

ISSN: 2795-3483



International Journal of
**ACCOUNTING
BUSINESS AND
ENTREPRENEURSHIP**

VOL. 2 NO. 1 JUNE, 2022

**A Publication of the Faculty of Administration,
Bingham University,
Karu, Nassarawa State.**

**INTERNATIONAL JOURNAL
OF ACCOUNTING BUSINESS
AND ENTREPRENEURSHIP
(IJABE)**

A Publication of the Faculty of Administration,
Bingham University,
Karu Nassarawa State.

ISSN: 2795-3483

VOLUME 2 NO. 1
JUNE, 2022

**INTERNATIONAL JOURNAL OF
ACCOUNTING BUSINESS AND
ENTREPRENEURSHIP**

VOLUME 2 NO. 1, JUNE 2021

A publication of the
Faculty of Administration,
Bingham University, Karu,
Nassarawa State.

All rights Reserved. Without limiting the copyright above, no part of this publication may be reproduced, stored or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), without the prior written permission of the copy right owner and the publishers of this book.

ISSN: 2795-3483

Copyright © IJABE 2022

EDITORIAL

The International Journal of Accounting, Business and Entrepreneurship is a publication of the Faculty of Administration. The Journal focuses on publishing scholarly researched academic papers in the fields of Management, Accounting, Banking, Finance, Marketing, Entrepreneurship and Insurance.

Volume 2 No. 1, June, 2022 contains a total of nineteen articles from scholars across the globe. The board in this edition received and published articles believed to be the original works of the contributors and will not be held liable for any intellectual theft in any of the articles.

We appreciate the special effort of the panel of Reviewers who took time to review the contributions of all the authors in this edition.

Finally, the editorial Board wishes to acknowledge with gratitude the support of our esteemed readers, colleagues and all those who made this publication a reality.

Dr. C.T. Zwingina
Editorial Chief

J.O. Arumona Ph.D
Managing Editor

CALL FOR PAPERS

The International Journal of Accounting, Business and Entrepreneurship is an annual publication. All contributors of articles, book reviews, research notes etc. intend for consideration for publication in this journal should be in English and should be submitted in soft copies. Articles, book reviews and research notes intended for consideration for publications are subjected to reviews by experts in the related field. It is pertinent to note that the primary criterion for publication in the journal is the significance of the contribution to advancement of the science of management research and related literature. The decision of the Editorial board based on the reviewers is final and not subject to negotiation. All articles must undergo plagiarism test with a maximum allowance of 20%.

All correspondence, enquiries, contributions and research notes should be submitted to:

The Editor;

International Journal of Accounting, Business and Entrepreneurship (IJABE)

Faculty of Administration,

Bingham University, Karu, Nassarawa State, Nigeria.

Subscription Rates;

Nigeria- (Exclusive of postage)

Outside Nigeria-(Exclusive of postage)

EDITORIAL BOARD

Dr. C.T. Zwingina	-	Editor in Chief
Prof. N.D. Gado	-	Editor
Dr. J.O. Arumona	-	Managing Editor
Prof. Sam B.A. Tende	-	Member
Dr. Lambe Isaac	-	Member
Mr. Peter Aroge	-	Member
Mr. Caleb Yashim	-	Member

PANEL OF REVIEWERS

Prof. N.D Gado	-	Chairman
Prof. Sam B.A Tende	-	Member
Dr. C.T. Zwingina	-	Member
Dr. J.O. Arumona	-	Member
Dr. Lambe Isaac	-	Member
Dr. B.B Orbunde	-	Member
Dr. M. I. Opusunju	-	Member

RESEARCH AND PUBLICATIONS COMMITTEE

Dr. J.O. Arumona	-	Chairman
Mr. Tony Wuyep	-	Member
Mrs. Felicia Eze	-	Member
Dr. Esther Bagobiri	-	Member
Mr. Caleb Yashim	-	Secretary

EDITORS AT LARGE

Prof. W.B. Quirix	-	Vice Chancellor
Prof. James Ihenieje	-	Visitor
Prof. Helen Andow	-	Visitor
Prof. Benjamin Gugong	-	Visitor
Assoc. Prof. Aza	-	Visitor

TABLE OF CONTENTS

Effect Of Social and Economic Reporting on Market Value of Deposit Money Banks in Nigeria <i>Jennifer M. Ipevnor, Professor Ioraver N. Tsegba, Dr. Kwaghfan Aondoakaa</i>	1
Effect of Corporate Boards on the Audit Quality of Deposit Money Banks in Nigeria <i>Arumona Jonah. O. PhD, Onoja Emmanuel E. PhD</i>	16
Effect of Board Size and Composition on Earning Per Share of Listed Health Care Companies in Nigeria <i>Onmonya Lucky Otsoge Ph.D, Udeozor Paul Ejike</i>	30
Effect Of Strategic Posture on Competitive Advantage of IHS (Towers) Nigeria Limited Strategic Business Units <i>Beetseh, Christopher Egu</i>	43
Participative Goal Setting and Employees' Performance in Selected Companies in Kaduna Nigeria <i>Joy Altasom Gwems, Dr. Abdul Adamu, Julius Tumba Ndaghu</i>	59
Relationship between Return on Equity (ROE) and Equity Investment in the Listed Companies in Nigeria <i>Ibrahim Adamu Saleh PhD, Abdullahi Umar PhD, Nasiru Balan Malam</i>	71
Effect of Corporate Social Responsibility on Performance of Faith Based Organizational Development in Karu, Nasarawa State, Nigeria (A Case Study of Winners Chapel International, Goshen) <i>Caleb Y. Yashim, Tony Lohven Wuyep, Kassah Virginia, Bamidele S.</i>	83
An Empirical Analysis of Pension Fund Investment and Nigerian Capital Market Development <i>Yusuf Paul Yaki, Caleb Y. Yashim</i>	97
Corporate Social Responsibility and Firm Performance in The Context of Listed Non-Financial Firms in Nigeria <i>Clement, E. Ozele, Sunny, I. Agbo, Mary Josiah</i>	116
Economic Implications of Money Laundering <i>Patrick Olasehinde Daniels, PhD, Kolawole Ebire, PhD</i>	131
Effect Of Firm Attributes on Financial Performance of Listed Oil and Gas Companies in the Nigerian <i>Ekpe Malthus Timothy, Mary Josiah, Sunny, I. Agbo</i>	140

