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## **Guidance for Submission of Articles**

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**Table of Contents**

Table of Contents.....	vii
Moderating Role of Organizational Justice on the Relationship between Organizational Climate and Employees Turnover Intention: An Empirical Study by <i>Abubakar Adamu Idriss &amp; Shehu Inuwa Galoji, Ph.D</i> .....	1
Effects of Entrepreneurial Orientation on Export Performance of Manufacturing SMEs in Kano, Nigeria by <i>Abiodun Tope Samson Ph.D</i> .....	11
Effects of Product Differentiation Strategies on the Sales Performance of Bakeries in Akure, Nigeria By <i>Muftau Adesina Abayomi</i> .....	35
Impact of Human Resource Development Programmes on Employee Performance: A Study of Academic Staff in FCE Zaria, Nigeria by <i>Salihu Habiba and Bilkisu Ovosi Mohammed</i> .....	52
Mediating Effect of Firm’s Growth on the Relationship between Leverage and Performance of Consumer Goods Firms in Nigeria By <i>Ahmad Adamu Ibrahim, Abubakar Hamisu Umar and Yusuf Abubakar Saddiq</i> .....	66
Debt Financing and Firm Financial Performance: Evidence from Non-Financial Sector of Nigeria by <i>Adamu Yahaya, Jamilu Abdulkadir and Ahmed Balarabe Musa</i> .....	78
Influence of Social Networking Sites on Online Purchase Behaviour: Mediating Role of Consumer Purchase Intention: A Pilot Test by <i>Asiya Usman Maude, Ahmad Audu Maiyaki and Mukhtar Shehu Aliyu</i> .....	91
Moderating Effect of Audit Committee Independence on the Relationship between Auditor Tenure and Stock Returns in Nigeria by <i>Emmanuel Igbawase Abanyam, Hanatu Sabo Ahmad and Muhammad Aminu Isah</i> .....	104
Audit Committee Effectiveness, Risk Management and Financial Performance of Nigerian Listed Deposit Money Bank by <i>Ishaya John Dabari &amp; Zephaniah Liuraman</i> .....	118

Target Costing as a Critical Factor for Efficiency of Manufacturing Business in Plateau State,  
Nigeria by *Sani Alfred Ilemona & Nwite Sunday* ..... 132

Price Reaction to the Announcement of Fuel Subsidy Removal in Nigeria by *Mohammed  
Aminu Bello, Ph.D* ..... 141

Dividend Policy and Share Price Reaction of Deposit Money Banks in Nigeria: A Post Global  
Financial Crises Review by *Nurudeen Oyairekhua Aileobini, Bala Ado K/Mata, Ph.D., and  
Muhammad Yadudu, Ph.D* ..... 160

***EDITOR'S NOTE***

The Editorial Board of Bayero Business Review (BBR) is delighted to publish Volume 6, Number 1 of the Journal which is domiciled in the Department of Business Administration and Entrepreneurship, Bayero University, Kano. BBR provides a platform for academics, policy makers and industrialists to extend the frontier of knowledge with regards to theory and practice in Management. To this end, the Journal publishes (bi-annually) original scholarly research underlined with sound academic prowess. The Journal's high quality is ensured by the efforts of our able members of the Editorial Board and also the critical paper reviewers.

The Editorial Board is further excited by the overwhelming response and submissions throughout the country. Thus, the Board appreciates the quality and academic excellence of the submissions. It is our pleasure to inform our audience that very soon the BBR will be available online and will be indexed in various Journal Databases in line with the international best practices.

On behalf of the Board of BBR, I sincerely appreciate the support and contributions of everyone who help in a way to seeing the success of our great Journal. Finally, we thank Allah in whose mercy good things are being accomplished.

**Associate Prof. Ahmad A. Maiyaki**

**Editor-in-Chief**

**Bayero University, Kano**

## **Moderating Role of Organizational Justice on the Relationship between Organizational Climate and Employees Turnover Intention: An Empirical Study**

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### **ABSTRACT**

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*This correlational survey study investigates the relationship between organizational climate's dimensions (responsibility, reward, support and structure of organization) and employee turnover intention and the moderating role of organizational justice on their relationships. The data used in this study was physically collected using questionnaire from 388 lecturers of public universities in northeast Nigeria who were chosen as the sample of the study out of the population of 6669 academic staff. The outcome revealed that three of the four dimensions of organizational climate; responsibility, reward and structure of organization have significant relationship with employee turnover intention. Whereas, support shows an insignificant relationship with employee turnover intention. Also, organizational justice moderates the relationships between responsibility, reward and employee turnover intention but does not moderate the relationships between support, structure with employee turnover intention. Partial least squares structural equation modeling (PLS-SEM) was used for the analysis. The study recommends that further studies should take into cognizance the possibility of introducing additional intervening constructs on different organizations in other sectors of the economy.*

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**KEYWORDS:** Turnover Intention, Organizational Climate, Organizational Justice

### **1. Introduction**

The executive director, centre for open, distance and e-Learning, Federal University of Technology, Minna, Musa Aibinu, assert that about 23,000 lecturers emigrate annually from Africa mostly from Nigeria to other countries yearly, (Aibinu, 2015). According to Aibinu (2015), retention of staff has been a mind boggling discourse in human resource management field. In conformity with the above, the president of Academic Staff Union of Universities (ASUU), Kogi State University chapter, raised panic

that the Nigerian public university is fast losing qualified and competent lecturers to greener pastures due to many factors, (Oluwagbemiga, 2016). He further revealed that qualified lecturers are leaving in droves due to delay in payment of salaries and other issues such as non- settlement of outstanding earned academic allowance from 2009 to 2014, (Oluwagbemiga, 2016). In the same vein, the president of Academic Staff Union of Universities in Nigeria, Professor Ogunyemi busted that “no fewer

than 100,000 lecturers are required to beef-up academic activities in the Nigeria's public universities", (Ogunyemi, 2016). Every industry strives to retain their best staff because they know that they will lose a lot if they leave and to hire new ones entails more funds. Nigeria University is confronted with trials such as derisory qualified lecturers, inadequate cross-ventilated classrooms, epileptic power supply for laboratory analysis and non-implementation of retirement age for lecturers by federal government and inadequate funding.

## **2. Literature Review**

In this section, relevant literature will be reviewed and synthesized.

### **2.1 Organizational Climate and Employee Turnover Intention**

The rate of workers turnover most importantly in higher institutions of learning has been growing from time to time due to a lot of reasons. Several common factors were discovered to be correlated to turnover intentions; they are; organizational commitment, job satisfaction, perceived organizational support, perceived supervisor support, organizational climate, and opportunities and organizational justice, (Alkahtani, 2015). The detrimental effect of high turnover rate on the hospitality industry is a major cause for concern among human resource practitioners. Students of organizational behavior have found many reasons for turnover of employees. Organizational climate has been cited as a possible reason because of the way it has been found to influence the behavior of Studies employees.

Organization climate have being found to be related to turnover intention in so many studies. For instance, a study conducted by (Askiyanto & Soetjipto, 2018; Djamil, Sutawijaya, & Irawan, 2018; Kuang & Wu, 2021; Park & Pierce, 2020) reports that organizational climate was discovered to have a significant positive relationship with turnover intention. So also, found a positive significant relationship between organizational climate and turnover intention

Organizational climate is a set of characteristics that makes an organization's work environment unique. According to Liou and Cheng (2017) these characteristics are enduring over time implying that the organizational members would be subjected to its effect considerably.

Ohly and Fritz (2019) show that work environment can play a significant role in influencing the behavior of the employees. Therefore, organizational climate could influence an employee's work-based outcome.

Research by Russel et al. (2010) found that organizational climate to be associated with turnover intention. The works by Subramaniam (2005) and Donoghue (2010) found that a positive organizational climate contributes toward a decrease in intention to leave. Intention to leave and actual turnover are often highly correlated. According to Pack et al. (2017) this is the reason why researchers often use intent to leave as a proxy for turnover. Turnover intention is defined by Lee (2012) as the

subjective perception of an organizational member to quit the current job for other opportunities. Shore and Martin (2016) and Khatri et al. (2018) noted that turnover intention is an appropriate dependent variable because it is linked with actual turnover. Bluedorn (2014) and Price and Mueller (2019) recommended the use of turnover intention over actual turnover because actual turnover is more difficult to predict than intention and there are many external factors that can affect a person's turnover behavior.

Inarguably, Fatemeh *et al.*, (2021) states that moderating effects in their study were not addressed and recommended that moderating variables like organizational justice, inclusion climate or top management commitment should be considered on the relationship between organizational climate and turnover intention in similar models and contexts of research. So also, Hadjri, (2019), revealed that organizational climate had a negative influence on workers' turnover intention.

## **2.2 Organizational Justice**

It has been perceived by the study of De Yreh (2012) that when organizational decisions and managerial undertakings are observed unfair and unjust by the employees, the organization is most probable to experience employees' reaction by conveying their moods by displaying discomfort, dissatisfaction and other undesirable manners. Fissure of organizational injustice are circumstances that may lead to employee negative feedbacks in the organization.

Turnover intention of employee is affecting both the employees and employer. Most organizations have been experiencing high turnover owing to how they handle organizational justice (procedural, interactional and distributive justice). Generally, studies about organizational justice has engrossed on two foremost issues: employees' reactions to the upshots they receive, and the way by which they get these outcomes, that is, the procedures used (Cropanzano & Greenberg, 1997). Akanbi & Ofoegbu (2013) glossed organizational justice as a vital element related with the success or otherwise of every organization. In order to keep employees well satisfied, committed, and loyal to the organization, the organization must be fair in its system concerning distributive justice, procedural justice and interactional justice. Furthermore, Akanbi & Ofoegbu (2013) while looking into impact of perceived organizational justice on organizational commitment of a food and beverages firm in Nigeria established that both distributive justice and procedural justice have significant relationship with organizational commitment and subsequently to the employees' turnover intention.

Turnover intention also impacts internal employees as well as employee–customer relationships (Isfahani, 2017). Previous research explains the negative relationship between organizational climate and turnover intention. This is evidenced by research conducted by (Burli & Chan, 2020) on several nurses at Taiwan Hospital. Based on these results, it is known that the hospital where they work is not a

place of work that shows concern for its employees.

Huang *et al.*, (2019) also reveals that in terms of internal fit, organizational justice presents significant relationships with organizational climate, organizational climate indicates notable correlations with employee turnover intention, and organizational justice divulges significant associations with organizational commitment. Thus the hypotheses of this study are:

**Hypothesis<sub>1</sub>:** *Responsibility is significantly related to employee turnover intention*

**Hypothesis<sub>2</sub>:** *Reward is significantly related to employee turnover intention.*

**Hypothesis<sub>3</sub>:** *Support is significantly related to employee turnover intention.*

**Hypothesis<sub>4</sub>:** *Structure is significantly related to employee turnover intention.*

**Hypothesis<sub>5</sub>:** *Organizational justice moderates the relationship between responsibility and employee turnover intention.*

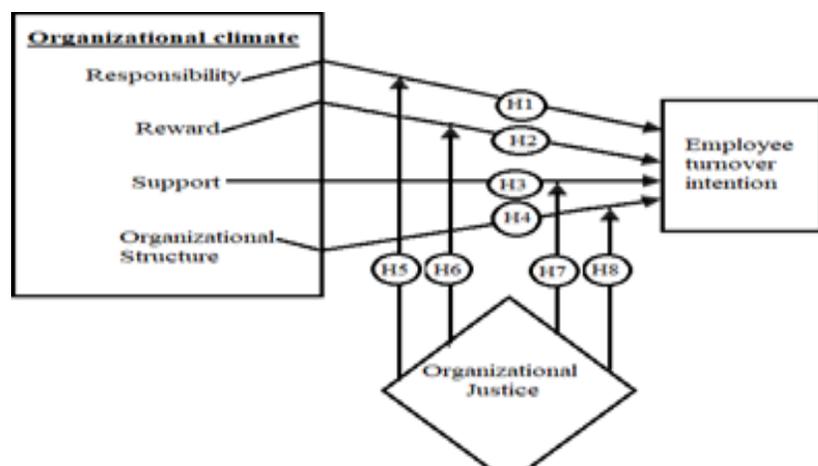
**Hypothesis<sub>6</sub>:** *Organizational justice moderates the relationship between reward and employee turnover intention.*

**Hypothesis<sub>7</sub>:** *Organizational justice moderates the relationship between support and employee turnover intention.*

**Hypothesis<sub>8</sub>:** *Organizational justice moderates the relationship between organization structure and employee turnover intention.*

Theoretical Framework: This study was conducted to understand the organizational climate in the public universities in the northeastern Nigeria with the intention to reduce employee's turnover intention and improve retention. Employees' turnover may result from various factors and by understanding the organizational climate, it would benefit the management to identify the dimensions, which impact the most on employee turnover intention. Thus organizational climate in this study refers to the employees' perception of four different climate dimensions within the organization, namely: responsibility, support and structure of the organization.

Turnover intention in this study refers to the extent of the staffs' desire and intention to leave the organization at current stage of their employment. The theoretical framework for this study is presented in Fig. 1.



**Figure 1: Framework of the Study**

### 3 Methodology

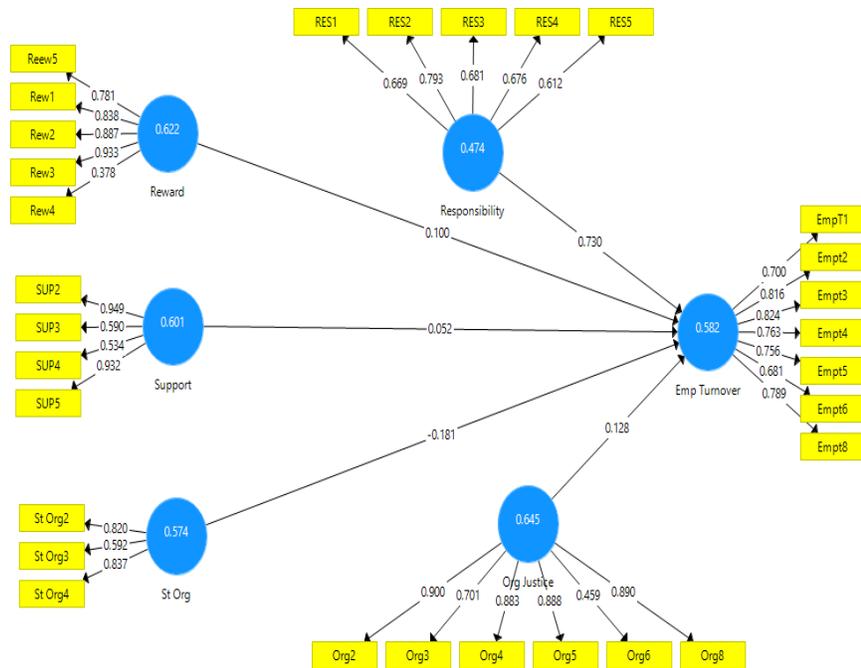
Quantitative approach has been deployed by the researchers to test the phenomenon. The population of this study is the academic staff of public universities in the northeast zone of Nigeria. Therefore the population of this study is 6669 lecturers who as at the time of the research were on the payrolls of their respective universities. Based on the sampling table suggested by Krejcie and Morgan (1970), the number of samples required to represent this population (6669 lecturers) is 388. The survey questionnaires were distributed among the targeted employees to collect important data. Structural Equation Modeling -Partial Least Square (SEM-PLS) was employed to establish the validity and reliability of the measurements and to test the postulated hypotheses.

### 4. Results and Discussions

This study used Partial Least Squares Structural Equation Modelling (PLS-SEM) to test the hypotheses earlier formulated as it is specifically suitable for this study since it permits the simultaneous estimation of multiple causal relationships between one or more independent variables and one or more dependent variables as suggested by Matthews, Hair, and Matthews (2018). The reflective latent variables of this study were subjected to reliability test, convergent validity, and discriminant validity tests. Reliability test was conducted using Cronbach's Alpha and composite reliability. Composite reliability (CR) and Cronbach

alpha (CA) values were relatively higher than the cut-off value of 0.70, hence, the instrument's reliability was achieved, this suggests an acceptable construct reliability (Hair et al., 2019).

*Figure 4.4 Shows the measurement model of this study.*



*Figure 2: PLS-SEM Algorithm (Measurement Model) General Model*

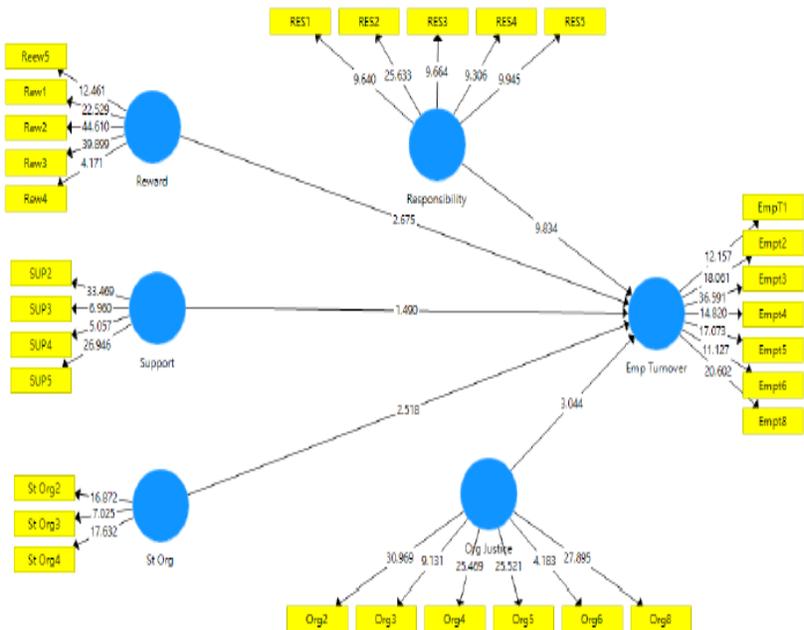
Construct	Loading	Cronbach's Alpha	Composite Reliability
Organizational Justice	0.901	0.879	0.913
Responsibility	0.902	0.795	0.859
Reward	0.781	0.835	0.885
Organizational structure	0.816	0.610	0.798
Support	0.708	0.823	0.869
Organizational Turnover	0.733	0.884	0.909

**Table 2: Structural Model Assessment**

Hypothes	Relations hip	Beta, $\beta$	Standard	T-values	P-Values	Remark
$H_1$	Responsibility -> Emp Turnover	0.730	0.074	9.834	0.000	Supported
$H_2$	Reward -> Emp Turnover	0.100	0.037	2.675	0.008	Supported
$H_3$	St Org -> Emp Turnover	-0.181	0.072	-2.518	0.012	Supported
$H_4$	Support -> Emp Turnover	0.052	0.035	1.490	0.137	Not-Supported

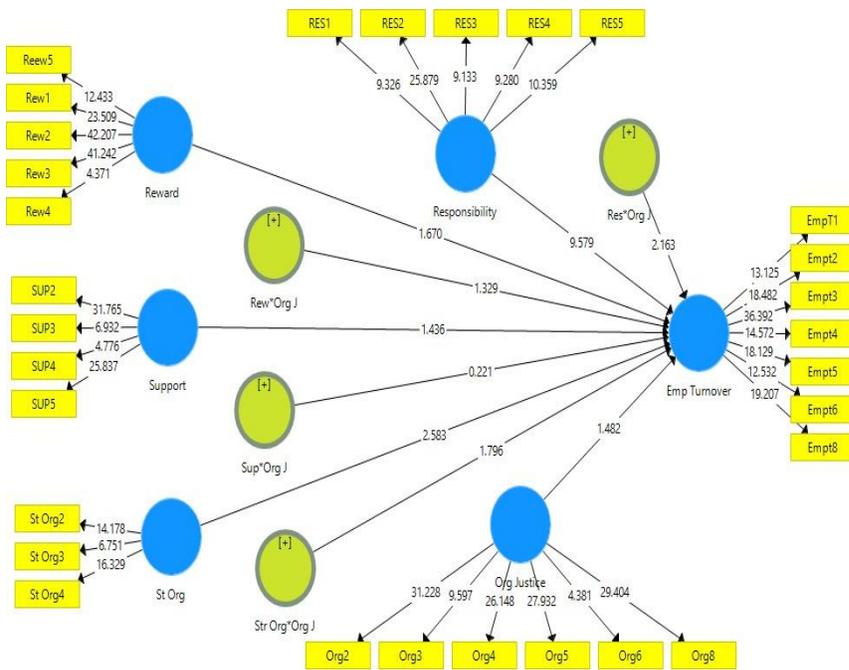
Note: In two-tailed test of significance  $p < 0.01^{***}$ ,  $p < 0.05^{**}$ ,  $p < 0.1^*$ , for 99%, 95%, 90% confidence level, the t- statistics level is 2.57, 1.96, and 1.65 respectively

relationship between responsibility and turnover intention where  $\beta = 0.128$ ,  $t = 3.044$ , and  $p < 0.002$ , supporting Hypothesis  $H_1$ . Likewise, Hypothesis  $H_2$  was developed to examine if there is a relationship between Responsibility and Employee Turnover intention. Results further shows that reward and turnover intention had a strong significant positive relationship with  $\beta = 0.730$ ,  $t = 9.834$ , and  $p < 0.000$ , supporting Hypothesis  $H_2$ . Similarly, Hypothesis  $H_3$  was developed to examine if there is a relationship between Reward and Employee turnover intention which indicates that there is a positive and significant association between reward and employee turnover intention with  $\beta = 0.100$ ,  $t = 2.675$ , and  $p < 0.008$  thereby supporting Hypothesis  $H_3$ . However, Hypothesis  $H_4$  was developed to examine if there is a relationship between organizational structure and employee turnover intention. Result shows that organiza tional structure and turnover intention has a negative significant positive relationship with  $\beta = -0.181$ ,  $t = 2.518$ , and  $p < 0.012$  rejecting Hypothesis  $H_4$ . Finally, Hypothesis  $H_5$  was developed to examine if there is a relationship between organizational support and turnover intention which shows positive and insignificant association between organizational Support and turnover intention was found with  $\beta = 0.052$ ,  $t = 1.490$ , and  $p < 0.137$  indicating non-support for Hypothesis  $H_5$ .



**Figure3: PLS-SEM Bootstrapping**

Hypothesis  $H_1$  was developed to examine if there is a relationship between Organizational Justice and turnover intention. Results show a significant positive



**Figure 4: PLS-SEM Bootstrapping Interactions (Moderator)**

The presence of a moderator is to examine if there is any change in the relationship between two variables. In this study, organizational justice was hypothesized to moderate the relationship between Responsibility, Reward, Organizational structure, and Support and Organizational justice (Hypotheses  $H_5$ ,  $H_6$ ,  $H_7$ , and  $H_8$ , respectively), and employee turnover. The study applied a product term approach using PLS-SEM to estimate and detect the strength of the moderating effect of Organizational justice on the relationship between organizational climate construct and employee turnover (Chin, Lo, & Ramayah, 2013; Chin, Marcolin, & Newsted, 2003; Henseler & Fassot, 2010). Henseler and Fassot (2010) suggested that to assess moderation, firstly, one has to examine only the main effects of the independent variable(s) on the dependent variables, followed by an examination of the effect of the

independent variable(s) including the moderator on the dependent variables, and lastly, to include the interaction terms.

The moderation model in Figure 4.7 test whether the prediction of employee turnover can be enhanced when organizational justice as a moderating variable becomes significant. Hence, the moderating effect holds only when these interaction terms are significant (Hair. et al., 2013).

The results of the moderating effects of organizational justice on the relationship between Responsibility, Reward, Organizational structure, and Support and Organizational justice were examined and reported. As in Figure 4.7 the path assessment when the moderator variable (Organizational justice) is included as the independent variable, show that the path coefficient is positively significant. Hence, it can be concluded that Organizational justice has a positive influence on employee turnover and the level of  $R^2$  increased from 0.509 to 0.533. Hypotheses  $H_5$ ,  $H_6$ ,  $H_7$ , and  $H_8$  were tested to show the moderating effect of organizational justice.

Results shown in Table 4.17 and Figure 4.7 did not support Hypothesis  $H_5$  which posited that organizational justice positively moderates the relationship between Responsibility, and Employee Turnover is supported With  $\beta=0.180$ ,  $SE=0.089$ ,  $t=2.163$ ,  $P=0.031$ . Hypothesis  $H_6$  which posited that

organizational justice moderates the relationship between, Organizational structure, and Employee Turnover revealed negatively significant relationship with parameter  $\beta=-0.105$ ,  $SE=0.058$ ,  $t=1.796$ ,  $P=0.073$ . However, hypothesis  $H_7$  which posited that organizational justice moderates the relationship between Support and Employee Turnover. Is rejected with negative and insignificant result  $\beta=0.010$ ,  $SE=0.045$ ,  $t=0.221$ ,  $P=0.853$ . in addition Hypothesis  $H_8$  which posited that organizational justice moderates the relationship between Reward, and Employee Turnover is also rejected due to positive and insignificant result with the following parameters  $\beta=0.056$ ,  $SE=0.042$ ,  $t=1.329$ ,  $P=0.182$ .

## **5. Conclusion and Recommendations**

This study concludes that of all the dimensions of organizational climate, support is the only one that shows insignificant relationship with employee turnover intention. Thus, responsibility, reward and organizational structure portrayed significant

relationship with the employee turnover intention. So also, the outcome indicates further that organizational justice moderates the relationships between responsibility and reward employee turnover intention whereas, it doesn't moderate the relationship between organizational structure and support with employee turnover intention. Limitations of this study was that the sample of this study was drawn from some Universities in Nigeria, therefore, there is the need for future studies to conduct similar study with higher or different sample size and increases the scope, so that it is conducted in other organizations. Due to this limitation, the findings of this study cannot be generalized across all organizations and employees in Nigeria.

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## Effects of Entrepreneurial Orientation on Export Performance of Manufacturing SMEs in Kano, Nigeria

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### ABSTRACT

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*The basic objective of this study was to assess the effects of innovativeness, risk-taking and pro-activeness on the performance of exporting manufacturing small and medium enterprises (SMEs) in Kano, Nigeria. Based on a theoretical consideration a model was proposed and three hypotheses were formulated. Survey questionnaires were used in the data collection and a total of 110 useable responses were received from the owner/managers of exporting manufacturing SMEs in Kano. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed in the data analysis. The results of the analysis depict that pro activeness; innovativeness and risk-taking have significant effect on export performance of manufacturing SMEs. The managerial implication of this study indicates that EO is a significant internal determinant of export performance. Exporting SMEs' managers could take complementary advantage of pro-activeness, innovativeness, and risk-taking resources to perform more than their competitors. The study recommends leverage renewal strategy on incentives giving to SMEs and reconfigure innovativeness; revamping all old Industrial Development Centres and establish new ones (IDCs); establishing SMEs clusters; upgrading rural urban road, introduce entrepreneurial studies; and emphasize science among others. .*

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**KEYWORDS:** Entrepreneurial Orientation, Pro-activeness, Innovativeness, Risk-taking, Export Performance

### 1 Introduction

Expanding non-oil export to get rid of monolithic economy has been suggested as a solution for economic development and increase in export can perform the roles of “engine of economic growth”, increase employment, create profit, trigger greater productivity and lead to rise in accumulation of reserves allowing a country to balance their finances (Imoughele & Ismaila, 2015). This drive for non-oil export diversification has been intensified, yet, the manufacturing exporting SMEs which should be the main driver of the economic growth's engine are

under capacitated due to the volatile business environment stressors and competitiveness issues hinged on strategic nexus of the SMEs into the non-oil export sector (Adesanya et al., 2018; Okpara & Koumbiadis, 2017). The strategies adopted by most SMEs' and their managerial judgment in the formation of their export business activities has remained ineffective without yielding the expected multiplying effects on the performance of SMEs' in the international market. Most SMEs' do not seek for or acquire adequate information and knowledge

about foreign markets and how to manage foreign activities while formulating their exporting strategies (Al-Mubarak, 2016; Mwebaze & Hisali, 2013). This has really hampered the export involvement, competitiveness, performance level and corporate growth of the SMEs'. The exportation portion of these companies against their production is low with overall poor export performance (Imran et al., 2018). This has resulted to the poor performance of small and medium sized firms in the international market (Imran et al., 2018). In the same vein, SMEs from developing nation often times directly interface with host market potential customers, but their products are often rejected and sent back to the home country as a result of not meeting the client product specification and standards in addition to the fact that SMEs have no representatives who can coordinate their export activities in the host market. The outbreak of covid-19 across the world has added a seismic impact on the global economy. In Nigeria, the negative economic impact is even more profound following the crash in international oil prices, reaching as low as \$22.58 a barrel. This has been extensively analyzed given that as of 2019, 87% of Nigeria's foreign exchange earnings came from crude oil exports. The price of Nigerian cocoa beans stood at US\$2880.63/tonne on 03 February 2020. It has now fallen to US\$2440.94/tonne as of 30 March 2020 (source: ITC market price information). This is a fall of US\$439.69 per tonne, or 15.3%. Similarly, the price change for Nigerian sesame seed has not proved as drastic as cocoa. In fact, since the start of

February 2020, the price has fallen by only US\$60 per tonne (i.e. 4.7%) from US\$1270/tonne to US\$1210/tonne (Sandrey, 2017).

Disappointedly, only few studies in international marketing have asked how innovative entrepreneurial firms from emerging economies, (most especially, Nigeria, Kano) compete in the global marketplace and improve export performance of SMEs. In this study, an attempt is made to argue that SMEs entry into the global marketplace and participating in export development are often a strategic choice that requires investment in several innovative capabilities (Abiodun & Mahmood, 2014). Innovative capabilities are organizational processes through which firms reconfigure their resources as their markets evolve (Abiodun & Mahmood 2015; Eisenhardt & Martin 2000). Innovativeness proactiveness, risk taking, competitive aggressiveness and autonomous capabilities underpin the recent advances in international entrepreneurship, which suggest that imaginative inertial nature of established routines and new ventures hold an advantage in developing capabilities during internationalization (Ren et al., 2015) In international marketing, innovative capabilities have been linked to export performance (Lages et al., 2009).

There has been a great deal of research on SMEs and entrepreneurial export orientation; however, these studies have been primarily conducted in Europe (i.e. Akyol, & Akehurst, 2003; Francis & Collins-Dodd, 2000; Fernández-Mesa, & Alegre, 2015). America

(i.e Yeoh, & Jeong, 1995; Kuivalainen, et al., 2007; Kropp et al., 2006). Specifically, research on this topic is disappointingly scarce in Africa, particularly Nigeria (i.e Abiodun & Mahmood, 2015; Ajayi, 2016; Okpara, 2009; Samson, 2015; Imran et al., 2017).

Since very little research has been conducted on this topic in Nigeria, undeniably there is a knowledge gap in the understanding of this issue with regard to the Nigerian environment. This study is an attempt to bridge that gap. For SMEs in Nigeria, an awareness of the characteristics of a proactive, innovative, competitive aggressive and autonomous export orientation that results in superior export performance might encourage entrepreneurs to enter into the export market.

Therefore, this study offers a significant contribution to both practitioners and researchers. Entrepreneurial orientation has been suggested as an important topic to be considered when developing an export market for SMEs, since globalization would really depend on the ability to internationalize operation and respond quickly to market condition (Asemokha et al., 2019).

Therefore, this study offers a significant contribution to both practitioners and researchers. The importance of EO for the survival of SMEs' export performance was acknowledged by many authors (e.g. Imran et al., 2018). Firms with stronger EO achieve higher export performance (Radulovich et al., 2018; Thanos et al., 2016).

Entrepreneurial orientations (Pro-activeness,

innovativeness and risk-taking) identified in management literature are selected as key variables for these aforementioned reasons to explain export performance of Manufacturing SMEs in Kano, Nigeria. Therefore, the major objective of this study is to examine the effect of entrepreneurial orientation on export performance of SMEs in Kano. While the specific objectives are:

1. To examine the effect of Pro-activeness on Export Performance of manufacturing SMEs in Kano.
2. To investigate the effect of Innovativeness on Export Performance of manufacturing SMEs in Kano and
3. To assess the effect of Risk-taking on Export Performance of manufacturing SMEs in Kano.

## **2. Literature Review**

This study delineates relationships between entrepreneurial orientation's dimensions and export performance of SMEs to show the effect, the relative contribution and the extent of the influence of each of the features of entrepreneurial orientation on export performance of SMEs in Kano state. Thus, the independent variables of the study are the EO dimensions; pro-activeness, innovativeness and risk-taking, while the dependent variable is export performance.

## **2.1 Entrepreneurial Orientations (EO)**

EO was first defined by Miller (1983) as follows; ‘‘an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘proactive’ innovations, beating competitors to the punch’’. Three dimensions were suggested to characterize and test entrepreneurship: ‘‘innovativeness’’, ‘‘proactiveness’’, and ‘‘risk-taking. Lumpkin and Dess (1996, p.136) define EO as ‘the processes, practices, and decision-making activities that lead to new entry’’ Lumpkin and Dess (1996) put forth two additional dimensions to characterize the entrepreneurial process – namely, competitive aggressiveness and autonomy. The importance of EO for the survival of SME export performance was acknowledged by many authors (Imran et al., 2018). Several studies believed that firms with stronger EO achieve higher export performance (Radulovich et al., 2018; Thanos et al., 2016). However, a literature review indicates that the most commonly used dimensions in research are innovativeness, proactiveness, and risk taking (Kropp et al., 2008).

### **2.1.1 Innovativeness**

Innovativeness reflects a firm’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lumpkin & Dess, 1996). The degree at which an organization is being characterized as being innovative is that innovation would be one of the primary contributing

factors to the success of such organization (Hult et al., 2004). In this study, innovativeness’ dimension of entrepreneurial orientation helps SMEs to gain competitive advantages in the competitive export markets through product, market, and technological newness (Ketchen & Shorter, 2012). Firm innovativeness is thus viewed as a strategic resource that may provide a firm with the ability to compete in target markets by offering customers products and services with added and/or different sources of value relative to competitors (Schilke, 2014).

### **2.1.2 Risk-Taking**

Risk-taking is defined as ‘‘the degree to which managers are willing to make large and risky resource commitments i.e. those which have a reasonable chance of costly failures’’ (Miller and Friesen, 1978, p. 923). Risk is the fundamental aspect of the entrepreneurial process; entrepreneurship is an uncertain activity (McMullen, & Shepherd 2006). It is the extent at which managers is ready to commit a large and risky resource into a project, which may constitute a reasonable change or expensive failure Yet, the risks are calculated risk, and extreme risk that involve reckless decision making that management identified is usually avoided (Ketchen & Shorter, 2012). Risk taking in this study is the capacity of the firms’ to view the foreign market as opportunity to be pursued positively despite the volatility, engenders success in export ventures (Adesanya et al., 2018).

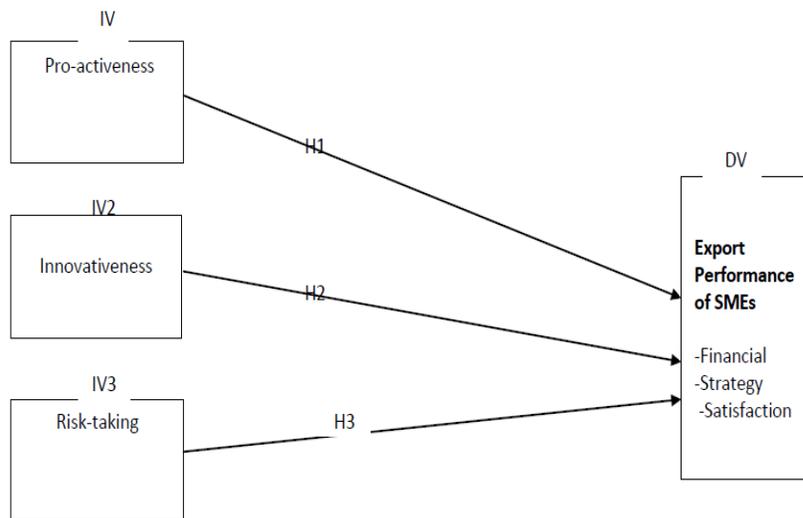
### **2.1.3 Pro-activeness**

Proactiveness is defined as “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of the life cycle” (Venkatraman, 1989). Pro-activeness defines the capability of the firms’ entrance to the export market *via* inference from SWOT analysis conducted to identifying the opportunity trend in the market, and exploiting them with the use of human capital expertise to be on top of competition (Okpara, 2009; Rua & França, 2017). In this study, Pro activeness enables SMEs exporter to identify new opportunities and evaluate them, discover and monitor market trends and have new team formation. An entrepreneur is a visionary because of his pro activeness’ quality; opportunities can be perceived where others did not see, thereby, as entrepreneurial exporter of SMEs will be first to exploit opportunities in foreign market (Cadogan et al., 2016; Phokha & Nonsrimuang, 2013).

### **2.1.4 Export Performance**

Cavusgil and Zou (1994) portray export performance as "the extent to which a firm accomplishes its financial and key intention and subjective actions for exporting". Laitinen (2002, p. 66; Reijonen & Komppula, 2007) characterizes performance as "the capacity of an item to create results in a measurement decided earlier, in connection to an objective". Shamsuddoha and Ali (2006) describe the

export performance as "the degree to which a company's exports are accomplished. Although export performance has been addressed in a vast number of studies, it remains one of the least understood and most contentious areas of international marketing. Another critical issue in the mode of evaluating export performance is the subject of objective measure against subjective measure, where some scholars subscribed to objective measures, while some prefer subjective measures. For instance author like Katsikeas *et al.* (2000) argued that even though subjective examination of export performance might give rise to some problems it appears to be more valid in determining long term aspect and more importantly managerial decision making and action can be easily influenced by it. However, created a measure of export performance that discussed the problem of objectivity and subjectivity of export performance, and they came out with multidimensional scale named EXPERF, and the area of interest is export venture. The dimensions are financial, strategic and satisfaction with export venture’s performance.



### Conceptual Frame Work

#### 2.1.5 Innovativeness and Export Performance

Zhang et al. (2021) explored the potential impact of CEO EO on firm choice of CSR activities (corporate philanthropy vs. CSR innovation. This study found that CEO EO leads to more engagement in CSR innovation rather than corporate philanthropy. The focus of this study does not show EO as multidimensional construct. Proactiveness is not specified as important dimension of EO that is responsible for firm performance. Monteiro et al. (2017) analyzed the relationships among EO’s dimension, and export performance, the results validate the fact that EO significantly impact on export performance. However, the study did not show innovativeness as the dimension of EO that is responsible for export performance. In Nigeria, Adesanya, et al. (2018) examine the impact of EO and business Performance of non-oil exporting SMEs in Lagos State, Nigeria.. The result of the descriptive data implies that EO works better when all the features are put to use. However, their

innovativeness was low. Likewise, Bıçakcıoğlu-Peynirci et al. (2019) conducted a study to find the impact of firms' innovation activities on export performance. The results of the study revealed that significant relationship between innovation activities of companies and their export performance. However, this study was carried out in different context that is different from developing economy where there is dearth of such study. Besides, the study employed qualitative methodology which is different from the one used in this study. Similarly, Rua and Franca (2016) studied the effect of innovativeness on Portuguese footwear SMEs export performance. The findings of this study revealed that innovativeness and absorptive capability enhance export performance of Portuguese footwear companies in foreign markets . However, this study is conducted in different context from Nigeria, besides capturing only footwear as industrial sample could narrow the perspective of innovativeness as against where other industrial samples (food and beverages, plastic, leather, chemicals) are involved. More importantly, Hossain and Azmi (2020) examined the impact of innovativeness on the apparel industry's export performance.