Effect Of Entrepreneurship Development and Alleviating Insecurity on Employment Generation In Abuja Nigeria	
<i>Jakada, Anthony T. Dr. Umaru D. Mohammed. Dr. Nana U. Bature</i>	150
Economic Sustainability Reporting and Market Value of Listed Manufacturing Companies in Nigeria	
<i>Isaac Mbanongun Kwanum PhD, Luper Iorpev PhD Jocelyn Upaa PhD</i>	166
Audit Committee Attributes and Financial Reporting Quality of Listed Health Care Firms in Nigeria	
<i>Abubakar Abubakar, Ibrahim Adamu Saleh Ph.D, Abubakar Usman</i>	179
Managerial Incentives and Fraud Prevention in Plateau State Board of Internal Revenue Services (PSBIRS)	
<i>Prof. Gbegi Daniel Orsaa, Yashim Caleb Yahaya, Lukman Jimoh Rahim</i>	193
Effect Of Service Recovery Justice on Customer Satisfaction of Deposit Money Banks in North Central Nigeria	
<i>Gbande Cephaz Ph.D, Dr. R. A. Anah, John Blessing Abecan</i>	207
Effect Of Agricultural Export on Economic Growth in Nigeria	
<i>Eze Felicia, Opusunju Michael Isaac Ph.D., Akyuz Murat Ph.D.</i>	218
Financial Integration and Financial Development in Nigeria: Using NARDL Approach	
<i>Hambolu Victor Olufunsho, Ahmed Tijani Abdulmajeed</i>	232
Effect Of Electricity Service Delivery and Customer Satisfaction: Evidence from Electricity Consumers in Nasarawa State, Nigeria.	
<i>John Blessing Abecan, Yakubu Shammah, Tsaku David Isaac</i>	248
Effect of Working Capital Management on The Profitability of Listed Industrial Goods Companies in Nigeria	
<i>Arumona Jonah. O. PhD, Oyewobi, Ifeoluwapo PhD, Idedekum OH Daniel O.</i>	259

EFFECT OF SOCIAL AND ECONOMIC REPORTING ON MARKET VALUE OF DEPOSIT MONEY BANKS IN NIGERIA

Jennifer M. Ipevnor¹, Professor Ioraver N. Tsegba² and Dr. Kwaghfan Aondoakaa³

^{1&2}Department of Accounting and Finance, Joseph Sarwuan Tarka University, Makurdi.

³Department of Accounting, Benue State University, Makurdi Nigeria.

Correspondence: mnenaterver@gmail.com

Abstract

This study examined the effect of social and economic reporting on market value of deposit money banks (DMBs) in Nigeria. To achieve the study objective, ex-post facto research design was adapted and secondary data were extracted from the annual reports and accounts of 12 sampled banks listed in Nigeria for eight years from 2012-2019. Content analysis was used to extract data for the independent variables namely: Social reporting (SOC) and economic reporting (ECO). The variables were used to create an interacting variable namely: Social-economic reporting (SOCECO) to further investigate bi-lateral relationships. Diagnostic tests such as normality test, test for heteroscedasticity, multicollinearity and Ramsey Reset test for model specification, among others, were carried out to determine the suitability or otherwise of the test statistics. Two models namely; Tobin's Q and Stock Return Model were examined in the study. Panel regression analysis was used to analyse the data. The result of the Hausman test for randomization of panel result showed that the random effect regression is most suitable for the study. The results show that for objective one, social reporting has a positive effect on market value proxied by Tobin's Q while it has a negative effect on Stock Returns. The result of objective two indicates that economic reporting has a negative effect on the two dependent variables of the study also statistically significant for the first model (TQ) but insignificant for SR second model. The interaction between social and economic reporting shows a positive effect on Tobin's Q and Stock Return but the effect is not statistically significant ($p > 0.05$), the effect is in line with a priori expectation. The study, concluded that social-economic reporting in the banking industry improves the value of the shares of the sampled banks. The study, therefore, recommended among others that banks should invest in socially responsible activities in order to sustain their business for the benefit of the shareholders.

Keywords: Social reporting, Economic reporting, Tobin's Q, Stock return, Deposit money banks

INTRODUCTION

Long-term corporate success need to ensure that economic activity is socially sustainable (Unerman et al 2007). In the short-term it may be possible to have economic growth, while damaging society but in the long-term this is impossible. Therefore, if businesses conduct

their operations in such a way that they continue to harm society and produce unstable economic environment, such organizations' activities are neither economically nor socially sustainable. Similarly social economic sustainability is important to long-term corporate success and for ensuring that markets

convey value across societies (United Nations Global Compact, 2014).

There is continuous increase in expectation for all organizations to be more transparent in how they treat their employees, and how they treat their communities. Sustainability focuses on the organization and management of human activities in such manner that physical and psychological needs are met while not jeopardizing the social and economic foundations that allow these needs to be addressed. Similarly, Unerman et al (2007) maintains that in practice, attempts to account for social and economic performance has increased among many organizations, which means there is no economy without society.

Awan and Akhtar (2014) have observed that traditionally, firms have to concentrate on strategies for their business activities and profit such as concentration, turnaround, differentiation, diversification, and globalization. Modern business managers are focusing on the fact that their organizations should extend its activities to the community and not limited only to goods or services (Bakri, 2005).

Modern strategic thinking supports the need to add activities that expand out from the company into society. These events have inevitably raised external pressure from a variety of stakeholders, including the government, socially responsible investors, financial institutions, and, most notably, community lobby groups, whose efforts have resulted in continuing social unrest. Thus, companies have to cope with the challenges that comes from the public and stakeholders in order to get the good reputation, increasing the effectiveness of the companies, improving the performance of the companies, having good relation to the stakeholders, and getting “social permission” to operate their business within societies and communities (Wibowo, 2012). However, recently strategic thinking support the need to

add activities that expand out from the company into society.

Corporate social responsibility is therefore viewed not as a desirable response to transient social pressures, but rather a manifestation of deep, far-reaching social changes in our society (Dabbas and Al-rawashdeh, 2012). It is therefore conceived as an activity policy and practice of entities (and individuals) when firms voluntarily integrate social activities into their operations and combine them harmoniously with economic interests, and the relationships with all interested groups are hinged on the valuable principles of respect for the individual and society as a whole (Sapkauskiene & Leitoniene 2014).

The issues that current managers face focus around how to monitor performance across the dimensions of sustainability in order to reap the benefits from its implementation strategy. In view of this, investors and scholars who support sustainability reporting have argued that companies who have enshrined and made public their sustainability operations have positive performance indices that outperform those that have not. This requires that more researches be carried out in this direction to determine the effect of sustainability reporting on corporate performance.

Statement of the Problem

Sustainability reporting has gained ground in most countries around the globe. It is reported that 80% of companies worldwide report on sustainability (KPMG, 2020). This is definitely as a result of the potential benefits of this reporting system and a response to the demand for companies to be more transparent in how they treat their social and economic activities as they affect their stakeholders. More researches to empirically confirm the effect of sustainability reporting on corporate performance is desirable considering the gaps in prior researches.