The results of this study revealed that innovativeness positively and significantly impact export performance. Even though the study is recent and really shows the close similarity with this study, yet the study was carried out in different context. Different sample in the turbulent environment where there is scarcity of such study would definitely

contribute to entrepreneurial and strategic management literature.

Despite the fact that many prior studies found significant effects of innovativeness on export performance, Chin *et al.* (2016) found *innovativeness* is negatively related to export performance among the Chinese global start-up OEMs (Original equipment manufacturers). On the same contrary note like Chin *et al.* (2016) on lack of significant effect of innovativeness on export performance of SMEs, Silva *et al.* (2017) analyzed the extent to which breakthrough innovation (market-innovation) has a positive impact on both economic and strategic export performance. Having employed PLS-SEM on primary data collected from SMEs' exporters. The result of the study revealed that innovativeness was found to be negatively associated with export performance, as it requires major learning effort by importers. Even though the study was carried out in different context with different sample, there is a need to carry out similar study to authenticate this finding in Nigeria. Similarly, Love and Roper (2015) summarized and synthesize the evidence on SME innovation, exporting and growth, paying particular attention to internal and external (eco-system) enablers, and for the interplay between innovation and exporting in SME growth. This study found inconsistency (insignificant) between the associations of innovation and export performance. However, the study employed qualitative methodology while the current study employed quantitative method; Smart

PLS-Structural Equation Modeling is used for data analysis. This could provide more reliable findings on the relationship between innovativeness and export performance. In a summary, the literature reviewed in this study on the effect of innovativeness on export performance of SMEs has found inconsistencies and mixed findings. Even though many studies found significant relationship between the two constructs. Yet some found no significant effect or low effect. So relied on the above discrepancies necessitate null hypothesis

**H<sub>01</sub>:** Innovativeness has no significant effect on Export Performance of manufacturing SMEs in Kano

### **2.1.6 Pro-activeness and Export Performance**

Li *et al.* (2009) examined the relationships among proactiveness, knowledge creation process, and firm performance. The findings of the study suggested that there is significant direct effect of proactiveness on firm performance. Nonetheless, the focus of the study is not export performance. Moreover, Aziz *et al.* (2014) studied the relationship between proactiveness and firm performance. The findings of the study suggest that there is significant relationship between proactiveness and firm performance. Nevertheless, the sample of the study did not focus on the exporting SMEs. Moreover, the current study employs PLS-Structural Modelling. In addition, Kraus, *et al.* (2012) assessed the relationship between proactiveness and firm performance of SMEs, the findings of the study revealed that proactiveness is significantly related to firm perfor

mance. However, the study was carried out from different context and owners/managers participating in export were not sampled. Similarly, Shan et al. (2016) examined the relationship between proactiveness and firm performance, the relationship between proactiveness lead to a higher performance level. Nevertheless, like Kraus, et al. (2012) the sample of the study are not exporting SMEs. The context is also different from the current study.

Furthermore, Flores et al. (2016) also studied EO and firm performance relationship. The findings of the study show positive and direct association of proactiveness on firm performance. However, the study was carried out from different context.. Focusing on export performance of SMEs in Nigeria, Okpara (2009) a studied the impact of proactiveness on the export performance of SMEs.. The findings of the study revealed that firms that adopted proactive orientation attain higher performance, profitability, and growth than those that adopted a conservative orientation. However, the study did not employ the latest statistical tool like PLS-SEM to analyze the data. Recently, Hossain and Azmi (2021) consider the impact of proactiveness on export performance. However, the context of this study is different from the current study. Similarly, Cannavale & Nadali (2019) conducted a study to examine the proactiveness impact on export performance in the 155 Iranian knowledge-based industries. However, the context of this study differed from the context of this current study. In addition, Rua & Franca (2016) examined the effect of proactiveness on

Portuguese footwear SMEs' export performance. The results of the study revealed that proactiveness positively influences export performance. However, besides the fact that the context differed from Nigeria, the study employed only footwear's owners/managers which the findings would be totally different from where different industrial samples are employed

On the contrary findings, Frishammar and Ake Horte (2007) examined the relationships proactiveness and firm performance. The result shows that proactiveness show no such relationship. Besides the fact that this study was carried out in a different context, PLS-SEM Could have provided better predictive relevance. Moreover, Okangi (2019) analyzes the impacts of proactiveness, on the profitability growth of local Tanzania's construction firms. The study found the negative impact of the proactiveness dimension on firms' profitability growth of 132 Tanzanian firms. Different context and different sample other than construction firms would have provided statistical significance. In support of lack of significant effect of proactiveness on firm performance, Andersén (2010) analyzed the assertion of significantly relationship between proactiveness and firm performance. In a specific context, there is no significant relationship between proactiveness and profitability or between proactiveness and growth. However, the sample of the study is not SMEs' owners or managers participating in export. Similarly, Soininen (2013) examined the effect of proactiveness on firm

performance. The study employed a quantitative approach on survey data and partial least squares path modeling was used in the analysis. This study found the contradictory role between proactive dimensions and performance relationship. Proactiveness depicts a negative role in SMEs' performance depending on the economic crisis level. However, the sample of the study is not SMEs' owners or managers participating in export. In conclusion, the literature reviewed on empirical studies on the effect of proactiveness on export performance of SMEs revealed that there is a mixed finding. Prior studies have shown positive significant effects between the two constructs while some studies have also shown lack of significant effect. This has created an important knowledge gap to contribute to entrepreneurial and strategic management literature. Therefore, this study proposes:

**Ho2:** Pro-activeness has no significant effect on Export Performance of manufacturing SMEs in Kano

### **2.1.7 Risk-taking and Export Performance**

Cannavale and Nadali (2019) conducted a study to examine risk-taking impact on firm performance in the Iranian knowledge based industry. The research has revealed the positive and significant effects of risk-taking on firm performance. However, the study was conducted in different context and moreover, the sample was not the owners/managers participating in export. Hence, thorough examination of effect of risk-taking on export performance could have

produced different result. Moreover, Okangi (2019) analyzes the impacts of risk-taking, on the profitability growth of local Tanzania's construction firms. The study found the positive impact of the risk-taking dimension on firms' profitability growth of 132 Tanzanian firms. Different context and different sample could have produced different findings. In addition, Ajayi (2016) conducted a study to find the impact risk-taking on export performance, the research revealed a positive and significant relationship between risk-taking and export performance. Even though this study was conducted in the same context with the current study and using export performance as dependent variable, the study focused on agricultural sector not the owners/managers of SMEs that are dealing with textiles/clothing, food and beverages, plastic and chemicals, leather and shoes (the product mentioned are within the groups of labour intensive and light manufacturing goods) However, there are studies on the contrary findings; some prior studies found negative and insignificant effect of risk-taking on firm performance. Nevertheless, the sample of the study focused on high-technology firm. Owners/managers of SMEs that are participating in export could have shown significant effect.

Similarly, Yang & Ju (2018) conducted their study on EO and firm performance. The study revealed that the risk-taking decreases product quality, which impacts on the firms' sales performance. Nonetheless, the study did not use the sample of SMEs participating in export. Besides, the study was

conducted in China and moreover, satisfaction or strategy as non economic could have been used as performance measure. Furthermore, Kraus *et al.* (2018) having employed a structured literature review to explain the relationship between risk-taking and firm performance, they found no direct influences of risk-taking on firms' financial performance. This is a qualitative study. Quantitative study could have collected much data from larger sample.

Moreover, financial measure as a performance measure might not be sufficient, subjective measure should have been included to capture the entire attributes of performance.

Also, Chin *et al.* (2016) examined the unique links and complicated interrelationships between the individual risk-taking and firm performance. However, the study was carried out from different context from the current study. Study from developing economy, in a turbulent/dynamic environment could have shown statistical significant effects.

As well as Hossain and Azmi (2021) examined the impact of risk-taking on export performance, the findings of this study revealed that risk-taking dimension does not affect export performance. Sample from developing economy like Nigeria could have produced significant effect on export performance.

In a nut shell prior studies confirmed the effects of risk-taking on export performance of SMEs,

In a nut shell prior studies confirmed the effects of risk-taking on export performance of SMEs, but most of these studies were carried out in different context with peculiar internal/external environmental factors. Besides, the statistical tools employed were not appropriate, and sample selected differ from the owners/managers participating in export. Conducting a thorough quantitative research is also important based on the fact that most of the prior studies reviewed in this study found negative, insignificant and discrepancies in the effect of risk-taking on export performance. These mixed findings have created a knowledge gap. This study proposes:

***Ho3:*** Risk-taking has no significant effect on Export Performance of manufacturing SMEs in Kano.

### **3 Research Methodology**

This study employs survey instrument based on measures used in the past literatures on export performance. Proactiveness and innovativeness are adapted from the measures of Eggers *et al.* (2013), for its adequate description of innovativeness and proactiveness in SMEs.

All items are measured using a 7-point Likert scale, ranging from “totally disagree” to “totally agree. The nine items adapted from Zou and Stan (1998) are used to measure export performance in this study because they reflect economic and non-economic factor that could easily show the performance of SMEs.

The researcher visited Nigeria Export Promotion Council to ascertain the population of the SMEs participating in export. The numbers of registered SMEs are negligible. While the fast majority of SMEs carry out exporting activities unofficially. Hence, there is no population sampling frame to draw representative sample. The study employed statistic approach to calculate sample Size for unknown population. The formula for determining sample is used to determine a sample size for this study. Therefore, the sample size of the study is 384

### **3.2 Data Analysis**

The study employed PLS-SEM to assess and test the hypotheses. The usage of PLS has been popular with information system more than any other discipline (Goodhue et al., 2007). The data analysis procedure using PLS in this present study follows these steps; these two -step processes are (1) the assessment of measurement model and (2) the assessment of a structural model (Henseler et al., 2009)

#### **3.2.1 Assessment of Measurement Model**

In this study the model estimation delivers the empirical Measures of the relationship between the indicators and the constructs (measurement model) The PLS –SEM algorithm in the first stage all the constructs scores are estimated to determine items reliability, internal consistency, convergent validity and discriminant validity. Similarly, there was examination of the outer loading of each construct's measure in Figure 4.2 in order to have assessment of individual items reliability (Hair et al., 2013).

The indicators with outer loadings between 0.40 are retained, while some items below the threshold of 0.40 are deleted (Hair et al., 2013).

About 7 items are deleted out of 28 items. The remaining 21 items are retained as they have loadings that range between 0.519 and 0.938. The internal consistency reliability is the extent at which all items on particular scale are measuring the same concept (Sun et al., 2007). Composite reliability's threshold; Values between 0.70 and 0.90 are considered satisfactory, value above 0.95 is regarded unsuitable and value below 0.60 indicate lack of internal consistency validity. Hence, this study employed composite reliability to ascertain the internal consistency of the measures adapted.

Table 3.4 depicts the composite reliability (CR), items loading and Average Variance Extracted (AVE) for the measurement model.

**Table 3.4: Items, Loading, CR and AVE of the Latent Variables**

<i>Constructs</i>	<i>Items</i>	<i>Loadings</i>	<i>AVE</i>	<i>CR</i>
Pro-activeness	PRO01	.840	.587	.847
	PRO02	.814		
	PRO03	.837		
	PRO04	.528		
Innovativeness	INN01	.519	.625	.865
	INN02	.839		
	INN03	.863		
Risk-taking	RIS01	.677	.526	.846
	RIS02	.666		
	RIS04	.698		
	RIS05	.779		
	RIS07	.796		
Financial (performance)	FIN01	.863	.692	.870
	FIN02	.731		
	FIN03	.894		
Satisfaction (Performance)	SAT01	.938	.795	.921
	SAT02	.869		
	SAT03	.865		
Strategy (Performance)	STG01	.698	.688	.867
	STG02	.900		
	STG03	.876		

Table 3.4 depicts the composite reliability coefficient of the latent construct. The composite reliability of each construct ranged from .847 to .921. The composite reliability of all the constructs is above the threshold of .70. Similarly, convergent validity is the extent to which a measure correlates positively with alternative measure of the same construct (Hair *et al.*, 2013). The assessment of convergent validity is usually based on the average variance extracted (AVE) of each construct and outer loadings the indicators (Fornell and Larcker, 1981). All outer loading of the indicators above .40 are retained and AVE above .50 is threshold of

convergent validity (Fornell and Larcker, 1981). The AVE for this study ranged between .526 and .795. While outer loading of all constructs ranged between .528 to .938, this indicates convergent validity. Moreover, discriminant validity threshold is that the square root of the average variance extracted is all greater than the correlation among latent constructs, signifying sufficient discriminant validity (Fornell & Larcker).

In Table 3.5, the squared root of the AVE, (.77, .79, .73, .72, .81 and .75) are all greater than the correlation among the latent construct which shows discriminant validity.

**Table 3.5: Square Root of AVE and Correlation of Latent Variable for the First Order**

Latent Variables	1	2	3	6	7	8
Pro-activeness	<b>.77</b>					
Innovativeness	.19	<b>.79</b>				
Risk-taking	.24	.14	<b>.73</b>			
Finance	.43	.43	.49	<b>.72</b>		
Strategy	.06	.34	.30	.24	<b>.81</b>	
Satisfaction	.25	.14	.28	.37	-.01	<b>.75</b>

Note: Diagonal elements (figures in bold) are the square root of the variance shared between the constructs and their measures. Off diagonal elements are the correlations among constructs.. Discriminant validity was also ascertained by comparing the indicator loading with cross loading. Table 3.6 compares the indicator loading with other reflective indicators. All the available indicators Proactiveness; .840, .814, .837 and .525 are greater than other

reflective loading. Similarly, for innovativeness; .519, .839, and .863 are greater than other reflective indicators. Moreover, risk-taking indicator loading; .677, .666, .698, .779 are greater than reflective indicators. The indicator loading of finance, strategy and satisfaction are also greater than the entire reflective indicator. This means the requirement of discriminant validity has been achieved.

**Table 3.6: Cross Loading Factor Analysis**

Vars.	PRO	INN	RIS	FIN	STG	SAT
PRO01	<b>.840</b>	.096	.137	.554	.092	.130
PRO02	<b>.814</b>	.237	.181	.504	.088	.100
PRO03	<b>.837</b>	.050	.148	.368	.024	.271
PRO04	<b>.528</b>	.218	.164	.328	-.051	.322
INN01	.328	<b>.519</b>	.192	.279	.143	.139
INN02	.111	<b>.839</b>	.062	-.046	.255	.103
INN03	.071	<b>.863</b>	.024	.116	.307	.074
RIS01	.230	.311	<b>.677</b>	.263	.219	.342
RIS02	-.008	-.131	<b>.666</b>	-.013	.122	.154
RIS04	.194	.198	<b>.698</b>	.275	.212	.104
RIS05	.126	.105	<b>.779</b>	.083	.278	.175
FIN01	.223	-.144	.056	<b>.666</b>	-.092	-.216
FIN02	.462	.357	.441	<b>.627</b>	.056	.231
FIN03	.528	.065	.046	<b>.799</b>	.066	.147
STG01	-.043	.302	.110	-.015	<b>.592</b>	.063
STG02	.128	.160	.272	.055	<b>.846</b>	-.010
STG03	-.020	.294	.199	-.019	<b>.882</b>	-.137
SAT01	.112	.080	.241	.020	-.014	<b>.808</b>
SAT02	.208	.183	.299	.037	-.013	<b>.789</b>
SAT03	.241	.025	.057	.122	.013	<b>.653</b>

Source: Field Work (2021)

**Assessment of the Structural Model**

Standard bootstrapping procedure was used with a number of 5000 bootstrap samples and 356 cases to assess the significance of the paths (Henseler *et al.*, 2009; Hair *et al.*, 2013). Table 4.12 summarizes the results of reflective measured constructs, pro-activeness, innovative ness, risk- taking and export

performance by showing the original outer weights estimates, the t-values and the corresponding significance levels marked in asterisks as well as the p values.

**Table 4.3: Test of Hypotheses**

Hypotheses	Beta	T Statistics	P Values	Decision	(f <sup>2</sup> )
Ho1: Proa ctiveness -> Export Performance	0.244	4.652***	0.000	Rejected	0.094
Ho2: Innova tiveness -> Export Performance	0.371	5.968***	0.000	Rejected	0.159
Ho3: Risk-taking -> Export Performance	0.248	3.725***	0.000	Rejected	0.071

Notes: Note: \*\*\* (P<0.01), \*\* (P<0.05), \*(P<0.1)

**Ho1:** Pro-activeness has no significant effect on the export performance of SMEs in Kano The result from the Table 4.3 shows that proactiveness has positive and significant effect on export performance of SMEs in Kano, with  $\beta=0.244$  and  $p=0.000$ . Thus Ho1 is not supported and therefore rejected at 5% level of significance, since there is enough statistical evidence to reject the null hypothesis, the study conclude that proactiveness has positive and significant effect on export performance of SMEs in Kano. Similarly, **Ho2:** Innovativeness has no significant effect on the Export Performance of SMEs in Kano.

The result of the study as shown in Table 4.3 revealed that innovativeness positively and significantly affects export performance of SMEs in Kano, with  $\beta=0.371$  and  $p=0.000$ .

Thus, **Ho2** is not supported and therefore rejected at

5% level of significance. There is adequate statistical

evidence to reject the null hypothesis and the study therefore concludes that innovativeness has positive and significant effect on export performance of SMEs in Kano. Moreover, **Ho3:** Risk-taking has no significant Effect on the Export Performance of SMEs in Kano. The result from Table 3.4 shows that risk-taking positively and significantly affects export performance of SMEs in Kano, with  $\beta=0.248$  and  $p=0.000$ . This result does not support Ho3 and therefore rejected at 5% level of significance. Since there is enough evidence to reject the null hypothesis, the study therefore concludes that risk-taking has positive and significant effect on export performance of SMEs in Kano. This study also employed coefficient of determination value) as one of the criteria to assess the structural model in PLS-SEM (Hensler *et al.*, 2009). R- Squared is a measure

of the proportion of an endogenous construct's variance that is explained by its predictor construct (Hair *et al.*, 2013). The acceptable level of are 0.25, 0.50, 0.75 for endogenous variable and could be described as weak, moderate, or substantial (Hair *et al.*, 2011). While minimum, an acceptable level of R squared is 0.10. The research model explained 50% of the variance in export performance. This implies that proactiveness, innovativeness and risk-taking collectively explained 50% of the variance in endogenous variable (export performance). Thus, using the criteria of Falk and Miller (1992) and Chin (1998), export performance (endogenous variable) could be considered moderate. In addition to the assessment of values of all endogenous variables, this study also evaluates effect size. This shows the effect of particular exogenous latent variable on endogenous latent variables through the means of changes in the R- squared (Chin, 1998). Cohen (1998) suggests that  $F^2$  value of 0.02, 0.15 and 0.35 as weak, moderate and strong effect respectively. Table 4.3 shows the result of the effect size of each of the latent variables. The exogenous constructs (proactiveness, innovativeness and risk- taking) explained export performance (the endogenous variable) have effect sizes of 0.094, 0.159, and 0.071 respectively. Thus, the effect size of each of the constructs on endogenous construct, applying the Cohen's (1998) recommendation, for risk taking; weak, innovativeness; moderate, and pro-activeness; weak.

In addition to evaluating effect sizes and magnitude

of  $R^2$  values as a criterion for predictive accuracy, Hair *et al.*, (2013) suggested that researcher should also examine Stone-Geisser's  $Q^2$  value (Geisser, 1974). This is usually used as supplementary assessment of goodness of-fit in Partial Least Squared Structural Modeling (Duarte & Raposo, 2010). The major criterion stipulated before blindfolding could be used; endogenous latent variables needed to have a reflective measurement model (Sattler, 2010). The present study has a reflective measurement model and blindfolding procedure was applied to endogenous latent variables. The predictive relevance of the research model was assessed through the cross-validated redundancy measure  $Q^2$  (Ringle *et al.*, 2012). Blindfolding is a sample reuse technique that omits every data point in the endogenous construct indicators and estimate the parameter with the remaining data point set (Hair *et al.*, 2013; Henseler *et al.*, 2009). A research model with  $Q^2$  statistics (s) greater than Zero is considered to have predictive relevance (Henseler *et al.*, 2009). Table 4.4 depicts the cross validated redundancy for export performance (endogenous variables).

#### **4.Results and Discussion**

The present study examines the effect of proactiveness, innovativeness and risk-taking (EO) on export performance of SMEs in Kano. The study reveals that proactiveness, innovativeness and risk-taking positively and significantly have effect on export performance. Therefore, this finding of EO

and export performance supports the previous studies that have posited EO and performance is contextual (Hansen et al., 2011; Wales et al., 2013). Hypothesis testing reveals that proactiveness is positively and significantly ( $\beta=0.244$  and  $p=0.000$ ) influence export performance. Therefore, this finding of EO and export performance supports the previous studies that have posited EO and performance is contextual (Hansen et al., 2011; Wales et al., 2013). Hypothesis testing reveals that proactiveness is positively and significantly ( $\beta=0.244$  and  $p=0.000$ ) influence export performance. The current finding is consistent with the previous studies of Ara et al. (2019), Rua & Franca (2016), and Flores Novelo *et al.* (2016) regarding the positive effect of proactiveness on export performance but inconsistent with the study of On the contrary, the finding is inconsistent with the study of Silva et al. (2017). However, the finding of innovativeness and export performance emerged a new theory by investigating different aspects measured in both variables. The owners/managers of SMEs in Kano suggest practicing the innovation strategies on their products, marketing activities, and production process to meet the customer demand in the international market. Moreover, the current study's finding is consistent with the prior studies; Ajayi (2016), Cannavale and Nadali (2019), Flores Novelo et al. (2016). The quantitative data analysis reveals that SMEs' innovativeness positively and significantly ( $\beta=0.248$  and  $p=0.000$ ). Thus, firms with an entrepreneurial risk-taking behavior, such as incurring heavy debt or making large resource

Frishammar & Ake Horte (2007) and Okangi, (2019). The study explored SMEs' business executives applied to different proactive activities, which positively influenced export performance of SMEs in Kano. Similarly, the quantitative data analysis reveals that SMEs' innovativeness positively and significantly ( $\beta=0.371$  and  $p=0.000$ ) impact export performance of SMEs. The current study finds innovativeness of SMEs in Kano influences firms' export performance. The consequence of this study provides another research conclusion about appropriateness of EO effect on export performance as realized in prior studies of Rua & Franca (2017), Habib et al. (2020), and Bıçakcıoğlu-Peynirci et al. (2019), who have found the positive impact of innovativeness on export performance commitments, in the interest of obtaining high returns by seizing opportunities in foreign market would achieve and sustain export-performance's competitive advantage. The results of the study are in consonant with the fact that entrepreneurial orientation and performance are key factors for economic growth which should be given due attention by all the stakeholders. From the study, it has been established that entrepreneurial innovativeness should be encouraged and enhanced by improving the domestic and foreign technological networking for competitive innovations in the foreign markets. The present study examines the effect of Proactiveness, innovativeness and risk-taking (EO) on export performance of SMEs in Kano. The study reveals that proactiveness, innovativeness and risk-taking positively and

significantly have effect on export performance. Therefore, this finding of EO and export performance supports the previous studies. Moreover, this study's findings also support the previous studies that have posited EO and performance is contextual (Hansen et al., 2011; Wales et al., 2013). Hypothesis testing reveals that proactiveness is positively and significantly ( $\beta=.083$ ,  $t=.041$ ,  $p<2.013^{**}$ ) influence export performance. The current finding is consistent with the previous studies of Ara et al. (2019), Rua & Franca(2016), and Flores Novelo *et al.* (2016) regarding the positive effect of proactiveness on export performance but inconsistent with the study of Frishammar & Ake Horte (2007) and Okangi, (2019). The study explored SMEs' business executives applied to different proactive activities, which positively influenced export performance of SMEs in Kano. Similarly, the quantitative data analysis reveals that SMEs' innovativeness positively and significantly ( $\beta=.114$ ,  $t=.034$ ,  $p<3.353^{**}$ ) impact export performance of SMEs. The current study finds innovativeness of SMEs in Kano influences firms' export performance. The consequence of this study provides another research findings about appropriateness of EO effect on export performance as realized in prior studies of Rua & Franca (2017), Habib et al. (2020), and Bıcakcıoğlu-Peynirci et al. (2019), who have found the positive impact of innovativeness on export performance. On the contrary, the finding is inconsistent with the study of Silva et al. (2017).

However, the finding of innovativeness and export performance emerged a new theory by investigating different aspects measured in both variables. The owners/managers of SMEs in Kano suggest practicing the innovation strategies on their products, marketing activities, and production process to meet the customer demand in the International market. Moreover, the current study's finding is consistent with the prior studies; Ajayi (2016), Cannavale and Nadali (2019), Flores Novelo et al. (2016). The quantitative data analysis reveals that SMEs' innovativeness positively and significantly( $\beta=.209$ ,  $t=.089$ ,  $p<2.337^{**}$ ) .Thus, firms with an entrepreneurial risk-taking behavior, such as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in foreign market would achieve and sustain export-performance's competitive advantage. The results of the study are in consonant with the fact that entrepreneurial orientation and performance are key factors for economic growth which should be given due attention by all the stakeholders. From the study, it has been established that entrepreneurial innovativeness should be encouraged and enhanced by improving the domestic and foreign technological networking for competitive innovations in the foreign markets.

## **5. Conclusions**

The major objective pursued and achieved in the course of this study was to examine the effect of EO on Export Performance of manufacturing Small

and Medium Enterprises (SMEs) in Kano Nigeria. The results of the analysis depict that proactiveness; innovativeness and risk-taking have significant effect on export performance of manufacturing SMEs.

The potentials of SMEs and opportunities to carry out the roles of engine of growth, poverty reduction, generation of an employment, development and industrialization are not mirage but possible if there is a pattern shift of focus instead from primordial tendency of noisy pronouncements to a realistic thorough approach to recognize problems. Strategic entrepreneurial orientation significantly impacts on export performance of SMEs, which denotes that entrepreneur who identify new combination of productive resources within the firm and extend the frontiers of capability, and connecting several ventures with different resources and enhance the ongoing adaptation of SMEs would improve overall innovation management that would enable the firm to reconfigure its resources and provide way to experiment new idea and subsequently achieve and sustain competitive advantage in export venture. Thus, taking initiative by anticipating and pursuing new opportunities and by participating in export in international arena has become associated with entrepreneurship. The study found that the owners/ managers apply different proactive activities, which positively influence export performance. Similarly, response, by entrepreneurial approach to dynamic

customers' demands necessitates innovation; incessant improved and enhanced products which consequently strengthen the firms competitive acuity in the domestic and foreign markets. Moreover, the owners/managers of SMEs in Kano show that risk-taking propensity has effect on export performance of SMEs. Thus, internationalization, especially exporting, requires all-inclusive strategic planning which determines various levels of involvement among SMEs due to risk and advantageous perception of the managers. Entrepreneurs, who diagnose export environment as favourable, are usually pro-active and tend to hunt for necessary information to make strategic decisions for market entry and foreign operations. Firms with an entrepreneurial risk-taking behavior, such as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in foreign market would achieve and sustain export performance competitive advantage. The significant effect of entrepreneurial orientations (proactiveness, innovativeness and risk-taking) on export performance is in line with prior studies. The possible explanation for these findings of EO and export performance emerged a new theory by investigating different aspects measured in both variables. The owners/managers of SMEs in Kano suggest practicing the innovation strategies on their products, marketing activities, and production process to meet the customer demand in the international market. The results of the study are in

consonant with the fact that entrepreneurial orientation and performance are key factors for economic growth which should be given due attention by all the stakeholders. From the study, it has been established that entrepreneurial proactiveness, calculated risk-taking and innovativeness should be encouraged and enhanced by improving the domestic and foreign technological networking for competitive advantage in the foreign markets. This study makes contribution to the literature of strategic management, particularly, SMEs in Nigeria which is believed to be under researched. Hence, SMEs should be innovative, aggressive, proactive and should take calculated risk to survive in Nigeria turbulent environment; the promoter/manager should think less on funding in the successful development of his enterprise but rather ready to learn and develop learning capabilities so that they can improve their capacity to achieve and sustain competitive advantage. Owners/ managers of SMEs should embrace science and technical education; they should practice partnership and equity participation SMEs should maintain quality in production; they should honor payment obligations, management staff of SMEs should be developed.

## **6. Recommendations**

Based on the findings, this study makes the following recommendations:

i. Innovativeness has been found to have positive and significant impact on export performance of SMEs in this study. The owners/managers of SMEs

should encourage and practice innovation strategies on their products, administration, marketing activities, and production process to meet the customer demand in the international market. Hence, owners/managers of SMEs should develop novel product innovations targeted at export markets as greater innovativeness means that firms are more likely to develop multiple types of innovative new product portfolios for successful international expansion, diversification, and differentiation. As such firms should export a range of innovative new products that can serve diversified export markets and benefit from a wider range of export prices, especially for products with greater scope for quality differentiation.

Moreover, government should encourage privatization of scientific commons along with stronger intellectual property laws to make innovation more important than ever in enabling SMEs to achieve positional advantages and better international economic outcomes.

To enhance comparative advantage for Nigerian SMEs, innovative industrial clusters that have common sharing facilities should be developed in suitable locations i.e. new processing machines, refining plants and beneficial sharing facilities can be positioned in strategic location where many SMEs can benefit from and complement the work of Nigerian export promotion council (NEPC) and export processing zones.

iii. Risk taking in this study has significant effect on export performance, hence; owners/managers of

SMEs should view the foreign market as opportunity to be pursued positively despite the volatility, engenders success in export ventures. The management of SMEs should take calculated risk by always investigating the result of various prospective investments and predicts scenario of likely outcome and thus recognize key risk factors and their causal sources and then tries to manage or reduce these factors in international arena. Extreme risk that involves reckless decision making that management identified should be avoided.

Proactiveness has significant effect on export performance of SMEs in this study; Owners/managers of SMEs should have a forward looking perspective and also enthusiastic to change the

scenery of competition in international market. They should continuously scanning and searching the international environment for new opportunities. Thus, Nigerian SMEs should introduce new product ahead of competitors, anticipating and seizing future opportunities in the marketplace and gives rise to pioneering new changes

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## **Effects of Product Differentiation Strategies on the Sales Performance of Bakeries in Akure, Nigeria**

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### **ABSTRACT**

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*The study investigated the effect of Product Differentiation Strategies on the Sales Performance of Bakeries in Akure with a view to gaining some insight into how to improve the performance of the Industry. Using Survey Research Design, primary data were collected with the aid of a well-structured questionnaire, and a sample size of 181 respondents was used in the study. The data collected were analyzed using both the Descriptive and Inferential Statistics. The study empirically established that sales among Bakeries in the study area generally increased in the last five years preceding the study. Furthermore, the study revealed that the Bakeries used Product Differentiation Strategies to a very high extent. The study also established that out of the six Product Differentiation Strategies selected, Product Conformance and Product Design Strategies individually exerted a significant positive effect on the Sales Performance of Bakeries in the study area, while Product Performance Strategy exerts a significant negative effect on Sales Performance. Finally, the study recommends the strengthening of the Product Reliability Strategy, a review of Product Performance Strategy and regular Customer Satisfaction Survey with a view to enhancing the Sales Performance of Bakeries.*

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**KEYWORDS:** Product Differentiation, Sales Performance, Strategies, Bakeries

### **1. Introduction**

The teeming population and changing demography in developing countries, such as Nigeria, are responsible for differing tastes and preferences among consumers. The possibility of producing products with different tastes for diverse beneficiaries or consumers in an industry suggests the likelihood of differentiation. According to Kotler, (2000) a Firm may face

considerable competition in the marketplace with a whole market approach. To operate effectively, then, a firm with good marketing strategy will universally use a strategy of differentiation. That is, making consumers believe the firm's offer is different or better than those of the competition. Tuva (2015) sees differentiation in business as the art of marketing a

particular product or service in a way that makes it stand out against other products or services. It is one of the three main directions of competitive strategy (including “no frills” and low-price), providing benefits of products differently from the competition but for the same price or sometimes even at higher prices. This strategy targets segments where consumers value uniqueness and differentiated attributes of the purchased products (Voropajeva, 2012). Product Differentiation is thus pervasive in markets (Shafiwu & Mohammed, 2013). Differentiation can occur by manipulating many characteristics, including features, performance, style, design, consistency, durability, reliability, or reparability (Ndugu, 2011). In view of the intensifying competition in various markets, Wekesa, (2014) observed that companies must quickly grasp surprising opportunities in Product Differentiation in order to respond to threats and out-perform their rivals in order to succeed and endure. To enhance Firm Performance within the scope of sustainable competitive advantage, decisions on shaping firm’s competitive strategies in the aspect of Product Differentiation is one of the main issues for Managers to deal with. Nwewi, Onwuka and Ogbotubo (2017) estimated that almost 75 percent of breakfast diets in every household in Nigeria contain bread. There is a high level of demand for this commodity in the country. Bread is very important to the households as fuel is to the transport sector in Nigeria. The reason is not far-fetched, bread is a ready-made food that people can easily consume as it has already been

made into different tastes and for diverse uses. This is a ready-made strategic tool for bakers of bread to stay competitive in the face of opportunities to grow their business. Nwewiet *al.*, (2017) stated that entrepreneurs had seen the lucrative nature of the industry. Hence, a lot of small and medium scale businesses are going into it and launching out different techniques, to take advantage of the industry at different locations in the country. The implication of this is that, there are still enormous opportunities yet to be tapped from the bakery industry given the present fair performance of the manufacturing industry. Due to the fierce competition being experienced in the industry, bakeries need to continuously increase their operational performance, be more customer-oriented, effective and efficient in product delivery. In urban areas with high and growing population as well as a relatively high disposable income, retailers have to increasingly incorporate in-house bakeries to widen their portfolio in an attempt to hold on to their income and remain competitive (Nigel, 2010). Many researchers at different times have tried to explore how product differentiation strategies adopted by different organizations have influenced their performance well, in the face of intense competition. For instance, Nwabaka and Adegbuyi, (2021), Tintara and Respati, (2020), Nwankwere (2017), Mutunga and Minja, (2014), Innes, Kerr and Hobbs, (2007), and Walsh and Whelen, (2002) have studied how product differentiation can be a useful tool for competitive advantage and optimal organizational performance in

different industries both within and outside Nigeria. However, findings have been less consensual partly due to different approaches adopted by various organizations. Furthermore, studies conducted on the nexus between product differentiation strategies and performance of bakeries in Nigeria still appeared scanty. This study differs from the previous ones in terms of the peculiarities of the bakery industry and the study are selected. It is one of the few studies on the effect of product differentiation strategies on sales performance among bakeries in Ondo State, Nigeria.

The findings from the study would assist bakeries to

## **2.0 Review of Literature**

In this section a critical review of related literature is done.

### **2.1 Conceptual Review**

This subsection review various concepts related to study.

#### **2.1.1 Concept of Product**

According to Kotler and Armstrong (2010), a product is anything that can be offered to a market for attention, acquisition, use or consumption with a view to satisfying a need or want. This implies that a product can either be tangible or intangible (service). Meanwhile, Kotler and Keller (2009) had defined product as anything that can be offered to a market to satisfy a want or need, whereas Lancaster and Massingham (2001) defined a product as any item that can be considered as a separate item or entity which may be distinguished in some way from other products that the company produces. From the above definitions, it can be inferred that a product is aimed at satisfying some needs and wants. This study adopted definition of product by Kotler & Armstrong (2010).

ascertain the particular differentiation strategies driving sales performance thereby enabling them to leverage such strategies for improved performance. The findings will also assist policymakers by giving them an insight into the drivers of sales performance in the bakery industry to enable them put together necessary policies and strategies for enhancing the performance of the bakery industry. Therefore, the study examined the effect of product differentiation on the performance of bakeries in Akure, Ondo State, Nigeria.

#### **2.1.2 Concept of Product Differentiation**

According to Adinan and Abukari (2013), Product Differentiation is that which positions a product within the market such that the product presents a that is not common to competitors' offerings. Product differentiation exists when Firm's offerings differ or are perceived to differ from those of competing Firms on any attribute including price. Marketers attempt to position a product or service in customers' mind to convince them that the product has unique and desirable characteristics. Davcik and Sharma (2013) posited that product differentiation will create market niches and new markets, allowing entrants and/ or incumbents , to enjoy some market power over competing brands for a period of time. This study used product differentiation as defined by Adinan & Abukari (2013).

#### **2.1.3 Concepts of Generic and Specific Product Differentiation Strategies**

A strategy can be described as a general plan action for achieving one's goals and objectives (Nickols,

2011). According to Aashish (2018), there are two types of generic product differentiation strategies as follows:

**Horizontal Product Differentiation:** This entails distinctions in products that cannot be evaluated in terms of quality. Products are different but they carry the same price. While some consumers will buy one, some others will buy the other depending on their preferences.

**Vertical Product Differentiation:** This involves differences in products that can be evaluated in terms of quality. It is a case where it is possible to say that one product is better than the other because they differ in qualities. All things being equal, all rational consumers would prefer the one with higher quality to the other one if they were sold at the same price.

The specific product differentiation strategies, as espoused by Kotler (2000), used in this study are as follows:

**Features:** A product serves a basic function. The basic function can be supplemented by adding some characteristics to the product. The characteristics that supplement the basic function of the product can be termed as features. Marketers now offer their product with varying features by adding characteristics to them in order to attract customers of new segments. In addition to the basic product, a company can create additional features.

**Performance:** A product performance may be low, average, high, or superior. At a time it usually performs at any one of the above levels. Product's

performance relates to the level at which it meets a particular need. Higher quality products generate higher revenue and higher return on investment. A producer of higher quality product can also charge a premium price from the customers yet able to attract more customers.

**Conformance:** Conformance is the degree to which all the produced units are identical and meet the promised target specifications.

**Durability:** Durability refers to the expected life of a product. It is an important aspect of most product types as well as to most customers. Customers expect that the product should last long if used under normal and unusual conditions. Customers do not mind paying a premium price for a product that is perceived to be durable,.

**Reliability:** This strategy relates to the functional performance of the product. If buyers perceive that the product will perform well without a major shortcoming, they will be ready to pay a higher price. Positive perception of buyers about the reliability of the product thus gives the seller a competitive edge.

**Design:** Design refers to the arrangement of items that collectively form a product. Good design provides three important aids to the consumer: it represents the 'perceived value' of the product, it enables the company to create a 'personality' for its products, and by judicious periodical alterations in design, it creates demand through 'replacement' with more fashionable new designs. It now appears that good designs

improve the marketability of a product and ensure more profit to the firms.

#### **2.1.4 Concept of Sales Performance**

Organizational performance is how a business is able to harness resources and navigate the internal and external business environments to create value for stakeholders. According to Salahu, (2016), performance is the achievement of a particular task measured by standards of accuracy, completeness, cost and speed. As opined by Mustapha (2017), performance can be measured based on growth, market share and profitability. Hence, sales performance can be measured using sales growth (Dirisu, Iyiola & Ibidunni, 2013). The higher the index, the greater will be the sales performance of the business and vice versa.

#### **2.2 Empirical Review**

Walsh and Whelen, (2002) carried out a study on product differentiation and firm size distribution with special application to the carbonated soft drinks' industry. According to the study, regularity in the firm size distribution is not disturbed by the nature of short-run brand competition (turbulence in brand market shares) within segments. Product differentiation resulting from firms acquiring various portfolios of product attributes and stores in market evolution was found by the authors to determine the limiting of firm size distribution. With reference to Unilever Nigeria Plc, Dirisu, Iyiola and Ibidunni (2013) found that product differentiation as a tool of competitive advantage has a positive and significant influence on organizational performance.

Souki, Reis and Moura (2015) studied the behaviour of the consumers of bakery products. They found that consumers attend bakeries mostly to buy perishable food or food for immediate consumption. Besides, the consumers demonstrated positive mental association about bread, bakeries and baked products, including those produced by companies other than bakeries. In addition, consumers are not willing to pay more for baked products than for products from other industries, although they have been showing preference for baked products. This preference was based on the following parameters: minimum or basic attributes; differentiating attributes for the general public; and differentiating attributes for specific publics. Tuva, (2015) evaluated the influence of differentiation strategy on performance of branded bottled water, with special focus on the contributory roles of its various elements in influencing performance. The findings of the study show that there is a positive relationship between differentiation strategy and firm performance. Product differentiation strategy was found to contribute more to the performance of water bottling companies than service differentiation strategy. On the other hand, Nwewi, Onwuka and Ogbotubo (2017) investigated entrepreneurial thinking and competitiveness in bakery industry in Delta State, Nigeria. The study found that innovation is an element of entrepreneurial thinking that helps entrepreneurs in the bakery industry in the State to gain competitive edge over others. The study also indicated the use of modern bakery equipment, ability to offer product

differentiation, ability to maintain value creation, flexibility to effect changes as innovative ways that promote competitive advantage. The authors recommended that entrepreneurs leading in bakery industry should continue to maintain their innovative ways and possibly, improve on them, as well as make good customer relationship as their central target. Donassolo and Matos, (2013) studied the predictors of sales performance among wholesale sellers. The results obtained from the survey supported the adequacy of the model, which presented goodness of fit indices. The relationship between self-efficacy, efforts and performance has been confirmed. Self-efficacy and effort have been proven to be the main influencers of the performance of salespeople. Mwanzia (2015) sought to establish the extent of adoption of differentiation strategies and their effect on market share of the tea export firms in Kenya. The study found that the extent of adoption of differentiation strategies ranges from 66.6% to 77.8%, with the highest being value added products strategy while the least was pricing strategy. Amongst the value-added strategies, product features (quality) is the most adopted strategy while certification is the least applied strategy. The effect of differentiation strategies on market share of the firms was low at 11.6%. The study stated that this was an indication that the five differentiation strategies under study were not necessarily

being applied to influence the market share.

Ju, Tong, Hu and Sun, (2017) carried out a study on the determinants as well as on the consequences of product differentiation strategy on Chinese indigenous exporters. Using Structural Equation Modeling, they established that product differentiation strategy exerted a significant positive effect on the performance of export. Gorondutse and Hilman, (2018) also carried out a research on the effect of product differentiation on 83 selected hotels in Kano, Nigeria. Using Partial Least Squares, they established that product differentiation exerted a significant positive impact on the performance of the selected hotels. Adegbite, Osinowo, Omisore, and Ayinde, (2019) also found that service differentiation exerted a significant favourable effect on creating competitive advantage for the Nigerian Railway Corporation in Nigeria.

In a study carried out by Wambaka and Adegbuyi, (2021), using partial least squares structural equation modelling (PLS-SEM) on data obtained from commercial banks in Uganda, found a positive and statistically significant relationship between product differentiation strategy and financial performance. On the other hand, in another study carried out by Tintara and Respati, (2020) the results showed that product differentiation, service differentiation, and image differentiation had a positive and significant effect on competitive advantage in different organisations.

### **3.0 Methodology**

#### **3.1 Research Design**

The study, which was carried out in Akure metropolis, the capital city of Ondo State, Nigeria, adopted the survey research design. The city hosts a significant number of small and medium sized bakeries that supply bread and related products to other towns in the State. The bakeries located in the town formed the critical mass of the bakery industry in the State. The respondents of the study comprised the sales representatives, marketing managers and bakery owners in Akure metropolis. The total number of bakeries in the metropolis was unknown in view of the perfectly competitive structure of the bakery industry and the rate at which firms freely enter and exit the industry. Being a cross sectional study, the data were collected at a particular point in time from the respondents.

#### **3.2 Sampling Procedure and Sample Size**

Using the Cochran's Formula (1963) for infinite or unknown population, a sample size of 384 was obtained. The study adopted a multistage sampling procedure. At the first stage, 384 bakeries that have operated for not less than five years were purposively selected from the unknown population of bakeries in the study area. At the second stage, convenience sampling technique was employed in the distribution of 384 copies of the structured questionnaire to the owners, marketing manager or sales representatives of the selected bakeries in Akure metropolis. A total of 181 copies of questionnaire were retrieved, screened and considered good for analysis.

#### **3.3 Research Instrument**

The research instrument was a structured questionnaire to elicit responses from the respondents. The instrument was divided into four sections – A, B, and C. Section A solicited for general information on the background of the respondents and information on the bakeries. Sections B contained questions that assessed the extent of product differentiation strategies among bakeries in the study area. Section B had a five-point Likert scale with the following response categories from 5- Strongly Agree (SA), 4-Agree (A), 3- Undecided (U), 2- Disagree (D), 1- Strongly disagree (SD). Section C asked questions on the sales performance of the bakeries in comparison with others in the last five years. This section was evaluated using five-point rating scale of 5- Very Strong, 4- Strong, 3- Undecided, 2- Weak, 1 - Very Weak. Section B to D also asked respondents to express their opinions on the subject of each section in an open-ended manner.

#### **3.4 Method of Data Collection**

The source of data used in the study was primary data obtained via a structured questionnaire. Research instrument was distributed and retrieved from the target respondents in each of the bakeries through the help of contact persons there. The questionnaire was administered through well supervised enumerators to the respondents.

#### **3.5 Validity and Reliability of Instrument**

The questionnaire was subjected to both contents and construct evaluation to discover if the instrument

covered the content area and to ascertain if the instrument was suitable for the study. The validated questionnaire was duly pre-tested. Table 1 presents the results of reliability test conducted on the variables in the study. These include product differentiation

strategies and sale performance. The Cronbach alpha values ranged from 0.621 to 0.731. These values were good enough for analysis as it was recently reported that many studies reported that Cronbach alpha between 0.45–0.98 is acceptable (Taber, 2018).

**Table 1: Reliability Statistics**

	<b>Cronbach's Alpha</b>	<b>No of Items</b>
Product Differentiation Strategies	.731	6
Sale Performance	.621	8

**Source:** Authors' Computation of Data Obtained from Field Survey, 2020

**3.6 Method of Data Analysis**

In this study, the effect of product differentiation strategies (features, performance, conformance, reliability, durability and design) as independent variables, on sales performance (dependent variable) of bakery industry in the study area was carried out. The analysis of data was done using both descriptive and inferential statistics. The descriptive statistics were used to analyse demographic information. These included: frequency, tables, percent-tages and mean.

On the other hand, inferential statistics allowed a decision to be made concerning the stated hypothesis. The study adopted the multiple regression analysis to test the effect of product differentiation strategies on sales performance. The analysis was conducted with the aid of Statistical Package for Social Science (SPSS) version 25.

The multiple regression equation below was used to establish the relationship between the variable

$$SAP = f(FEAT, CONF, PPER, PROD, PREL, PDUR) \dots\dots\dots(1)$$

Explicitly, model (1) can be written as follows:

$$SAP_i = \beta_0 + \beta_1 FEAT_i + \beta_2 CONF_i + \beta_3 PPER_i + \beta_4 PROD + \beta_5 PREL + \beta_6 PDUR + e_i \dots\dots(2)$$

**Where:**

- SAP = Sales Performance
- FEAT = Product Features
- CONF = Product Conformance
- PPER = Product Performance
- PROD = Product Design
- PREL = Product Reliability
- PDUR = Product Durability
- $\beta_0$  = Constant

**4.0 Results and Discussion**

**4.1 Basic Information on the Selected Bakeries**

Table 2 presents information on the bakeries in Akure metropolis based on the responses from the owners, marketing managers and sale represent-tatives that participated in the study.

**Table 2: Basic Information on the Selected Bakeries**

<b>Form of bakery ownership</b>	<b>Frequency</b>	<b>Percent</b>	<b>Sales Outlets/ Distributors in Akure</b>		
Sole Proprietorship	176	97.2	No Response	5	2.8
Partnership	2	1.1	10	1	0.6
Limited Liability	3	1.7	15	2	1.1
Total	181	100.0	20	1	0.6
<b>Age of bakery</b>			50	2	1.1
No Response	2	1.1	Few	40	22.2
5 years and below	28	15.5	As many as possible	61	33.6
6 – 10 years	73	40.3	Many	69	38.0
11 – 20 years	44	24.3	Total	181	100.0
21 – 30 years	25	13.8	<b>Sales Outlets/Distributors outside Akure</b>		
31 – 40 years	6	3.3	No Response	157	86.7
41 – 50 years	0	0.0	13	1	0.6
Above 50 years	3	1.7	Fewer than 13	12	6.6
Total	181	100.0	As many as possible	2	1.1
			Many	9	5.0
			Total	181	100.0

**Source: Field Survey, 2000**

**4.2 Extent of Product Differentiation Strategies in the Bakery Industry in Akure**

The study sought to examine the extent of product differentiation strategies adopted (or in use) by bakeries in the study area. The results are presented using mean values, degree of use index, and by ranking each specific product differentiation strategy as shown in Table 3.

**Table 3: Extent of Specific Differentiation Strategies adopted by Bakeries in Akure**

<b>Strategy</b>	<b>Mean</b>	<b>Extent</b>	<b>Degree of Use Index</b>	<b>Rank</b>
<b>Product Features:</b> Characteristics that supplement the basic function of the product.	4.56	Very High	0.91	1
<b>Product Design:</b> Arrangement of items that collectively form a product.	4.50	Very High	0.900	2
<b>Product Reliability:</b> Bakery maintains a quality control at key supplier facilities and purchases superior quality raw materials.	4.41	Very High	0.882	3

<b>Product Conformance:</b> Product meets the promised target specifications.	4.35	Very High	0.870	4
<b>Product Durability:</b> Product lasts for a long time under normal and unusual conditions.	4.34	Very High	0.868	5
<b>Product Performance:</b> Product meets the need of target customers.	4.21	Very High	0.842	6

Very High = 4.21 - 5.00, High = 3.41 - 4.20, Low = 2.61 - 3.40, Very low = 1.81-2.6, Not at all = 1-1.8

**Source:** Field Survey, 2020

As presented in the Table 3, all the specific differentiation strategies are in use to a ‘very high’ extent considering the fact that, they all have mean values ranging between 4.21 – 4.56. The degree of use index were calculated from the means and ranked in order of magnitude. From the analysis of the results, feature strategy of the products was ranked first as it had the highest degree of use index of 0.910. This means that most of the bakeries used product features strategy (i.e. attributes) to differentiate their products

Product reliability strategy ranked third with a degree of use index of 0.882. This implies that the bakeries to a very high extent maintained quality control at key supplier facilities and by purchasing superior quality raw materials. The latter would guarantee the production of reliable products. When products are made from quality raw materials, the firms are shielded from possible complaints as a result of defective products. They are also able to win the heart of customers who know them for quality products.

Conformance is another strategy of product differentiation which was rated very high in terms of degree of use by the bakeries with a mean of 4.35. It ranked fourth with a degree of use index of 0.870.

in order give them competitive advantage in the market. A product’s features can be likened to the contents which the products are made of.

In addition, the product design strategy ranked second with a degree of use index of 0.900. This strategy ensures bakeries have specific arrangements of items that collectively form the products that make them different from those being produced by their rivals. The respondents stated that they have been using the design of product to a ‘very high’ extent but a little less in comparison to the features of product strategy. This means that customers always have a pre conceived idea of what meets their needs. It is this criteria that determines whether they will patronize a product or its substitutes. The implication of this is that, product must meet the promised target specifications for it to be acceptable. Hence, bakeries in the study area obtained feedbacks from consumers in respect of what exactly the consumers wanted in the products to satisfy their needs and they tried to meet the specifications.

Product durability strategy was placed in the fifth position before performance with a mean of 4.34 and degree of use index of 0.868. This implies that bakery management used the product durability strategy to a

large degree to ensure that the products lasted for a long time under normal and unusual conditions. However, the degree of use of this strategy was not as high as the earlier identified ones, since bakery products are not meant to stay for a long time if they are to be healthy foods for consumption. Hence, it was ranked among the last two product differentiation strategies. However, this strategy can distinguish a bakery from the others if it is used wisely.

The performance strategy, a measure of product’s ability to meets the need of target customers was the least used strategy according to the respondents. It had a mean value of 4.21 and degree of use of 0.842. This strategy requires that bakeries to do extra work to identify customer needs that would satisfy the consumers since the latter evaluate products before making purchase decisions.

### **4.3 Effect of Product Differentiation Strategies on The Sales Performance of Bakeries in Akure**

The study sought to establish the effect of product differentiation on the sales performance of bakeries in Akure. As the first step in achieving this objective, the study evaluated sales performance in the industry in the last five years. The study asked the respondents to show the extent to which sales turnover of bakeries increased in the last five years. Table 4 shows that 56.4 per cent and 38.7 per cent of the respondents opined that sales turnover of bakeries increased in the last five years to a ‘very high’ and ‘high’ extent respectively, while 3.3 per cent and 0.6 per cent stated that the increase has been to a ‘moderate’ and ‘low’ extent respectively. This result shows that majority of the respondents observed that sales turnover among bakeries increased to a very high extent in the last five years.

**Table 4: Extent to Which Sales Turnover of Bakeries Increased in the Last Five Years**

	Low Extent	Moderate Extent	High Extent	Very High Extent	No Response	Total
Frequency	1	6	70	102	2	181
Percent	0.6	3.3	38.7	56.4	1.1	100. 0

**Source:** Field Survey, 2020

A regression analysis was conducted to assess how sales performance responded to product differentiation strategies (features, performance, conformance, durability, reliability and design of product). The data were also pre-tested to confirm they meet the assumptions for a set of data to be used for the regression analysis.

The sample size of 181 was more than adequate given the number of independent variables (6) subjected to the test. The ratio for this analysis was 181 valid cases to 6 independent variables. This equates to 30 to 1, which satisfies the minimum requirement of 15 to 1 (Tabachnick & Fidell, 2001). The assumption of singularity was also met. A close look at Table 5 shows that none of the independent variables (features, performance, conformance, durability, reliability and design of product) correlated highly with each other. To establish the existence of multicollinearity, tolerance has to be close to zero while variance inflation factor (VIF) has to be close to 10, but that was not the situation as revealed in Table 5. The variables have Variance Inflation Factor (VIF) between 1.167 and 1.982, which indicate that all the variables have a Variance Inflation Factor (VIF) less than ten. On the other hand, their tolerance varies from 0.510 to 0.857, which are close to one. This implies that there was no multicollinearity (Coakes, 2005). The normality test is only needed for small samples of say  $N \leq 20$  or so. In view of the central limit theorem, test results are unaffected by even severe violations of normality (Van den Berg, 2021).

Since there are no violations of multiple regression assumptions, the study proceeded to establish whether the independent variables-features (*FEAT*), performance (*PPER*), conformance (*CONF*), durability (*PDUR*), reliability (*PREL*) and product design (*PDES*) affected sales performance (*SAP*) among bakeries in Akure. The strength of predictability of *SAP* by *FEAT*, *PPER*, *CONF*, *PDUR*, *PREL* and *PDES*, using the Adjusted  $R^2$  with a value 0.194 shows that approximately 19 per cent of the changes in *SAP* is caused by *FEAT*, *PPER*, *CONF*, *PDUR*, *PREL* and *PDES*.

Additionally, the coefficient section of the table shows that three of the six predictor variables individually contribute significantly to the changes observed in the dependent variable. Conformance strategy ( $\beta = 1.726, p = .002$ ) was the most significant predictor followed by product design strategy ( $\beta = 0.966, p = .029$ ), and performance strategy ( $\beta = -1.040, p = .044$ ). These imply that conformance and product design strategies individually exerts a significant positive effect on the sales performance of bakeries in the study area at 5 percent level. Performance strategy exerts a significant negative effect on sales performance of bakeries in the study area. Other strategies such as features ( $\beta = 0.655, p = .214$ ), durability ( $\beta = 0.132, p = .763$ ) and reliability ( $\beta = 0.590, p = .214$ ) are not significant drivers of sales performance among bakeries in the study area at 5 percent level.

If all the product differentiation variables (features, performance, conformance, durability, reliability and product design) constant at zero, Table 5 shows that sales performance will be 19.028 units. Taking all other independent variables at zero, a unit improvement in the product conformance strategy will lead to a 1.726 units increase in the sales performance. This suggests that by fulfilling the promised target specifications, bakeries have been able to increase their sales. Also, a unit improvement in the product design strategy will lead to a 0.966 unit increase in sales performance of bakeries in the study area. This means that the arrangements of items that collectively form the bakery products have effectively increased sales among bakeries in the study area. However, a unit improvement in product performance strategy will lead to 1.040 decreases in sales performance. This suggests that bakeries have been applying a wrong product performance strategy. This

calls for a review of the existing product performance strategy, which can be driven by findings from a regular customer satisfaction survey. These findings are in line with those of Tuva (2015) and Atikiya, Mukulu, Kihoro and Waiganjo, (2015) who established that differentiation strategies significantly influence the performance of manufacturing firms. This study has further established the bakery industry-specific drivers of sales performance. These findings are also in consonance with that of Nwewi *et al.*(2017) who revealed that product differentiation strategies have enabled bakeries to stay competitive in Delta State of Nigeria by increasing their market share. Further-more, the fact that product features, product durability and product reliability strategies are not significant drivers of sales performance among bakeries in the study area underscore the need for a regular customer satisfaction survey.

**Table 5:** Effect of Product Differentiation Strategies on the Sales Performance of Bakeries in the Study Area

<b>Model Summary<sup>b</sup></b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.470 <sup>a</sup>	.220	.194	3.01705

a. Predictors: (Constant), Design of Product, Durability, Reliability, Performance, Features, Conformance  
 b. Dependent Variable: Sale Performance

		Coefficients <sup>a</sup>						Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
Model		B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	19.028	2.837		6.708	.000			
	Features	.655	.526	.109	1.246	.214	.582	1.719	
	Performance	-1.040	.513	-.153	-2.027	.044	.786	1.273	
	Conformance	1.726	.558	.290	3.094	.002	.510	1.962	
	Durability	.132	.437	.024	.302	.763	.741	1.350	
	Reliability	.590	.473	.094	1.247	.214	.784	1.275	
	Product Design	.966	.439	.159	2.202	.029	.857	1.167	

a. Dependent Variable: Sale Performance

Source: Authors' Computation of Data Obtained from Field Survey, 2020

#### 4.4 Tests of Hypotheses

The understated hypotheses were tested using the result generated from the multiple regression analysis.

1. **H<sub>0</sub>**: Product Features Strategy does not exert a significant influence on Sales Performance of Bakeries in Akure.

2. **H<sub>0</sub>**: Product Performance Strategy does not exert a significant influence on Sales Performance

3. **H<sub>0</sub>**: Product Conformance Strategy does not exert a significant influence on Sales Performance

4. **H<sub>0</sub>**: Product Durability Strategy does not exert a significant influence on Sales Performance

5. **H<sub>0</sub>**: Product Reliability Strategy does not exert a significant influence on Sales Performance

6. **H<sub>0</sub>**: Product Design Strategy does not exert a significant influence on Sales Performance.

The result of the tests of hypotheses is presented in Table 6. The probabilities presented under "Sig."

were tested at 5% level. Hypothesis 2 in respect of product performance strategy ( $\beta = -1.040$ ,  $p = .044$ ), hypothesis 3 in respect of conformance strategy ( $\beta = 1.726$ ,  $p = .002$ ), and hypothesis 6 on product design strategy ( $\beta = 0.966$ ,  $p = .029$ ) stand rejected as their respective probabilities are less than 0.05. These suggest that product performance, product conformance and product design strategies exert significant influence on sales performance in the study area. However, hypothesis 1 in respect of product features strategy ( $\beta = 0.655$ ,  $p = .214$ ), hypothesis 4 on product durability strategy ( $\beta = 0.132$ ,  $p = .763$ ) and hypothesis 5 in respect of product reliability strategy ( $\beta = 0.590$ ,  $p = .214$ ) stand accepted as their respective probabilities are greater than 0.05. These suggest that product features, product durability and product reliability strategies do not significantly influence sales performance among bakeries in the study area.

**Table 6: Tests of Hypotheses**

Hypothesis No.	Strategy	$\beta$	T Statistic	Sig. @ (5%) Level	Decision
1	Features	.655	1.246	.214	Accept H <sub>o</sub>
2	Performance	- 1.040	-2.027	.044	Reject H <sub>o</sub>
3	Conformance	1.726	3.094	.002	Reject H <sub>o</sub>
4	Durability	.132	.302	.763	Accept H <sub>o</sub>
5	Reliability	.590	1.247	.214	Accept H <sub>o</sub>
6	Product Design	.966	2.202	.029	Reject H <sub>o</sub>

**Source:** Authors' Computation from Data Obtained from Field Survey, 2020

### 5.0 Conclusion and Recommendations

From the findings of the study, it can be concluded that product differentiation strategies are in use to a very high extent among bakeries in the study area, with product design strategy being the most adopted. The study empirically established that sales from the bakeries in the study area generally increased in the last five years preceding the study. The study further established that out of the six product differentiation strategies examined, product conformance and product design strategies individually exerts a significant positive effect on the sales performance of bakeries in Akure, while product performance strategy exerts a significant negative effect on the sales performance of bakeries in the study area. Sequel to the findings from the study a number of recommendations are hereby put forward in order to engender improved sales performance among bakeries in the study area:

i. Management of bakeries should build on their product conformance and product design strategies,

which constitute their strengths, to drive sales performance.

ii. Since product reliability strategy (i.e. bakery maintains a quality control at key supplier facilities and purchases superior quality raw materials) does not significantly influence sales performance, there is need to strengthen this strategy in order to attract more sales.

iii. In view of the product performance strategy's negative contribution to sales performance, management of bakeries need to review this strategy with a view to ensuring a turnaround of its contribution to sales.

iv. Management of bakeries should ensure a regular and comprehensive customer satisfaction survey in order to identify customers' needs with respect to their products in order to take informed decisions on the appropriate strategies to adopt with a view to increasing sales.

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## Impact of Human Resource Development Programmes on Employee Performance: A Study of Academic Staff in FCE Zaria, Nigeria.

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### ABSTRACT

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*The study was carried out with two specific objectives which are to examine the impact of in- service and workshop training programmes on academic staff job performance in College of Education, Zaria, Nigeria. Two research questions were raised in line with the objectives and hypotheses. Descriptive survey design was adopted for investigations and collection of data. The total population of the study was 914 academic staff. Through stratified random sampling techniques, the total sample size for the study was drawn. This was made up of 120 Academic staff obtained as recommended by Research Advisor (2006). The instrument used for this research was structured questionnaire designed by the researchers. The instrument was validated by experts with the reliability coefficient of 0.72 realized. The research tool used was Chi-square ( $X^2$ ) at 0.05 significant level. From the findings, it was established that Regular In- service training has positive impact on academic staff job performance which has helped them to learn how to plan lesson well, master their subjects, control their classes and evaluate lessons and this enhances their performances in the class. The study also found that, with regard to the impact of workshop on the academic staff job performance of College of Education, results showed that mentoring enhanced the job performance of academic staff. It was recommended therefore that management of the College of Education should create an enabling environment for academic staff to enjoy in-service and workshop training by supporting them financially and morally to aspire for further studies as these will improve their performance.*

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**KEY WORDS:** Human Resource, Development Programmes, Academic Staff, Performance

### 1. Introduction

Building a solid academic staff program influences the realization of the Colleges of Education mission statement. Employee development refers to the human resource programs designed to enhance the value of employee after they have joined the

organization. It includes employee training and orientation, which involves giving employee experience designed to foster learning geared towards proper preparation for job performance. The most important roles of the Colleges of Education system

in any society apart from teaching are development of new knowledge, research work and community services is for the overall upgrade of learners' skills, knowledge and technical process towards personal and nation's development. These cannot be achieved without proper planning of human resource development. New employees are often uncertain about their roles and responsibilities in organisations, hence, job demands and employee's capabilities must be balanced through human resource development (Riley & Baldrige, 2018).

Human resources include personnel from ministry of education, Board of Government, the teachers and students as well as other stakeholders in the society. Human resources in education are the students, teaching staff, non – teaching staff, bursar, librarian, laboratory attendants, clerks, messengers, mail runners, gate-keepers, gardeners and cooks as well as educational planners and administrators. Human resources, according to Nwaogugbe, (2014) represented personnel department of an organisation. For secondary schools, it is the principals, teachers and non-teaching staff of the school. The human resources available in school both in quantity and quality, their management determine the quality of the products. The school human resource is the bridge between the various school resources like material, finance, time and curriculum. It ensures synergy among the resources in the school to determine the quality of goal attainment.

Staff development programmes provide opportunities for staff to increase their knowledge, skills, experiences and understanding thereby improving their job performances. Staff development is a process of enhancing the capacity of the teachers to be effective and efficient in their ability to accomplish the predetermined objectives of the school system. FGN (2008) stated the major functions of higher education to include the development of new knowledge through research, the training of very high level personnel through teaching and the provision of services to the society. This means that human service development may make the works or teaching functions of academics to remain sound or not. It is directed towards the improvement of teachers and the focus should be areas where skills are inadequate. It is also for the purpose of upgrading and bridging the gaps with much interest to provide the need for creativity and flexibility in academic activities. In other words, ability is stimulated thereby creating an environment in which it becomes easier to explore, becoming more proactive and commands changes in the organization.

Training is the organised way in which organizations provide development and enhanced quality of new and existing employees. Training is viewed as a systematic approach of learning and development that improve individual, group and organization (Greicar, 2013). Thus, it is the series of activities embarked upon by organization that leads to knowledge or skills acquisition for growing purposes.

Colleges of Education in Nigeria are the train – the-

trainers' college as they are responsible for the production of teachers at the primary and secondary school levels. The colleges as stated in the Colleges of Education Act (Decree of 1986) are to perform the following: provide full time courses in the teaching, instruction and training in (i) technology, applied science, humanities and management. (ii) Such other fields of applied learning relevant to the development of Nigeria, conduct courses in education for qualified teachers, arrange conferences, seminars and workshop relative to the field of learning specified in paragraph 'a' of this section; and its performance function as in the opinion of the council may sense to promote the objectives of the college (FGN, 1986).

The Nigeria Certificate in Education is the basic qualification for teaching in Nigeria; it is a sub-degree (certificate course) and a professional teacher diploma which is obtained after three years full-time at the College of Education. Muktar (2015) observed that there has been greater awareness that teachers who were trained some few years ago are not adequately equipped for effective teaching except complemented by in-service training

The need for lecturers in Colleges of Education to improve their knowledge, skills, attitude and behaviours while on the job is more critical now in the developing nation like Nigeria than ever before for a number of reasons. For example, academic programmes in our colleges rarely adequately prepared students as finished products for their future position as teachers and their accompanying responsibilities (Pretomode, 2001), Peretomode and

Chukwuma (2014) moreover said the issue of quality assurance to ensure credibility of certification is essential in teacher production.

The human resources are human skills, abilities and knowledge of the persons who are the members of the systems while the material resources are referred to as the raw materials that will be used to produce other goods and services, that are for consumption, saving and investment which represent potential claims on goods and service. It is with this background that this study was carried out on the Impact of Human Resource Development on Academic Staff Job Performance in Federal College of Education (FCE), Zaria.

In the time past, in spite of management intervention in Federal College of Education (FCE), Zaria, the institution's staff performance score-card largely remained poor and inefficient (Muktar, 2015). The intention of any organization is to operate efficiently to achieve its stated objectives. This can only be achieved through effective and efficient utilization of both human and material resources. Colleges of Education have the objective of training students to acquire National Certificate of Education (NCE) and Bachelor of Education (B.Ed) Certificates in their various field of specialization, achieving this laudable objective depends largely on the quality of their staff which constitutes both academic and non-academic of the institutions. Some years back the College of Education, Zaria, witnessed low quality in the performance of its staff.

On the part of the academic staff, there is poor research knowledge, inexperience in setting examination questions, marking and grading of students and poor inter personal relationship with the students and co-staff. For the non-academic staff, their non-performance and low service delivery is evident from poor knowledge of keeping records and filling system, poor minutes writing, delay in work, and inability to cope with the new technology such as the use of computers and other office equipment. The Management of the college realizing these problems constituted a committee on Staff Orientation and Development Committees (SODC) to address the identified problems. To fill this yearning gap, the researchers were motivated to investigate the Impact of Human Resource Development Programmes on Academic Staff Job Performance in Federal College of Education (FCE), Zaria. Hence, the main objective of this study is to examine the impact of human capital development on the job performance of academic staff of the College of Education, Zaria, Kaduna State, Nigeria.

### **1.1 Research Questions**

This study therefore, sought to answer the following research questions;

1.1.1 What is the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria?

1.1.2 What is the impact of workshop improve the academic staff job performance in Federal College of Education, Zaria?

### **1.2 Hypotheses**

The following hypotheses have been postulated to guide the study

*H0<sub>1</sub>*: There is no significant difference in the opinions of academic staff on the impact of in- service training programmes on academic staff job performance in Federal College of Education, Zaria; and

*H0<sub>2</sub>*: There is no significant difference in the opinions of respondents on the impact of workshop on academic staff job performance in Federal College of Education, Zaria.

## **2.0 Review of Related Literature**

In this section related and relevant literature to the research are critically reviewed.

### **2.1 Human Resource Development**

Before discussing human resource development there is the need to explain the word “human resource”. Human resource may refer to latent force which is inherent in a person (Muktar, 2015). When such resource or inherent power is developed through education, training and health, the individual would be in a better position to make contribution to the group and or the society he or she belongs. Furthermore, “human resource” means the power of human physical strength. Also, it refers to power in terms of the workers available to a particular group or required for a particular task in any organization, be it educational, service or industrial organization. In economic terms, it means the labour force in a nation, including both men and women. If there are more

people than available jobs, it is called human resource surplus: if available people are fewer than jobs, it becomes human resource deficit.

Development of human resource is undertaken through formal and non-formal education in order to make workers useful to themselves and the group they are working for (Okotoni & Erero, 2015). The emerging challenge of developing organizational cultures not only support the acquisition, sharing and management of the knowledge that currently resides in individuals in an organization, but also the creation and application of the knowledge for improving business practices and processes (John, 2018).

Meanwhile, human resources development refers to the improvement in knowledge, skill, attitude and endowment of labour force so as to bring about sustained economic growth. In the past, much emphasis was laid on capital and material resources development.

However, it has now been recognized that access to capital and material resources can only be achieved if human resource is adequately developed. Besides, it has also been realized that human beings are the active agents used in accumulating capital, tapping natural resources, building social, economic and political organization, and for national development (Okotoni & Erero, 2015).

In view of the recent trend in information and communication technology and free market economy,

the nature of manpower development programme being provided has also changed. For instance, the (World Bank, 2003) advocates knowledge-based economy which relies primarily on the use of ideas and application of technology.

Thus, preparing workers to compete in a knowledge economy requires a new mode of education and training, a mode of life-long learning that encompasses learning throughout the life cycle of an individual. It includes formal, non-formal and informal education and training. According to the (World Bank, 2003), a knowledge economy rests on four pillars:

- i. A supportive economic and institutional regime which can provide incentives for the efficient use of existing and new knowledge.
- ii. Educated and skilled population who can create, share and use knowledge.
- iii. A dynamic information infrastructure which can facilitate the effective communication dissemination and processing of information.
- iv. An efficient innovation system of firms, research centres, universities, consultants and other organizations that can tap the growing stock of global knowledge, assimilate and adapt it to local needs, and create new technology.

### 3. Methodology

The research design adopted for this study was survey design. The total population of the study was 914 academic staff. Through stratified random sampling techniques, the total sample size for the study was drawn. This was made up of 120 Academic staff obtained as recommended by Research Advisor (2006). Chi-square at 0.05 confidence level was used. The instrument for data collection was a questionnaire titled: Impact of Human Resource Development Programmes on Academic Staff Job Performance in Federal College of Education Questionnaire (IHRDPASJPFQ) for academic Staff. The instrument was validated by experts. Pilot test was carried out in two Colleges of Education in the zone.

The reliability of the instrument was tested using split half method according to Akuezilo and Agu (2004).

The reliability coefficient of the questionnaire was based on the requirements internal consistency that the average was pretty high around for internal consistency that the average was pretty high around 0.72. The reliability coefficient of the questionnaire was based on the requirements for internal consistency that the average was pretty high around 0.72. This was high enough for the instrument to be considered reliable. The inferential statistics adopted was Chi-square ( $\chi^2$ ) to test the differences and bring out the causes of such differences to further check the significant differences with the degree of freedom at 0.05 level of significance.

### 4. Presentation of Results and Discussion

To answer these research questions, opinions of all respondents related to item 1-20 in the questionnaire related to the questions were collected, analyzed and discussed using frequency counts, percentages, mean and standard deviation.

**Research Question One:** What is the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria

**Table 1: Opinions of Respondents on the Impact of In-service Training Programmes on Academic Staff Job Performance in Federal College of Education Zaria**

S/N	Item Statements	A (%)	U (%)	D (%)	N	Mean	St.Dv	Decision
1	Through in-service training, academic staff learn how to plan lesson well and this enables them to perform better in the class.	108 90.0%	3 2.5%	9 7.5%	120	3.94	1.660	Accepted
2	Through in-service training, academic staff learn how to plan lesson well and this enables them to perform	110 91.7%	2 1.7%	8 6.7%	120	3.57	1.821	Accepted

3	Through In-service training, academic staff learn how to control their classes and this enhances their performances in the class.	111 92.5%	4 3.3%	5 4.2%	120	3.89	1.674	Accepted
4	Through In-service training, academic staff learn how to evaluate lessons, hence improve their performance	118 98.3%	0 0.0%	2 1.7%	120	3.41	1.781	Accepted
5	Through In-service training, academic staff learn questioning techniques, which helps to improve their performances in the class.	80 66.7%	15 12.5%	25 20.8%	120	3.59	1.846	Accepted
6	Through In-service training, academic staff learn how to carry out formative evaluation of students.	109 90.8%	4 3.3%	7 5.8%	120	3.01	1.905	Accepted
7	Through In-service training, academic staff knowledge increases and this helps to enhance their performances in the class.	105 87.5%	5 4.2%	10 8.3%	120	3.51	1.786	Accepted
8	Through In-service training academic staff learn how to effectively communicate and this enhances their performances in and outside class.	117 97.5%	1 0.8%	2 1.7%	120	3.13	1.816	Accepted
9	Through In-service training, academic staff learn how to carry out summative evaluation of students.	101 84.2%	3 2.5%	6 5.0%	120	3.19	1.868	Accepted
10	Through In-service training, academic staff learn how to introduce and present lesson, which helps in improving their <u>performance in the class.</u>	106 88.3%	2 1.7%	12 10.0%	120	2.76	1.905	Accepted

In response to items 1 to 10 in table 1 which sought the opinions of the respondents on the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria responses of all respondents were collected, analysed and discussed. Item 1 shows whether through in-service training, academic staff learn how to plan lesson well and this enables them to perform better in the class, this could be seen from the responses of the respondents where the mean of score is 3.94 which shows acceptability. In item 2, the responses of the respondents are largely agreed that through in-service training, academic staff learn how to plan lesson well and this enables them to perform better in the class with the mean score of 3.57.

Item 3, shows that the respondents all agreed with the mean scores above 3.89 that through In- service training, academic staff learn how to control their classes and this enhances their performances in the class. In Items 4 and 5, the respondents all agreed that through In-service training, academic staff learn how

to evaluate lessons, hence this improves their performance and academic staff learn questioning techniques, which helps to improve their performances in the class with the mean score of 3.41 and 3.59 respectively. Going by items 6, 7, 8 and 9, respondents largely agreed that through In-service training, academic staff learn how to carry out formative evaluation of students, academic staff knowledge increases and this helps to enhance their performances in the class and academic staff learn how to carry out summative evaluation of students with their mean scores of 3.01, 3.51, 3.13 and 3.19 respectively. Item 10 shows that through In-service training, academic staff learn how to introduce and present lesson, which helps in improving their performance in the class with the mean score of 2.76. Generally, the results show the responses as affirmative.

**Research Question Two:** In what ways does workshop improve the academic staff job performance in Federal College of Education, Zaria?

**Table 2: Opinions of Respondents on the Impact of Workshop Participations of Academic Staff Job Performance in Federal College of Education, Zaria**

S/N	Item Statements	A (%)	U (%)	D (%)	N	Mean	St.Dv	Decision
11	Through workshops, academic staff Learn how to plan lesson well and this enables them to perform better in the class.	107 89.2%	2 1.7%	11 0.9%	120	3.74	1.748	Accepted
12	Through workshops, academic staff master their subjects and this improves their performances in the class.	90 75.0%	10 8.3%	20 16.7%	120	3.76	1.734	Accepted

13	Through workshops, academic staff learn how to control their classes and this enhances their performances in the class.	109	7	4	120	3.24	1.796	Accepted
		90.8%	5.8%	3.3%				
14	Through workshops, academic staff learn how to introduce and present lesson, which helps in improving their performance in the class.	101	6	13	120	3.40	1.805	Accepted
		84.2%	5.0%	10.8%				
15	Through workshops, academic staff learn how to evaluate lessons, hence improve their performances.	102	4	12	120	3.34	1.856	Accepted
		85.0%	3.3%	10.0%				
16	Through workshops, academic staff learn how to effectively communicate and this enhances their performances in and outside class.	110	2	8	120	3.49	1.758	Accepted
		91.7%	1.7%	6.7%				
17	Workshops are organized for academic staff to enhance their teaching methods in the school.	111	4	5	120	3.49	1.815	Accepted
		92.5%	3.3%	4.2%				
18	workshops are organized for academic staff to enhance their technical skills.	118	0	2	120	3.45	1.756	Accepted
		98.3%	0.0%	1.7%				
19	Academic staff are allowed to go for workshops training.	80	15	25	120	3.47	1.799	Accepted
		66.7%	12.5%	20.8%				
20	Academic staff are encouraged to attend workshops.	109	5	6	120	3.95	1.94	Accepted
		90.8%	4.2%	5.0%				

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In response to items 11 to 20 in table 2, which sought the opinions of the respondents on the impact of workshop on academic staff job performance in Federal College of Education, Zaria, responses of all respondents were collected, analysed and discussed.

Item 11 shows whether through workshops, academic staff Learn how to plan lesson well and this enables them to perform better in the class. This could be seen from the responses of the respondents where the mean of score is 3.74. The respondents expressed an agreement towards the statement.

From item 12, the responses of the respondents all agreed that through workshops, academic staff master their subjects and this improves their performances in the class with the mean score of 3.76.

Item 13, shows that the respondents all agreed with the mean score of 3.24 that through workshops, academic staff learn how to control their classes and this enhances their performances in the class.