Prior studies that investigated into sustainability reporting and corporate performance have focused mainly on developed countries and there is less work done on measuring the impact of sustainability reporting on performance in developing countries like Nigeria. The exemplary cases in Nigeria, which include Akinlo and Iredele (2014), Olayinka and Temitope (2011), Uwuigbe and Uadiale, (2011), and Uwuigbe, Olubukunola and Anijesushola (2011) have reported mixed results. These mixed results can be attributed to the methodologies adopted, variables used, or time frame used by the researchers. Burhan and Rahmanti (2012) and Aondoakaa (2015) have concluded in their study that researchers need to re-evaluate other important variables that could determine company performance. This study is motivated by two reasons: first, the scarcity of research in the Nigeria context; and second, lack of interaction between social and economic aspects of sustainability reporting in previous researches and how these issues affect market value.

Objectives of the study

The main objective of this study is to investigate the effect of social and economic reporting on the market value of listed deposit money banks (DMBs) in Nigeria. Specific objectives include:

- i. To ascertain the effect of social reporting on the market value of DMBs in Nigeria.
- ii. To determine the effect of economic reporting on market value of DMBs in Nigeria.
- iii. To examine the effect interaction between social reporting and economic reporting have on market value of DMBs in Nigeria.

Hypothesis Formulation

Three hypotheses were accordingly formulated as follows:

- i. Social reporting has no significant effect on the market value of DMBs in Nigeria.

- ii. Economic reporting has no significant effect on market value of DMBs in Nigeria.
- iii. The interaction between social reporting and economic reporting has no significant effect on market value of DMBs in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual framework

Social reporting

Social reporting is important basis for social analysis. Investors have gradually increased regard for the social risks as important indicators of enterprises' efforts to improve corporate governance and increase transparency has also increase due to the financial crisis experienced by both developed and developing countries. Social reporting reduces the risks associated with inadequate training of employees on health and safety, local community development programmes, stakeholder engagement, anti-corruption policies and procedures, assessment of suppliers based on impacts on society and identification of negative impacts on society in the supply chain.

Social reporting therefore is defined as the impacts an organisation has on the social systems within which it operates, which means a business must be responsible for its promotion and social welfare as well as all its stakeholders (GRI Sustainability Reporting Guidelines, 2016). In general, social reporting means that businesses consider the interests of a wide range of stakeholders (e.g., government, shareholders, suppliers, employees, customers and the local community) and incorporate social justice principles into their operations (Alkababji, 2014)

Economic reporting

Economic indicators generally involves indirect impacts which is externalities and direct impact which includes monetary flow between organisation and stakeholders; impact of organisation on economic well-being of

stakeholders. Global Reporting Initiative (GRI) specifically recognizes two main aspects of impact with respect to economic indicators namely: capital flows from organizations to stakeholders and economic impacts of organizations at the national and international level, based on that we conclude that economic indicators illustrate the flow of capital among different stakeholders and main economic impacts of the organisation throughout society. GRI Sustainability Reporting Guidelines (2006) defines economic reporting as the organisation's impacts on the economic conditions of its stakeholders and economic systems at local, national and global levels.

Market value

Firm value is an economic measure which reflect the market value of a business. According to Emeka-Nwokeji (2019), investors' assessments of a firm's management' ability to forecast and adapt to future changes in the organization influence its market value. The forward-looking, market-based measure of the value of a firm used in this study is Tobin's q and stock returns. Tobin's q , represents investors' perceptions of a firm's market value relative to its book value. Tobin's Q , is the ratio of the market value of equity (fiscal year-end price times number of shares outstanding) plus book value of debt (total assets less book value of equity) to total assets (Albuquerque, Durnev, & Koskinen, 2013). It reflects the market's expectations of future earnings and thus a good proxy for firm value (Campbell & Mínguez-Vera, 2008).

Stock returns can be made through dividends announced by the companies. Generally, at the end of every quarter, a company making profit offers a part of the kitty to the shareholders. The marketstock returns is calculated as follows:

$$\text{Total Stock return} = (P_1 - P_0) + D_t / P_0$$

Where: P_0 = Initial Share Price, P_1 = Ending Share Price and D_t = Dividends per share

Theoretical Framework

Legitimacy Theory

Legitimacy theory was first traced to the study of Sethi (1975) who defined corporate social responsibility as business behavior that conforms to established social norms, values, and expectations (Swaen, 2002). Legitimacy theory was a broad-based theory proposed by Dowling and Pfeffer in 1975 from organizational legitimacy who defines organizational legitimacy as a condition which exists when an entity's value system is harmonious with the value system of the larger social system of which the entity is a part. The theory was further developed by Mark C. Suchman, in 1995, who defined legitimacy as a generalized perception or presumption that an entity's acts are desirable, legitimate, or appropriate within some socially formed system of norms, values, beliefs, and definitions. Legitimacy theory posits that business organizations disclose their sustainability initiatives to legitimize their operations.

Faisal *et al.*, (2012) observe that businesses that are prone to sustainability issues also report more information to minimize criticism from the host community, address stakeholder expectations, build reputation and ultimately attract capital. Social contract concept holds that the activities of business organizations should comply with social expectations that is rules, regulations and societal norms that governs it.

Sethi (1975) discloses that legitimization is characterized by changes in the internal decision-making, changes in the perception of the external environment, and accountability mechanisms of the business organization. It therefore implies that in the absence of this compliance, society will withdraw the organizations' right to continue its operations. Similarly, businesses that experience legitimacy problems tend to disclose more information in order to satisfy the public about their sustainability performance (Guo and Zhao, 2011).

Stakeholder theory

The stakeholder theory of modern corporations was propounded by Edward Freeman in 1984, who defines a stakeholder as any group or individual who can affect or is affected by the achievement of a company's purpose. Stakeholders are groups and individuals who benefit from or are harmed by, and whose rights are violated or respected by company's actions (Freeman, 1984). Thus stakeholders are considered as those groups who are vital to the survival and success of the corporation (Freeman, 1984). Stakeholder assumes that corporation is a nexus of both implicit and explicit contract among a broad range of stakeholders. Due to these contracts, companies develop reputation which helps in determining this trading terms and negotiations with their stakeholders. Thus, stakeholders may bring an action against the directors for failure to perform the required duty of care (Freeman, 1984).

Review of Empirical Studies

A number of studies have examined the effect of social and economic reporting on market value. Some of these studies are reviewed below.