In Items 14 and 15 the study revealed that through workshops, academic staff learn how to introduce and present lesson, which helps in improving their performance in the class and academic staff learn how to evaluate lessons, hence improve their performances with the mean score of 3.40 and 3.34 respectively.

Going by items 16, 17, 18 and 19 respondents all agreed that through workshops, academic staff learn

how to effectively communicate and this enhances their performances in and outside class, Workshops are organized for academic staff to enhance their teaching methods in the school, workshops are organized for academic staff to enhance their technical skills and academic staff are allowed to go for workshops training. These have mean scores of 3.49, 3.45, 3.47 and 3.95 respectively.

Item 20, shows that overall, academic staff are encouraged to attend workshops with the mean score of 3.35. Generally, the results expressed the responses as affirmative.

#### **4.1 Testing of the Hypotheses**

The hypotheses tested have results that are related to the variables in the research objectives which expressed opinions of the respondents of whether in-service training programme and workshop improve the academic staff job performance in Federal College of Education, Zaria.

**Hypothesis 1:** There is no significant difference in the opinions of academic staff on the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria.

The test instrument administered on academic staff is used to obtain data for the study while Chi-square ( $\chi^2$ ) is used in testing the hypothesis. The Summary of data collected and analyzed in respect to hypothesis one is presented in Table 3 below.

**Table 3: Summary of Chi-Square ( $X^2$ ) on the Impact of In-Service Training Programmes on Academic Staff Job Performance in Federal College of Education, Zaria.**

N	$X^2_{cal}$	Df	$\alpha$	p-value	Decision
120	096.1654	119	0.05	0.701	Retained

As seen in table 3, it is evident that, p-value  $0.701 > \alpha = 0.05$  level of significance. This means the p-value calculated at 0.701 is greater than  $\alpha = 0.05$ . The null-hypothesis ( $H_{01}$ ) is thus, retained or accepted.

**Hypothesis 2:** There is no significant difference in the opinions of academic staff on the impact of mentoring on academic staff job performance in Federal College of Education, Zaria.

Therefore, there is no significant difference in the opinions of academic staff on the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria.

The test instrument administered on academic staff is used to obtain data for the study while Chi-square ( $x^2$ ) is used in testing the hypothesis. The Summary of data collected and analyzed in respect to hypothesis one is presented in Table 4.

**Table 4: Summary of Chi-Square ( $X^2$ ) on the Impact of Workshop on Academic Staff Job Performance in the Federal College of Education, Zaria.**

N	$X^2_{cal}$	Df	$\alpha$	p-value	Decision
640	53.739	639	0.05	0.092	Retained

As revealed in table 4, it is evident that, p-value  $0.092 > \alpha = 0.05$  level of significance. This means the p-value calculated at 0.092 is greater than  $\alpha = 0.05$ . The null-hypothesis ( $H_{02}$ ) is thus, retained or accepted. Therefore, there is no significant difference in the opinion of academic staff on the impact of workshop on academic staff job performance in Federal College of Education, Zaria.

#### 4.2 Discussion of Findings

The study investigated the Impact of Human Resource Development Programmes on Academic

Staff Job Performance in Federal College of Education, Zaria. In response to items 1 to 10 in research question one which sought the opinions of academic staff on the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria, responses of all respondents were collected, analysed and discussed. Going by the respondents' opinions on items 1, to 10 where no respondent had less than 55% in respect of agreement, it is evident that there was a positive perception from the respondents on the impact of in-service training programmes on academic staff job

performance in Federal College of Education, Zaria. It is believed that through In-service training academic staff learn how to effectively communicate and this enhances their performances in and outside class. In all, the respondents showed a higher perception of their response on the impact of in-service training programmes on academic staff job performance in Federal College of Education, Zaria. The hypothesis leading to this finding is retained or accepted because the p-value is 0.701 which is higher than 0.05 level of significant. This is in contrast to the study conducted by Uhuru (2013) titled "Impact of Employee In-service Development Programs on Organizational Commitment in Public Universities in Kenya. The findings of the study revealed that those employees' development and support influence performance in public universities to an extent with the p-value is 0.01 which is lower than 0.05 level of significance.

In summary, the hypothesis leading to this present research finding is retained or accepted of which the p-value is 0.701 which is higher than 0.05 level of significant while Uhuru study was rejected of which the p-value was 0.01 which is lower than that of 0.05 set for significant level. In response to research question two which sought the opinions of academic staff on the impact of workshop on academic staff job performance in Federal College of Education, Zaria, responses of all respondents were collected, analysed and discussed. Going by the respondents' opinions on items 1 to 10 where no respondent with less than 65%

in respect of agreement, it is evident that there was a positive perception from the respondents toward impact of workshop on academic staff job performance in Federal College of Education, Zaria. It is believed that through workshop, there is always room for Academic staff to develop themselves. In all, the respondents showed a higher perception of their response on the impact of workshop on academic staff job performance in Federal College of Education, Zaria. The hypothesis leading to this finding is retained of which the p-value is 0.092 which is higher than 0.05 level of significant. This is in line with the study conducted in Lagos by Yilfashewa (2012) carried out as a Doctorate thesis research titled "Staff Development as an Imperative Avenue in Ensuring Quality Workshop on the staff performance in the university. The findings of the study revealed that continuous professional development has been perceived as the useful avenue of teachers' continuous and life-long learning because the p-value is .034 which is lower than 0.05 level of significance. From the findings, the study revealed that regular in-service training has positive impact on academic staff job performance which has helped them to learn how to plan lesson well, master their subjects, control their classes and positive impact on academic staff job performance which has helped them to learn how to plan lesson well, master their subjects, control their classes and computed probability is 0.701 which is higher than the p-value of level of significance.

## **5. Conclusions**

Based on the findings of the study, the following general conclusions are made:

In-service training programme had a positive impact on the academic staff job performance of Federal College of Education, Zaria, that through in-service training academic staff learn many teaching skills.

## **6. Recommendations**

Based on the findings of the study, the following recommendations are hereby made: Management of the Federal College of Education, Zaria should create an enabling environment for academic staff to enjoy in-service training by supporting them financially and morally to aspire for further studies as this will

Moreover, participation in workshops had positive impact on the job performance of academic staff of Federal College of Education, Zaria, by enhancing the knowledge generally. It also helps academic staff learn how to carry out formative and summative evaluation, effectively communicate both in and out of the class

improve their performance; and workshops should also be organised by the Management of the Federal College of Education, Zaria related to the use of modern techniques of teaching regularly to improve academic staff skills in their assignments;

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## **Mediating Effect of Firm's Growth on the Relationship between Leverage and Performance of Consumer Goods Firms in Nigeria**

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### **ABSTRACT**

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*This paper examined the Mediating Effect of Growth on the relationship between Leverage and Performance of Consumer Goods Firms in Nigeria for the period of 2012-2017. The sample consists of a balanced panel data of 17 companies from consumer goods sectors listed on the Nigerian Stock Exchange. The study utilized econometrics regression models to test the mediating effect of growth on the relationship between leverage and performance of consumer goods Firms in Nigeria. The result shows that independent variable (leverage) have significant effect on performance of the sample firms. It was also found that sales growth (mediating variable) have significant effect on performance. Also, the result reveals that leverage have significant effect on sales growth. As, all path c, a, and b are significant, it can be concluded that the sales growth can explain the relationship between leverage and firms' performance. However, path c' is not significant which shows the sales growth is fully mediating the relationship. In fact, leverage does not have any significant relationship with Firms' performance (ROE) in the present of sales growth (full mediation effect). Therefore, it's recommended that the firms in the sector should be more of equity financed than debt by sourcing more of equity in their finance ratio and avoiding too much debt, since firms' performance can be strengthened and enhanced by raising the level of sales growth.*

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**KEYWORDS:** Growth, Firms' Performance, Leverage, Consumer Goods, Nigeria

### **1. Introduction**

Firm performance is a researchable area in finance, but still has a lots of gaps to bridge that is why is termed as evergreen topic for research purpose (Abbasi & Malik, 2015). Every firm need to maximize the shareholder's wealth and this objective could also be achieved by reducing the cost and enhancing the profitability of the firm (Ibrahim &

Bello 2019). Furthermore, the firm performance has its further influence on cost of equity and as a result of high profitability the firms could have more retained earnings, which may lead to a reduction in the cost of equity (Myers, 1977). Therefore, the firm performance has its own significance for research purpose. In summary, firm performance is a

construct of great bear on many interest groups (i.e. investors). Meanwhile, leverage simply means the extent to which a business or investor is using the borrowed money as it measures how much firm uses equity and debt to finance its assets (Ibrahim & Bello, 2019). Ur-Rehman, (2013) mention that as debt increases, financial leverage increases. Some commonly believe that a better mixture of an organization's capital is the oil that lubricates its performance and growth (Kakanda, Bello & Abba 2016). Noghondari and Noghondari (2017) conducted a research to investigate the mediating influence of financial leverage between the ownership concentration and financial corporate performance and findings are showing that the financial leverage explains the relationship between the ownership concentration and corporate financial performance. Moreover, the expansion of companies constitutes one amongst the central topics of interest to economists, scholars and business, due to its role in economic science. Additionally, firm's growth is of considerable interest to policy-makers based on its importance for job creation and productive growth (Coad & Hölzl, 2012). Ibrahim and Bello (2019) reported that regulative policy programs are often designed to support firm's growth, hoping that these programs end in a creation of jobs. Moreover, firm's growth is a debated topic in business media, as many of the foremost business print media (e.g. The Business Week Magazine by Bloomberg or the Fortune Magazine) are annually honoring fast growing companies (Nicholls-Nixon, 2005).

In summary firm's growth is a vital topic for many interest groups and it is almost exclusively regarded as a positive phenomenon across these stakeholders. Nevertheless, the studies of (Ramlan & Nodin, 2018; Jeleelá & Olayiwola, 2017; Ramli & Nartea, 2017) showed that leverage is positively related to firm financial performance. Additionally, the studies of (Abdul Jeleel & Olayiwola, 2017; Matar & Eneizan, 2018) showed negative significant relationship between leverage and firm performance.

Also the studies of Gohar, Rehman, Shahid, and Baig, (2015) showed that leverage and firm performance are not related. On the other hand the studies of (Zare, Farzanfar & Boroumand, 2013; Anton, 2016) showed significant positive relationship between leverage and firm growth, where the studies of Sarchah and Hajiha, (2013) and Tuominen, (2015) reported that there is significant but negative relationship between leverage and firm growth. And the study of Yasemia, Khairollahi, Fatahidehpahni and Jalilian, (2014) reported leverage has no significant effects on firm's growth. Abbasi and Malik, (2015) argued that future study ought to check the mediating impact of leverage (Debt equity ratio) on firm's growth and firm's performance, this suggestion made the researchers to raise the following question; is it possible for growth to have effect on leverage? If no, therefore leverage will not mediate the relationship and ideally some people argued that as a firm grow in term of its assets, sales and profit etc.

There is no need for that firm to borrow from external source of finance (i.e. banks) because it will continue ploughing back its profit into the business. Ramlan and Nodin, (2018), suggested that future research needs to be conducted on the scope of the topic “the effect of leverage, liquidity and profitability on companies’ performance”. However, the consumer goods sector is selected for this study because of its importance to Nigeria’s GDP (Gross Domestic Product). For instance, the consumer goods sector is the third largest sector in Nigeria (NSE Factbook, 2019). There are twenty two (22) companies under the consumer goods sector as at March, 2019 (NSE Fact book, 2019). The sector plays a very active role in the Nigerian stock market and contributes significantly to the nation’s exports and also the sector contributes about twenty one percent (21%) to the gross domestic product (GDP) of Nigeria in 2014 (Uchiena, Olayinka, Nwanneka, & Uzoma, 2017). But recently the consumer goods companies’ profit was down by forty one percent (41%) in 2016, the profit after tax for the year 2016 was N67 billion compared to N114.8 billion for 2015 even though, in 2017, 2018 and 2019 there was a slight improvement as the economy of Nigeria is gradually increasing, but still some companies (i.e. McNichols, 7up bottling company, and Cadbury’s) are performing poorly. Therefore, based on the gaps identified in the literature the main objective of this paper is to examine the mediating effect of firm growth on 2017, 2018 and 2019 there was a slight improvement as the economy of Nigeria is gradually increasing,

but still some companies (i.e. McNichols, 7up bottling company, and Cadbury’s) are performing poorly. Therefore, based on the gaps identified in the literature the main objective of this paper is to examine the mediating effect of firm growth on the relationship between leverage and performance of consumer goods firms listed on the Nigerian Stock Exchange (NSE). Precisely, the study will:

- i. To determine the relationship between leverage and firms’ performance of consumer goods companies in Nigeria.
- ii. To determine the relationship between leverage and sales growth of consumer goods companies in Nigeria
- iii. To determine the relationship between sales growth and firms’ performance of consumer goods companies in Nigeria.
- iv. To determine if sales growth explains the relationship between leverage and firms’ performance of consumer goods companies in Nigeria.

## **2. Literature Review**

Although several researchers have studied the link between leverage and company performance, but they have failed to get a consensus, and the research conclusions are quite different. Some studies believe that there is a positive significant relationship between financial leverage and corporate performance i.e. Kuria, (2014); Maria, (2014); Tsuruta, (2015); Vithesonthi and Tongurai (2015); Vinayagamoorthi, (2015); Jejeleá and Olayiwola (2017); Ramli and Nartea (2017) and Ramlan and Nodin (2018). Debt

financing could reduce the free cash flow of companies, thus increasing their value (Jensen, 1986). The increase of firm debt ratio could reduce the agency costs associated with external equity (Berger & Udell, 2006).

Another part of the researchers believe that leverage and firm performance are significant but negatively correlated i.e. Adongo (2012); Botoc (2013); Vintilă, Nenu, & Gherghina, (2014); Rajkumar, (2014); Yazdanfar and Öhman (2014); Abdul-Jeleel and Olayiwola, (2017); Matar and Eneizan, (2018). They believe that when firms had lots of growth opportunities, the businesses would take a lots of conservative financial leverage policy, growth opportunities and debt ratios showed a reverse relationship (Myers & Turnbull, 1977).

Some studies indicate that the link does not exist between leverage and firm performance; these includes the study of Alcock, Baum, Colley, and Steiner, (2013); Innocent, Ikechukwu, and Nnagbogu, (2014) and Gohar, Rehman, Shahid, and Baig, (2015).

### **2.1. Leverage and Firm Growth**

Several studies such as Huynh and Petrunia, (2010); Avarmaa, (2011); Zhao and Wijewardana (2012); Zare, Farzanfar and Boroumand (2013); Anton, (2016) shows that there is positive significant relationship between leverage and corporate growth (measured in absolute or relative terms, using different variables and time spans). Other studies such as Psillaki (2010) and Sarchah and Hajiha (2013); Tuominen, (2015) show that leverage and

company growth has negative significant relationship. While the studies of Amjed (2007); Mutai, (2013) and Yasemia, Khairollahi, Fatahi dehpahni and Jalilian (2014) indicated that there is no significant link between leverage and company growth.

### **2.2 Growth and Firm Performance**

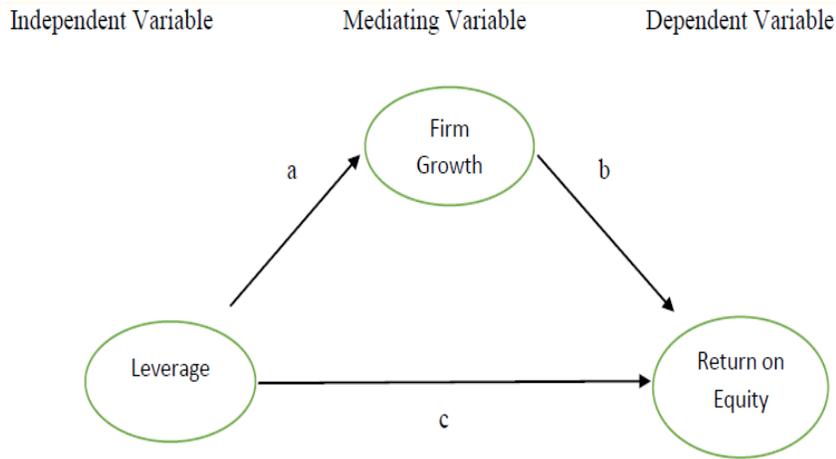
Empirical evidence about the growth influence on performance indicates a positive, negative or no statistical relationship between growth and performance. Coad (2007), Niskanen and Niskanen (2007); Bottazi, Da Rin and Hellmann (2008); Asimakopoulous, Samitas and Papadogonas (2009); Kling, Ghobadian, and O'Regan (2009); McKelvie & Wiklund, (2010); Jang and Park (2011); Kouser, Bano, Azeem, and Hassan, (2012); Maggina, (2012); Delmar, McKelvie and Wennberg, (2013); Çoban, (2014); Abbasi and Malik (2015); Chashmi and Fadaee (2016) and Fitzsimmons (2017), results shows a positive significant relationship between company growth and performance. On the other hand some studies showed a negative significant link between growth and performance i.e. the studies Glancy (1998); Markman and Gartner (2002); Cooper, Gulen, and Schill (2008); Davidsson et al. (2009); Coad (2010); Gray and Johnson (2011); Watanabe et al. (2011) and Nakano and Kim (2011). Already, Roper (1999) and Gschwandtner (2005), Serrasqueiro, Nunes and Sequeira (2007) finding shows an insignificant statistical correlation between corporate growth and performance.

**2.3 Theoretical Framework**

In order to provide a proper theoretical foundation for this paper, the researchers briefly reviews the Pecking order theory which will serve as the bedrock (Underpinning theory).

**2.3.1. Pecking Order Theory**

Pecking order theory was initially suggested by Donaldson (1961) and later on modified by Myers & Majluf, (1984). This theory states that firms prioritize their sources of funding per the principle of least effort. This means that firms initially use internal funding at startup. Once this is often depleted, they use debt funding, and once they cannot get any capital any longer through debt funding, they raise capital by searching for external equity. This phenomenon are often explained that internal funding is the most cost-effective way to raise additional capital. The access to external financing is often limited for smaller firms and even if they are able to attract external financing, they would pay a very expensive price for it. Smaller firms namely have a higher failure risk. Therefore, the possibility for smaller firms to grow is often limited. Moreover, pecking order theory claims that profitable firms use less financial leverage than firms with non-existing or low profit. This indicates that financial leverage affects the financial performance (Brealey, M & Allen, 2017).



**Fig.2.1. Research framework**

**3.0 Research Methodology**

The research design used in this paper is the ex-post facto method, as the paper entails the use of annual reports and accounts of listed consumer goods company in Nigeria. Therefore, the non- survey design is adopted to actualize the research objectives, which aim at examining the mediating effect of firm growth on the relationship between leverage and performance of listed consumer goods companies in Nigerian stocks exchange. The population of the study consists of all the 22 Consumer Goods Companies listed by the NSE as at year 2019. Filter sampling technique was used through applying criteria, for a company to be part of the sample; the company should be qualified in terms of the following: They should have been listed on Nigerian Stock Exchange as at 2011, there should be no change in the fiscal year during the period, there should be no transaction cease for more than six months, the required data should be available.

Therefore, the application of the criteria resulted to the selection of 17 consumer goods companies as sample size of the study.

Moreover, the researchers used secondary source of data for the purpose of this study. It consists of existing information which may be useful for the purpose of the study at hand. The secondary data were sourced from the companies’ financial statement for the period of 6 years from 2012 to 2017 contained in the companies’ annual reports and account. The data collected includes total assets, total equity, and profit after tax, non-current liability, total debt, total liability and total revenue. Therefore, for the purpose of presentation and discussion of the result of data generated in the course of this research regression technique of data analysis was used in STATA statistical tools of analysis. However before the data analysis, robustness test (i.e. multi-collinearity test, Hetero-skedasticity test, Normality test of the residuals) was conducted so as to ensure the validity of all statistical inferences and fitness of the model.

**4.1 Data Screening and Analysis**

Firstly, the test for multi co linearity was done before analyzing the regression model. According to Field (2000), this test is necessary because multi-co linearity can affect the parameters of a regression model. Based on the results in Table 4.4, 4.5, 4.6 and 4.7, the variance inflation factor (VIF) is less than 10 meaning that there is no multi-co linearity. To recognize the Heteroskedasticity, this study applied Breusch-Paga test. Based on Table 4.4,

4.5, 4.6 and 4.7, the P-values of all research models are greater than 5 percent, thus, there is no Heteroskedasticity problem in all four models. To check the unit root test of the panel data, Levin-Lin-Chu test is applied and the result shows that the amount of P-value is less than 5percent for all variables; this indicates that, all variables are at a stable level during the period studied.

**4.2 Result of Panel Data Regression Analysis**

The dependent variable is firm performance proxied by Return on Equity (ROE), Leverage (LEV) is the independent variable while Sales growth (CHSAL) is the mediating variable that is used to proxy firm growth. The Firm Age (AGE), Firm Size (SIZE) and Exchange Rate (EXCR) are introduced as the control variables. The results of the panel data regression for model 1-4 are presented in the table 4.1, 4.2, 4.3 and 4.4 below:

Variables	First Model			
	$\beta$	T-Statistic	P-value	VIF
LEV	-0.2074718	-2.19	0.029	1.24
AGE	0.0026386	1.58	0.114	1.18
SIZE	0.1269804	2.33	0.020	1.10
EXCR	-0.0007273	-2.77	0.006	1.07
CONS	-0.7272495	-1.75	0.080	-
$R^2 = 0.1813$ P-value = 0.0137 Hetero-Skedasticity = 0.7391				

*Source: Output of STATA (version 13)*

**4.2.1 The Result of H<sub>1</sub> Test**

The result of the finding from the 1<sup>st</sup> model; show that the R<sup>2</sup> which is the coefficient of determination of the variables was 0.1813. This implies that the model explain about 18.13% of the systematic variation in the DV. That is, about 81.87% of the variations in ROE of consumer companies are accounted for by other factors not captured by the model. Since P-value of leverage 0.029 at 5% significant level which is less than 5% (Percent).

Therefore, the first null hypothesis is rejected; this means there is negative and significant relationship between leverage and firm performance (ROE). means there is negative and significant relationship between leverage and firm performance (ROE). Therefore, path ‘c’ is significant; this mean there is direct relationship between firm growth and performance.

**Table 4.2: The Test Results according to Dependent Variable Growth in the Second Hypothesis**

Variables	Second Model			
	β	T-Statistic	P-value	VIF
LEV	-0.1342375	-2.27	0.023	1.24
AGE	0.0001638	0.25	0.806	1.18
SIZE	0.0478788	2.13	0.033	1.10
EXCR	0.0004213	1.82	0.068	1.97
CONS	-0.3568378	-2.06	0.039	-
R <sup>2</sup> = 0.1365 P-value= 0.0046 Hetero-skedasticity= 0.6666				

*Source: Output of STATA (version 13)*

**4.2.2 The Results of the H<sub>2</sub> Test**

The result of the finding from the 2<sup>nd</sup> model; show that the R<sup>2</sup> which is the coefficient of determination of the variables was 0.1365. This implies that the model explain about 13.65% (percent) of the systematic variation in the dependent (mediating) variable. That is, about 86.35% (percent) of the variations in sales growth of consumer companies are accounted for by other factors not captured by the

model. Since P-value of leverage is 0.023 at 5 percent significant level which is less than 5 percent, therefore second null hypothesis is rejected, this means there is negative significant relationship between independent variable (leverage) and mediating variable (sales growth). Therefore, path ‘a’ is significant; this mean there is negative significant relationship between leverage and growth.

**Table 4.3: The Test Results according to Dependent Variable Return on Equity in the Third Hypothesis**

Variables	Third Model			
	$\beta$	T-Statistic	P-value	VIF
CHSALE	0.2211513	1.97	0.049	1.10
AGE	0.0019257	1.24	0.215	1.02
SIZE	0.1044548	2.00	0.046	1.05
EXCR	-0.000677	-2.61	0.009	1.08
CONS	-0.6127688	-1.53	0.127	-
$R^2 = 0.1874$ P-value = 0.0179 Hetero-skedasticity = 0.9365				

Source: Output of STATA (version 13)

**4.1.1. The Results of the H3 Test**

The result of the finding from the 3<sup>rd</sup> model shows that the  $R^2$  which is the coefficient of determination of the variables was 0.1874. This implies that the model explain about 18.74% of the systematic variation in the dependent variable. That is, about 81.26% of the variations in performance of consumer companies are accounted for by other factors not captured by the model.

Since P-value of leverage is 0.049 at 5% significance level which is less than 0.05 therefore third null hypothesis is rejected, this means there is positive significant relationship between dependent variable (performance) and mediating variable (growth). Therefore, path ‘b’ is significant; this mean there is positive significant relationship between growth and performance.

**Table 4.4: The Test Results according to Dependent Variable Return on Equity in the fourth Hypothesis**

Variables ROE	Fourth Model			
	$\beta$	T-Statistic	P-value	VIF
LEV	-0.175883	-1.83	0.067	1.31
CHSA	0.1760006	1.56	0.119	1.16
LE	0.0025905	1.58	0.115	1.18
AGE	0.1163396	2.16	0.031	1.16
SIZE	-0.0007929	-3.01	0.003	1.11
EXCR	-0.6509101	-1.58	0.114	-
CONS				
$R^2 = 0.2074$ P-value = 0.0094 Hetero-skedasticity = 0.5410				

Source: Output of STATA (version 13)

#### **4.1.2. The Results of the H4 Test**

The result of the finding from the 4<sup>th</sup> model shows that the  $R^2$  which is the coefficient of determination of the variables was 0.2074. This means that the model explain about 20.74% (percent) of the systematic variation in the dependent variable. That is, about 79.26% (percent) of the variations in performance of consumer companies are accounted for by other factors not captured by the model. Since P-value of leverage (independent variable) is 0.067 at 5 percent significant level which is greater than 0.05 therefore fourth null hypothesis is rejected. Therefore, path c' is not significant; this means growth is fully mediating the relationship.

#### **4.1.3 Findings of the study**

The first objective of this study is to examine the relationship between leverage and firms' performance of consumer goods companies in Nigeria. The result indicated that there is negative significant relationship between the independent variable (leverage) and the dependent variable (ROE). The outcome is in line with the study of Lasisi, Dikkiand Okpanachi, (2017). Also the finding is contrary with that of Martis, (2013) and Chijindu and Nwaolisa, (2016). However, result is consistent with pecking order theory which claims that if the company is profitable, they are able to finance the operating business and investments with their own cash flows or retained earnings instead of debt or external capital from investors (Ebaid, 2009). The second objective of this study is to examine the relationship between

leverage and sales growth of consumer goods companies in Nigeria. The result shows that there is negative significant relationship between the independent variable (leverage) and the mediating variable (sales growth). The outcome is consistent with the study of Psillaki (2010) and Sarchah and Hajiha (2013); Tuominen, (2015). This study does not support the results of study La Ode-Sumail, Moeljadi, Atim-D. and Solimun, (2013) show that leverage not significantly associate with salesgrowth

This study is different or does not support the results of study La Ode-Sumail, Moeljadi, Atim-Djazuli and Solimun, (2013) which showed that leverage not significantly associated with sales growth.

The third objective of this study is to examine the relationship between sales growth and firms' performance of consumer goods companies in Nigeria. The result indicated that there is positive significant relationship between the independent variable (sales growth) with the dependent variable (ROE). The outcome is consistent with the study of Lasisi, Dikkiand Okpanachi, (2017). However, result is consistent with Alchian's theory of the firm, which also beliefs that fitter firms will survive and grow, while the less fitter will disappear (Alchian, 1950). Also the result is consistent with Kaldor-Verdoorn Law which stated that the productivity of a firm can be increased by enhancing the firm growth and when productivity is increased, the sale also increases thus increasing the profit of the organization (Kaldor, 1966).

The fourth objective of this study is to determine if sales growth mediate the relationship between leverage and firms' performance of consumer goods companies in Nigeria. Since, path c, a, and b are significant, it can be concluded that the sales growth can explain the leverage and firms' performance relationship. However, path c' is not significant which shows the sales growth is fully mediating the relationship. In fact, leverage does not have any significant relationship with firms' performance (ROE) in the present of sales growth (full mediation effect).

## **5.0 Conclusion and Recommendation**

The following conclusions can be drawn from the study; previous studies just discussed the direct relationship between leverage and performance. In order to comprehend the nature of mediation analysis, in this critical review a mediation model was theoretically discussed and practically elaborated via illustrative example. The results of direct relationship show that there is negative significant relationship between independent variable (leverage: debt/equity) and dependent variable (leverage: debt/equity) and dependent variable (performance: ROE). Moreover, the result also indicated that there is negative significant relationship between the mediating variable (firms' growth: sales growth) and independent variable (leverage). Meanwhile, it was

relationship. However, path c' is not significant which shows the sales growth is fully mediating the relationship. In fact, leverage does not have any significant relationship with firms' performance (ROE) in the present of sales growth (full mediation effect).

found that there is positive significant relationship between mediating variable (firms' growth: sales growth) and dependent variable (performance: ROE). The results obtained from the statistical analysis suggest the confirmation of mediation effect of sales growth in the relationship between the independent variable, leverage, and the dependent variable, firms' performance. Providing empirical evidences to show the existence of full mediation is a valuable part of the present study.

Leverage couldn't influence the performance (ROE) without the hidden variable which is the sales growth. Therefore, firms in the sector should be more of equity financed than debt by sourcing more of equity in their finance ratio and avoiding to much debt, since firms' performance can be strengthened and enhanced by raising the level of it growth.

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## **Debt Financing and Firm Financial Performance: Evidence from Non-Financial Sector of Nigeria**

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### **ABSTRACT**

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*Obtaining an optimal mix of debt and equity that will significantly improve firm performance has been challenging. This study seeks to examine the effect of debt financing on the financial performance of firms in the non-financial sector of Nigeria. A total of 74 listed firms were drawn for the period of 9 years, between 2012 and 2020. The study employed two-step system generalized method of moment (GMM) as the method of analysis. The findings of the study indicated that long-term debt and short-term debt reveal a significant and negative association with the performance of firms. Moreover, firm size was found to be significantly positive in influencing firm performance. The study recommends the stakeholders in the industry to keep low debt composition in the capital structure due to its negative influence on the firms' performance. Moreover, the firms should place more emphasis on equity financing source due to its reliability and affordability.*

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**KEYWORDS:** Short-Term Debt, Long-Term Debt, System GMM, Non-financial Sector, Nigeria

### **1. Introduction**

Developing economies are faced with difficulty in sourcing funds for business financing and a less advanced capital market. There is also the issue of less effective statutory provisions and regulations that concern information disclosure, accounting requirements, absence or inefficient securities

trading (De young, Distinguin, & Tarazi, 2018). This challenge paved way for managers to control debt financing to their advantage against the shareholders. Therefore, a study that look in to the issue of Debt Financing and its effect on Firm Performance will enhance stakeholders knowledge of that specific

field (Pham & Nguyen, 2020). The sources of finance for any kind of business rely on the relative ease at which various types of funds are available. This in return is influence by the cyclical fluctuation, Firm's Asset Attributes, the Season, Size, Rate of Growth, its expected continuity and profits stability of operations and any other aspect of its activities, which determine its position as a potential borrower. Moreover, these determinants influence its peculiar policy, resulting in management decision to preferred financing source in place of the other (Harelimana, 2018). The value of the Firm could be enhanced through a sound capital structure decision. Firms should be able to make an optimal mix of equity and debt composition of capital in order to achieve increase in firm's value. The value of the firm increases with a decrease in cost of capital, following a well-organized capital structure (Damodaran, 2001). The risk and return of shareholders is affected by capital structure decision that is seen the most pivotal decision of the management (Pandey & Sahu, 2019). Firms are faced with financial related issues particularly optimal utilization of funds in the event of their failure to make a proper plan of their capital structure. Debt is relatively cheaper source of funds because it is tax deductible and could raise the earnings and dividend per share of the firm (Adesina, Nwidobie, & A, 2015). Financial expert hold the believe that more loan taking could increase leverage due to increase in interest costs and firm performance decrease (Chowdhury & Chowdhury,

2010). The level of firms taking up debt should be based on its ability to pay off to avoid taking excessive debt. Firms should operate always operate within the optimal capital structure that balance the bankruptcy cost and tax savings benefit, knowing that sustaining high leverage result in absolute decrease in firm's value and a rise in cost of capital (Aziz & Abbas, 2019). The continue increase in debt component of firm's capital structure posed potential danger to lack of reliability associated with debt financing. The study is motivated due to recent failures of firms which are largely attributed to high debt profile; hence the study seeks to examine the influence of both debt and equity financing on the firm financial performance of non-financial sector in Nigeria.

## **2. Theoretical Framework & Literature Review**

The section provides the theoretical framework and the literature review on the effect of debt financing on firms performance.

### **2.1 Theoretical Framework**

Modigliani and Miller, (1958) argued that firm value is not affected by capital structure in perfect capital markets. However, this argument has been contested by a number of theoretical works suggesting the existence of a relationship between debt and firm performance. Therefore, they improved their previous work by claiming that the gain of debt coming from the tax shield generates a positive association between firm's profitability and debt (Jaros & Bartosova, 2015).

The arguments by the tradeoff theory hold that benefits of tax savings and financial distress should be tradeoff by the firms to have an optimal capital structure which leads to firm value maximization (Cecchetti & Krause, 2001). Agency theory claims that in order to maximize firm performance, the optimal capital structure should minimize total agency costs, which result from the conflict of interest between different agents. Accordingly, this theory defines two types of conflicts of interest, shareholder–manager conflict and shareholder–debt holder conflict, leading to opposite perspectives on the relationship between debt financing and firm performance (Jensen & Meckling, 1976).

The conflict between shareholders and managers occurs when managers follow their personal objectives and waste firm resources rather than maximizing shareholders' returns. Since debt financing implies interest payment obligations, free cash flow at the disposal of managers decreases. As a result, managers' pressure to invest in profitable projects and generate enough cash flow to satisfy these obligations increases (Jensen, 1986). As a result, debt financing increases firm performance. On the other hand, leverage increases shareholder–debt holder conflict arising from incentives of shareholders to invest sub optimally at the expense of debt holders (Jensen & Meckling, 1976). Therefore, leverage can have a negative effect on a firm's performance.

## **2.2 Debt Financing and Firms Performance**

Debt financing could be seen as a form of loans that are obtained from banks, firms or other financial institutions so as to facilitate business operations. The repayment of the loan principal together with interest expenses is made at a later period before the maturity of the debts (Cheong, Kwak, & Tang, 2015). On the other hand, financial performance is the extent to which financial objectives has been achieved. It is the act of estimating the outcome of company's activities and policies in monetary terms. It is used in the measurement of the firm's entire financial health over a particular period and is also used in the comparison of like companies across the sector or to compare sectors or industries in totality (Meigs, 1978).

A lot of studies evaluate the association between firm profitability and debt, with a divergent and mixed result. Ezeoha, (2008) found that business profitability is affected by debt-taking negatively, confirming the pecking order theory. Internal funding sources are most preferred among firms compared to external sources (Myers & Majluf, 1984). Shares and debentures are both forms of external financing for a separate entity. In the former case, the firm owes debentures holders' interest. In the latter case, the firm accrues dividends for its shareholders. The firm directors' must choose the financing source that is more appealing and cost effective. A positive association between profitability and debt is found by (Margaritis & Psillaki, 2010). On the other hand, Podpiera and Weill, (2008) opine that debt financing can negatively and positively influence firm's

profitability because of divergent prevalent economic conditions, industrial antecedents and other macroeconomic factors. Many researchers reveal relationship between debt financing and financial performance (Habib, Khan, & Wazir, 2016; Margaritis & Psillaki, 2010).

Conversely, several scholars reveal a negative association between profits and debt (Habib et al., 2016; Margaritis & Psillaki, 2010). Habib et al., (2016) examine non-financial firms' performance in Pakistan. The study revealed a variation in Pakistan economic policies from one sector to another with respect to tax relief and interest rate. For instance, the interest rate for exporters may be reduced by the government and the government settles the difference. A multiple regression analysis is used to examine 64 listed Egyptian firm's performance between 1997-2005 by (Ebid, 2009). The findings indicated that total debt and short-term debt negatively associated with firms' performance with respect to their return on assets (ROA). However, the findings revealed absence of any significant association between long term and short term debt and performance with respect (ROE) and net interest margin (NIM).

Salim and Yadav, (2012) used the regression technique to evaluate the association between firm profitability and capital structure, using a total of 237 sampled Malaysian listed firms over the period of 1995-2011. The results showed that short and long term debts are negatively correlated with the company profitability with respect to their ROE, ROA and EPS. A study by Sheikh and Wang, (2011) analyzed the

effect of capital structure on the profitability of 240 listed non-financial Pakistan firms between 2004 to 2009. Various techniques comprising of random effect, fixed effect and pooled OLS were used. The findings from the study showed that both the short-term and long-term debts are negatively associated with ROA. Davydov, (2016) in his study of BRICS countries found a positive effect of debt financing. He fails to put in to consideration contingency and situational factors that could affect the debt usage effectiveness. In their analysis of non-financial firms in China, Li and Cui, (2003) reveal a high debt to asset ratio, high ratio of return on equity and high ratio of annual sales to total assets.

Moreover, a study by Nazir and Saita (2013) indicate an inverse effect of leverage measured by long term, short-term, contractual and total debt ratios on the entire and administrative expense ratio. An empirical study on the perspective of Indian firms affirm the negative impact of debt by agency cost, as measured by operating expenses to sales ratio (Rakesh & Lakshmi 2013). Moreover, a study by Brewer and Featherstone (2017) indicate that a rise in debt level negatively affect the efficiency of Kansas Farms. There is a research gap in this type of study on the Nigerian non-financial sector, hence the need to conduct the research so as to bridge the gap.

More recent and relevant studies on the relationship between performance of companies or agency cost and debt financing include the work of Vätavu, (2015), Russell, Briggeman, and Featherstone, (2017), Pandey and Sahu, (2019) and so on. Following an

intense review of the literatures, a careful observation revealed a substantial number of contributions from scholars on the association between debt financing and its effects on agency cost and performance of firms. Javed, Younas, and Imran, (2014) found a mixed result after analysing various performance ratio to find the effect of debt. The result indicated that no significant effect on all proxies of profitability. The result show a positive effect of debt financing on return on asset (ROA) and a negative influence on return on equity (ROE). Zeitun and Saleh (2015) evaluate the relationship between firm financial performance and Gulf Cooperation Council (GCC) firms' debt financing during the recession and financial crisis of 2008. The outcome indicates a negative, significant influence of financial associated problems. Mun, Jang and Shawn, (2017) in their study of equity and debt financing among restaurant-business firms' behaviour based on the financial limitations and debt maturity. The result indicate that firms within food business focus more on equity financing compared to debt due to optimal equity and debt ratio and other financial limitations. Aziz and Abbas, (2019) in their recent study on the debt-profit association in the non-financial listed firms found an inverse and significant relationship between performance and debt. Based on the above empirical findings, the following hypotheses are developed;

**H<sub>1</sub>:** There is a significant negative relationship between short-term debt and financial performance of non-financial sector in Nigeria.

**H<sub>2</sub>:** There is a significant negative relationship

between long-term debt and financial performance of non-financial sector in Nigeria.

**H<sub>3</sub>:** There is a significant relationship between firm size and financial performance of non- financial sector in Nigeria.

### **3. Data and Methodology**

This section; deals with the design employed by the study and the methods and procedures used in conducting the study. It also deals with the population, sample size and sampling techniques employed by the study. Similarly, the sources from which data for the study were collected and the methods that were used in analysing the data so collected.

#### **3.1 Data for the Study**

The study used a panel data consisting of a total of 74 listed non-financial firms over 9 years, making a total of 666 observations. The study is conducted in the most recent financial period, between the periods of 2012 to 2020. The sample of the study was obtained through convenience sampling based on data availability of the firms within the period. The equity data of the individual firms were obtained through Thomson Reuters data stream and their respective financial report. Macro-economic data were obtained from World Bank open data source.

#### **3.1 Variable Description**

The variable in the study are classified into independent variable, control variables, macro-economic variable and dependent variable. The main independent variables are Short- Term Debt (STD)

and Long-Term Debt (LTD). The control variables are Firm Size (FS), Sales Growth (SG) & Tangibility (TNG), while the macro-economic variables included in the study are Inflation (INF) and Gross Domestic

Product (GDP). The dependent variables include Return on Asset (ROA) and Earnings Per Share (EPS). Below table contain a detailed description of the variables and their respective measurement.

**Table I. Variable Description**

Variable Name	Notation	Measurement
<b>Independent Variable</b>		
Short-Term Debt	STD	Short-Term Debt Divided by Total Assets
Long-Term Debt	LTD	Long-Term Debt divided by Total Assets
Firm Size	FS	Log of Total Assets
Sales Growth	SG	Sales Growth
Tangibility	TNG	Net Fixed Asset divided by Total Asset
<b>Macroeconomic Variable</b>		
Inflation	INF	Annual Consumer Price Index in Percentage
Gross Domestic Product	GDP	GDP Growth Rate in Percentage
<b>Dependent Variable</b>		
Return on Asset	ROA	Net Profit After Tax by Total Assets
Earnings Per Share	EPS	Net Income by Total Number of Outstanding Shares of its Common Stocks

**Source:** Compiled by the author, based on the literature, 2021

### 3.3 Model Specification and Estimation Technique

The study aims to examine the effect of short-term debt and long-term debt on the financial performance of non-financial sector firms in Nigeria. The study intends to use short-term debt and long-term debt as the main independent variable of interest on two dependent variable proxy of firms' performance; return on asset (ROA) and earning per share (EPS). Other control variables and macroeconomic variables are employed in the model. the model was developed based on the work of (Aziz & Abbas, 2019). The nature of the dependent variable; performance which is persistent, a dynamic estimator; system generalized

method of moment is employed as the technique of analysis. The system GMM has a lot of advantages as an estimation technique. The system GMM has an instrument that addresses the problems of endogeneity and provides parameters that give consistent estimates. The system GMM is less biased and addresses problems posed by OLS and fixed effect estimates. The estimates under the system GMM are more consistent and efficient.

$$PER = PER_{ijt-1} + \beta_0 + \beta_1STD_{ijt} + \beta_2LTD_{ijt} + \beta_3FS_{ijt} + \beta_4SG_{ijt} + \beta_5TNG_{ijt} + \beta_6INF_{jt} + \beta_7GDP_{jt} + \eta_i + \lambda_t + \varepsilon_{ijt} \quad 1.$$

$$ROA = ROA_{ijt-1} + \beta_0 + \beta_1STD_{ijt} + \beta_2LTD_{ijt} + \beta_3FS_{ijt} + \beta_4SG_{ijt} + \beta_5TNG_{ijt} + \beta_6INF_{jt} + \beta_7GDP_{jt} + \eta_i + \lambda_t + \varepsilon_{ijt} \quad 2.$$

$$EPS = EPS_{ijt-1} + \beta_0 + \beta_1STD_{ijt} + \beta_2LTD_{ijt} + \beta_3FS_{ijt} + \beta_4SG_{ijt} + \beta_5TNG_{ijt} + \beta_6INF_{jt} + \beta_7GDP_{jt} + \eta_i + \lambda_t + \varepsilon_{ijt}$$

#### 4. Result and Discussion

The results of the various tests conducted in the study and the findings of the study resulting from the test of the hypotheses are all presented and discussed in this section.

##### 4.1 Descriptive Statistics

The study has a total of 666 years observation, covering 9 years, from 2012-2020. The two dependent variables employed in the study are return on asset (ROA) and earning per share (EPS). ROA has a mean value of 33.3508 and a standard deviation of 6.0313 while EPS has a mean value of 62.2947 with a standard deviation of 9.4291. The main independent variables are STD and LTD has a mean value of 12.3044 and 25.2018 and a standard deviation of 3.0361 and 4.1401 respectively. Other control variables that include FS, SG and TNG have mean values of 16.6913, 1.5808 and 45.5668 respectively. The macro-economic variables maintain mean values of 10.3291 and 3.1398 for inflation and gross domestic product respectively.

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	666	33.3508	6.0313	4.6601	117.11
EPS	666	62.2947	9.4291	7.724	158.59
STD	666	12.3044	3.036	-16.239	126.553
LTD	666	25.2018	4.1410	-22.060	302.51
FS	666	16.6913	1.5501	11.5906	21.3980
SG	666	1.5808	1.7640	-	11.1301
TNG	666	45.5668	7.2262	3.2101	108.3
INF	666	10.3291	3.9658	3.2371	16.5235
GDP	666	3.1398	2.4647	1.6168	6.67133

Source: STATA 15 Result

##### 4.2 Correlational Matrix

The highest co-efficient in the matrix is -0.6872 between inflation and GDP. This clearly indicates an absence of multicollinearity problem. Relationship between the two dependent variables ROA and EPS is low and positive. ROA maintains a strong negative and positive relationship with - 0.5018 for LTD and 0.5867 for TNG respectively. Other variables maintain a weak relationship with ROA. On the other hand, all the variables maintain a negative relationship with EPS with the exception of FS which maintain a positive association with 0.0425.

**Table III. Correlation Matrix**

	ROA	EPS	STD	LTD	FS	SG	TNG	INF	GDP
ROA	1								
EPS	0.0027	1							
STD	0.0183	-0.0121	1						
LTD	-0.5018	-0.0805	-0.0222	1					
FS	-0.0191	0.0425	-0.0207	0.0604	1				
SG	-0.0150	-0.0037	0.0502	-0.0517	-0.1272	1			
TNG	0.5867	-0.0063	0.0102	-0.2275	0.0114	0.0013	1		
INF	-0.0096	-0.0055	0.0185	-0.0382	-0.0053	-0.0019	-0.0292	1	
GDP	0.0509	-0.0071	0.0172	-0.0122	-0.0444	-0.0015	0.0579	-0.6872	1

**Source:** STATA 15 Result

#### 4.1 Multicollinearity Test

There is an absence of a multicollinearity problem among the variables in the data analyzed. This is confirmed by the result obtained from the multicollinearity test, where the mean VIF is less than 10. Moreover, the variance inflation factor (VIF) and the tolerance value, revealed a value of less than 5 and greater than 0.10 respectively.

**Table IV. Multicollinearity Test**

Variable	VIF	1/VIF
GDP	1.91	0.52225
INF	1.91	0.523518
LTD	1.07	0.938795
TNG	1.06	0.944363
FS	1.02	0.976041
SG	1.02	0.979408
STD	1.01	0.99499
Mean VIF	1.29	

**Source:** STATA 15 Result

#### 4.2 Regression Result

The results of all the regressions conducted in the study are presented in this section.

##### 4.2.1 First Regression Result

This regression aims to test the influence of short-term debt and long-term debt on the return on asset of non-financial firms in Nigeria. The lagged dependents are all significant at 1% in the models. This indicates the appropriateness in using the dynamic estimator. The inference is based on the two-step system generalized method of moment. The short-term debt is significant at 1 percent and negatively associated with ROA. This implies that an increase in the rate of STD decreases the ROA of the firms, this is consistent with (Aziz & Abbas, 2019; Yazdanfar & Öhman, 2015). Long-term debt is also significant at 1% and negatively related with ROA. This shows a decrease in ROA with an increase in the rate of LTD, this is in line with (Nazir, Azam, & Khalid, 2021). The results for the control variables indicate that firm size has a significant and positive relationship with the ROA of the firms. This implies that an increase in the total asset in the firms, positively affect the performance of the firms in terms of their ROA, this

is consistent with (Pham & Nguyen, 2020). The sales growth maintains a significant positive association with ROA of the firms. This indicates that an increase in the sales level of the firms positively affect performance, this confirmed the finding of (Sener, Akben-Selcuk, & Didin-Sonmez, 2021).

percent. This indicates an increase in the firm performance with an increase in the tangibility rate. For the macroeconomic variables; inflation is not significant in the model, while gross domestic product is significant at 5 percent and positively associated with the performance of firms in Nigeria,

**Table V. Regression Result 1**

VARIABLES	ROA			
	One-step Differenced GMM	One-step System GMM	Two-step Differenced GMM	Two-system System GMM
ROA <sub>ijt-1</sub>	0.153*** (0.0299)	0.136*** (0.0126)	0.339*** (0.0245)	0.305*** (0.0175)
STD <sub>ijt</sub>	-0.0510 (0.0465)	-0.0174 (0.0187)	-0.0878* (0.0524)	-0.0812*** (0.0268)
LTD <sub>ijt</sub>	-0.294*** (0.0399)	-0.264*** (0.0337)	-0.109*** (0.0336)	-0.114*** (0.0108)
FS <sub>ijt</sub>	10.28*** (2.055)	7.667*** (1.221)	5.373*** (1.870)	4.232*** (0.585)
SG <sub>ijt</sub>	-1.475** (0.709)	-0.672* (0.392)	0.196 (0.743)	0.468** (0.227)
TNG <sub>ijt</sub>	0.890*** (0.0237)	0.905*** (0.0140)	0.833*** (0.0235)	0.856*** (0.0133)
INF <sub>jt</sub>	0.0650 (0.143)	0.0290 (0.0589)	0.0609 (0.160)	0.0499 (0.0499)
GDP <sub>jt</sub>	0.122 (0.243)	0.131* (0.0785)	0.161 (0.272)	0.168** (0.0715)
Constant	170.1*** (35.39)	123.9*** (21.64)	77.86** (32.50)	59.48*** (9.697)
Observations	518	518	592	592
Number of firm	74	74	74	74
<i>Diagnostic Test</i>				
Mean VIF	1.29			
No. of Instrument	36	43	36	43
AR(1): P-Value	0.0238	0.04591	0.3480	0.5421
AR(2): P-Value	0.4520	0.2790	0.8909	0.2116
Sargan test: P-Value	0.1034	0.4103	0.3066	0.7454

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The post estimation test indicates absence of multicollinearity and first order and second order autocorrelation problem. The instrument used is confirmed to be valid based on the Sargan test result.

**4.2.2 Second Regression Result**

This regression examines the effect of short-term debt and long-term debt on the earning per share of non-financial firms in Nigeria. The lagged dependent is significant which indicate the suitability in using the dynamic technique in the study. The two-step system GMM is used for inference due to its robustness in addressing endogeneity bias and providing consistent estimates. The main variables of interest; the short-term debt and the long-term debt are both significant at 1 percent and negatively associated with earning per share of non-financial firms in Nigeria. This indicates a decrease in the firms’ performance in the event of an increase in the debts rate, this is consistent with (Aziz & Abbas, 2019; Nazir et al., 2021).

The results for the control variables indicate that; firm size is significant and positively relates with the performance of the firms’. An increase in the size of the assets, positively influence firms’ performance, this is consistent with (Pham & Nguyen, 2020). Sales

growth is significant and positively associated with EPS of the firms. An increase in the level of sales of the firms’, result to an increase in the performance of the firms, this confirmed the findings of (Sener et al., 2021). Tangibility is significant and negatively associated with the performance of the firms. An increase in the level of tangibility negatively influenced the performance of the firm, this is in line with the findings of (Nazir et al., 2021).

The macroeconomic variables are both significant. Inflation is significant at 1 percent and positively influences the performance of the firms. An increase in inflation returns as a revenue to the firms, this is consistent with (Derbali, 2021). Gross domestic product is significant and positively relates with the performance of the firms. This implies that an increase in the general level of production in the country increase returns in terms profits to firms, this is similar with the finding of (Saif-Alyousfi & Saha, 2021).

**Table VI. Regression Result 2**

VARIABLES	EPS			
	One-step Differenced GMM	One-step System GMM	Two-step Differenced GMM	Two-step System GMM
EPS <sub>ijt-1</sub>	0.512*** (0.0565)	0.495*** (0.0100)	0.899*** (0.0270)	0.888*** (0.00458)
STD <sub>ijt</sub>	-0.384* (0.184)	-0.239*** (0.0895)	-0.518** (0.213)	-0.506*** (0.0763)
LTD <sub>ijt</sub>	-0.440** (0.174)	-0.224*** (0.0614)	-0.381*** (0.103)	-0.190*** (0.0341)
FS <sub>ijt</sub>	19.90** (8.035)	19.04*** (1.475)	11.16 (7.585)	9.691*** (0.901)

SG <sub>ijt</sub>	4.581 (2.793)	4.859*** (0.387)	8.102*** (2.929)	7.844*** (0.343)
TNG <sub>ijt</sub>	-0.0652 (0.102)	-0.0903** (0.0433)	-0.152 (0.118)	-0.194*** (0.0526)
INF <sub>jt</sub>	0.829 (0.621)	0.597*** (0.100)	1.790** (0.707)	1.481*** (0.0928)
GDP <sub>jt</sub>	0.565 (1.051)	0.330* (0.188)	1.580 (1.210)	1.164*** (0.207)
Constant	303.7** (137.7)	294.6*** (27.20)	192.4 (132.2)	160.3*** (16.72)
Observations	518	518	592	592
Number of firm	74	74	74	74
<i>Diagnostic Test</i>				
Mean VIF	1.29			
No. of Instrument	36	43	36	43
AR(1): <i>P</i> -Value	0.0470	0.0024	0.1450	0.1388
AR(2): <i>P</i> -Value	0.2104	0.1291	0.9160	0.6299
Sargan test: <i>P</i> -Value	0.1012	0.3102	0.1054	0.2240

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The post estimation test indicates absence of multicollinearity and first order and second order autocorrelation problem. The instrument used is confirmed to be valid based on the Sargan test result

### 4.3 Discussion of Main Findings and Hypotheses Testing

The study examines the effect of debt financing on the performance of non-financial firms in Nigeria. The short-term debt is significant and negatively correlate with the performance of firms in the non-financial sector. So also, the long-term debt is significant and negatively correlate with the performance of firms' in the non-financial sector. Moreover, the result of the firm size revealed a significant relationship with the two proxy of performance. From the foregoing result, all the formulated hypotheses are supported by the study findings.

### 5.0 Conclusion and Recommendations

This study examined the effect of debt financing on

non-financial firms in Nigeria. The study covers 9 years from 2012 to 2020. A total of 74 firms constitute the sample of the study. The study main finding indicates that both short and long-term debts have negative and significant influence on firm performance. Moreover, the study found a significant positive relationship between firm size and firm performance. The study among others makes the following recommendations; the firms in Nigeria should keep a minimal level of debt due to its negative effect on performance. Moreover, the firms should place more emphasis on equity financing source due to its reliability and affordability and lastly, the firms should maintain an optimal capital level because high debt level may expose the firms to insolvency risk.

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**Influence of Social Networking Sites on Online Purchase Behaviour: Mediating Role of  
Consumer Purchase Intention: A Pilot Test**

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**ABSTARCT**

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*The purpose of this study is to investigate the influence of social networking sites on online purchase behaviour regarding masters' students of Dangote Business School Bayero University Kano. Survey research design is adopted and Quantitative method of data collection and analysis was used. Thus, a structured questionnaire based on Five -point scale Likert-type scale also adapted from different sources after testing its reliability and validity and following data regularity were analyzed with small sample data with cooperation of PLS path modelling using Smart PLS 3.3 M3 software employed to ascertain the internal consistency reliability and construct validity of the constructs used in the pilot study the result was calculate the average variance extracted and the composite reliability coefficients, meanwhile, assessment of discriminant validity value of Heterotrait Monotraits ( HTMT) is below 0.90, has been established between reflective constructs.*

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**KEYWORDS:** *Social Networking Site, Online Purchase Behaviour, Consumer Purchase Intention, Pilot Test*

## **1.0 Introduction**

Online shopping has become an important part of our daily lives. This is as a result of the rapid growth of online technology into a massive global marketplace for the exchange of products and services (Anushka, Chew & Yeo, 2021). Nowadays, internet shopping is rapidly growing in developing and developed economies due to advancement in technology. Internet buying provides convenience to the online customer because of fewer efforts to purchase goods (Khan & Khan, 2018). The internet has been adopted as an essential medium in many developed countries, offering a wide range of products with 24hours availability and full coverage (Mustakim, Abdul rahman & Abdulaziz, 2020).

Furthermore, online purchasing of goods plays a significant role in the last two decades and more than 1.6 billion people all over the world are considering this method to purchase goods online, amounting to 2.20 trillion US dollars in 2019. It is expected to increase online consumers more than 2.8 billion in 2022 and retail sales increased by more than 100% than 2019 at the end of 2021 (Statistia.com, 2020). In Africa, awareness on online purchase behaviours is on increase. For instance Varrella (2020) reported that, between 2017 and 2019, the average e-commerce spending per online shopper in Africa experienced an increase up to 53 Euros as of 2019. In 2024, the average spending per digital buyer in Africa might be 64 Euros. Varrella (2020) further reported that, in 2020, 3% of all purchases in Egypt were made online.

This was the highest of e-commerce retail among the five African countries taken into account. South Africa followed with 2% while e-commerce in Kenya, Nigeria and Morocco accounted for 1% of the total retail, respectively.

In 2020, Nigeria had 99.05 million internet users. This figure is projected to grow to 108.27, 120.24, 131.68, 142.39 and 152.28 million by 2021, 2022, 2023, 2024 and 2025 respectively (Statista.com, 2021). The internet penetration amounted to 46.6% of the population in 2020 and is set to reach 65.2% by 2025. Between 2017 and 2019 the number of online buyers in Nigeria increased steadily. In 2019, the number of the shoppers reached 76.6 million, out of a population of over 200 million people (Varrella, 2020). The problems of online shopping behavior in Nigeria comprised with low Internet infrastructure, high level of illiteracy, cultural barrier, security issues, inadequate regulatory framework, and so forth, all of which have led to the low Internet penetration in the Country, and made adoption of online shopping unpopular among shoppers (Abiodun, 2017).

Nigerian Communications Commission (NCC) puts the numbers of Nigerians with access to internet at approximately 122 million. Interestingly, proportion of Nigerians with access to internet was highest among young Nigerians between 18 – 35 years (70 percent) (NCC, 2020). As a result of these challenges, not many Nigerian consumers adopt online shopping. For example, in a survey of online shopping behavior of

consumers in Nigeria, only 23.3 per cent had ever purchased goods online; 37 per cent had never visited any online shop; 18 per cent had visited 1 to 2 online shops, 24.6 per cent had visited 3 to 5 online shops, 12.6 per cent had visited between 6 to 20 online shops, and 7.8 per cent had visited above 20 online shops (Ayo, Adewoye, & Oni, 2011). The research also aims to explore the influence of social networking sites on online purchase behaviour: mediating role of consumer purchase intention among MBA Student of Dangote Business School, Bayero University Kano.

Presumably, shopping online, could result in positive or negative feedback. The problems online shopping behavior in Nigeria comprised with low Internet infrastructure, high level of illiteracy, cultural barrier, security issues, inadequate regulatory framework, and so forth, all of which have led to the low Internet penetration and Inadequate regulatory framework (Ayodele & Chigbata, 2021). Positively, Social networking site is a medium through which consumers and businesses can communicate within a limited time, allowing all parties to use, experience, and gain benefits (Dwivedi, Kapoor, & Chen, 2015). Apart from that, social media marketing uses social media technologies, channels, and software to create, communicate, deliver, and exchange offerings that are valuable for organizations and stakeholders (Tuten & Solomon, 2015).

Previous researches indicated that attitude towards social networking site is a significant predictor of making online purchases. These include: Lee (2013),

Harshini (2015), Surenderkumar (2016), Lim, Heng, Ng, and Cheah (2016), Adnan and Ahmed (2016), Hajli et al. (2017), Pütter (2017), Asif and Kaushik (2017), Timothy and David (2017), Toor, Husnain and Hussain (2017), Mestlat (2018), Lang (2018), Andreini, Trisna and Sefnedi (2018), and Roudposhti, (2018). Others are: Renu (2018), Voramontri and Klieb (2019), Renu (2019), Teo, Leng, and Phua (2019), Renu and Gupta (2020), Ali, Abass and Farid (2020), Ayodele and Chigbata (2021), Udegbe and Aliu (2021), and Olutade (2021).

Additionally, from theoretical perspectives, scholars have employed different theories to understand the underlying courses of online purchase behaviour, Theory of planned behaviour (Ajzen, 1991) (TPB), as well as Theory of reasoned action (Fishbein, 1960) (TRA), online consumer decision theory (Adam, 2010), social exchange theory (SET) and Traver (2009), envisages the consumer behavior, and TPB is the greatest theory that envisages consumer behavior (Taylor & Todd, 1995). Moreover, another study reveals that TPB theory extensively predicts consumer behaviour (Rehman et al. 2019). Despite this, TPB has some limitations in predicting consumer behaviour as this theory ignores fear, threat, and trust in determining consumer behaviour (Rehman et al. 2019). Perceived risks theory play a significant impact on internet buying behaviour and cannot ignore in decisive customer behaviour (Kamalul Ariffin, Mohan & Goh, 2018). Moreover, trust also plays a significant role in influential the online buying behaviour of customers and lack of trust reduces the online buying behaviour

of customers (Rahman et al. 2018). Therefore, the current study will use Technology Acceptance Model Theory TAM and Theory of planned behaviour (Ajzen 1991).

Although there are empirical studies that focus on various dimensions of social networking site, the current study seeks to adopt a multidimensional construct of social networking sites to include three dimensions of (Ease of use, Trust and Visual appeal). The identification of various factor in this paper has been done on the basis of the outcomes of numerous studies conducted in various contexts and cultures, and the suitability of these factors should be empirically examined in future research (Allahawiah & Tarawneh, 2018). Researchers may also propose different frameworks and models based on their own outcomes, taking the findings of the present study as a base.

Furthermore, reviewing the literature has revealed that many previous studies reported positive results on the relationship between social networking sites and online shopping behaviour (such as, Nadeem (2016), Adnan and Ahmed (2016), Pütter (2017), Asif and Kaushik (2017), Timothy and David (2017), Toor, Husnain and Hussain (2017), Mestlat (2018), Lang (2018), Andreini, Trisna and Sefnedi (2018), Teo, Leng, and Phua (2019), Renu and Gupta (2020), and Ali, Abass and Farid (2020). Few others (such as, Lee (2013), Surenderkumar and Huarng (2015), Harshini (2015),) Voramontri and Klieb (2019), Darsono and Sabri (2019), reported negative results.

These inconsistencies coupled with recommend-dation

of previous studies and limitation although the results of this study contradicts with some of the results of the previous researchers, it can be assumed that the reason for this may be due to different sample sizes or the population studied is different. Moreover, it can also be due to different studied variables for this particular research compared to previous researchers. Future researchers could possibly yield different results as well if different variables are studied or if a mediate variable is added, or more observed variables are included in the latent variable. Different methods can be further used to analyze the data or different statistical analysis within the same methodology could further be tested (Looji, 2021). Based on the recommendation from the study of Looji, (2021) consumer purchase intention could be use as a mediator, because according to traditional consumer decision model, Consumer purchase decision typically starts with need awareness, then information search, alternative evaluations, deciding to purchase and finally, post-purchasing behaviour, these advertise ments may attract customers' attention and stimulate their interesting particular products. The researcher found it worthwhile to introduce these additional variables of consumer purchase intention as a mediator In line with previous research and suggestion (Baron & Kenny, 1986). The mediator is expected to set a condition under which the relationship between social network ing sites and online purchase behaviour can be established.

## **2.0 Literature Review**

This sections critically reviews both conceptual and empirical literature relevant to the study.

### **2.1 Online Purchase Behaviour**

Online purchase behaviour (also called online shopping behaviour and Internet shopping/purchasing behaviour) refers to the Internet method of buying goods or services (Mustakim, Abdul rahman & Abdulaziz, 2020). Jadhav and Khanna (2016) defined Online Shopping behaviour as a kind of an individual's overall perception and evaluation for product or service during online shopping which could result in bad or good way. Bhatti, Rahman, kamal and Akram (2020) viewed Online shopping behaviour as a phenomenon when a person purchases goods and services by using internet technology because the internet is compulsory while shopping online. Ariff, Sylvester, Zakuan, Ismail and Ali (2014) gestured that Online shopping behaviour may be defined as a type of attitude which involve consumers browsing websites to search, select and purchase of goods and services, in fulfilling their needs and wants. It involves the reaction and choice of consumer decision making. However, Li and Zhang (2002) argued that online shopping behaviour relates to customer's psycho logical state regarding the accomplishment of online buying.

Online Shopping/ Internet shopping is one of the widely and commonly used mediums for convenient shopping. It is in fact, a popular means of shopping in the Internet community (Bourlakis et al., 2008).

One advantage of internet shopping is that it provides the consumers with detailed information and multiple choices so that they can compare products and price. The more the choice and convenience, the easier it is to find what you're looking for online (Butler & Peppard, 1998). It has been seen that online shopping provides more satisfaction to the modern-day consumers who are seeking convenience as well as speed (Yu and Wu, 2007). Internet shoppings that are widely and commonly used mediums for convenient shopping and the easier it is to find what you're looking for online.

### **2.2 Social Networking Sites**

Social media have forever changed the way we communicate, interact and conduct our relationship with family, friends, politicians, the media, celebrities and companies (Elsantiel 2015). According to Mayfield (2008), a social network sites or social network services allow people to establish personal webpages and then connect with friends for the purpose of sharing information and communication. There are several social networking sites and their applications that allow users to make their profile and share contents with others. Some social media sites offers personal profile creation and allow users to share their views, photographs, and other activities (Nazir et al., 2020). Social networking sites are platforms used to assemble online networks where clients can easily access and associate with

one another (Aydin 2020). Social networking sites refer to web sites that allow the “friending” of people and staying connected with friends and family (Boyd & Ellison 2008). The most used social networking sites are Twitter, Instagram, Facebook and YouTube around the world; that is why marketers are trying to focus fully on these social networking sites to promote their company products (Nazir et al., 2020). These social networking sites are not just becoming a sources of communication between the customers and these companies but are also creating a better relationship between the firm and their customers (Kujur and Singh, 2020). Social network sites nowadays are far more than just platforms rather it has gradually been integrated into people’s daily life.

### **2.3 Consumer Purchase Intention**

Consumer purchase intention is an important predictor of online shopping if consumer have intention then they can behave (Bhatti 2018). Thus, intention comes from the extent of conscious effort that an individual will follow to approve his or her behaviour and it is also considered as one of the motivational components of behaviour (Ru et al, 2021). Moreover, consumers generally develop their expectations based on product information before they decide to purchase a product (Kim 2020). Consumer purchase intention is an individual plans to buy products or services in the future (Bhatti and

Rehman, 2019). A consumer’s purchasing intention refers to that consumer’s attitude toward a specific purchasing behaviour and the consumer’s degree of willingness to pay (Zhang, Zhou and Liu 2020).

Similarly, consumer purchase intention can be described as the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society (Kuester, 2012). Every individual’s consumer behaviour varies from another, depending on their buying choices. These choices are influenced by their buying habits which are affected by psychological and social factors which have an effect on the purchase decision process (Brassington & Pettitt, 2000). Online shopping behaviour (also known as online buying behaviour) is the process of purchasing products or services through websites on the Internet. The process has five steps, which are similar to the steps related to conventional shopping behaviour (Liang & Lai, 2000). Magee (2003) says that the growth in the number of people who shop online has become more than the growth in general Internet users. This indicates that more Internet users have begun to get comfortable with the concept of shopping online.

### **3.0 Methodology**

A cross sectional survey method will be adopted in this study because a representative subset of the entire population of the study will be analysed at a specific point in time. The study population used small sampled of MBA students of Dangote business school, Bayero University Kano because there appears to be little or no empirical study that has investigated the underlying issue within the study area. 50 copies of questionnaire were distributed, 46 were returned out of which 1 were not perfectly completed. A PLS path modelling using Smart PLS 3.0 M3 software (Ringle, Wende, & Will, 2005) employed to ascertain the internal consistency reliability and construct validity of the constructs used in the pilot study, the Smart PLS 3.0 M3 software was selected as a tool of analysis because of its user friendly interface, which help users create a mediating effect for path models with interaction effects (Temme, Kreis & Hildebrandt, 2010). In particular, PLS Algorithm (Geladi & Kowalski, 1986) was calculated to obtain the average variance extracted and the composite reliability coefficients. Bagozzi and Yi (1988) as well as Hair et al. (2011) suggested that the composite reliability coefficient should be at least .70 or more. Meanwhile, Henseler (2015) suggested that, HTMT criterion has high sensitivity and specificity in detecting discriminant validity problems and more empirical evidence is needed to use this approach. However, to assess discriminate validity, model setup along with how conservative the researcher wants to be in assessment of discriminant

validity should also be kept in view. If the value of Heterotrait Monotraits (HTMT) is below 0.90, discriminant validity has been established between reflective constructs (Henseler, 2015)

### **3.2 Instrumentation and measurement of variables**

The primary data is simple sourced through the use of a questionnaire, which will be administered to the selected students of the study area. In order to achieve the study objectives, the questionnaire will be divided into the following sections. Section A: Personal information "Gender, Age, and Marital status". Section B will measure the study independent variables which are the Social networking site dimensions "Ease of use, Trust and Visual appeal". Section C will measures the study dependent variable which is online purchase behaviour and finally section D will measures the study mediating variable which is consumer purchase Intention. Study variables will be utilized using a five point Likert-scale questions ranging from "5 =strongly agree" to "1 = strongly disagree".

### **3.3 Result of Reliability and Validity Result**

*Reliability* refers to the extent to which the scale produces consistent results, and whether it is free from error and therefore yields consistent results (Zikmund, 2000). Previous Empirical studies in psychology commonly report Cronbach's alpha as a measure of internal consistency reliability despite the fact that many methodological studies have shown that Cronbach's alpha is riddled with problems

stemming from unrealistic assumptions. In many circumstances, violating these assumptions yields estimates of reliability that are too small, making measures look less reliable than they actually are (McNeich, 2017). Consistent with recent recommendations from Sharpe (2013) concerning bridging innovations in the use of statistical methods in psychology to empirical researchers, his paper is to state as plainly and succinctly as possible why Cronbach’s alpha is often inappropriate in empirical contexts and why researchers would benefit from abandoning Cronbach’s alpha in favour of alternative measures. (Bentler, 2007; Crutzen, 2007; Crutzen & Peters, 2015; Geldhof, Preacher, & Zyphur, 2014; Graham, 2006) These arguments have led to the development of alternative reliability measures whose assumptions are more in-line with psychological data. Composite reliability using Smart PLS Verison 3.3.is conceptually related to Cronbach’ alpha in that it assesses reliability via a ratio of the variability explained by items compared to the total variance of the entire scale (Bentler, 2007; Geldhof et al., 2014; Raykov, 1997,).

Validity of the measuring instrument refers to the extent to which the instrument is measuring what it is supposed to be measuring. It is used to verify items loading on the correct factors as identified by researcher (venkatraman, 1989). Previous researcher used Fornell and Larcker (1981) for assessing the discriminant validity. However, recently in Henseler (2015) disapproved the Fornell and Larcker criterion. They found out that the previous criterion is still lacking in establishing the distinctiveness between constructs that prompted them to suggest a more robust approach that could capture the discriminancy among the constructs under study. Heterotrait-monotrait (HTMT) criterion has high sensitivity and specificity in detecting discriminant validity problems and more empirical evidence is needed to use this approach. However, to assess discriminant validity, model setup along with how conservative the researcher wants to be in assessment of discriminant validity should also be kept in view (Henseler, 2015). If the HTMTvalue is below 0.90, discriminant validity has been established between reflective constructs.

Table. 3.1: Reliability of Constructs ( $n=45$ )

<b>Latent construct variance</b>	<b>No. of indicators Composite</b>	<b>Average</b>
		<b>Extracted</b>
Online Purchase Behaviour	5	0.81
Ease of Use	5	0.87
Trust	5	0.72
Visual Appeal	5	0.84
Consumer Purchase Intention		

Latent variables	CPI	EU	TR	VA	OPB
1 Consumer Purchase Intention	-				
2 Ease of Use	0.73	-			
3 Trust	0.56	0.78	-		
4 Visual Appeal	0.52	0.74	0.73	-	
5 Online Purchase Behaviour	0.27	0.62	0.60	0.82	-

**HTMT Results**

Source: Researcher (2021)

If the HTMT value is below 0.90, discriminant validity has been established between reflective constructs

**4.0 Conclusion**

This paper is work in progress advancing towards M.Sc. Dissertation, the study concise and relevant and not incorporate too much, the scope will be especially on the younger generations (aged less than 35 years) who represent the majority of Social Networking Sites users. One of the reasons behind this choice is that the younger generation was born amidst the digital revolution and represents a great share of all Social Media platform users with similar characteristics to coming generations who also take Social Networking Sites for granted.

Another reason is that this generation is going to acquire more financial power as they have recently entered employment or will do so soon and will furthermore be the backbone of the economy in the (near) future. Thus, this generation is very interesting to examine for this study's research direction. This study will focus on Facebook and Instagram as the leading Social Networking sites.

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## Moderating Effect of Audit Committee Independence on the Relationship between Auditor Tenure and Stock Returns in Nigeria

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### ABSTRACT

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*The study investigates the moderating effect of Audit Committee Independence on the relationship between Auditor Tenure and Stock Returns of Consumer Goods Firms that are listed on the Nigerian Stock Exchange. Data were gathered from the Annual Financial Reports of the Companies chosen for this study covering the period from 2008 to 2019. Panel Data Regression was employed for the purpose of analysis. It was discovered that Audit Tenure has a significant positive relationship with Stock Returns, and that, the interaction of the Audit Committee Independence with Auditor Tenure has no moderating effect on the relationship between Auditor Tenure and Stock Returns. Based on these findings, the study recommends to Investors and other capital market participants that in taking investment decisions, besides Financial Variables, they should pay attention to Auditor Tenure as a factor affecting Stock Prices, that Independent Directors who are not engaged with the Company in one way or the other should constitute the majority in the audit committee.*

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**KEYWORDS:** Auditor Tenure, Stock Returns, Audit Committee Independence, Firm Size, Growth Opportunities

### 1. Introduction

Stock Returns refer to the sum of all dividend yielded from the Stock and Stock Capital Gain less the Initial Cost of Investment (Davis, 2021). A return represents the change in the price of an asset, investment or project over time, which may be represented in terms of price change or percentage change. A positive return represents a profit, while a negative return

marks a loss. Stock Returns are important to investor and hence, the investor expects to get returns from such an investment. Returns from stock enable an investor to take charge of his financial security and also allows him to grow his wealth.

In view of the importance of company's earnings, Managers of the Firm employ some strategies to

purposely manipulate earnings to align with their pre-determined target such as carrying out some activities that either manipulate or falsify income so that they can attain high level of earnings and push up the company's prices of stock (Schipper, 1989; Healy & Wahlen, 1999). Stock prices in turn convey to Financial Markets Firm specific information, to this end Roll (1988) maintain that, there are so much inconsistencies in stock returns that are informed by Firm-Specific Information. Firm-Specific Information comprises both public and private information. A conveyance of both public and private information avails the stockholders the opportunity to adjust their expectations appropriately if such information is of significant relevance to analysts and other users of financial statements, they will also adjust earnings estimate and share prices for other companies in the industry. The reaction of shareholders to disclosed information most especially earnings is reflected in the Stock Returns (Ji & Yoon, 2020; Maggina, 2018). Stock Returns is used by researchers to theoretically explain how different investors and the market react to information of audit reports especially earnings information (Nelly & Apandi, 2018; Su, Zhao & Zhou, 2016).

Extant literature has inextricably linked Auditor tenure with stock returns. Auditor tenure is thought to be an Audit quality variable that prior studies have suggested that can impact on Stock Returns of Firms. Researchers are divided on this issue of Auditor Tenure. Some researchers such as Ghosh and Moon (2005); Hohenfels (2016) avail that, with the increase

in Auditor tenure, there will be a good and better appreciation of the operations of the business, the accounting systems and good standard of reporting issues thereby enhancing the quality of audit reports, the firm's quality of financial reporting standard and the financial statements.

Consequently, the uncertainties that are associated with investment decisions and forecasting of returns will be minimised (Su, Zhao & Zhou, 2016). Other researchers maintain that, if auditors maintain a long term relationship with their clients, there is a tendency for them to become reluctant and complacent in using appropriate audit tools and procedures in performing their audit and they can become less sceptical in identifying financial errors and misstatements contained in the financial statements (Shockley, 1982; Mgbame, Eragbe, & Osazuwa, 2012; Gosh & Moon, 2005; Siregar, Amallurah, Wisowo & Angarraith, 2012). When this happens, it brings to question the quality of audit reports produced by these authors which may affect negatively the perception of investors resulting to negative changes in stock prices. Audit committee is another variable that affects stock returns. One of its basic functions is to supervise the financial reporting process by overseeing the internal control system of the firm to ensure that it complies with the laws and regulations. It further stands as a reinforcement agent to the independence of the external and internal auditors. As the Audit committee interacts with the external and internal auditors, they are able to influence the Firms internal control strength as well as financial reporting quality

therefore enhancing high audit quality (Godwin & Seow, 2000). Most studies on Audit quality have been examining the direct relationship between Audit quality and stock returns on one hand and also Audit committee and stock returns on the other hand. We therefore have in this study used Audit committee to interact between Audit quality and Stock returns to see whether it will strengthen their relationship or weaken it. According to Larcker and Richardson, (2004); Sun and Liu, (2013), Internal Corporate Governance mechanisms do not work as substitutes but work to complement each other in impacting on the quality of reported earnings hence high audit quality. In Nigeria, researchers in this area are yet to look at the moderating role of the Audit committee independence on the relationship between auditor tenure and Stock Returns thereby leaving a gap in literature in the area of auditing and accounting which now serves as a motivation for this study.

The main objective of this study is therefore to investigate the moderating effect of Audit Committee on the relationship between auditor tenure and Stock Returns. The Nigerian stock exchange is experiencing some steady growth in terms of trading volume, listed firms and market capitalisation, it is still very clear that the Nigerian economy is a developing economy with the full characteristics of a developing economy (Mgbame, Eragbe & Obazuwa, 2012; Omotosho, Okpanachi, Yahaya & Aniete, 2017). It is therefore very revealing to examine the relationship between auditor tenure

and stock returns with audit committee Independence moderating the relationship in the context of Nigerian economy using the consumer goods firms listed on the Nigerian Stock Exchange. The findings of our study contribute to literature in this area and also add to the frontiers of knowledge of the theories of previous researchers. Additionally, the findings will also contribute to policy formulation, professional practice and many others that normally use of accounting information. Accordingly, the rest of the paper is presented as follows; Literature review, Methodology, Results & discussion, Conclusion and recommendations.

## **2.0 Literature Review**

Under this section, the concept of Auditor tenure as well as Stock Returns and Audit committee independence will be discussed. The section will also discuss the baseline theory and how this theory is related to this work.