Kwanum (2021) examined the effect of sustainability reporting on performance of listed manufacturing companies in Nigeria. The study covers a five year period, from 2013-2017, ex-post facto was adopted as research design. The population of the study was made of 101 manufacturing companies listed on the NSE and remain listed as at 31st December, 2017, which are categorised into eight (8) sub-sectors of agriculture, conglomerates, construction/real estate, consumer goods, health, industrial goods, natural resources and oil and gas. The study used secondary source of data, which were collected from the annual reports and accounts of the sampled companies, their individual websites and the NSE website. From the annual reports and accounts, the Director's report, multiple regression models were adopted. Data validation checks

conducted were Ramsey RESET, Hausman Test, Langragian Multiplier (LM), Variance Inflationary Factor (VIF), Correlation Analysis, Histogram. From the direction and nature of the correlation between the variables found in the regression coefficients, the results show that environmental reporting has a positive effect on TQ, the results also show that social reporting was negatively related to TQ, economic reporting shows a positive relationship was found with TQ, On the interaction terms, environmental and social reporting has negative effect on TQ. It was recommended that sustainability reporting in Nigeria has to include not only the environmental aspect of reporting but also the social aspect as it has become eminent that such reports have benefits both in the short and long run.

Erhinyoja and Marcella (2019) examined corporate sustainability reporting and financial performance of Oil and Gas Industry in Nigeria. Ten oil and gas companies were sampled. The findings were that sustainability reporting showed negative effect on all three performance proxies, however only its effect on return on equity was statistically significant. It therefore recommends, among others, that existing sustainability reporting standards should be aligned to reflect country-specific social and environmental challenges, while its implementation should rather be obligatory rather than voluntary.

Swarnapali (2018) examined whether corporate sustainability disclosure has a potential impact on the market value in Sri Lankan firms. The data was collected from 220 companies listed in the Colombo Stock Exchange (CSE) over a period of four years. Regression analysis was conducted on the panel data to achieve the objective. The results revealed a positive relationship between sustainability reporting (SR) and firm market value. It was suggested that investors pay a premium in the capital markets for firms that perform in an environmentally and socially responsible manner, compared to firms do not perform in a

similar manner which contributes significantly to the extant literature by broadening the geographical context.

Loh, Thomas and Yu Wang (2017) investigated the relationship between sustainability reporting and firm value based on listed companies in Singapore. The study covers companies listed on the SGX Mainboard. The total sample size used was 502, using weighted least squares (WLS) regression. The result shows that sustainability reporting is positively related to a firm's market value and that this relationship is independent of sector or firm status, such as government-linked companies and family businesses. It was recommended that further investigation should be carried out in a more matured economic settings especially in the Asian region.

Ching, Gerab, and Toste (2017) wanted to see if the quality of sustainability reporting has an impact on corporate financial performance (CFP) among companies included on the Corporate Sustainability Index (ISE) in Brazil, as well as the quality of information given in those reports (SR). The sample composed of all firms listed on Brazilian Stock Exchange for the period 2008 to 2014. Regression analysis was used. The result indicated a significant positive relationship between social reporting rating score and stock returns and negative relationship between environmental sustainability reporting and return on assets. They recommends the need to improve sustainability disclosures for companies in Brazil. The result interpretation is silent about economic sustainability which is a signal that other researchers should fill the gap.

Caesaria and Basuki (2017) investigated the effect of Sustainability Report Disclosure on Firm's market performance. Three material aspects disclosed in the Sustainability report such as economics (EC), environmental (EN), and social aspect (SC) were used as the independent variables, furthermore, the dependent variable was the market performance

proxied by Tobin's Q. The researchers examined 44 sustainability reports of companies listed on the Indonesia Stock Exchange (IDX) that reveal sustainability reports using GRI-G4 guidelines. Positivistic quantitative methods were used in testing hypotheses and results showed that economic, environmental, and social aspects of a company's activities have a positive, significant influence on its market performance. There is need for such an empirical study to be conducted in a developing nation like Nigeria to see if such reports are capable of impacting on company performance.

Garg (2016) investigated the relationship between sustainability reporting and financial performance of companies in India. Data were collected through annual reports of selected companies and Prowess Database and analysed. The study shows that the sustainability reporting practices of companies had improved over time. Further, research revealed that sustainability reporting practices of a firm impact its performance negatively in short run while positively in long run. As it was conducted in India, there is a need to carry out a near similar study in Nigeria to be able to compare results, if possible.

METHODOLOGY

The population of this study comprises of all the 14DMBs listed in Nigeria as at 31st December, 2019 out of which 12 DMBs were selected using the filtering method. Criteria for inclusion of banks in the sample size are: Exclusion of banks whose shares were not listed on the Nigeria Exchange Group in year 2012; such banks are Ecobank; and Skye bank, and exclusion of banks with incomplete annual reports for the study period.

The data is sourced from the Director's report and also additional data were obtained from www.machameRatios.com. Two sets of variables are used the dependent and independent variable. Using multiple

regression analysis, two models were constructed for the study as follows:

$$TQ_{it} = \beta_0 + \beta_1 SOC_{it} + \beta_2 ECO_{it} + \beta_3 SOC * ECO_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + e_{it} \dots \dots \dots (1)$$

$$SR_{it} = \beta_0 + \beta_1 SOC_{it} + \beta_2 ECO_{it} + \beta_3 SOC * ECO_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + e_{it} \dots \dots \dots (2)$$

Where,
 SOC= Social reporting
 ECO = Economic reporting
 TQ = Tobin’s Q
 SR= Stock return
 SOC*ECO =Interaction between Social and Economic disclosure
 SIZE= total revenue,

LEV= Leverage
 β_0 =the constant;
 $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$, = the regression coefficients;
 it = firm i at time t
 e =the error term used in the regression model.

Tobin’s Q and Stock return are dependent variables, independent variables are Social and Economic disclosures

RESULTS AND DISCUSSION

Descriptive statistics

These are described in table I below.

Table 9: Descriptive Statistics

Variables	Mean	Minimum	Maximum	Standard Deviation	Obs
TQ	.8450442	.6322	2.5508	.2142055	96
SR	15.63389	-240.7925	53.846	33.35749	96
SOC	9.479167	8.00	10.00	.580003	96
ECO	9.5625	7.00	10.00	.6930102	96
SOCECO	90.98958	63.00	100.00	9.076859	96
SIZE	3120.722	307.4462	6185.11	1381.094	96
LEV	6.5828	-2.0509	33.2828	3.675775	96

From the table above, the average amount spent by the banks on social (SOC), economic (ECO) and interaction between social and economic (SOCECO) disclosure score averaged are 9.479167, 9.5625, 90.98958 measured using the GRI (Global Reporting Initiative) G4 guideline.

Diagnostic tests

A number of diagnostic tests were carried out to ensure the reliability of the data used in the study. These includes; normality test,

multicollinearity test, Pearson correlations matrix, variance inflation factor, autocorrelation test, heteroscedasticity test, RESET test, Hausman test.