### **2.1 Auditor Tenure**

This is the length of the period an audit firm has audited his client. The question of whether stock returns increases or decreases when an auditor maintains a long-term relationship with their clients has been one of the major issues that has engaged the attention of researchers. Some researchers maintain that, because of the long-term relationship maintained by the auditors and their clients, they become less interested in applying appropriate audit tools and proper procedures in performing their audit work and they usually become less sceptical (Safari, et al 2012).

On the other hand, some researchers are of the opinion that, maintaining long term auditor tenure relationship increases the knowledge and competence of the auditor (Su, Zhao & Zhau, 2016; Ji & Yoon, 2020). The second argument favouring long term auditor tenure suggests that auditor tenure is most likely to be associated with high quality audit which has a significant relationship with Stock Returns (Maggina, 2018). Based on the above stand point of view, Gull, Fing and Jaggi (2009) posits that, the quality of earnings in the early years of the tenure of an Auditor is low, equally, Nelly and Apandi (2018) show that, the risk of fraudulent reporting in the early years of the tenure of an auditor is higher. Similarly, Nekoueizadeh and Shahbazi (2016) found that, the discretionary accrual figures during the early years of the tenure of an auditor are higher than what is observed towards the end of the tenure of an auditor. In the same vain Khodamiepoor, Delfan and SabrojoWalker, (2014) discovered that, the possibility of increasing lawsuits against auditors' is most probable in the early years of their audit work.

We therefore develop the following hypothesis:

**H<sub>01</sub>:** There is no significant relationship existing between Auditor Tenure and Stock Returns of Consumer goods firms in Nigeria

## **2.2 Stock Returns**

These refers to the income that investors are able to get from the stock market where they have invested in Stock. Such returns may be in form of the dividend paid to its shareholders by a firm from time to time. Stock Returns are not fixed income but lend

themselves to market risk fluctuations which could be either positive or negative. However, market characteristics and the firm specific information content impacts directly on the magnitude in which the participants in the market reflect this new information of accounting numbers to bear on the prices of stock (Maggina 2018). Stock returns have been used in positive accounting research to theoretically analyse the reaction of the markets to different information events (Ahmadi & Jamali 2014). It has also been used to analyse how different investors react to unfolding information events. Prior studies suggest that auditor tenure could have significant effect on stock returns (Nekoueizadeh & Shahbazi 2016; Nelly & Apandi 2018; Safari Gerayeli & Jorjani 2018; Ji & Yoon 2020). Emphasis on the possible significant effect of auditor tenure on stock returns from developing countries such as Nigeria could bring out a positive impression on the firms listing requirements and enforcement with respect to the quality of auditors.

## **2.3 Audit Committee Independence**

An audit committee is a selected number of members of a company board of directors whose responsibilities include helping auditors to remain independent of management. The audit committee plays a critical role in providing oversight and serving as a check and balance on a company's financial reporting system. It is imperative that an audit committee should ensure that the management of a firm are accountable to shareholders (Blue RC, 1999; Cadbury Report, 1992; Treadway Commission, (1987). The code of

corporate governance (2011) by SEC provide that, the majority of audit committee members should be independent while the chairman of the committee must be a non-executive director. Equally section 11(4) (2) of the Nigeria code of corporate governance (2018) states that, all members of the audit committee must be financially literate and should be able to read and understand financial reports. According to Bala and Kumai (2015), the higher the independence of an audit committee, the more the degree of oversight functions, the more likely that members will show objectively in evaluating the propensity of firms accounting internal control and reporting practices thereby enhancing the quality of audit reports which has an impact on the stock returns of firms. Previous studies such as Azzoz and Khamees (2015), Velnampy, Sivatha Thavanika and Sinthuju (2014) showed Auditor tenure and stock returns giving inconsistent results with some showing positive relationship while others yet show a negative relationship. The main objective of the study is therefore to investigate the moderating effect of Audit committee independence on the relationship between Auditor tenure and Stock Returns. Audit committee independence as a moderating variable is expected to improve the efficiency of the model and its relationship with Auditor tenure and Stock Returns.

We therefore propose second hypothesis as follows:

**H<sub>02</sub>:** Audit committee independence does not significantly moderate the relationship between Auditor tenure and Stock Returns of consumer goods firms in Nigeria.

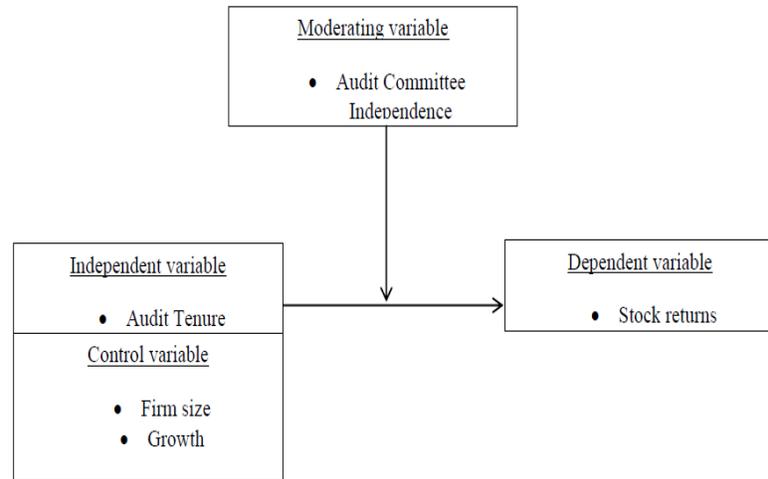


Figure 2.1: The conceptual framework of the study

Figure 2.1 presents the framework of the current study within the existing research and also explaining how Auditor tenure affects Stock Returns.

Figure 2.1 of the expected relationship between Auditor tenure and Stock Returns is divided into four parts, Auditor tenure (independent variable) Stock Returns (dependent variable), Audit Committee Independence (moderating variable).

## 2.4 Theoretical Framework

The theory that is used to support the analysis of this work is the Agency theory which is considered appropriate to explain the model of the study.

### 2.4.1 Agency Theory

Auditing is regarded as a mechanism for mitigating information asymmetries among related parties. This position is supported by the Agency theory. The demand for audit of companies' accounts is created by the agency problems which are related to the separation of corporate ownership from control

(Gerayeli, 2011). The agency problem arises from the existence of asymmetric information in the principal agent contracts (Jenson & Messier, 2000). Some studies Wild and Wild (1995) have shown that the existence of information asymmetry between management and shareholders is a necessary condition for an easy perpetration of earnings misreporting and financial statements manipulations. The audit of a company's accounts is a monitoring or control mechanism that diminishes information asymmetry and protects the interests of the principal. The duration of the audit engagement improves the quality of audit reports making the company's stock to become more competitive because the existing shareholders are not ready to pull out their investments while the potential investors clamour to enter the market through the purchase of the company's shares. Clamour for more of the company's shares will now create a demand for the company's shares resulting into the rise in prices of these shares which

### **3.0 Methodology**

The research approach adopted for this paper is the *Ex-Post* is carried out after events have taken place and the data is a systematic empirical study in which the researcher because the situation for the study already exist or has al made up of all the consumer goods firms listed on the Ni

Stock Exchange as from 2008-2019 covering 21 firms. Out of this number, a sample of 16 firms was chosen using the following criteria: i) The firms should have complete financial statement for the period under review; ii) The firm must not have ceased operations during the period under review. iii) Firms must have been listed on the Nigeria Stock Exchange as at the beginning of the study period.

### **3.0 Variables of Study and their Measure ments.**

The study uses four sets of variables, that is, dependent variable, the Independent variable, moderating variable and the control variables in order to study the hypothesised moderating effect of Audit committee Independence on the relationship between Auditor tenure and Stock Returns.

#### **3.0.1 Dependent Variables (Stock Returns)**

Stock return is the appreciation in the price of stock plus any dividend by the original price of the stock. The measurement of the stock returns is done using the following equation:

Where: RET = Stock Returns

$$RET = \frac{(P_{1it} - P_{0it}) + D_{it}}{P_{0it}}$$

Where: RET = Stock Return

$P_{0it}$  = Initial Stock Price at the beginning of the year.

$P_{1it}$  = Ending Stock price at the end of the year

$D_{it}$  = Dividend paid

Table 3. 1 Variables and their Measurements

<b>Symbol</b>	<b>Variable</b>	<b>Measurement</b>	<b>Source</b>
<b>Dependent Variable</b>			
RET	Stock Returns	Price of Stock at the end of the year minus Price Stock from the beginning of the year plus Dividend Divide b Prices of Stock at the beginning of the year	Bhattacharya, (2011); Perotti and Wagenhofer (2014)
<b>Independent Variables</b>			
AUT	Auditor Tenure	Measured by the period the Audit Firm has spent as the Auditor of the Firm.	Heydari,(2015)Hohenfels,(2016)
<b>ModeratingVariable</b>			
ACI	Audit Committee Independence	Measured by the proportion of Independent Directors sitting on the audit Committee	Omosho, Okpanachi, Yahaha and Aniette, (2017); Reid, Carcello, Li and Neal, (2017)
<b>Control Variables (Firm Characteristics)</b>			
FSZ	Firm Size	Measured using the log of Assets of the Firm.	Khostinant & Barari, (2006); Chaney & Jeter, (1992)
GRT	Growth Opportunities	Measured using the Market Value of Equity to book Value of Equity	Scott, 2011; Bolo & Mirzaeei, (2011)

**Source:** Authors Compilation, 2021

### 3.1 Model for the Study

A multiple regression model is used to test the moderating effect of Audit Committee Independence on the relationship existing between Auditor tenure and Stock returns. The model is structured as follows:

$$RET_{it} = \beta_0 + \beta_1 AUT_{it} + \beta_2 ACI_{it} + \beta_3 AUT_{it} * ACI_{it} + \beta_4 FSZ_{it} + \beta_5 GRT_{it} + e_{it}$$

RET<sub>it</sub> = Stock Returns of Firm ‘i’ in year ‘t’

Where:

AUT<sub>it</sub> = Auditor Tenure of Firm ‘i’ in year ‘t’

ACI<sub>it</sub> = Auditor Committee Independence of Firm ‘i’ in year ‘t’

FSZ = Firm size of Firm ‘i’ in year ‘t’

GRT = Growth Opportunities of Firm ‘i’ in year ‘t’

β<sub>0</sub> – β<sub>5</sub> = Regression Model Coefficient of Independent Variables

\* = Interaction between Independent and Moderating Variable

e<sub>it</sub> = error term of firm ‘i’ in year ‘t’

## 4. Results and Discussion

In this section, statistical results are presented and discussed.

### 4.1 Descriptive Statistics

The descriptive statistics of the data for the study is presented in table 4.1

**Table 4.1 Descriptive Statistics**

Variable	No.	Min.	Max.	Mean	Std. Dev.
RET	192	-1	1,435	115.28	172.11
AUT	192	1	12	5.43	3.08
ACI	192	0.17	0.57	0.39	0.11
AUTACI	192	0.2	6	2.06	1.29
FSZ	192	9.09	11.59	10.53	0.63
GRT	192	-16.92	27.48	4.89	6.21

Source: STATA output results

Table 4.1 shows a minimum of -1 and a maximum of 1.435 for RET which means that the minimum annual returns on stock prices of firms under study is negative (-1), and the maximum stock returns for the same period for the same set of firms is ₦1,435 with a mean value of ₦115.28 and a standard deviation of ₦172.11. Auditor tenure show a minimum of 1 year and a maximum period of 12 years meaning that the minimum period an auditor has stayed with his client is one year and the maximum period an auditor has stayed with his client is 12 years for the firms under study. It also shows a mean of five years and a standard deviation of 3 years.

Audit committee independence has a minimum value of 0.17 representing 17% and a maximum value of

0.57 representing 57%. This shows that some of the sampled companies have about 17% of the composition of their audit committee members to be non-executive directors while some of the sampled companies have about 57% composition of their audit committee members to be non-executive directors. The mean value of the audit committee independence is 0.39 representing 39%. This implies that the sampled firms have an average of 39% of the composition of their audit committee members to be non-executive directors whereas the rest of the members of the committee ie 61% comprising of shareholders and executive directors with a standard

deviation of 11%. From table 4.1, the minimum value of -16.92 and maximum value of 27.48 represents -1,692% and 2,748% growth rate respectively. The firms also have a mean value of 4.89 representing an average growth rate of 489% and a standard deviation of 6.21 representing 621%

**4.2 Correlation Matrix of the Study Variables**

The Pearson correlation results showing the relationship between the dependent and the independent variables are presented in table 4.2. It also shows the relationship among all pairs of variables in the regression model.

**Table 4.2 Correlation matrix of the Dependent, Independent and Control Variables**

<b>Variable</b>	<b>RET</b>	<b>AUT</b>	<b>ACI</b>	<b>FS2</b>	<b>GRT</b>
<b>RET</b>	1.0000				
<b>AUT</b>	0.2029	1.0000			
<b>ACI</b>	-0.0608	-0.0869	1.0000		
<b>FSZ</b>	0.2881	0.1052	0.0449	10000	
<b>GRT</b>	0.4610	0.1572	-0.0583	0.2506	1.0000

**Source:** STATA output results

Table 4.2 shows the highest correlation coefficient of 0.4610 between Stock Returns and Growth meaning the variables have no correlation problems. The rest of the variables have correlation coefficients of less than 0.4610 meaning that the data used for this study has no correlation problems.

**4.3 Assumptions for Multiple Regression Tests**

Here the results of regression analysis showing the relationship between the Dependent and Independent variables and the moderating effect of the audit committee independence on the relationship existing between Auditor tenure and Stock Returns will be discussed.

**Table 4.3 Breusch-Pagan/Cook Wersberg Test for Heteroscedasticity**

Chi2(1)	Prob>chi2	Null (Ho)
175.17	0.0000	Rejected

Table 4.3 Shows a P Value of less than five ( $P < 0.05$ ) meaning that the data used for this study has heteroscedasticity issues. Panel Corrected Standard Error (PCSE) was used to correct the heteroscedasticity presence in the data (Beck and Katz, 1995).

**Table 4.4 VIF and TV for Multicollinearity Test**

Variable	VIF	TV ( )
GRT	1.09	0.916452
FSZ	1.08	0.928552
AUT	1.04	0.963770
ACI	1.01	0.985906
MEAN VIF	2.04	

Table 4.4 shows the variance inflation factor (VIF) The Hausman specification test results show a preference for fixed effect model as can be seen in table 4.6 for Hausman specification test. This study however cannot use the fixed effect model for analysis of this work because the data set contains heteroscedasticity and Autocorrelation issues. According to Moundigbaye, Rea and Reed, (2018) Panel Corrected Standard Error was established as a superior tool for Panel data with the problems of heteroscedasticity and autocorrelation.

with Tolerance values. The independent variables for the model are all below the bench mark of ‘‘10’’ which is considered harmful for regression analysis. The VIF mean of 2.04 supports this.

**Table 4.5 Wooldridge Test for Autocorrelation**

F (1.15)	Prob> f	Null Ho
27.049	0.0001	Rejected

In table 4.5 the Wooldridge Test for Auto-correlation show the result of P value of less than 0.05 ( $P < 0.05$ ) meaning that the data set used for this study has autocorrelation issues. Panel Correlation Standard Error (PCSE) regression as suggested by Beck and Katz (1995) was used to correct the autocorrelation issue.

**Table 4.6 Hausman Specification Test**

Chi2 (5)	Prob>chi2	Null Ho
45.82	0.0000***	Rejected

Note: The \*\*\* Indicates Significance at 1 percent ( $P < 0.10$ )

**4.3.1 Multiple Regression Tests**

4.7 Summary of the Panel corrected Standard Error Regression

Variable	Coef.	Z Values	Prob> z
AUT	36.65483	2.06	0.040**
ACI	311.7953	1.43	0.152
AUTACI	-77.27413	-1.79	0.074

FSZ	48.23864	5.05	0.000***
GRT	10.44596	3.34	0.001***
R <sup>2</sup>			0.2760
Prob.>f			0.0000***

NOTE: The \*\*\* indicates significance at 1% (P<0.01) \*\* indicates significance at 5% (P<0.05)

### 4.3.2 Regression Summary

From Table 4.7, the results show that the coefficient of determination R<sup>2</sup> stands at 0.2760 meaning that 27.60% of the variations in stock Returns over the period under study was jointly explained by the independent variables. The unexplained part of the dependent variable which is 72.40% can be explained to come from the exclusion of some important independent variables that could also explain the changes in the dependent variable but are however not within the scope of this study. The P Value of 0.0000 shows that the PCSE regression model overall is statistically significant at 1% level. From the table the interaction between Auditor tenure and Audit committee Independence is negatively and insignificantly related to Stock Returns ( = - 77.27, P=-1.79) On the other hand the coefficient of Auditor tenure (=36.65, P= 0.040) is positive and significantly associated with Stock Returns. Audit Committee Independence has a positive but insignificant relationship with Stock Returns ( =311.80, P= 0.152). Both firm size and growth have a positive and

significant relationship with Stock Returns ( = 48.24, P= 0.000; =10.45, P =0.001 respectively).

### 4.3.3 Hypotheses Testing

From table 4.7, the results show that, Auditor tenure has a significant and positive effect on the Stock Returns for the firms under study ( = 36.65, P=0.040). Therefore, Hypothesis Ho<sub>1</sub>, is rejected meaning that, Auditor tenure has a significant positive effect on stock returns. The implication of this result is that, longer Auditor tenure helps to improve the quality of the stock returns of firms selected for this study. These findings are supported by the works of Nekoueizadeh and Shahbi (2016); Ji and Yoon (2020)

From table 4.7 the results reveal that the Audit Committee Independence do not moderate significantly the relationship between Auditor tenure and Stock Returns ( = -77.27, P= 0.074), therefore hypothesis H0<sub>2</sub> is accepted. The implication of this result is that, Audit Committee Independence do not moderate the relationship existing between Auditor tenure and Stock Returns. The insignificant outcome of the moderating result means that the external auditors with their long stay in the firms and the Audit committee are not complementing the efforts of each other in improving the effectiveness of each other in producing quality reporting that will impact positively on the Stock Returns.

## **5.0 Conclusion and Recommendations**

From the findings of the study, it is concluded that, with prolonged Auditor Tenure, the auditors will have a better understanding of the operations of the clients business. The Auditor will also be more familiar with the accounting systems and reporting issues leading to improvement in Audit quality and the quality of the firm's financial reports and audited financial statements. This will improve the Investors decision making process as the level of uncertainties in investment decisions and forecasting returns. This will in turn impact positively on Stock Returns. That the interaction between the moderator Audit committee independence and Auditor tenure cannot automatically lead to higher stock returns.

The study therefore recommends to investors and other capital market participants that when taking investment decisions, consideration should not only be given to financial variables only but they should

also pay attention to the tenure of the auditor as a factor affecting stock prices. Furthermore the financial reporting council of Nigeria, (FRC) Securities and Exchange Commission (SEC) and other policy makers of the provision of the audit market are advised to recommend that, a mandatory period of 10 years that is permitted by statute in Nigeria be increased to 15 years or more, as this will ensure that the audit quality improves thereby increasing the Stock Return of firms. We also recommend that, the FRC and SEC in their next review of their codes should make a provision for Independent directors who are in no way committed or involved in one way or the other with the firm should form the majority of the Audit committee members, this will ensure their total independence from management.

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## Audit Committee Effectiveness, Risk Management and Financial Performance of Nigerian Listed Deposit Money Banks

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### ABSTRACT

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*This study examined the moderating effect of audit committee financial literacy on the relationship between risk management and financial performance of listed deposit money banks in Nigeria adopting ex-post facto research design to define the structure and strategy of the study, the target population were listed deposit money banks (DMBs) in Nigeria as at 31<sup>st</sup> December, 2020, which were 19 in number. 11 were selected as sample size based on the complete published annual reports and account submitted to the Securities and Exchange Commission for the period of 5 years (2016-2020). The data obtained from annual reports and account of the banks, were analyzed using both descriptive and inferential statistics. The result shows that liquidity risk management, capital adequacy risk management, and operational risk management have positive and significant effect on return on assets, while credit risk management have negative and insignificant effect on return on assets of the banks. However, audit committee financial literacy positively and significantly moderates the relationship between risk management and financial performance of the banks. Therefore, the study recommended that, the board should increase the number of financial literate members on audit committee to assist in identifying risk exposure with a view of monitoring and controlling them.*

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**KEYWORDS:** Audit Committee Financial Literacy, Deposit Money Banks, Financial Performance, Risk Management.

### 1. Introduction

Financial performance of a firm is very important to stakeholders given the current effect of COVID 19 pandemic on the activities of businesses across the globe. The pandemic has a tremendous effect on several business strategies and make the market so dynamic and increase the rate of business risk. Thus, for any business to remain competitive and

sustainable, risk management is necessary. In maximization of the value of the shareholders, risk management has attained the level of necessity of which any serious minded management would not give it a light thought. Hence, the need for effective risk management to enhance firms' performance is important.

Furthermore, looking at the recent corporate failures, the weaknesses of corporate governance was identified as the main cause of accounting and auditing scandals, consequent to subsequent corporate failures. Therefore, corporate governance top the highest discussion among many stakeholders. In view of this, as other countries, the Nigerian government established a code of corporate governance in 2011 to monitor and control the activities of management of listed companies in Nigeria. The code provides that, each listed company should establish a board of directors and the principal objective of the board is to ensure that the company is properly managed. Thus, oversee the effective performance of the management in order to protect and enhance shareholder value and to meet the company's obligations to its stakeholders. In order to achieve this precarious objective, the board is required to operate through committees. It should determine the number and composition of such committees ensuring that each committee comprises the relevant skills and competences and its members are able to devote sufficient time to the committee's work. Therefore, one of those committees is audit committee, and one of the major responsibilities of audit committee is to oversee management's process for the identification of significant risks across the company and ensure that adequate prevention, detection and reporting mechanisms are in place. To this extent, Ala et al., (2020), Kristian and Siswanto, (2020), and Oudat et al., (2021) argued that, the effectiveness of the audit committee is determine by the qualities of the

constituted members. This corroborates the provision of the Nigerian code of corporate governance that, members of the committee should have certain attributes such as basic financial literacy and should be able to read financial statements. Thus, this study believes that, the extent of financial literacy of the audit committee members would significantly moderate the relationship between risk management and financial performance of listed deposit money banks in Nigeria.

However, given the present business environment, and the role of audit committee, there are limited studies that empirically examined the moderating effect of audit committee financial literacy on the relationship between risk management and financial performance. The few studies conducted such as Ashari and Kristian, (2020), Omotoye et al., (2021), and Omid et al., (2021) considered audit committee characteristics and financial performance; and audit committee characteristics and financial reporting quality. Furthermore, studies such as Vivian et al., (2018), Dyah et al., (2019), and Stephen et al., (2021), examined the relationship between audit committee characteristics and risk management. However, Shatnawi et al., (2019) through their conceptual analyses on the moderating effect of risk management on the relationship between audit committee characteristics and corporate performance in Jordan; suggested that, there is a need for empirical analysis to ascertain the moderating effect of either audit committee characteristics on the relationship between risk management and corporate performance, or

moderating effect of risk management on the relationship between audit committee characteristics and corporate performance. Hence, the motivation for this study to examine the moderating effect of audit committee financial literacy on the relationship between risk management and financial performance of listed deposit money banks in Nigeria. To achieve this objective, the following hypotheses were formulated and tested using multi-regression analysis at 5% significant level.

**H<sub>01</sub>:** Risk management and audit committee financial literacy have no significant effect on the financial performance of listed deposit money banks in Nigeria.

**H<sub>02</sub>:** Audit committee members' financial literacy has no significant moderating effect on the relationship between risk management and financial performance of listed deposit money banks in Nigeria. The significance of this study lies in its contributions to knowledge in the area of corporate governance, risk management and financial performance of listed deposit money banks in

Nigeria, since there is dearth of empirical analysis on the concepts in developing countries. More so, the study would benefit policy makers especially the Nigerian Stock Exchange, Central Bank of Nigeria, and the Securities and Exchange Commission on the level of compliance and the impact of the provisions of code of corporate governance among deposit money banks in Nigeria. It would further enlighten the management of the banks on the role of audit committee financial literacy and its oversight function on risk management and consequently improve

financial performance.

## **2. Literature Review**

This section provides the literature review for the study.

### **2.1 Financial performance**

The concept of corporate performance has received a tremendous attention in finance theory by both policy makers and finance scholars. However, there is no generally accepted definition of the concept. Hence, the concept was defined in various terms based on the objectives of the studies. Didier (2002) viewed performance as achieving the goals that were given to you in convergence of enterprise orientations. While, Jenatabadi (2015) stated that, performance is repeatable activities that utilize corporate resource to attain organizational goal.

To this effect, Rolstadas (1998) believes that the performance of an organizational system is a complex relationship involving seven performance criteria that must be followed: effectiveness, efficiency, quality, productivity, quality of work, innovation, and profitability. Hence, this study is based on profitability performance measure. To measure corporate financial performance, two measurements are in use such as market based system and accounting based system. However, the most adopted financial performance of a company by previous scholars is accounting based system that used profitability and relates it to other variables of the financial statement (Kristian & Siswanto, 2020). This is based on the reason that, it provides management, analysts, and other stakeholders with information that is timely and

reasonably accurate for decision making which is in line with the organizational goals (Chamberlain, 2010).

The accounting base indicators of financial performance according to Rateb (2018), and Ahmed and Ombaba (2019) includes returns on assets, returns on equity, and returns on capital employed.

## **2.2 Risk Management**

Ahmad (2014) defines risk management as the increase in organization's value by elevating its focus from tactical to the strategic. While, Shatnawi et al. (2019) viewed risk management as comprises of integrated management of threat to achieving organizational objective, which manifested as a result of operational activities, financial activities, and strategic activities based on corporate policies. Risk is associated with advancement in technology, human capital, goodwill, regulatory power, globalization, and diversification (Carey, 2001). These factors cause both pure and speculative risks that may have an impact on business performance. Thus, to attain the company's objectives; risk has to be managed or controlled in a systematic way across the firm (Beasley et al., 2017). Firms commonly adopt good risk management tactics to connect with their policies, cost, accounting, guidelines, and long-term projection with the aim of regulating assets and interest in an effective manner (Cohen et al. 2017). Furthermore, Nair et al. (2014) described risk management as a process, created by the board of directors, management, and other employees, operated in a strategy situation and across

the enterprise, developed to identify potential incidents that may affect the corporate, and regulate risk to be within its risk appetite, to provide practical assurance concerning the realization of corporate objectives.

However, many organizations are not adopting effective risk management process and little is known about why they are not effectively implementing risk policies despite its importance (Bually, 2018). Furthermore, there are limited studies that examined the relationship between risk management and financial performance (Ayayi, 2012; Asare-Bekoe, 2010). This justifies the need for further research in financial institutions especially with respect to assessing the level of current risk management practices among banks in Nigeria. The few studies that examined the relationship such as Oluwafemi et al. (2014), Edogbanya and Karmardin (2015), and Inegbanya et al. (2020), revealed contradicting results. Thus, it is necessary to observe the moderating effect of effective board of directors on the implementation of risk management framework in money deposit banks. Hence the motivation of this study in adopting audit committee members' financial literacy to examine its interactive effect on the relationship between risk management and financial performance of deposit money banks in Nigeria. This is indeed a landmark contribution to the body of knowledge by this study.

Golshan and Rasid (2012) suggested that the decision to implement risk management policies commences in the boardroom and gains support and commitment

from other committees in order to influence the manner firms' should think positively about risk and plan for eventualities. Failure to develop an effective risk management process can result in a severe financial loss and consequently business failure (Owojori et al., 2011).

### **2.3 Audit Committee Financial Literacy**

According to CAMA (2004), the audit committee (AUC) is a committee of shareholders and non-executive directors charged with the responsibility of liaising between the external auditor and the board of directors on one hand, and between management and the external auditor on the other hand. Every public company is required under Section 359 (3) and (4) of the CAMA to establish an audit committee. It is the responsibility of the board to ensure that the audit committee is constituted in the manner stipulated and is able to effectively discharge its statutory duties and responsibilities. Thus, to fulfil this important responsibility, Ahmed and Ombaba (2019), and Rateb (2018) were of the view that, the effectiveness of audit committee is determined by the quality of the constituted members. Thus, Ida and Asuka (2016) mentioned one of those attributes such as the financial literacy of the members. This corroborated the provision of the Nigerian code of corporate governance, that at least one board member of the committee should be financially literate, that is having knowledge of accounting or finance. Thus, members of the committee should be able to read financial statements. In the same vein, Ala et al. (2020) emphasized that, the extent of financial literacy of

audit committee members will assist in the oversight of the integrity of the company's financial statements, compliance with legal and other regulatory requirements, assessment of qualifications and independence of external auditor; and performance of the company's internal audit function as well as that of external auditors, consequently, improve corporate effectiveness. Therefore, the financial literacy of the audit committee members is a very important attribute that may moderate the relationship between risk management process of listed deposit money banks and financial performance of the banks.

### **2.4 Empirical Review**

The concepts of risk management and financial performance have attracted the attention of both policy makers and scholars in the field of finance and management. Thus, several studies were conducted and examined the relationship between risk management and financial performance. The following are the analysis of some of the empirical studies carried out by various scholars.

Mwangi (2014) examined the effect of risk management on financial performance of 43 listed commercial banks in Kenya for a period of one year, 2013. Using regression analysis to analyze the data collected, the study found that, credit risk management, liquidity risk management, interest rate risk management and capital adequacy risk management have positive and significant effect on return on assets of the banks. This result was corroborated by the study of Oluwafemi et al. (2014), which assessed risk management and financial

performance of 10 banks in Nigeria over a period of 3 years (2006-2009). Using panel data estimation techniques, the result of the analysis revealed that, liquidity risk management, credit risk management, and capital adequacy risk management were positively and significantly related to return on assets and returns on equity of the banks. A study was also carried out by Mutuku (2016) on the effect of risk management and financial performance of 42 commercial banks in Kenya over a period of 5 years (2011-2015). The result of the study indicated a positive and significant relationship between capital adequacy risk management, interest rate risk management and returns on equity of the banks over the period of the study.

However, the result of the study conducted by Mardian et al. (2018) on the effect of risk management and financial performance of 5 Islamic banks in Indonesia with corporate governance as a moderator over a period of 5 years (2011-2016) shows a negative effect of capital adequacy risk management, operational risk management, non-performing loan risk management on return on assets of the banks. This finding was confirmed by the result of the study conducted by Chukwunuku et al. (2019), on risk management and the performance of Nigerian listed commercial banks over a period of 22 years (1994-2016). The study reported a negative relationship between credit risk management and return on assets, and no significant relationship between liquidity risk management, operational risk management and returns on assets of the banks. In the recent study conducted

by Inegbedion et al. (2020) on risk management and financial performance of 5 banks in Nigeria over a period of 7 years (2010- 2017) it was revealed a positive and significant relationship between liquidity risk management, capital adequacy risk management and return on assets, while credit risk management was found to have a negative effect on return on assets of the banks.

Looking at the trend of the results of the various previous studies, the findings were inconsistent, hence inconclusive, given the contradicting results. Hence the need for further study to introduce either moderating or mediating variable in order to observe its interactive effect on the relationship between risk management and financial performance (Shatnawi et al., 2019). Thus, the motivation for this study to adopt audit committee financial literacy to observed its interactive effect on the relationship between risk management and financial performance of listed deposit money banks in Nigeria.

## **2.5 Theoretical Review**

There are various theories adopted by previous studies to explain the concepts of risk management, financial performance, and corporate governance. Some of the theories as mentioned by Inegbedion et al. (2020) are commercial loan theory, credit risk theory, and shift-ability theory. Therefore, this study was anchored on credit risk theory. This theory explained the relationship between lender of credit and receiver with a tendency of default. As simply put it by Inegbedion et al. (2020), as the likelihood of a customer to whom the bank has extended credit may not pay on time or

may not even pay at all, hence, increases rate of banks risk. Since, there is a likelihood that a customer would default, hence, the bank might risk recovery both the principal and the interest, therefore, affects its performance. In order to minimize credit risk, prospective borrowers are subjected to extensive background check to determine their credit worthiness. This may necessitate an insurance policy on the part of the borrower. In general, risk is directly

**3. Methodology**

The study adopted EX-post facto research design to define the structure and strategy of the study. The target population consists of all the listed deposit money banks in Nigerian as at 31<sup>st</sup> December, 2020, which were nineteen (19) in number. Out of the nineteen (19), eleven (11) were selected based on the complete and available required financial reports and accounts of the banks over the period of the study. The required data were collected from the annual reports and accounts of the banks for the period of

proportional to interest rate that the borrower is made to pay, which implies that the higher the risk, the higher the interest rate that the borrower will be required to pay on the debt (Owojori et al., 2011). Therefore, this study used credit risk theory to explain the relationship between risk management process of deposit money banks and financial performance of the banks with an effective audit committee financial literacy to moderate the relationship of the variables.

five (5) years (2016-2020). The data collected were analyzed using both descriptive and inferential statistics. Two models were developed to analyze the variables of the study. These models are presented as follows:

Model 1 was developed to evaluate the direct effect of risk management indicators (LRM, ARM, CRM, ORM), and audit committee financial literacy (AFL) on return on assets (ROA) of the banks, while controlling banks size (BSZ).

$$ROA_{it} = \beta_0 + \beta_1 LRM_{it} + \beta_2 ARM_{it} + \beta_3 CRM_{it} + \beta_4 ORM_{it} + \beta_5 AFL_{it} + \beta_6 BSZ_{it} + e_{it} \dots\dots\dots \text{Model 1}$$

Model 2 was developed to examine the moderating effect of audit committee financial literacy (AFL) on the relationship between risk management (LRM, ARM, CRM, ORM) and financial performance (ROA) of the banks.

$$ROA_{it} = \beta_0 + \beta_1 LRM_{it} + \beta_2 ARM_{it} + \beta_3 CRM_{it} + \beta_4 ORM_{it} + \beta_5 AFL_{it} + \beta_6 LRM_{it} * AFL_{it} + \beta_7 ARM_{it} * AFL_{it} + \beta_8 CRM_{it} * AFL_{it} + \beta_9 ORM_{it} * AFL_{it} + \beta_{10} BSZ_{it} + e_{it} \dots\dots\dots \text{Model 2}$$

The variables of the study are identified and presented in Table 1. This gives information in respect to the measurement as used by the previous studies.

**Table 1: Variables Identification, Measurement and Sources**

Label	Variable	Description	Sources
ROA	Return on assets	Profit before tax divide by total assets	Chukwunulu et al., 2019
LRM	Liquidity risk management	Average liquidity ratio	Inebegdion et al., 2020
ARM	Capital adequacy risk management	Capital adequacy ratio	Mardiana et al., 2018
CRM	Credit risk management	Proportion of non-performing loan to total loan	Inegbedion & Obadiaru, 2018
ORM	Operational risk management	Proportion of expected lost to actual lost	Okere et al., 2018
AFL	Audit committee financial literacy	Proportion of audit committee members with B.Sc. in accounting or finance	Ajeka et al., 2021
BSZ	Banks size	Natural logarithms of total assets	Mutuku, 2016

#### 4. Results and Discussions

The outcome of the analyses are presented into tables, which consists of the results of descriptive statistics, correlation analyses, diagnostics test results and regressions results.

**Table 2: Descriptive Statistics**

Variables	Mean	Stand. Dev.	Minimum values	Maximum values
ROA	.210	.102	.001	.421
LRM	.321	.003	.121	.603
ARM	.182	.012	.003	.581
CRM	.403	.162	.017	.743
ORM	.209	.032	.001	.486
AFL	.214	.130	.018	.638
BSZ	.392	.201	.013	.810

**Source:** STATA 13 Descriptive Statistics Result (2021)

The descriptive statistical result presented in Table 2 revealed that, the average return on assets of the banks was 0.210 at the maximum of 0.421 and minimum of 0.001 with a standard deviation of 0.102. While the lowest proportion of liquidity risk management of the banks over the period was 0.121 and the maximum value was 0.603, with a mean value of 0.321 and standard deviation of 0.003. In respect to capital adequacy ratio, the result shows a mean value of 0.182 with a standard deviation of 0.012 and maximum and minimum values of 0.581 and 0.003

respectively. The result further shows that, the average value of 0.403 for credit risk management, with a standard deviation of 0.162 in between the minimum value of 0.017 and the maximum value of 0.743. Operational risk management indicates the average value of 0.209, while standard deviation was 0.162 with a minimum of 0.001 and a maximum of 0.486. The average value of audit committee financial literacy of the banks was 0.214, in between the minimum of 0.018 and the maximum of 0.638, with a standard deviation of 0.032. In respect to corporate

characteristics of the banks, the descriptive result in Table 2 shows that, banks size has a mean value of 0.392, with a standard deviation of 0.201, while 0.012 and 0.521 were minimum and maximum values respectively. After the analyses of the descriptive

statistics, the correlation analysis was carried to determine the direction and the magnitude of the correlation between the variables of the study using Pearson product moment correlation statistics and the results are presented in Table 3.

**Table 3: Correlation Matrix**

	ROA	LRM	ARM	CRM	ORM	AFL	BSZ
ROA	1						
LRM	.013	1					
ARM	-.141	.412	1				
CRM	.341	.381	.363	1			
ORM	.416	.648	-.014	.192	1		
AFL	.271	.392	.203	.274	-.012	1	
BSZ	.513	-.031	.391	-.041	.043	.432	1

**Source:** Correlation matrix-STATA 13 (Level of Significant @ 5%)

The result of the correlation matrix presented in Table 3 indicates the correlation coefficient magnitude between LRM and ROA, ARM and ROA, BSZ and LRM, ORM and ARM, ORM and CRM, BSZ and CRM, AFL and ORM, and BSZ and ORM were negligible with a correlation coefficients ranges between 0.00 and 0.20. While the correlation between CRM and ROA, AFL and ROA, CRM and LRM, AFL and LRM, CRM and ARM, AFL and ARM, BSZ and ARM, and AFL and CRM were low with a correlation coefficient ranges between 0.21 and 0.40. However, the correlation between ORM and ROA, BSZ and ROA, RAM and LRM, and BSZ and AFL were moderate with a correlation coefficient ranges between 0.41 and 0.60. But the correlation between ORM and LRM was high with a correlation

coefficient of 0.648. In respect to the direction of the correlation, all the correlation values were positive correlated except the correlation between ARM and ROA, ORM and ARM, BSZ and LRM, BSZ and CRM, and AFL and ORM which were negatively correlated. Since all the value of the statistics in Table 3 are less than 0.800 critical level of multicollinearity problem (Hair et al., 2009), thus, the conclusion that, there is absence of multi-collinearity problem. This is evidence as shown in Table 3 that, the highest value of correlation is between operational risk management (ORM) and liquidity risk management (LRM) with positive correlation coefficient of 0.648. In order to carry out regression analyses, a diagnostic tests was conducted and the results are presented in Table 4.