Test of normality

As shown in Table 2, the normality status of the individual variables, shows that the skewness and kurtosis values of all the study variables are between -1 and +1, indicating that the study variables are normally distributed.

Table 2: Skewness/Kurtosis tests for Normality

Variables	Obs	Pr(Skewness)	Pr(Kurtosis)	Adj Chi ² (2)	Prob> Chi ²
TQ	96	0.0000	0.0000	-	0.0000
SR	96	0.0000	0.0000	-	0.0000
SOC	96	0.0218	0.1056	7.19	0.0000
ECO	96	0.0000	0.0014	28.45	0.0000
SOCECO	96	0.0034	0.5550	7.99	0.0000
SIZE	96	0.0012	0.0073	14.35	0.0000
LEV	96	0.0000	0.0000	-	0.0000

Multicollinearity test**Pearson correlations matrix**

In examining the level of association between the independent variable and the control variables in Table 3 of this study, Pearson correlations matrix is adopted. The result shows that the highest correlation coefficient among

the variables is firm size with 0.2050 and economic reporting index with 0.1080. This shows that there is no sign of multicollinearity between the independent variable and the control variable of the study as the highest correlation coefficient between the variables is below the 0.9.

Table 3: Correlation matrix

	SOC	ECO	SIZE	LEV
SOC	1			
ECO	0.1080	1		
SIZE	0.2050	0.2508	1	
LEV	-0.1901	0.0044	-0.0621	1

Table 4 shows the result of the multicollinearity test based on VIF performed on the variables of the study. The VIF ranges between values of 1.05 to 1.30 with a mean of 1.18 which is below the threshold of 10 indicating the absence of multicollinearity among the variables of study. Also, the tolerance level ranges from level of

0.77 to 0.95 which is above the threshold of 0.1 indicating the absence of multicollinearity among the variables of the study. Based on the preceding, we conclude that there is no multicollinearity challenge among the variables.

Table 4: Variance inflation factor

Variable	VIF	1/VIF
SOC	1.30	0.766861
ECO	1.14	0.877062
SIZE	1.08	0.929279
LEV	1.05	0.950137

Mean VIF | 1.18

Heteroscedasticity Test

Table 5, shows the result of heteroscedasticity test. As a result of the use of time series cross sectional data, it is important to investigate heteroscedasticity in the model of the study. The null hypothesis of the panel cross-section and period heteroscedasticity is that the residuals are homoscedastic. The result of the panel cross-section heteroscedasticity

likelihood ratio test indicates the acceptance of the null hypothesis as the probability value of the likelihood ratio test is greater than the critical value ($p > 0.05$) for the two models of the study. This implies that the likelihood estimate is not statistically significant at 5 percent level of significance. Hence, there is an absence of heteroscedasticity in the models of the study.

Table 5: Test of Heteroscedasticity

Variable	Likelihood ratio	Position	Probability
Model I (TQ)	150.2393	Cross section	0.0802
Model I (TQ)	59.69586	Period	0.1400
Model II (SR)	208.5209	Cross section	0.9324
Model II (SR)	109.3436	Period	0.0626

Null: Homoscedastic

Ramsey RESET Test for Model specification

As shown in Table 6, the Ramsey RESET tests whether non-linear combinations of the fitted values help explain the response variable. Therefore, at 5 percent significance level, we

fail to reject the Ramsey RESET test null hypothesis of correct specification. This indicates that the functional form is correct and the model does not suffer from omitted variables.

Table 6: Ramsey RESET Test for Model specification

Model	Statistics	Value	Probability
I (TQ)	F-Statistics	3.271854	0.0743
II (SR)	F-Statistics	9.912470	0.1023

Hausman Tests for the choice of an Estimator for Model I & II

As shown in table 7, to select the most appropriate multiple regression technique for the study between the random and the fixed effect, the Hausman specification test was run to determine the most appropriate technique between the random effect and the fixed effect models. This basically test if the unique errors in the model are correlated with the regressors. The null hypothesis is that they are not; if the null hypothesis is accepted, the random effect is the most appropriate model, otherwise the fixed effect model. The decision rule is that if

the $\text{prob} > \chi^2$ is less than 0.05 the fixed effect is the most appropriate technique, otherwise the random effect technique. In this study, the Hausman test shows a $\text{prob} > \chi^2$ of 0.0750 and 0.1033 which are not significant ($p > 0.05$) thus, implying that the fixed effect technique is not the best technique for the study. Thus, the result provides evidence in support of the fact that the error terms are correlated with the independent variables. The result suggests that the random effect regression model is most suitable for the data in use. Therefore, the study adopted random effect regression result for interpretation. The result is as presented below.

Table 7: Hausman Test for Model I & II
Model I^a

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	14.271726	8	0.0750

Model II^b

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.257777	8	0.1033

Regression Test of Hypotheses

As shown in Tables 8a&b, the coefficient of determinations for TQ and SR model is 0.622271 and 0.412132 respectively. This means that 62.22% and 41.21% of the variations in the dependent variables, Tobin's (TQ) & Stock Returns (SR) of DMBs in Nigeria are jointly explained by the explanatory variables. 37.78% and 58.79% of the variation can be attributed to unexplained variation captured by the stochastic term. The probability of F statistics for the two models of the study shows that the values are less than the critical value of 0.05. This indicates that the model used for the study are fit and robust to estimate the relationship between the variables of the study. Hence, it can be concluded that the explanatory variables are properly selected and they predict the population of the study.

Effect of social reporting on market value of DMBs in Nigeria

H₀₁: Social reporting has no significant effect on market value of DMBs in Nigeria

Using the probability value of the estimates, we do not accept the null hypothesis for TQ, model but accept the alternative hypothesis, implying that social reporting is statistically significant at the 5% level of significance. This means that at 5% level of significance, social reporting has a significant effect on the market value of DMBs in Nigeria proxied by Tobin's Q while it has insignificant effect on market value of DMBs in Nigeria proxied by stock return.

Examining the Tobin's Q which is the first model of the study, it can be found that social reporting (SOC) has a positive effect on market value of DMBs in Nigeria and the effect is statistically significant ($p < 0.05$) and in line with *a priori* expectation. This means that when Social reporting (SOC) increases by one, market value of DMBs in Nigeria proxied by Tobin Q will increase by a margin of 0.502265. The result of the second model of the study (Stock Return) shows that social reporting (SOC) has a negative effect on market value of

DMBs in Nigeria proxied by stock return (SR) and the effect is not statistically significant ($p > 0.05$) and not in line with *a priori* expectation. This means that when social reporting (SOC) is increased by one, it will result in a corresponding decrease in market Stock Return (SR) by a margin of -57.52282.