**Table 4: Result of VIF, Standard Skewness, Standard Kurtoses, and Durbin Watson Test**

Variables	VIF	1/VIF	Std. Skewness	Std. Kurtoses
LRM	4.108	0.243	0.782	-0.532
ARM	2.140	0.467	0.813	0.741
CRM	1.582	0.632	0.341	0.842
ORM	2.301	0.435	0.627	-0.641
BSZ	1.244	0.804	0.416	-0.538
Durbin Watson test = 1.248				
Chi <sup>2</sup> - prob. = 0.000				

**Source:** STATA 13 Output (Level of Significant @ 5%)

The result in Table 4 indicated that the standard skewness of each of the risk management indicators do not exceed the range of  $\pm 1.96$  evidencing the normality of the data and it was confirmed by the standard kurtosis statistics values of all the explanatory variables which do not exceed the normality range of  $\pm 3$  (Haniffa & Hudaib, 2006). Hence, the data were normally distributed. Furthermore, the result of the VIF indicated that the highest VIF was 4.108 and the highest tolerance coefficient is 0.804, while the lowest VIF is 1.244 and the lowest tolerance coefficient was 0.243. Therefore, there was no unacceptable level of multicollinearity among the study variables, confirming that there was no need for

concerned about multicollinearity issue (Hair et al., 1995). The result of Durbin Watson test statistics is 1.248 which is less than 2 (Adefila, 2014). Hence, the conclusion that, there was no problem of autocorrelation among the variables of the study. Furthermore, the result of Hausman model specification test was significant with chi-square probability of 0.000, hence the null hypothesis was rejected (random effect) in favor of fixed effect. Since the data collected were normally distributed and no problem of multicollinearity and autocorrelation, regression analysis was conducted and the results are presented in Table 5.

**Table 5: Result of Regression Analyses**

Models	Model 1		Model 2	
Variables	Coefficient	p-value	Coefficient	p-value
Intercept	0.321	0.002	0.382	0.000
LRM	0.104	0.014	0.114	0.001
ARM	0.281	0.043	0.412	0.010
CRM	-0.372	0.068	0.381	0.011
ORM	0.041	0.037	0.182	0.014
AFL	0.397	0.021	0.410	0.010
BSZ	0.417	0.000	0.417	0.000
LRM*AFL			0.342	0.000
ARM*AFL			0.217	0.010
CRM*AFL			0.304	0.000
ORM*AFL			0.413	0.000
R <sup>2</sup> = 0.607	Adj. R <sup>2</sup> = 0.508		R <sup>2</sup> = 0.721	Adj. R <sup>2</sup> = 0.571

**Source:** STATA 13 Output (Level of Significant @ 5%)

The result of the regression analysis of model 1 presented in Table 5 indicates a coefficient of determination ( $R^2$ ) of 0.607 and Adjusted  $R^2$  of 0.508. This implies that the indicators of risk management, audit committee financial literacy and bank size included in model 1 account for 50.8 percent variation in financial performance of the selected banks, while 49.2 percent was explained by other factors. Given the p-value of 0.002 at 5% significant level, is significant, thus model 1 is significant and has a good explanatory power.

In respect to the indicators of risk management in model 1, the result of the regression analyses in Table 5 revealed that, liquidity risk management (LRM), capital adequacy risk management (ARM) and operational risk management (ORM) have positive and significant effect on return on assets of the selected banks, while credit risk management (CRM) was found to have negative but insignificant effect on return on assets of the selected banks over the period of the study. However, audit committee financial literacy (AFL) and bank size (BSZ) shows a positive and significant direct effect on return on assets of the banks. Adopting a moderator, audit committee financial literacy, to observe its interactive effect on the relationship between risk management and financial performance of the banks. The result of the regression analysis of model 2 presented in Table 5 shows a coefficient of determination ( $R^2$ ) of 0.721 and Adjusted  $R^2$  of 0.571. This implies that, the interaction of audit committee financial literacy and

indicators of risk management included in model 2 account for 57.10 percent of the variation in return on assets of the banks, while 49.9 percent was explained by other factors. Furthermore, the p-value of 0.000 at 5% significant level is significant, thus model 2 has a good predictive power.

Furthermore, audit committee financial literacy has positively and significantly moderates the relationship between all the indicators of risk management and returns on assets of the banks over the period of the study. In addition, introducing a moderator “audit committee financial literacy” in model 2 has resulted to the change in  $R^2$  of 11.4 percent (72.1-60.7), thus a conclusion that, audit committee has a positive and significant moderating effect on the relationship between risk management and financial performance of listed deposit money banks in Nigeria.

## **5. Conclusion and Recommendations**

The direct regression analyses of the indicators of risk management and return on assets shows that, LRM, ARM and ORM have positive and significant effect on ROA, while CRM have negative effect on ROA of the banks. However, the regression result of model 2 shows that, audit committee financial literacy has positively and significantly moderated the relationship between all the indicators of risk management and return on assets, hence the conclusion that, audit committee financial literacy has a positive and significant moderating effect on the relationship between risk management and financial performance of listed deposit money banks in Nigeria over the

period of the study. This implies that, those banks with higher members of audit committee that have knowledge in accounting and finance performed financially better than their counterpart who do not have or have limited financially literate members on audit committee.

Therefore, the study recommended that, in constituting audit committee, the banks should ensure that, the majority of the members are financially literate, this will increase the proportion of competent hands in managing risk in the banks, consequently improve financial performance of the banks.

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## **Target Costing as a Critical Factor for Efficiency of Manufacturing Business in Plateau State, Nigeria**

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### **ABSTRACT**

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*The study examined the impact of target costing (TC) On the efficiency of manufacturing enterprises in Plateau State, Nigeria. Using primary sources, data for the study were obtained from responses to the questionnaire designed to reflect five (5) point Likert scale incorporating indicators of efficiency (dependent variable, PQ) and TC (explanatory variables: QoM, PrD, ProcD, and VCO) in the construct. The questionnaire was administered on 235 staff of seven (7) sampled manufacturing businesses in Jos, Plateau state with 153 of the questionnaires returned representing approximately 65% response rate. The data obtained were analyzed using ordinary least square (OLS) regression. The results indicate that all the explanatory variables combined have positive significant effect on product quality ( $r^2 = 41.2\%$ ). However, quantity of material, product design, process design, and value chain orientation individually has positive but insignificant effect on product quality of manufacturing businesses. The study recommends that manufacturing businesses in Plateau state should implement TC with the government supporting the efforts of entrepreneurs by embarking on economic policies to tackle issues of inflation and devalued currency.*

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**KEYWORDS:** Target Costing, Operational Efficiency, Manufacturing Business, Product Quality, Product Design.

### **I. Introduction**

In a competitive global economy, businesses in manufacturing have no choice but to produce goods that are readily acceptable to consumers anywhere in the world. Within the business of production, the quality and cost to produce (cost of inputs) and the output are key to efficiency on which the survival of any manufacturing business rotates (Gysum & Sungbum, 2018). Production efficiency is achieved when a product is created at its lowest average total cost (Bryan & Cashin, 2017). The lowest average

total cost means that a business is producing as much as possible without wasting its scarce resources (Denhall & Sporter, 2016). Efficiency is all about creating as much as a manufacturing business can with its resources while reducing the time, materials and energy put into production. It is in a bid to achieve efficiency in business that many manufacturing firms especially those in advanced economies such as China, the U.S.A, U.K. and Japan modernize their business processes, invest in

modern equipment, examine their workflow and invest heavily in preventative machines (Armington & Zeelan, 2018) manufacturing firms in these countries rely on the efficiency of their manufacturing processes to create quality products that consumers can afford. The more expensive and inefficient a manufacturing process is, the higher the cost of production with the ultimate burden borne by consumers. The result of inefficient manufacturing process whether due to outdated machines/ tools broken machines, unmotivated employees or a dysfunctional system creates problems such as higher prices and fewer sales (Currie & Cooplan, 2015). Target Costing (TC) is a managerial approach to ensure efficiency in manufacturing businesses. the essence of the approach is to determine products life cycle cost which should be sufficient to develop specified functionality and quality (Eden & Ebaiai, 2017). In the process of lifecycle determination, the target costs of a product are decomposed from product to component level. Through the decomposition, TC spreads the competitive pressure faced by the enterprises to product designers and suppliers (Carlos & Migan, 2016). Therefore, TC technique is a strategic tool for efficiency involving all members of the value such as suppliers, distributors and final consumers. Thus, Leonard and Churchill (2017) viewed TC as an efficiency tool involving a long-term relationship of mutual benefit to all members of the value chain with sharing of information on cost identification and elimination of all wastes for

efficiency.

In literature, the relationship between TC and efficiency of manufacturing enterprises has been established in developed countries such as the U.S, china, U.K and Japan. For instance, Gouilding, Colin and Goshel (2016), Dalmiski and Ashnol (2017), Mowen and Evans (2018) and Nourlu (2018) findings showed a positive and significant impact of TC on the efficiency of manufacturing businesses. However, in Plateau State, the veracity of findings has shown a mixture of the impact of TC on efficiency. For instance, while the findings of Rasheed and Olayinka (2018) indicated a significant impact of TC on the operational efficiency of manufacturing enterprises in Nigeria, particularly in Plateau State; Ollegako and Tuwen (2019) showed negative non-impact of TC on efficiency manufacturing business in the country. Based on the veracity of the findings of previous studies of the impact of TC on the efficiency of manufacturing business in Plateau State there is the need to investigate the impact of TC on the operational efficiency of manufacturing business in Nigeria.

The paper is divided into five sections as follows: Section one presents the introduction of the study section two is on literature review, section three explains the methodology used in this study, section four presents the results and section five is on the conclusion reached in this study.

## **2. Literature Review**

In this section, relevant literature will be reviewed and synthesized.

### **2.1 Conceptual Review**

Quality (Q) refers to conformance to specifications and standards (Harrison & Slizer, 2017). For a manufacturing business, specifications and standards are always set by management monitored by quality controllers and regulatory agencies to which a particular firm belongs. Thus, Thormri and Halttee (2017) defined q as conformance with laying down the standard for production without compromising the required quantity and quality of material needed for the desired output or product quality. Product quality (PQ) is the satisfaction derived by consumers inherent in a product (Singer & Iyed, 2016). Process Design (ProcD): It is the act of transforming an organization's vision goals and available resources into discernible and measurable means of achieving organizations to improve efficiency across business processes and maximize resources so as keep costs at a minimum. ProcD is steps that are followed by the product team for design solutions (Farah & Marrah, 2016).

Product Design (PrD): PrD is a systematic process that involves an idea, concept generation, concept development and evaluation (Scot & Tockle, 2016). The cardinal objective of PrD is to create goods with excellent functional utility at a reasonable list and delivery them to customers. For a utility to consumers' satisfaction, the product should be high quality at low cost and methods (Norman & Axena, 2017).

Value Chain Orientation (VCO): VCO is the process in which a business receives raw materials and adds value to them for quality output (Richard & Young, 2015).

The purpose of the orientation is to increase efficiency so that a company can deliver maximum value at the least possible cost. However, as significant as TC is in the operational efficiency of firms, there is a veracity of reports as to the impact of the managerial technique on the efficiency of manufacturing enterprises in Nigeria.

### **2.2 Empirical Review**

Implementation of TC has been adjudged as the most effective mechanism in achieving production efficiency (Hamber & Bell, 2016). Studies have documented the impact of TC on manufacturing business (Goulding, Colin And Goshel, 2016; Dalmiski & Ashnol, 2017; Mowen & Evans, 2018). Their findings suggest that TC has a significant impact on the efficiency of the manufacturing business and is beneficial to all involved in the value chain of the manufacturing process. The broad benefits of TC underscore the critical nature of the managerial tool that requires the attention of managers. Corroborating these findings and the importance of the managerial technique (TC) Ghassan and Boeli (2018) viewed that TC has helped many manufacturing organizations across the globe to review their activities for cost minimization, a key objective of TC. It is in view of the cost minimization that TC implementation has become a practice in companies in both developing

and developed ones (Bovee & Malcon, 2017). Therefore, TC implementation is not unique to manufacturing firms in developing nations with contradicting results. For instance, in the UK, Gouilding, Colin and Goshel (2016) examined the impact of TC on the efficiency of manufacturing enterprises. Data collected related to the year 2015. The result of the correlative-descriptive analysis designed by the researcher indicated that TC implementation is associated with efficiency. Dalmiski and Ashnol (2017) in their study on TC implementation and impact on the efficiency of manufacturing enterprises in the U.S.A. findings suggested a significant impact of TC on the efficiency of manufacturing businesses. The finding is consistent with Mowen and Evans (2018) were in a study of the impact of TC implementation and efficiency of manufacturing firms in China found that implementation of TC has impacted significantly on the operational efficiency of the firms. However, Nourlu (2019) provided additional and specific evidence of the impact of product design on product quality as an indication of efficiency. The study examined the impact of product design on product quality. Data for the study were obtained from purposively sampled 470 manufacturing firms in Japan. Findings from analysis of the characteristic for quality design and quality output using the OLS and IV estimation model indicated a significant impact of product design (TC implementation) on output quality (A proxy for efficiency).

In a study by Rasheed and Olayinka (2018) on TC and efficiency of manufacturing firms in south-western Nigeria, the results of data obtained primarily from 10 manufacturing firms in Lagos and Ogun states descriptively analyzed found evidence of the positive impact of TC implementation on the efficiency of the firms. Ollegako and Tuwen (2019) provided a result that differs from the findings of Rasheed and Olayinka (2018). This study sought to establish a relationship between TC implementation and operational efficiency. Data for the study were obtained from randomly selected thirty (30) listed on the Nigerian stock exchange (NSE). Efficiency and TC implementation were proxied by product quality (PQ) and process design (ProcD) respectively. Self-constructed product quality (PQ) and process design (ProcD) index of the firm's Standard Organization of Nigeria (SON) mechanisms, were used for analysis. The result of panel regression analysis indicated a negative relationship between TC implementation and the efficiency of the firms. The result suggests that TC implementation has no impact on the efficiency of firms.

Apart from product design (PrD), product quality (PQ) also depends on other variables such as quality of materials (Qom) input, process design (ProcD) and value chain orientation (VCO) which are all processes of TC implantation that impact manufacturing efficiency (Singer & Iyed, 2016).

### **3. Methodology**

The section describes the method used in carrying out the study and the procedure adopted in data collection.

Out of a population of 16 manufacturing enterprises in Jos-Plateau state, a sample of seven (7) manufacturing companies namely Nasco Packs Ltd., Ralmo Foods, Elco Tiles Ltd., Dutshe Packs Ltd., ITLM Plastics, Papco Tiles Ltd., and Becco Furnitures -was purposively selected for the study. Data for the study were obtained from primary source. Copies of questionnaire were distributed to 235 staff of the selected companies out of which 153 were returned representing 65% response rate.

The data used were primarily collected from two hundred and twenty-five (235) staff out of a population of four hundred and ten (410) staff of the selected companies. Out of 235 copies of the questionnaire administered, 153 of them were returned representing a response rate of 65%. Items on the research questionnaire were tailored in line with the assumptions of the research with respect to each of the variables selected for the study. Respondents were thus asked to respond on the extent to which they agree or disagree with each item on the survey questionnaire prepared on a five (5) point Likert scale.

The study employed Ordinary Least Square (OLS) regression to analyze the responses obtained with the questionnaire. Reliability of the data was established using Cronbach's alpha with each construct on efficiency indicators and explanatory variables of the study having a coefficient greater than 0.6. alpha coefficient greater than 0.6 is considered acceptable for the reliability of items of questionnaire construct (Nunnally, 1994 cited in Othman & Mamman, 2019).

The apriori expectation of the study was are inferred reasoning that values of explanatory variables will be greater than zero.

The model used in the study was adopted from the work of Ramdhan and Arlmer (2018), Erman and Taylor (2010), Kane and Leurd (2012) and Sawyer & Darmer (2013) that include QoM, PrD, ProcD and VCO as variables that can impact on PQ (efficiency indicator).

Therefore, the econometric equation representing the model of the study is stated as follows:

$$PQ = a + \beta_1 QoM + \beta_2 PrD + \beta_3 ProcD + \beta_4 VCO + \epsilon$$

Where:

PQ = Product Quality. QoM = Quantity Of Material

PrD = Product Design ProcD = Process Design

VCO = Value Chain Orientation

$\epsilon$  = Error Term

#### 4. Results

In the sections, results of the study are presented and discussed as follows:

**Table 1: Multiple Ordinary Least Square (OLS) Regression**

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	2.038429	2.792213	0.730041	0.4839
QOM	1.000879	0.421633	0.256963	0.3215
PRD	0.125184	0.351156	0.356492	0.7297
PROCD	0.506419	0.536468	0.343988	0.3698
VCO	0.176907	0.289661	0.410738	0.5565
R-Squared	0.432415	Mean Dependent Var		18.92857
Adjusted R-Squared	0.412104	S.D. Dependent Var		20.36764
S.E. Of Regression	6.944133	Akaike Info Criterion		6.986124
Sum Squared Resid	433.9889	Schwarz Criterion		5.114359
Log-Likelihood	-43.90287	Hannan-Quinn Criteria.		6.964997
F-Statistic	25.70945	Durbin-Watson Stat		2.110463
Prob(F-Statistic)	0.000012			

**Source:** Computations Using E-Views Version 10

Quality of material (QoM, 1.000), product design (PrD, 0.125), process design (ProcD, 0.506) and value chain orientation (VCO, 0.176) all individually relates positively with product quality (PQ). This implies that 1% increase in QoM, PrD, ProcD and VCO will contribute up to 100%, 12.5%, 50.6% and 17.6% increase in PQ respectively. However, this effect is not significant at 5% level of significance. However, the results of the OLS regression show that the coefficient of determination ( $r^2$ ) has a value of approximately 43%. This implies therefore that about

43% of variations or likely changes in PQ are jointly explained by the explanatory variables of this study. Similarly, the adjusted  $r^2$  value of approximately 41% indicates that 41% of changes in PQ are jointly explained in the model after all necessary adjustments are taken care of. This complements the moderate explanatory power of  $r^2$ . The value of  $r^2$  (0.43) is an indication that the independent variables jointly contributes and have a statistically significant impact of 43% on PQ. This is evidence by the F-statistics probability (0.00) which is clearly below the 0.05

significant boundary. This implies that the result is useable for prediction. The result is consistent with the findings of studies such as Gouiding, Colin & Goshel, 2016; Dalmiski & Ashnol, 2017; Mowen & Evans, 2018; Rasheed & Olayinka, 2018; and Nourlu, 2019 that found a positive and significant impact of TC on the efficiency of manufacturing business.

The result of this study further suggests that while about 43% of the efficiency of manufacturing can be induced by an endogenous policy of TC implementation, a greater percentage of 57% of efficiency in manufacturing in the Nigerian environment is induced are explained by other factors such as inflation and purchasing power of the currency (exogenous factor). Quality of input for desired output is a function of the number of resources (financial resources) eroded by inflation and low value as the case in Nigeria (Elila & Wahab, 2018; Folu & Dickson, 2019). The statistical tool used to test the presence of autocorrelation (error) is Durbin Watson (DW) statistics. The value of 2.11 greater than the upper value of Durbin Watson (DW) at 1.883 shows the absence of autocorrelation error conforming to the adequacy/efficiency of the model as a good fit.

## **5. Conclusion**

Implementation of the TC technique is a potent managerial tool that has enabled many manufacturing organizations around the world to attain efficiency. However, there is veracity in the finding of authors in studies conducted on the impact of the TC technique

on the efficiency of the TC technique on the efficiency of manufacturing business in Nigeria. This study investigated the impact of TC on the operational efficiency of manufacturing businesses in Nigeria. data obtained through the primary source from seven (7) purposively selected on a stratified random basis out of 16 manufacturing businesses in Jos – Plateau state was analyzed using OLS regression analysis.

The results of the analysis indicated a positive  $r^2$  value of 43%. This suggests an impact of TC on the efficiency of the manufacturing business. the study recommends the need for manufacturing businesses in Plateau state to implement TC for efficiency in operation. In addition to this, endogenous policy of management, the government should embark on micro and macroeconomic policies that will tackle issues of inflation and the low purchasing power of Nigerian currency

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## **Stock Price Reaction to the Announcement of Fuel Subsidy Removal in Nigeria**

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### **ABSTRACT**

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*On the 11th of May, 2016 the federal government of Nigeria announced the removal of fuel subsidy which generated a lot of arguments and several reactions in the midst of observers and market analysts as to the likely consequences of such an action to the Nigerian economy on the market value of listed firms in Nigeria. This study aims to empirically investigate the reaction of the stock prices to the sudden announcement of the removal of fuel subsidy in the Nigerian Stock market. Data for the study were collected from the Nigerian Stock Exchange daily official list covering both the 190 days estimation period and the 35 days event window. The standard event study methodology was used on a sample of 76 firms that cut across all the various sectors of listed firms in the Nigerian Stock Exchange. The study found the event to have a significantly positive impact on the stock market as positive cumulative abnormal returns were recorded in the market on the event day and a negative significantly cumulative abnormal return after the announcement of the fuel subsidy removal. Consequent upon the findings, this study recommends, among other things that policy makers should avoid sudden announcement of policies that bothers on sensitive sectors of the economy. Such actions should be preceded by the release of information that adequately justifies such action by policymakers before it is made public. The release of such information is useful as it will help the stock market to correctly interpret the philosophy underlying the action by policy makers and will further drastically reduce information asymmetry in the market.*

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**KEYWORDS:** Subsidy Removal, Stock Market, Event Study, Cumulative Abnormal Returns

### **1. Introduction**

It is a generally believed that Stock Markets act as a measure of the state of health and the bearing of economic activities of any given nation. In the information oriented world we are living today, information travels very fast and consequently, any event of economic interest is rapidly and automatically incorporated into the prices of shares. Therefore, the share price reaction may be positive, negative or indifferent depending on how the market perceives the event and the economic environment

existing at the instance of the event (Bello, 2014).

Successful investment for every kind of market participant depends largely on the acquisition, understanding, analysis and interpretation of financial information, regardless of whether it is an individual investor or an investment company. Financial information is the blood stream of investment decision making and this information can either be obtained easily through an in depth analysis of the company's financial statements or through a detailed

analysis of market factors. Official announcements are a more reliable source of information in the financial market; even though rumors also play a significant role in the various decisions by market actors. External factors like changes in political, legal, administrative or social environment of the country are also another source of information that may have an impact on the investments, but a sudden shock in the form of an unanticipated event garners more attention because of its plausible effects on the market trends.

Unanticipated events are sudden, random shocks that have not been calculated for by the investors. These may include acquisition announcement, bankruptcy declaration, corporate illegality, sudden removal of chief executive officers like the sudden removal of the Central Bank Governor in Nigeria, natural disasters, political changes, terrorist activity related issues like the *Boko Haram*, sudden announcement of government policies etc. It is the goal of investors to quantify all anticipated or unanticipated events and their likely effects on the market so as to be able to take informed decisions backed by a calculated risk. However, it is rather difficult to take decisions based on the information gathered regarding a sudden, unforeseen event. This is so because if a market is assumed to be inefficient, then the information gathered about the event is not simultaneously priced in leaving some time for the informed market participants to take advantage from this situation. If the market is supposed to be efficient then the event is priced in simultaneously because the market

participants re - evaluate their expectations about the firms. Event study analysis is an important tool commonly used by researchers' the world over to assess and analyze the efficiency of a stock market. This tool has been effectively used to gauge the effects of an event on the stock market, and has proved to be especially efficacious in the area of corporate finance.

An event, whether announced or unanticipated can have a strong impact on the stock market because stocks are a highly liquid form of investment and investors can take rapid decision regarding their sale or purchase based on the information they receive. Whatever the event indicates, such information will be priced in the stock and the market may experience a trend of activities in that respect. In a press conference on Wednesday 11<sup>th</sup> May, 2016, the then Minister of State, Petroleum Resources, IbeKachikwu surprised Nigerians through a press release announcing the removal of fuel subsidy which resulted in the increase of the pump price of Premium Motor Spirit (PMS) from N62 to N140. Arguments have it that it will be good for the economy while others argued that it will not favour the average Nigerian, especially those at the grassroots. Again, the single most important issue confronting a growing number of world economies today is the price of oil and its attendant consequences on economic output. Oil plays a significant role in the Nigerian economy not only as the largest contributor in terms of total government revenue but also as the overall contributor in her exports composition and therefore,

any policy that will be directed towards its direction will attract attention.

Several studies have investigated the effect of oil price shocks on levels of Gross Domestic Product (GDP). Some of these studies include: the effect of crude oil prices on real GDP, the real interest rate, government spending, real government revenues, the real stock price, the real effective exchange rate, the real crude oil prices and inflation rate in India (Abuzarour, 2005), effect of crude oil price on exchange rate (Aruwa, 2009), effect of PMS price on inflation rate in Nigeria (Akgiray, 1989), effects of increasing oil prices on the manufacturing sector of Nigeria (Aruwa, 2009). Among all the studies conducted in Nigeria there is no study that investigated the consequences of fuel subsidy removal on the stock market and therefore a central area of the economy was overlooked. Consequent upon that this study is necessary as it will help in understanding the reaction of the market as a result of the fuel subsidy removal, The sudden announcement of fuel subsidy removal by the federal government on the 11th of May, 2016 in Nigeria has generated a lot of argument and several reactions in the midst of observers and market analysts as to the likely consequences of such an action to the Nigerian economy on the market value of listed firms. The fear among many stakeholders is that policy makers could take such an abrupt decision without recourse to the possible consequences such decision might have on the Nigerian economy in general and the capital market in particular which is the engine of growth of

every nation's economy. Despite the divergence of opinions on the resultant consequences of the decision, they can at best be considered as mere guess but not borne out of empirical investigation. The need therefore to undertake an empirical research in order to investigate the level of the reaction is therefore crucial.

This event raises so much curiosity and very interesting, thus worthy of empirical investigation because, it is the first time the federal government of Nigeria is totally removing the fuel subsidy and also the event took place at a time the Nigerian economy is facing very serious challenges as well as shortly after a well contested election that removed the ruling party from power for the first time in the political history of Nigeria. Therefore, the impact of this event on the economy definitely is expected to have some important policy implications. Consequently, the main objective of this study is to examine the signalling effect of this sudden announcement of fuel subsidy removal on the Nigerian stock market. The event for this study is the unexpected announcement of fuel subsidy by the federal government of Nigeria on Wednesday the 11<sup>th</sup> May, 2016. The study appears exceptional in the sense that, there is no study known to the authors to date that has empirically investigated the information effect of the sudden removal of fuel subsidy in Nigeria.

The study, therefore investigated how the Nigerian Stock Market reacted to this shock. The main objective of this study, therefore, is to investigate the reaction of share prices in the Nigerian stock market

as a result of the sudden withdrawal of fuel subsidy by the federal government of Nigeria.

The specific objectives of the study include:

- i. Establishing the significance of firms' cumulative abnormal returns fifteen days from the announcement day of fuel subsidy removal in the Nigerian Stock Exchange.
- ii. Establishing the significance of firms' abnormal returns on the announcement day of fuel subsidy removal in the Nigerian Stock Exchange.
- iii. Establishing the significance of firms' cumulative abnormal returns fifteen days after the announcement day of fuel subsidy removal in the Nigerian Stock Exchange.

In order to achieve these objectives, we hypothesise as follows:

**H<sub>01</sub>:** There is no significant cumulative abnormal return fifteen trading days before the announcement day of fuel subsidy removal in Nigeria

$$(AR_{(t-15, t0)} = 0)$$

**H<sub>02</sub>:** There is no significant abnormal return on the announcement day of fuel subsidy removal in Nigeria

$$(AR_{(t0)} = 0)$$

**H<sub>03</sub>:** There is no significant abnormal return fifteen trading days after the announcement day of fuel subsidy removal in Nigeria  $(AR_{(t+15)} = 0)$

This study of share price reaction to the announcement of fuel subsidy removal in the Nigerian Stock Market is unique as earlier mentioned, that to date there is no study known to the author that has empirically investigated the reaction of share prices to the announcement of fuel subsidy removal in the

Nigerian Stock Exchange This study is therefore, significant as it will fill a gap of investigating the reaction of the Nigerian Stock Market given petroleum subsidy removal by the federal government. This investigation will be useful in making investment decisions by investors and potential investors. The research will also add to existing literature on market reaction to sudden events using the famous event study methodology.

The next part of the paper is a short sketch of the literature related to market reaction to sudden events. Section three discusses the research methodology and the analytical techniques used while section four dealt with data analysis and results interpretation. The final section presented a summary of findings and conclusion.

## **2. Literature Review and Theoretical Framework**

Sharp drop in security prices as a result of a sudden event is a very unique opportunity for testing efficient market hypothesis. Unanticipated events generate more stress in the market, and market participants may lose their capability to assess rationally the valuation repercussion of the event.

In this way, quite a number of papers have investigated the behaviour of security prices after uncertainty in financial market increases following unexpected events. The logic of stock market event studies is straightforward. Under the efficient market hypothesis, share prices of publicly traded firms reflect current information about the profitability of those firms. It follows that any new information that

affects a firm's bottom line will quickly be capitalized into its share price. Therefore, some surprising event that affects any industry or group of firms will produce a coincident response in the stock prices of those firms. This allows researchers to test hypotheses about what matters for firms' profitability.

The first key step in an event study is identifying an event that contains surprising information. The sudden and untimely death of a powerful politician would be one example. Even somewhat anticipated events may contain an element of surprise. For example, the outcome of a close election resolves uncertainty, even if the result was not wholly unanticipated. The event's degree of surprise will affect the magnitude of the response in the share prices of affected firms. This is because anticipated events are already capitalized into share prices. Thus, some caution must be exercised in interpreting findings from events that are not complete surprises.

The second key step in an event study is choosing a baseline for comparing stock prices before and after the event. Consider the change in actual share prices immediately before and after an event: This change captures the market valuation of the informational shock associated with the event, but it also captures the value of anything else that is simultaneously occurring. For that reason, most event studies examine "abnormal returns" by comparing the change in the actual stock price of an affected firm to a prediction of what would have occurred otherwise. These predictions are usually based on the recent

historical correlation between changes in a firm's share price and changes in the overall market.

Empirical studies show an increasing evidence of stock market reacting instantaneously to disastrous events (Carter & Bettey, 2004). The sudden fluctuation in the stock prices following information about an event show the investors' review of future expected returns. These fluctuations, when considered as aggregate movements, reflect a whirlwind of activity. The impact on stock prices of firms is significant as a result of rapid investor activity because stocks and bonds are highly liquid and investors can easily and quickly change their decisions regarding their sale or purchase. The effect of an event can be better analyzed if the events being studied are unanticipated and the market is efficient so as to avoid any puzzling or unrelated effects within the event window (McWilliams & Siegel, 1997). Since the efficient market hypothesis is based on the assumption that the market takes possession of any information, whether it be macroeconomic or microeconomic information, to forecast the future stock prices, it is only rational to suppose that this information needs to be "new and unpredictable" to examine the full effect of the hypothesis (Brooks, Patel & Su, 2003). In case of the event being disastrous, investors prefer to take money out of the stock market and invest in low risk, secure financial alternatives; this has the potential to turn into chaos which can result in an extended bearish trend in the stock market. However, in case of the event being

favorable, the stock market is likely to experience a wave of bullish activity.

An event study can provide valuable insight in the proceedings of stock market when investor activity suddenly increases. Following information of an unanticipated event, a sudden increase in investor activity has been observed in stock markets worldwide. This increased investor activity causes the volatility of security prices to increase and the volatility in the stock market resulting from an event, outlives the event itself (Javid, 2009). The information accompanying an unanticipated event may be available in varying degrees initially to the investors and the stock market may run the risk of a chaotic volatility. An event occurring when the market is still open gives the market participants the opportunity to immediately take position according to the information but for events that take place over night, there is a phase of no activity before the information is priced in. The effect of an event on the stock returns of an organization is determined by two elements-the nature of event structure and information structure (Damodaran, 1985).

Researchers have taken up the event study method with interest in analyzing the impact of an event on the stock prices and stock returns. The events being examined range from announcement of policy changes, changes in the organisation's governance, to social and political occurrences involving natural disasters, terrorist attacks, military coups, national elections or some law and order situation. The prime

motive for studying these events and their effect on the stocks is to test the efficiency of the market and whether the events being analyzed are priced simultaneously or not. The methodological issues concerning the conduction and design of event studies were addressed in the early 1980s, focusing on daily and monthly data (Brown & Warner, 1980). Assuming that the researcher analyses an unfavorable event, the outcome will be dependent on whether the event was expected or not by the market and whether the market is efficient or not. We would expect the stock prices to experience a decline whether the event was anticipated or unanticipated but how soon this will be priced in would be a matter of how efficient the market is. In case of an efficient market, the unanticipated event will be priced instantaneously, but in case of an inefficient market, the drift from normal will be visible sometime after the event. Also, in case of an expected event, the stock prices will show a declining trend, some times before the event in an inefficient market and in an efficient market, stock prices are more likely to stabilize on the date of the event. Events that take place while the market is closed have been found to exhibit price movements when the market opens (Brookes, Patel & Su, 2003).

The first event study analyzed the stock market's response to the announcement of stock splits (Fama, Fisher, Jensen & Roll, 1969). This provided useful insights in the complex workings of the stock market. The first event study paved way for other researchers conducting other similar useful studies. Another

major event study analyzed the impact of sudden CEO deaths on the stock prices (Johnson, Magee, Nagarajan, & Newman, 1985). With an increase in research in this field, controversial evidence was highlighted. Event studies conducted late 1970s and early 1980s emphasized seasonality (Rozeff & Kinney, 1976) in the stock market and the major phenomena of “Monday Effect” (Gibbons & Hess, 1981), the study indicated that some of the participants were aware of the effect and took advantage of it but with time their gains declined.

Event studies have been most successful in the field of corporate finance. Event studies have given significant results in areas like mergers and acquisitions creating shareholder value (Andrade, Mitchell & Stafford, 2001), internalization (Morck & Yeung, 1992), investments and the value of the firm (Im, Dow & Grover, 2001) and issuance of debt/equity (Jung, Kim, & Stulz 1996). Event studies conducted about whether or not mergers and acquisitions create shareholder value have contributed to understanding the reasons behind price movements in the market. Short-window studies have proven to be more reliable in this case, especially the three day window considering the day before and after the announcement including the main. Earlier studies have shown merger announcements to be positive for the target firm as the abnormal returns for these firms are favourable, but no significant results have been assessed for the acquiring firm (Andrade, Mitchell & Stafford, 2001). There are also data leading to the conclusion that the short-run reaction to mergers may

overturn in the long run (Rosen, 2006). Unforeseen events include natural disasters, terrorist activities and other sudden policies such as political and social activities. In the recent age, terrorism and natural disasters have been on the top of the list to wreak havoc in economies, particularly in international trade and finance. Financial markets are victimized by these events, either directly or indirectly and there is a trickledown effect of this on the global economy (Liargovas & Repousis, 2010). Empirical research on unanticipated events and the related market response shows abnormal returns based on the intensity and nature of the event. Following the September 11 attacks on the World Trade Centre, studies examined negative abnormal returns by the airline industry, with the market generally plunging on the first trading day after the attacks with the Dow Jones Industrial Average falling almost 684.81 points and the airline stocks particularly tumbling (Carter & Simkins, 2004). Research has shown that the negative effect of natural disasters is often offset to a certain limit by the opportunity of gain through premium from the insurance companies by the market participants (Angbazo & Narayanan, 1996).

In 1999, the study conducted in Pakistan analyzed the stock market’s reaction to nuclear blasts by India and Pakistan (Javid & Ahmed, 1999). The results showed that Indian detonation caused a decline in the daily rate of return at Karachi Stock Exchange but an increase in the trading volume and volatility. Whereas the detonation by Pakistan had no significant effect on the average ROR but it also caused an increase

volatility and trading volume. There is evidence of the resilience of the banking and financial sector of Pakistan and it has been found to rebound and stabilize quicker (Javid, 2009). This study is being conducted with the purpose to add to the existing knowledge bank. Osuala, Nwansi, Osuji and Njoku (2015) examined the signalling effect of the unexpected removal of Mallam Sanusi Lamido Sanusi, the erstwhile governor of the Central bank of Nigeria on the Nigerian stock market. The results of the study showed that the sudden ouster of Sanusi L. Sanusi as the governor of CBN had statistically significant negative impact on the stock market as negative abnormal returns were recorded in the market following the unexpected ouster from the event day up to four days after the event. They recommended that care should be taken in appointing central bank governors to avoid unexpected termination of their appointments as such action make huge negative publicity and send negative signals to the participants in the market, be they indigenous or external stock market investors.

### **2.1 Theoretical Framework**

The foremost theoretical underpinning for the signalling or information effect of surprise events in the capital market is the efficient market hypothesis developed by Fama (1965). In the past three decades, the Efficient Markets Hypothesis (EMH) developed by Fama (1965) has been the most venerable tenet of financial economics and a staple of academic analysis (Erzurumlu, 2011). The EMH suggests that security

prices reveal all currently available information in the market, provided that stock market investors are rational. Under the EMH, a natural metric for assessing the information content of a new event in the market is the fraction of the variance of stock returns that is associated with the announcement of such events (Aga and Kocaman, 2008). Osuala (2007) opined that the stock price performance around the announcement of the sudden removal of CEOs is a measure of the information conveyed by the change.

### **3. Research Methodology**

The objective of this study is to establish the relationship between the sudden announcement of fuel subsidy removal by the federal government of Nigeria and the resultant market returns. This study therefore utilised the correlational research design. The choice of this design is warranted by the fact that it seeks to establish the existence and nature of relationships, associations and interdependence between variables (Kumar, 2005). This study employed the standard event study methodology. Since an event study is an examination of the effect of a certain event upon the value of a company (Christensen, 2009), the first thing to do is to map and describe the event which in this study is the sudden announcement of fuel subsidy removal by the Federal Government of Nigeria and the event date is the day the announcement was made (11<sup>th</sup> May, 2016).

Furthermore, in order to determine the expected return on the market, an estimation period needs to be chosen within which the alpha ( $\alpha$ ) and the Beta ( $\beta$ ) will be estimated. The estimation period has to be of a certain length. In order to effectively avoid an overlap, a parameter estimation window of one hundred and ninety (190) days (203 to 14) was utilised. The idea behind making sure that the event window and the estimation window do not overlap is to make sure that an unbiased estimate of how the firm's stock prices would have behaved normally without the event's occurrence is obtained; otherwise the normal return is *contaminated* by the event (Osuala, Nwansi, Osuji & Njoku, 2014). An event window of thirty one days (31 days) (-15 to +15) was adopted by the study. This covers fifteen (15) trading days before the announcement, the day of the announcement and another fifteen (15) trading days after the announcement.

According to Dyckman, Philbrick and Stephen (1984); Brown and Warner (1985) and Shaheen (2006), a parameter estimation period of 120 days is adequate, while Shahid, Xiaping, Mahmood and Usman (2010) opined that a parameter estimation window of 190 days is more adequate since daily market returns data for 190 days prior to the event can sufficiently formulate a benchmark for normal market returns.

Even though some studies (Panayides & Gong, 2002; Shahid et al., 2010; Osuala et al., 2014 and Mohammed et al., 2014) suggested that event windows of 11 days before and 5 days after; 10 days

before and 10 days after; 1 day before and 6 days after and 15 days before and 15 days after respectively are sufficient to fully capture the effect of an event; this study utilised the longer event window. The choice of the longer event window (of -15, +15) is made in order to capture possible pre-event reaction and this is consistent with the view that emerging markets like Nigeria in the words of Afego (2010) are generally known to be less efficient than matured markets and therefore, tends to be more sluggish in reflecting new information in stock prices.