Effect of economic reporting on market value of DMBs in Nigeria

H₀₂: Economic reporting has no significant effect on market value of DMBs in Nigeria

Using the probability value of the estimates, we reject the null hypothesis for TQ, model and accept the alternative hypothesis, implying that economic reporting is statistically significant at the 5% level of significance. This means that at 5% level of significance, economic reporting has a significant effect on the market value of DMBs in Nigeria proxied by Tobin's Q while it has insignificant effect on market value of deposit money banks in Nigeria proxied by stock return.

The result of the random effect regression analysis for the Tobin's Q model indicates that economic reporting (ECO) has negative effect on the two proxies of market value of deposit money banks in Nigeria (Tobin Q and SR) and the effect is statistically significant ($p < 0.05$) for the first model (TQ) but insignificant for the SR model. This implies that a unit increases in economic reporting (ECO) will result to a corresponding decrease in market value of DMBs in Nigeria proxied by Tobin Q and stock returns by a margin of 0.404177 and 27.89278 respectively.

Effect of the Interaction between social and economic reporting on market value of DMBs in Nigeria.

H₀₃: The interaction between social and economic reporting has no significant effect on market value of DMBs in Nigeria

In testing the hypotheses for the study using the probability value of the estimate, we accept the null hypothesis for TQ and SR models. That is, we accept that the estimate b_5 (interaction

between social and economic reporting) is not statistically significant at the 5% level of significance. This implies that the interaction between social and economic reporting has no significant effect on the market value of DMBs in Nigeria proxied by Tobin's Q and stock return.

The result of the interaction between social and economic reporting (SOC*ECO) shows a positive effect on market value of DMBs in Nigeria proxied by Tobin Q but the effect is not statistically significant ($p > 0.05$) and but in line with *a priori* expectation. This means that a unit increases in interaction between social and economic reporting (SOC*ECO) will result to a corresponding increase in market value of DMBs in Nigeria proxied by Tobin Q by a margin of 0.020058. Equally, the interaction between social and economic reporting (SOC*ECO) resulted to a positive effect on market value of DMBs in Nigeria proxied by stock return (SR) and the effect is not statistically significant ($p > 0.05$) and not in line

with *a priori* expectation. This means that when the interaction between social and economic reporting (SOC*ECO) is increased by one, it will result in a corresponding increase in market Stock Return (SR) by a margin of 1.238057.

Control variables (SIZE & LEVERAGE)

As shown from the result of the study, two control variables namely; SIZE and Leverage (LEV) were used. The result indicates that SIZE and LEV are positive predictor of market value as captured by TQ and SR. A unit increase in SIZE and LEV resulted to a corresponding increase in market value proxied by TQ by a margin of 0.029201 and 0.000186 respectively. The effect is not statistically significant ($p > 0$) SIZE and LEV were also positive predictor of market value as captured by SR. A unit increase in SIZE & LEV resulted to a corresponding increase in market value proxied by TQ by a margin of 5.350365 and 2.131201 respectively. SIZE was insignificant in the SR model while LEV was statistically significant ($p < 0.05$).

Table 8a: Result of the random effect regression for Model I (TQ)

Variables	(β)	(t-stat)	(p-value)
SOC	0.502265	2.511149	**0.0495
ECO	-0.404177	-3.386400	**0.0011
SOCECO	0.020058	1.771298	0.0800
SIZE	0.029201	0.756363	0.4515
LEV	0.000186	0.030938	0.9754
C	2.289229	1.212039	0.2288

$R^2 = 0.622271$

Prob (F-Statistic) = 0.000616

Dependent variables: TQ

Significant values: **

Table 8b: Result of the random effect regression for Model II (SR)

Variables	(β)	(t-stat)	(p-value)
SOC	-57.52282	-1.597081	0.1139
ECO	-27.89278	-1.386055	0.1693
SOCECO	1.238057	0.646275	0.5198
SIZE	5.350365	0.728275	0.4684
LEV	2.131201	2.069730	**0.0414
C	666.0031	1.977058	**0.0512

$R^2 = 0.412132$

Prob (F-Statistic) = 0.017818

Dependent variables: SR

Significant values: **

Discussion of Findings

In examining Tobin's Q which is the first model of the study, it was found that social reporting has a positive effect on market value of DMBs in Nigeria and the effect is statistically significant and in line with the *a priori* expectation of the study. This implies that it is assumed to be true that social reporting has a positive effect on Tobin's Q, a proxy for market value as used in the study. This finding is in line with that Swarnapali (2018) who found a positive relationship between sustainability reporting (SR) and firm market value. The result of this study confirms the study of Loh, Thomas and Yu (2017) who investigated sustainability reporting and firm value.

The result of the second model of the study (stock return) shows that social reporting (SOC) has a negative effect on the market value of deposit money banks in Nigeria proxied by stock return (SR) and the effect is not statistically significant and not in line with *a priori* expectation. Thus, based on *a posteriori* expectation, the researcher has established that social reporting does not have a positive effect on the market value proxied by stock return. This finding is in line with that of Erhinyoja and Marcella (2019) who found that social sustainability reporting shows negative effect on all three performance proxies. This result is however inconsistent with the findings of Ching, Gerab, and Toste (2017) who revealed that social reporting was significant and positively related to SR.

Thus, the results of the study correspond with the stakeholder theory which predicts that a firm attempting to lower the implicit costs by implementing social irresponsible actions will incur higher explicit costs and puts the company at a competitive disadvantage. It is possible that the market and its participants interpreted SR as not meeting legal requirements and community norms, thus having a negative relationship with market value.

The third objective of the study examined the effect of economic reporting on market value of DMBs in Nigeria and found that for the two model of the study (Tobin's Q and stock return), economic reporting has a negative effect on the market value of DMBs in Nigeria and the effect is statistically significant for the first model (Tobin Q) but insignificant for the stock return (SR) model. The finding indicates that the effect of the variable of economic reporting on the two independent variables of the study (TQ & SR) are not in line with *a priori* expectation earlier anticipated. As a result, the researcher is made to believe *a posteriori* that economic reporting does not have a positive effect on market value of the selected banks under study. The result of this study tallies with that of Garg (2016) who found that sustainability reporting practices of companies impact its performance negatively in short run. However, this finding is contrary to that of Caesaria and Basuki (2017) who found a positive relationship between economic reporting and performance. The result is inconsistent with the legitimacy theory, under legitimacy theory companies want to be doing good to receive support from the corporate citizens. Also inconsistent with New institutional theory, as their behaviours is likely to influence the society negatively, as their acceptance will be at risk.