Therefore, event windows should be much wider in order to capture leakages, rumours and long-run effects of events. Thus, the choice of a large event window is necessary not only in capturing any leaking information and rumour, but even to measure any effect of growing expectations to equity issue announcements in the Nigerian market.

### **3.1. The Study Population**

The population of this study consists of all the 174 listed firms on the Nigerian Stock Exchange that traded on the 11th May 2016 which was the day the news of the subsidy withdrawal became public.

### **3.2. Sampling Design and Procedure**

The study utilised all the listed firms in the Nigerian stock market. For a firm to be part of the sample, however, the following criteria must be met:

- i. Data on daily stock prices must be available for the firm at least over the period of 190 trading days before the announcement and another fifteen trading days after the announcement.

ii. The firm did not undergo technical suspension within the period of the event window.

iii. No other simultaneous important announcement such as earnings and bonus issues announcement have taken place such as to have contaminated the effect of the event within the event window. The application of the above criteria resulted in the elimination of 98 (ninety eight) firms from the sample. This left us with 76 (seventy six) firms in our sample.

### 3.3. Sources and Method of Data Collection

This study relied solely on data collected from secondary source. Specifically, the study utilised secondary data relating to the daily stock prices of sample companies for 190(one hundred and ninety) trading days estimation window and the 31 (thirty one) trading days event window. Similarly, the corresponding NSE daily All Share Index (ASI) was collected for the same period. Both the daily series of stock prices of the sample companies and the corresponding NSE ASI was retrieved electronically from the online database of cash-craft asset management limited and verified from the capital assets management website. Since the study as aimed at evaluating the information effect of the announcement on the shares of firms'listedon the NSE, the data collected werebased on those firms whose stocks traded on the NSE during the study period.

### 3.4. Data Analysis Techniques

Analysis of the study began with the conversion of

daily share price data to daily continuously compounded stock returns using the formula below as advocated by Strong (1992), Arsiraphongphisit (2003), Brooks (2008) and Adelegan (2009a) all in Bello (2014):

$$R_{i,t} = \ln \frac{P_{i,t} - D_{i,t}}{P_{i,t-1}} \times 100 \quad (1)$$

Where  $R_{i,t}$  is the return on the security company  $i$  at time  $t$ ;  $P_{i,t}$  is the share price of the company at time  $t$ ;  $D_{i,t}$  is the dividend received from security  $i$  at time  $t$ ;  $P_{i,t-1}$  is the share price of company  $i$  at time  $t - 1$  and  $\ln$  stands for natural logarithms. Given that the study in the first instance will utilise an event window and the estimation window of less than a year dividends would be constant at zero. The logarithmic transformation of the time series data became necessary in view of the need to keep the effect of outliers under control. The same approach will also be applied to the NSE ASI to create daily compounded market returns as follows:

$$R_{mt} = \ln \left[ \frac{ASI_t^*}{ASI_{t-1}} \right] 100 \quad (2)$$

Where  $R_{mt}$  is the return on the market at time  $t$ ;  $ASI_t$  is the NSE ASI at time  $t$ ;  $ASI_{t-1}$  is the NSE ASI at time  $t - 1$ ; and  $\ln$  is as defined above. The log daily returns of the Sample Company's and those of the NSE ASI will be the main variables of the study. Being an event study, log stock and index returns were computed over the parameter estimation window of 190 trading days, starting from day -203 to day -14

and the event window of 31 trading days running from day -15 to +15 with day 0 as the day of the event. The next step was establishing the stationarity of computed daily sample of company returns and the return on the market index. Financial time series data, especially those collected on daily basis are generally believed to be non-stationary (Brooks, 2008; Agung, 2009). This non-stationarity implies the existence of unit root in the data which often give rise to the occurrence of spurious regressions (De Medeiros & Matsumoto, 2006).

Consequently, the study employed the Augmented Dickey-Fuller test for unit roots (Dickey and Fuller, 1979) to test for the stationarity of the sample data series which will consist of stock return series and market return series. The estimation was done based on the following model (Brooks, 2008 cited in Bello, 2014):

$$\Delta y_t = \mu + \gamma Y_{t-1} + E_t \quad (3)$$

Where  $y$  is a non-stationary series;  $\mu$  and  $\gamma$  are parameters to be estimated and  $E$  is a random disturbance term. The null hypothesis for the presence of a unit root in the series will be rejected if the Dickey Fuller test statistic is less than the critical value at a given apriori alpha level and the alternative hypothesis of a stationary time series will be accepted. The reverse will be true if the test statistic is greater than the critical value.

In order to capture the abnormal returns in the event window, the study utilised the market model

pioneered by Ball and Brown (1968), Fama et al (1969) and Brown and Warner (1985) and Mackinlay (1997). When using the market model, abnormal returns are the differences between the actual stock return and the predicted stock return (the return that would have been earned had the event not occurred) based on Ordinary Least Squares (OLS) estimation that employs market return as the independent variable (Mackinlay, 1997). To obtain the actual return over the parameter estimation window and the event window, the following linear model was estimated:

$$R_{i,t} = \alpha_1 + \beta_1 R_{m,t} + \epsilon_{it} \quad (4)$$

Where  $R_{i,t}$  is the actual return on company  $i$ 's security at time  $t$ ;  $\alpha_1$  and  $\beta_1$  are parameters to be estimated;  $R_{m,t}$  is the market return at time  $t$ ; and  $\epsilon_{it}$  is company  $i$ 's random disturbance term at time  $t$ . Assuming a constant beta value, the estimated return for company  $i$ 's security can be computed by substituting the estimated values of  $\alpha_1$  and  $\beta_1$  over the estimation window in equation (6) above as follows:

$$\hat{E}_{ts} = \hat{\alpha}_1 + \hat{\beta}_1 R_{m,t} \quad (5)$$

Where  $\hat{E}_{ts}$  is the expected return on company  $i$ 's security at time  $t$ ;  $\hat{\alpha}_1$  and  $\hat{\beta}_1$  are the estimated parameters based on the estimation window; and  $R_{m,t}$  is the market return at time  $t$ . The abnormal return is defined as the difference between equation (6) and (7) as follows:

$$AR = R_{it} - E_{it} \quad (6)$$

Once the estimated equation has been obtained, the actual return on company i's security was calculated as follows:

$$R_{it} = \alpha_i + \beta_i R_{m,t} + E_{it} \quad (7)$$

Since  $E_{it} = \alpha_i + \beta_i R_{m,t}$  equation (9) simplifies to:

$$R_{it} = E_{mt} + E_{it} \quad (8)$$

This implies that abnormal return for company i at time t is simply given as:

$$AR_{it} = E_{it} \quad (9)$$

Thus, the abnormal return on the security of a given sample company will simply be the residual of the OLS after regressing the company stock return on the market return. For the residuals to be considered as the abnormal return however, the parameters estimated over the estimation window must be integrated into the equation as shown above.

Since the hypotheses of the study were tested using the standard t-test, the need to ensure that all assumptions regarding the use of the tool hold became crucial. The standard t-test assumes that individual firms' abnormal returns are normally distributed. Thus, the normality of residuals is necessary to validate t-tests (De Medeiros & Matsumoto, 2006). In the light of this, the study utilised the Jarque-Bera Normality test (Bera & Jarque, 1981) to test for the normality of the abnormal returns. The statistic was computed as follows:

$$\text{Jarque-Bera} = \left[ \frac{N-k}{6} S^2 + \frac{(K-3)^2}{4} \right] \quad (10)$$

Where S is the skewness, K is the kurtosis; and k is the number of estimated coefficients used to create the series. The null hypothesis of normality will be rejected if the Jarque-Bera statistic is significant at an a priori alpha level, and vice versa.

The cumulative abnormal return of company i in the sample for a given period was obtained by summing up the abnormal return in a given period. The procedure is demonstrated by the following formula (Peterson, 1989):

$$CAR_i(t_0, t_1) = \sum AR_{i,t} = \sum \epsilon_{t,1} \quad (11)$$

Where  $CAR_i(t_0, t_1)$  is the cumulative abnormal return of company i from time  $t_0$  to  $t_1$ ;  $AR_{i,t}$  is the abnormal return of company i at time t;  $\epsilon_{t,1}$  is the residual of company i at time t. Similarly, the sample average abnormal return at time t is simply the arithmetic mean of n number of stocks, as shown below:

$$AAR_t = \frac{1}{n} \sum AR_{i,t} \quad (12)$$

Where  $AAR_t$  is the sample average abnormal return at time t; n is the number of observations; and  $AR_{i,t}$  is the abnormal return of company i at time t. As a consequence of the foregoing, the cumulative average abnormal return was computed as follows:

$$CAAR(t_0, t_1) = \sum AAR_t \quad (13)$$

Where  $CAAR(t_0t_1)$  is the sample cumulative average abnormal return from time  $t_0$  to  $t_1$ ; and  $AAR_t$  is the sample average abnormal return at time  $t$ . The null hypothesis of no significant cumulative abnormal return for equity issues announcement fifteen trading days before the announcement, on the announcement date, and fifteen trading days after the announcement was tested using the t-test for the significance of abnormal returns. According to Brown and Warner (1985) and Panayides and Gong (2002), the test statistic is simply the ratio  $t_0$  to period  $t_1$  CAR to its estimated standard deviation over the estimation window as shown in the equation below:

$$t(CAR) = \frac{CAR(t_0t_1)}{S(AAR_t)} \quad (14)$$

Where  $t(CAR)$  is the test statistic for cumulative abnormal return;  $CAR(t_0t_1)$  is as defined above;  $S(AAR_t)$  is the standard deviation of average abnormal return over the parameter estimation window. For the decision criteria, the null hypothesis of no significant abnormal return will be rejected if The EVIEWS 7.0 Econometrics package was used for all statistical and econometric tests in this study. The choice of this package among its peers was motivated by its robustness and flexibility in handling financial and time series data (Gujarati, 2003; Agung, 2009) in Bello (2014).

#### **4. Presentation and Discussion of Results**

The analysis of our results started with establishing the stationarity of all the variables that were utilised for the study. Hence, the ADF test was employed to establish the stationarity of the stock return series and

the corresponding market return series within the event window. The test was conducted in order to avoid dealing with non-stationary variables which might give rise to spurious results. The results for the unit root test were based on the 76 stock return series and the corresponding 76 market return series for the supports the existing evidence that prices of financial assets tend to be non-stationary while their return tend to be stationary (Chiang & Doong 2001; Brooks 2008). In addition, results for the White (1980) test illustrated in Table 1 suggest the absence of heteroskedasticity of unknown form in the residuals of the 76 models within the event window. Furthermore, the result of Breusch-Godfrey test for the presence of first order serial correlation in the residuals revealed that 69 models are not serially correlated at one lagged (-1) period, while that of seven (7) firms became serially uncorrelated at two lagged (-2) period after which the observed serial correlation disappeared. Lastly, the results indicate that the data for 42 firms are normally distributed at 1% level of significance, while data for 34 firms are normally distributed at 5% level of significance.

**Table 1: Diagnostic and Specification Tests Results**

FIRM	NORMALITY	SERIAL	HETERO	FIRM	NORMALITY	SERIAL	HETERO
ACADEMY	0.0530	0.2092	0.8763	MOBIL	0.0140*	0.0110	0.0101
ACCESS	0.9826	0.0983	0.6699	MORRISON	0.0120*	0.5256	0.7799
AFRIPAINTS	0.0758	0.0137	0.1464	MPFMCRF	0.9475	0.0108	0.7638
AGLEVENT	0.0110*	0.0360	0.3782	NAHCO	0.2256	0.0992 (-2)	0.8788
AIRSERVICE	0.3394	0.8425	0.7272	NASCON	0.1264	0.9730	0.5822
ALEX	0.0356*	0.0121	0.0127	NCR	0.0150*	0.9649	0.8832
ANINO	0.0238*	0.0102	0.4872	NEIMETH	0.0120*	0.7921	0.7919
ASHAKACEM	0.0120*	0.4349	0.0106	NESTLE	0.0126*	0.0381	0.1136
AUSTINLAZ	0.0110*	0.9649	0.8056	NEWGOLD	0.0120*	0.1252	0.9124
AVONCROW	0.0775	0.0101	0.0147	OANDO	0.0140*	0.5998	0.8806
BETAGLASS	0.0122*	0.0125	0.4411	PAINTCOM	0.0112*	0.6789	0.8643
CADBURY	0.0180*	0.1384	0.8610	PORTPAINT	0.0120*	0.0113	0.0110
CAPHOTEL	0.0124*	0.0538(-2)	0.0717	PREMBREW	0.0158*	0.0329	0.0701
CAP	0.4193	0.0577	0.0729	PRESCO	0.5884	0.8719	0.9887
CCNN	0.0110*	0.5094	0.5119	REDSTAREX	0.0191*	0.0483 (-2)	0.8291
CHALLERAM	0.0577	0.0104	0.0162	SCOA	0.0101*	0.5694	0.5278
CHAMPION	0.8190	0.0585 (-2)	0.9128	SEVENUP	0.0110*	0.7293	0.7494
CONTINSURE	0.1048	0.1621	0.7697	SKYEBANK	0.0111*	0.6944	0.5908
DANGCEM	0.0149*	0.0147	0.7483	SMURFIT	0.0120*	0.9505	0.0121
DANGFLOUR	0.0267*	0.0520	0.8548	STANBIC	0.0349*	0.7783	0.5342
DANGSUGAR	0.0100*	0.9743	0.8919	STERLIN	0.9051	0.0559	0.8350
DIAMOND	0.1200	0.0571(-2)	0.8312	THOMSWYAT	0.0105*	0.6783	0.7067
ENAMELWA	0.0641	0.1465 (-2)	0.6385	TOTAL	0.0130*	0.9930	0.8950
ETI	0.1100	0.2215	0.9812	TOURIST	0.1209	0.3506	0.3178
FBNH	0.3147	0.1085	0.9686	TRANSCOHOT	0.9879	0.5289	0.5143
FCMB	0.1081	0.1114	0.4139	TRANSEX	0.0121*	0.9113	0.8898
FIDELITY	0.1120	0.0920	0.8218	UACN	0.0116*	0.1002	0.6867
FLOURMILL	0.7985	0.1436	0.8353	UACPR	0.3197	0.1872	0.5020
GOLDBREW	0.0122	0.3534	0.1973	UBA	0.7987	0.0409	0.8564
GUARANTY	0.1466	0.6676	0.4001	UBN	0.9245	0.3895	0.6185
GUINNESS	0.4517	0.0573	0.4052	UNHOMES	0.0101*	0.0709	0.9004
IKEJAHOTEL	0.0110*	0.9641	0.8931	UNITY	0.4381	0.0763	0.0674
INTBREW	0.0130*	0.2931	0.8991	VANLEER	0.0104*	0.7362	0.7218
JOHNHOLTI	0.0146*	0.0791 (-2)	0.7722	VITAFOAM	0.0131*	0.9189	0.5992
LEARNAFRICA	0.0120*	0.0949	0.7682	WEMA	0.8094	0.0121	0.4138
LENNARDS	0.0108*	0.4967	0.6946	ZENITH	0.6646	0.7035	0.5965
MANSARD	0.4742	0.3016	0.4677	-* at 1% level of significance - (-2) two lagged periods			
MAYBAKER	0.0104*	0.9386	0.7651				
MCNLCHOLI	0.0130*	0.4119	0.8110				

Source: Eviews 7.0 Output/Researcher's Computations, 2017

The hypotheses of the study were tested using the *t*-test for the significance of abnormal return over three periods. In each of the cases, the *t*-statistic sought to establish whether the abnormal return or cumulative abnormal return over the period of interest is significantly different from zero. Thus, the three points at which the significance of abnormal return and the cumulative abnormal return were tested include announcement day abnormal return, announcement day cumulative abnormal return and post-announcement day cumulative abnormal return.

as Osuala, Nto and Akpan (2013) and Adelegan (2009b) and negates the findings of Lassoued and Attia (2013), Suchard, Singh, and Barr (2001) and Mohammed and Nwafor (2014).

Conversely, the result of  $H_{02}$  indicates that the calculated *t*-statistics at 0.4996 is less than the critical value of 6.3138 at 5% level of significance, thus the study failed to reject  $H_{02}$ . Therefore, there is no significant CAR on the day of announcement, this finding supports the findings of Adelegan (2009b) and contradicts Lassoued and Attia (2013), Suchard, Singh and Barr (2001) and Mohammed and Nwafor (2014).

Lastly, the result of  $H_{03}$  shows that the calculated *t*-statistics of -3.0988 in absolute values is greater than the critical value of 1.7613 at 5% level of significance, therefore the study failed to accept  $H_{03}$ .

Thus, there is negative significant CAR fifteen (15) trading days after announcement, this finding is in contrast with the findings of Osuala, Nto, and Akpan (2013) and Warner, Watts, and Wruck (1988) and consistent with Lassoued and Attia (2013), Suchard, Singh, and Barr (2001) and Mohammed and Nwafor (2014).

## 5. Conclusions

This study surveys the signalling effect of the unexpected removal of fuel subsidy by the Federal Government of Nigeria on the Nigerian stock market using the standard event study methodology. The results of this study indicate that the sudden announcement of the removal had positive but

**Table 2: Results of Test of Null Hypotheses ( $H_{01}$  to  $H_{03}$ )**

	<b>H01</b>	<b>H02</b>	<b>H03</b>
CAR	4.0991	0.7879	-4.8870
Standard Deviation	1.5771	1.5771	1.5771
Calculated T – Stat.	2.5991	0.4996	-3.0988
Degree of Freedom	14 (15-1)	1	14 (15-1)
Critical Value	1.7613	6.3138	1.7613

**Source:** Eviews 7.0 Output and Critical Value Table

The result for test of  $H_{01}$  indicates a calculated *t*-statistics of 2.5991 which is greater than the critical value of 1.7613 at 5% level of significance therefore the study failed accept  $H_{01}$ . Thus, there is positively significant CAR fifteen (15) trading days before the announcement. While studies on the sudden announcement of sudden events such as fuel subsidy removal are not common, the finding of significant positive abnormal return on the announcement day is consistent with the findings of existing studies on sudden events like the sudden removal of CEO's such

insignificant CAR on the day of the announcement and a negative significant CAR after the announcement. Thus, it can be concluded that the reason behind the positive insignificant CAR may be as a result of the fact that the market was pervaded by uncertainty on the success or otherwise of the sudden removal. While, the reason for the negative significant CAR after the announcement might be as a result of the fact that market participants in the Nigerian stock market adjudged the sudden announcement of the removal of fuel subsidy as bad news. Thus, fear of the possible consequences the subsidy removal might have on the economy may have accounted for the sharp negative reaction after the announcement. This study shows that there exist high economic and social costs associated with the sudden announcement of policies by the Government, particularly on a sector that has direct linkage with virtually every aspect of the economy. That may be the reason why investors reacted immediately to the event on the announcement day and immediately after the event.

## **6. Recommendations**

Consequent upon the findings of the study, it is recommended that policy makers should avoid sudden announcement of policies that borders on sensitive sectors of the economy. The announcement of such actions should be preceded by the release of information that sufficiently justifies such action by policymakers before it is made public. The release of such information is useful as it will help the stock market to properly understand the idea underlying the action by policy makers and will further severely reduce the information asymmetry in the market

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## **Dividend Policy and Share Price Reaction of Deposit Money Banks in Nigeria: A Post Global Financial Crises Review**

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### **ABSTRACT**

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*This paper examined the effect of Dividend Policy on the Market Price of Shares of Deposit Money Banks in Nigeria. The sample consists of a balanced panel data of 13 Deposit Money Banks listed on the Nigerian Stock Exchange as at 2019. The study utilized Econometrics Regression model to test the effect of Dividend Policy on Market Price of Shares of Deposit Money Banks in Nigeria. The result shows that first proxy of Independent Variable (DY) has no significant effect on market price of shares of sampled banks. It also found out that DPR (another proxy of Independent Variable) has no significant effect on market price of shares. The result revealed that DC (the third proxy of Independent Variable) has no significant effect on MPS. Therefore, the Managers of Deposit Money Banks in Nigeria should focus on Dividend Policy of their banks, as investors can use the Dividend Yield as a direct signal toward the potential upside of the Share Price. Hence, they could buy Shares with a high Dividend Yield to gain more stock appreciation.*

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**KEYWORDS:** Dividend Yield, Dividend Payout, Dividend Cover, Share Price

### **1. Introduction**

The market share price of listed corporate is a matter of concern not only to the management of the corporate but to other stakeholders such as employees, suppliers, investors, and customers. According to Akhmadi, Nurohman and Robiyanto, (2020) a fall in the share price of a corporate subsequently decreases its value and the demand for equity of the corporate in the market fall, this induces further fall in share price. When this happens, the life of the corporate is affected and its management may be threatened with adverse consequences such as the

discontent of individual and corporate investors, undercut the confidence of employees, customers, rise in cost of raising new capital, suppliers and may handicap merger (Akhmadi, Nurohman & Robiyanto, 2020). The movements in the stock prices can occur due to many factors, which are commodity prices, world oil price fluctuation, precious metal prices (Putra & Robiyanto, 2019; Arfaoui & Ben-Rejeb, 2017; Robiyanto 2018). This could happen because these prices can affect the profitability level of the corporations as Muryanti and Subowo, (2017) found

that the Firm's share price would increase along with the increase in the firm's profitability.

Despite dividend policy being one of the mostly researched topics in the field of finance (Njogo, Ogboi, Inim, & Seun, 2018). Persistent crash in the market price of shares has become a major concern to financial analysts and investors all over the nation and the world in general (Bibiana, Ogboi, Victor, & Ayanwale, 2018). Some financial analysts attribute the crash to the Firm's non-payment of dividends which made investors lost interest in trading on shares, they added that the objective of any corporate is the maximization of shareholders wealth and once investors could not get the value of their investment, they tend to divert their funds to other investment opportunities that could yield them immediate returns. Some financial analysts are of the opinion that payment of dividend has no significant influence in the determination of market prices of shares (Nurlita & Robiyanto 2018).

Meanwhile, dividend policy has been kept as the top ten puzzles in finance (Ideweke & Murad, 2019). The most pertinent question to be answered here are; how much cash should corporations give back to their shareholders? Should firms pay their shareholders through repurchasing their shares or by dividends? Which is the least costly form of payout from tax perspective? Corporations must take these important decisions period after period, some must be repeated and some need to be reevaluated each period on regular basis. Adefila, (2004) concluded that Nigerian

firms wish to pay dividends without any breaks and that there is no association among Net Earnings, Dividend Payments and Share Prices. Nigerian Firms disburse dividends to owners of the Firms irrespective of the amount of incomes for the contentment of the owners.

In Nigeria, the new policy directive by the CBN on dividend payment is a proactive measure to protect and strengthen the industry in the economy, financial system and consumers, to ensure a more efficient economy, where any normative approach to dividend policy intended to be operative under real world conditions; should consider the corporate's investment opportunities and any preferences that investors have for dividends as opposed to capital gains and vice versa, and difference in "cost" between retained earnings and new equity issues should also be considered. Various firms adopt dividend policy depending on the firm's articles of association, memorandum of association (in some situation) and the prevailing economic situation. Some make high payout, while others make low payout and yet others pay share dividends (bonus issue) in lieu of or in addition to cash dividend while others pay cash only. All in a bid to maximize shareholders wealth which, in this case, is the market value of the firm's common stock (Adefila, 2010).

According to Ideweke and Murad (2019) some banks listed in the Nigeria Stock Exchange have failed to meet the requirement of paying dividend on a yearly basis for a number of years, and also considering the Matters Act (CAMA, 1990) as amended, payment of

dividend should be on the basis of net profit for the period. The questions are; is there any relationship existing between the profitability and the dividend policies made by banks in Nigeria? Is it that the financial status of these firms did not favour the payment of dividend during these periods? The return of banking stock is very low when compared to other sectors like food and beverages that recorded an average return of 1,126 points and 1,106 points in 2015 and 2016 respectively (Akhmadi, Nurohman & Robiyanto, 2020). Popoola (2019) reported that in August 2019 banking index, Dragged by losses in Unity Bank Plc, FBN Holdings Plc and Zenith Bank Plc, declined by 6.05 percent.

However, the interactions among powerful states during the time of the global financial crisis, from August 2007 to March 2009, and the continuing aftermath, were a time of great drama (Purdum, 2009). The collapsing values of equities, real estate, and currencies combined with the potential for bankruptcy of the financial and credit systems of many nations to create considerable fear and anxiety (Roxburgh, et al., 2009). Fears were raised about a possible repeat of the depression of the 1930s and about the viability of capitalism itself (Valencia, 2010). The chance of a global economic system spiraling out of control was not small, and ministerial and political leaders made decisions in an atmosphere of genuine crisis. Missteps could have catastrophic consequences (Roxburgh, et al., 2009). In the end, there was much reason for worry. The cost of the

crisis in various forms of governmental support was \$15 trillion, equal to nearly one-quarter of the global gross domestic product (GDP) (Valencia, 2010). In addition, the losses in home equity and in investments (potentially recoverable) were as much as \$28 trillion. Financial institutions sustained several trillion dollars in losses, as would many firms operating in other areas of the economy (Valencia, 2010). Unemployment rates around the world rose substantially, driven up by the severe economic downturn that followed, with significant negative effects of the crisis linger (Roxburgh, et al., 2009). To this end the contribution of this study is, although researches on the relationship between stock prices and dividend policy had been done previously, but Akhmadi, Nurohman and Robiyanto, (2020) suggested that future study should include macro economics/external factors as the control variables. The study therefore comes in to fill the void by establishing whether there is effect of dividend policy on share price among listed Deposit Money Banks in Nigeria: A post global financial crisis, by including; inflation rate, and economic growth rate as control variables.

## **1.2 Research Objectives**

The purpose of this research is to examine the effect of dividend policy on market price of shares among listed deposit money banks in Nigeria. The following specific research objectives have been developed to take the issue.

- i. To determine the effect of dividend yield on share price of deposit money banks in Nigeria
- ii. To determine the effect of dividend payout ratio on share price of deposit money banks in Nigeria.
- iii. To determine the effect of dividend cover on share price of deposit money banks in Nigeria.

## **2. Literature Review**

In this section, relevant literature is reviewed and synthesized.

### **2.1 Concept of Share Prices**

Shares are among the main investment vehicles used by investors to invest their monies, it has become an important investment vehicle because it makes holders of the shares part owners of the business. Gitman (2006) divides shares into common and preferred; holders of common shares have ownership claim against the real or productive assets of the firm. When the firm is performing shareholders are the main beneficiaries. On the other hand, if the firm is not performing, they are the main losers. Investors purchase shares for varying reasons: while some are interested in the long run growth of the firm, others expect to receive returns in the form of regular dividend on their investment. Therefore, Share price refers to the price of a single share of a number of saleable stocks of a firm (Huang, 2004). These factors include; Investors tend to respond to factors that affect the company's future as merger proposals, takeover bids, quality of management, growth history, competitive position of the company and potentials for technological breakthroughs. Hence, in a corporate

valuation, a company's analysis is done to select a firm that is not only competitive but has a reasonable chance of at least maintaining its competitive position in future.

**i. Speculation of the performance of a company of an aggravate share price movement:** Investors generally react to economic conditions which may lead to a bullish or bearish market. For instance, fear or hope of budgetary or monetary measures or even publications of the balance of payment figures that can influence investors (Huang, 2004).

**ii. Level of interest and yield differentials:** During the period of rising interest rate, stock prices tend to drop or level-up. The price of bond will move in the opposite direction because of its attractiveness, but from a corporate point of view, as interest rate increases, stock prices might rise depending on the use of internal financing by companies (Huang, 2004).

**i. Money supply and by extension inflation:** According to Kraff and Kraff (1977) as supply of money increases, stock price tends to increase, normally which suggests that real stock prices remained constant except if the increase in the supply of money is a lot less than the increase in the stock price.

**Trading volume:** Ying (1966) suggested that it takes volume to move the price of a stock on the stock exchange because trading volume is indeed a measure of investor's emotions.

Another important factor that can affect stock price is the financial performance of a company, i.e., the company's earnings. The world economy and political situation within the country can influence investors' confidence in the economy and therefore, in their investment behavior (Huang, 2004).

## **2.2 Dividend Policy**

The concept of dividend has been defined by many authors and researchers. According to Bierman (2001), dividend is an appropriation of profits to shareholders after deducting tax and fixed interest obligations on debt capital. It constitutes return to shareholders on their investment, and the aim is to increase their confidence in the future of the company in which they have invested. Watson and Head (2010) define dividend as a cash payment made on a quarterly or semiannual basis by a company to its shareholders. It is a distribution of after-tax profit. Jo and Pan (2009) assert that dividend payment could provide a signal to the investors that the company is complying with good corporate governance practices.

### **2.2.1 Factors Affecting Dividend Policy**

According to Brigham and Gapenski (1985) factors affecting dividend policy include but not limited to the following: tax position of the shareholders (high and low income tax bracket), loan repayment, availability of acceptable project, inflation floating cost, information content of dividend, investment opportunities, company size, company growth, profitability, liquidity etc. Dividend policy may come in different form as noted by Pandey (2010) it may come in stable

dividend payout ratio, extra dividend (interim dividend), residual dividend and stock dividends.

### **2.2.2 Dividend Relevance & Irrelevance**

Developed by Gordon (1963) and Lintner (1962), the dividend relevance theory states that there is a direct relationship between the market value of a company and its dividend policy. One aspect and addition to this theory is the bird-in-the-hand argument which main point is that investors value current dividend over future dividend or capital gains (Gitman&Zutter, 2012). The argument is based on the notion that certain dividend today is more valuable than uncertain cash flows or returns in the future. The dividend irrelevance was developed by Miller and Modigliani (1961), the theory states that a firm's value is determined by its earning power and its risk of investment. How the firm chooses to distribute its earnings, as dividend or reinvestments, is not relevant for the valuation of the firm. Another aspect here is that investors are indifferent whether their capital gain is derived from dividends or capital gain since if they are in need of cash they can sell some of their stocks. The return gained by the investor is, therefore, the same whether the stock pay dividend or not, thus, the dividend policy is irrelevant for the stockholder and the possible returns (Gitman&Zutter, 2012).

### **2.2.3 Measures of Dividend Policy**

Dividend policy can be different for different countries because of different tax policies, rules, regulations and different institutions & capital markets (Zameer, Rasool, Iqbal & Arshad, 2013).

**i. Dividend Payout Ratio= Dividend per Share/Earnings per Share**

Dividend payout ratio is the amount of dividends paid to stockholders relative to the amount of total net income of a company. There are two metrics which are commonly used to gauge the sustainability of a firm's dividend policy (McManus, Ap-Gwilym, & Thomas, 2004).

**ii. Dividend Yield= Dividend per share/ Price per share**

Dividend is an annual rate of return on common stock (ordinary shares) or preferred stock (preference shares), computed by dividing the annual dividend by the shares' market price. Dividend yield reflects the return on the current 'opportunity value,' and not on the historical cost of the investment. As the price of the shares declines, the dividend yield goes up indicating that the shares are priced cheaply and are a 'good buy.' Such shares usually attract risk averse investors (Warren, Reeve, & Duchac 2011).

**i. Dividend cover:** is calculated by dividing the company's cash flow from operations by the dividend, this simply mean earning per share/dividend per share = dividend cover. This ratio is apparently popular with analysts of income trusts in Canada (Eriotis, 2005).

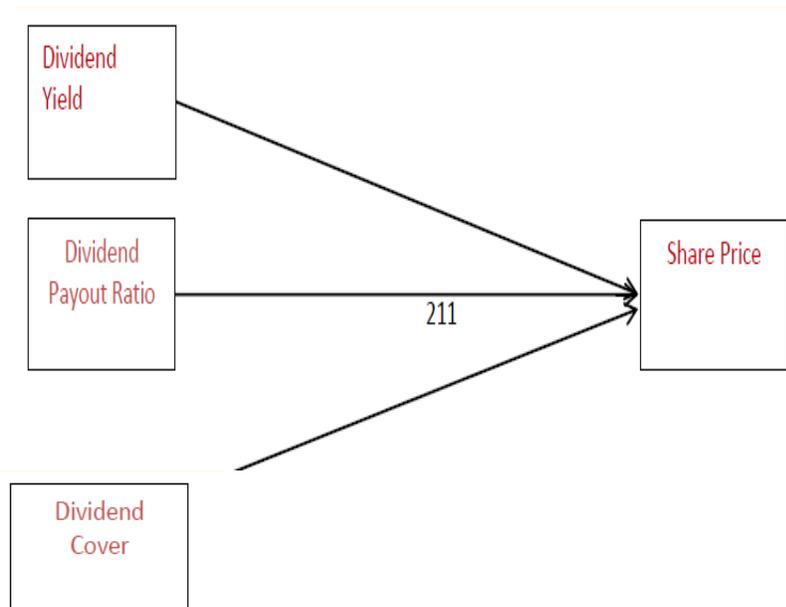
**2.3 Relationship between Dividend Policy and Share Price**

In the signaling theory, the existence of dividend changes can give signals to external parties about the company's prospects in the future. An increase in dividend payments is considered a good signal

because it illustrates the conditions and good prospects of the company so that it can affect the stock price increase (Hang *et al.*, 2018). Several empirical studies state that dividend policy had a positive effect on stock prices i.e. Hunjraet *al.* (2014) and Ernayaniet *al.* (2017). They confirmed that there was a positive influence of dividend policy on stock prices. For this reason, the main hypothesis is formulated as follows: there is positive significance relationship between dividend policy and share prices.

**2.4 Conceptual Framework**

The framework (figure 1) for this study presented below shows the hypothesized conceptual framework guiding the study and it also show the relationship between the independent variable (Dividend Policy) and the dependent variable (share price).



**Figure 1: Conceptual Model**

### 3.0 Research Methodology

The research design that have been used in this research is the ex-post facto method, as the study entails the use of annual reports and accounts of listed deposit money banks in Nigeria. Therefore, the non-survey design is adopted to actualize the research objectives, which aim at examining the effect of dividend policy on market price of shares of deposit money banks in Nigerian stocks exchange.

The population of the study consists of all the 15 deposit money banks listed by the NSE as at year 2019. Filter sampling technique was used through applying criteria, for a bank to be part of the sample; the bank should be qualified in terms of the following: They should have been listed on Nigerian Stock Exchange as at 2009, there should be no change in the fiscal year during the period, there should be no transaction cease for more than six months, the required data should be available. Therefore, the application of the criteria resulted to the selection of 13 deposit money banks as sample size of the study.

Moreover, the researchers used secondary source of data for the purpose of this paper. It consists of existing information which may be useful for the purpose of the study at hand. The secondary data were sourced from the banks' financial statement for the period of 10 years from 2010 to 2019 contained in the banks' annual reports and accounts.

Therefore, for the purpose of presentation and discussion of the result of data generated in the course

of this research technique (regression) of data analysis was used in STATA statistical tools of analysis.

However before the data analysis, robustness testS (i.e. multi-collinearity test, Hetero-skedasticity test, Normality test of the residuals) were conducted so as to ensure the validity of all statistical inferences and fitness of the model.

### 4.0 Result of Panel Data Regression Analysis

The dependent variable is Share Price (SPR), Dividend Yield (DY), Dividend Payout Ratio (DPR) and Dividend Cover (DC) which are used as proxies for dividend policy. The Inflation Rates (INF) and Economic Growth Rates (ECOGRW) are introduced as the control variables. The results of the panel data regression for the research model are presented in the table 4.6 below:

**Table 1:** The test results according to Dependent Variable SPR in the First, Second and Third Hypotheses

SPR	Research Model		
	$\beta$	T-Statistic	P-Value
DY DPR DC	-9.206734	-1.75	0.083
INF	1.329748	1.79	0.075
ECOGRW	-.0045134	-0.37	0.710
CONS	0.0109353	0.03	0.975
	-0.2149377	-0.65	0.518
	12.6278	2.53	0.013
$R^2 = 0.1306$ P-value= 0.0035 Hetero-skedasticity= 0.9365			

Source: Output of STATA (version 13)

#### **4.1 The Results of the First, Second and Third Hypothesis Test**

The result of the first and second hypotheses tests is shown in Table 1. The research model indicates the relationship between the independent variable (dividend policy) which proxied by (DY, DPR and DC) and the dependent variable SPR. The results of the finding from the model; show that the  $R^2$  which is often referred to as the coefficient of determination of the variables was 0.1306. The R-Squared which is also a measure of the overall fitness of the model indicates that the model is capable of explaining about 13.06% of the variability of banks' share price. This means that the model explain about 13.06% of the systematic variation in the dependent variable. That is, about 86.94% of the variations in share price of deposit money banks are accounted for by other factors not captured by the model. Since P-value of DY (independent variable) is 0.083 at 5% significance level which is greater than 0.05 therefore first null hypothesis is accepted; this mean there is no significant relationship between DY and SPR. Meanwhile, the results shows P-value of DPR is 0.075 at 5% significance level which is greater than 0.05 therefore second null hypothesis is accepted, there is no significant relation-ship between independent variable when proxied with DPR and dependent variable (SPR). Also the results shows P-value of DC is 0.710 at 5% significance level which is greater than 0.05 therefore third null hypothesis is accepted, this means there is no significant relationship between independent variable when

proxied with DC and dependent variable (SPR).

#### **4.2 Discussion of Findings**

The main objective of this paper is to determine the effect of dividend policy on market price of shares of deposit money bank in Nigeria. The result indicated that there is no significance relationship between the three proxies of independent variable (dividend yield, dividend payout ratio and dividend cover) this means that investors in emerging markets tend to less concerned with volatility in dividends over time, this statement supports the dividend irrelevant theory developed by Miller and Modigliani (1961). Meanwhile, the outcome is in contrary with the study Zakaria, Muhammad, and Zulkifli (2012); Adna, Farzand and Ilyas (2015), Njogo, Ogboi, Inim and Seun (2018), Baral, & Pradhan (2018).

#### **5. Conclusion**

The following conclusions can be drawn from the study; in order to comprehend the nature of the analysis, in this critical review a model was theoretically discussed and practically elaborated via illustrative example. The results show that there is no significant relationship between independent variable DY and dependent variable SPR. Moreover, the result also indicated that there is no significant relationship between the second proxy of independent variable DPR and SPR. Meanwhile, it was found that there is no significant relationship between another proxy of independent variable DC and dependent variable SPR. The results obtained from the statistical analysis suggest the all the three proxies of independent

variable has no effect on SPR of deposit money bank in Nigeria.

## **6. Recommendations and Suggestion for Further Studies**

Based on the aforementioned results, it is recommended that; Bank managers should carefully concentrate on dividend yield, even though it proved that DY have no significance effect on share price of the banks. This imply that investors must consider the

banks' profitability and the potential dividend in their stock investment decision. The paper provides the required evidences in order to offer the following suggestions for future studies: Evaluating the presented subject using the financial report of other companies in Nigerian stock exchange. As this paper is limited to certain operationalization for dividend payout ratio, it is suggested that other measurement tools may be useful.

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**APPENDIX**

**Sampled Banks**

S/NO	Bank
1	Access Bank Plc.
2	EcoBank Transnational Incorporated
3	FBN Holdings Plc.
4	FCMB Group Plc.
5	Fidelity Bank Plc.
6	Guaranty Trust Bank Plc.
7	Stanbic IBTC Holdings Plc.
8	Sterling Bank Plc.
9	Union Bank Nig. Plc.
10	United Bank for Africa Plc.
11	Unity Bank Plc.
12	Wema Bank Plc.
13	Zenith International Bank Plc.