The fifth specific objective of the study examines the effect of the interaction between social and economic reporting on market value of DMBs in Nigeria. The result indicates that social and economic reporting shows a positive effect on market value of DMBs in Nigeria proxied by Tobin Q. Equally, the interaction between social and economic reporting resulted to a positive effect on market value of DMBs in Nigeria proxied by Stock Return and the relationship is in line with *a priori* expectation. The finding shows that the effect of social and economic reporting are in line with *a priori* expectation earlier anticipated. As a result, the researcher, based on the empirical evidence believes *a posteriori* that the variables have a positive effect on market value of the selected

banks under study. This finding corroborates that of Kwanum (2021) who found that economic and social index has positive impacts on performance proxy by Tobin's Q. The study result is in accordance with stakeholder theory, where company has to keep relationship between its stakeholder by accommodating its stakeholder's desire and needs, especially stakeholder that have power on resource availability which is used for company operational activity, as labour, market of company product.

Conclusion and Recommendations

Conclusion

This study examined the effect of social and economic reporting on the market value of deposit money banks in Nigeria using two proxies to represent market value namely; Tobin's Q and stock return. The analysis of annual reports of the selected banks in Nigeria shows that banks perception concerning these issues may be partly responsible for the relatively low attention given to them. The study shows that interaction variable produced a much higher effect on stock returns and Tobin's Q than the single variables of social and economic reporting. In view of the above findings, the study concludes that management of deposit money banks should understand that improving social and economic sustainability practices is as important as improving their performance.

Recommendations

The following recommendations emanated from the findings of this study:

- i. It is recommended that banks should invest in socially responsible activities as sustainable business is one that are able to ensure their future.
- ii. Economic reporting was found to have a negative effect on all the proxies of market value. Hence, the management of the studied banks should be proactive in responding to economic issues in the environment in which they operate. This will have a far-reaching positive effect on the market value of the banks in the study area.
- iii. The interaction between social and economic reporting can be made to have a significant effect on market value if management of the selected banking industry integrate economic and social consideration into decision making processes relating to the business activities of the banks to avoid, minimize or offset insignificant impacts the social and economic issues pose in the attainment of higher market value of the banks in Nigeria.

REFERENCES

- Akinlo, O.O. & Iredele, O.O. (2014). Corporate environmental disclosures and market value of quoted companies in Nigeria. *Journal of Business & Management Review*, 5(3).8-7.
- Albuquerque, R., Durnev, A., & Koskinen, Y. (2013). Corporate social responsibility and firm risk: Theory and empirical evidence. Discussion Paper Retrieved September 2, 2018, from <https://www.cbs.dk/files/cbs.dk/cpr-dp9533.pdf>
- Aondoakaa, K. (2012). Impact of sustainability reporting on corporate performance of selected quoted companies in Nigeria. An unpublished Thesis of the University of Nigeria, Enugu Campus.
- Awan, A. G., & Akhtar, N. (2014). The impact of corporate social responsibility (CSR) on profitability of firms: A case study of fertilizer & cement industry in Southern Punjab, Pakistan. Retrieved from <http://www.eajournals.org/wp-content/uploads/The-Impact-of-Corporate-Social-Responsibility-CSR-on-Profitability-of-Firms-A-Case-Study-of-Fertilizer-Cement-Industry-in-Southern-Punjab-Pakistan.pdf>.

- Bakri, T. (2005). *Marketing and health services* (1sted.). Amman: Dar Wael Printing and Publishing.
- Burhan, A. H., & Rahmanti, A. (2012). The impact of sustainability reporting on company performance, *Journal of Economics, Business, and Accountancy* 15 (2), 35-43.
- Caesaria F.A & Basuki, B. (2017). The study of sustainability report disclosure aspects and their impact on the company's performance. *SHS web of conferences* 349 (7).
- Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of business ethics*, 83(3), 435-451. doi:DOI 10.1007/s10551-007-9630-y
- Ching, H.Y., Gerab, F. & Toste, T.H. (2017). The quality of sustainability reports and corporate financial performance: Evidence from Brazilian listed companies. *SAGE Open*, 7(2).
- Dabbas, M., & Al-rawashdeh Salah, T. (2012). The effect of corporate social responsibility on the profitability of the industrial companies in Jordan. *Canadian Social Science*, 8(3), 32-37.
- Dowling and Pfeffer (1975) Organizational legitimacy: Social values and organizational Behaviour. *Pacific Sociological Review*, 18(1):122-136.
- Emeka-Nwokeji, N. A. (2019). Nexus between corporate social responsibility disclosures and market value of listed nonfinancial firms in Nigeria. *International Journal for management sciences*. 5(3)
- Erhinyoja, E. F & Marcella, E. C. (2019). Corporate social sustainability reporting and financial performance of Oil and Gas industry in Nigeria. *International Journal of Accounting, Finance and Risk Management*. 4(2)44-60. doi: 10.11648/j.ijafirm.20190402.12
- Faisal, F., Tower, G., and Rusmin, R. (2012). Legitimizing corporate sustainability reporting throughout the world. *Australasian Accounting, Business and Finance Journal*, 6(2), 19-34.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman Press.
- Garg, R. (2007) Methodology for research, *Indian Journal of Anaesthesia* 60(9):640-645
- GRI (2016) Sustainability reporting guidelines: G3.1 version. Retrieved from <http://globalreporting.org>
- Guo, M., and Zhao, X. (2011). What is the impact of industrial environmental events on the quality of environmental disclosure in corporate annual reports? A longitudinal study (Master's thesis). Umea University, Sweden. Retrieved from <http://www.diva-portal.org/smash/get/diva2:429076/FULLTEXT02>
- Klynveld Peat Marwick Goerdeler. (2020). The time has come: The KPMG survey of sustainability reporting 2020. Retrieved from <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf>
- Kwanum, I. M. (2021). Effect of Sustainability reporting on performance of listed manufacturing companies in Nigeria. An unpublished Ph.D thesis, Benue State University, Makurdi, Nigeria.
- Loh, L., Thomas, T. & Wang, Y. (2017). Sustainability reporting and firm value: Evidence from Singapore- listed companies. Retrieved from www.mdpi.com/journal/sustainability 3/3/2021.
- Olayinka, M.U. & Temitope, O.F. (2011). *Corporate social responsibility and financial performance in developing economies-The Nigerian experience*. New Orleans, New Orleans

- International Academic Conference, 815-824.
- Sapkauskiene, A. &Leitoniene, S. (2014). Corporate social responsibility research methods analysis. *European Scientific Journal*, 10(7). Retrieved from <http://www.eujournal.org/index.php/esj/article/view/2829>.
- Sethi, P.S. (1975). Dimensions of corporate social performance: An analytical framework. *California Management Review*, 17(3), 58-64. Doi: 10.2307/41162149
- Suchman, M.C. (1995). Managing legitimacy-strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571-610.
- Swaen, V. (2002). Corporate social responsibility: Do managers and consumers have the same conception of “doing good”? In: 10th International Conference of the Greening of Industry Network, Goteborg, Sweden, 23-26 June 2002, pp: 1-13.
- Swamapali, N. (2018) Corporate Sustainability Reporting and Firm Value: Evidence from A Developing Country. *The International Journal of Organizational Innovation Vol 10*.
- United Nations Global Compact (2014). Our participants. Retrieved from <https://www.unglobalcompact.org/wh-at-is-gc/participants>
- Uwuigbe, U. &Uadiale, A. (2011) . Corporate social environmental sustainability reporting and firm performance: A study of selected firms in Nigeria. *Business Journal* (3) 36-44.
- Uwuigbe, U., Olubukunola, A &Anijiesushola, M. (2011). Corporate environmental reporting practices: A comparative study of Nigerian and South African firms Published (Doctoral dissertation). Covenant University, Nigeria.
- Wibowo, A. J. (2012). Interaction between corporate social responsibility disclosure and profitability of Indonesia firms. In *UMT 11th International Annual Symposium on Sustainability Science and Management* (pp. 373–380). Retrieved from <http://www.academia.edu/download/30489834/be19-oral-pp-373-380.pdf>

EFFECT OF CORPORATE BOARDS ON THE AUDIT QUALITY OF DEPOSIT MONEY BANKS IN NIGERIA

¹Arumona Jonah. O. PhD, ²Onoja Emmanuel E. PhD

¹Department of Accounting, Bingham University, Karu, Nasarawa State,
E-mail: jonaharumona@yahoo.com, Phone No: +2347034684686

²Department of Accounting, Federal University, Lokoja, Kogi State,
E-mail: emma.onoja92@gmail.com, Phone No: +2348069742324

Abstract

The consolidation of the banking industry in Nigeria necessitated the issue of a code of corporate governance for banks' post consolidation effective, April 2006. In order to address weaknesses and improve the mechanisms for enforcing its code of corporate governance issued in 2003, the SEC of Nigeria issued a revised code applicable to all public companies effective April 2011. The data for the study were sourced from the twelve (12) selected Deposit money Banks in Nigeria using multiple regression analysis to examine effects of corporate governance on audit quality of deposit money banks in Nigeria. The random effect regression result of the study shows that corporate governance attributes had significant effect on the quality of audit of Deposit money Banks in Nigeria. It also shows that board independence and board audit committee independence had significant effect on audit quality, while board size had no significant effect on audit quality. Arising from the findings, the study recommended that the board should be composed of competent and -independent board members that can use their expertise to improve audit reporting process of Deposit money Banks in Nigeria. Also, that the board audit committee membership should be encouraged to be proactive in carrying out its duties in a diligent manner. Furthermore, the study recommends that board size should not be increased beyond the regulatory specification so as to make them more effective and efficient.

Keywords: Corporate Governance, Audit Quality, Board of Directors, Audit Committee

INTRODUCTION

The responsibility of Board of directors is to render service for the optimal use of economic resources of the shareholders for high productivity. The external auditors provide assurance service to the shareholders thereafter to confirm that the financial reports prepared by Management show a true and fair view of financial transactions of the organization for the period under review. The place of corporate governance mechanisms, specifically as it relates to audit of financial statements has been considered of great importance especially since the recent incidence of corporate financial scandals. The outcry from investors to firms across Nigeria for transparency and

accountability has increased due to the effect of the covid-19 pandemic that has affected the economies of the world. Institutions therefore, more than ever before, need to not only assure investors that sound corporate governance mechanisms are in place, but must reflect this in the quality of their financial reporting. Investors (current and potential) rely on the external auditors' reports to make informed decisions. Good corporate governance by board of directors is deemed to influence the quality of financial reporting which in turn has an important impact on investors' confidence (Levitt, 2000). Heirany, Sadrabadi and Mehrjordi (2013) held that when corporate governance mechanisms are strong, managers

find it unfavourable to manipulate accounting information and this consequently increases the quality and reliability of their financial reporting. This position follows the recent attention given to the issues of corporate governance among scholars.

Audit services have been crucial to the financial reporting quality since industrial revolution. Lin & Liu (2009) asserted that high-quality auditing services bolster the confidence of investors in financial reporting and boost fund raising chances. Thus, top-notch auditing is especially crucial for firms that are usually involved in fund mobilization, such as financial firms. Audit quality employ some methodologies to identify wrong claims in customer's accounting system and report the discrepancies. Audit quality is an argumentative matter in the recent decades and most previous evidence shows that poor audit quality is a critical factor for financial and corporate scandals (Sayyar et al, 2015). Audit quality refers to the condition of an audit activity to uncover material error and fraud resulting in errors in the financial documents where such occurred. De Angelo (1981) in Akhalumeh et al (2017) posted that audit quality as an assessment by the market of the combined likelihood that an auditor will discover a significant disparity in the client company accounting system and publish this abnormality. Palmrose (1988) also views audit quality as a level of assurance. The objective of an audit is to provide an assurance on the financial documents, the quality of audit is therefore the level of such assurance that material irregularities does not exist in the financial documents. Previous studies revealed that audit quality as external corporate governance monitoring can enhance firm's performance. Auditing is therefore, a kind of governance system, as auditors perform the responsibility of a gatekeeper by verifying information from firms (Coffee, 2002). Hay (2006) described two views in the literature regarding the connection between corporate governance and audit quality. One of these

views is that better control will reduce the need for top-notch auditing, whereas the other perception opines that governance mechanisms are complements; thus, improved control mechanisms will engender auditing and greater audit quality.

Studies in corporate governance and audit quality have been carried out internationally including Alghamdi (2012) who examined investigation into quality of audit practices and the role of corporate governance and external audit in emerging markets from Saudi listed companies. Many of the authors focus on board size and board composition, but to the best knowledge of the researchers, empirical evidence linking corporate board diversity to audit quality in Nigeria banks is scanty. This paper is propelled by the interest on the need for reforms brought about by corporate governance code in Nigerian banks consequent upon the corporate maladies and failures, global best practice and their implicit efficiency as it relates to implementation and audit quality of banks in Nigeria. Hence, this study will fill the gap by examining the nexus between corporate board diversity and audit quality. In doing that, the paper will answer the following research hypotheses:

The hypotheses are;

H₀ 1 Board Size has no significant effect on the quality of audit of Deposit money banks Nigeria

H₀ 2 Board Composition has no significant effect on the quality of audit of Deposit money banks Nigeria

H₀ 3 Board Audit Committee size has no significant effect on the quality of audit of Deposit money banks Nigeria

Review of Related Literature

Corporate Boards ensure that the activities of a company are directed and controlled in a lawful manner by those charged with the responsibility, in order to meet the needs and expectations of the stakeholders. Arumona (2018) asserts that Boards have no universal

definition but are rather described by their role in every organisation. In the corporate world, the Board of Directors of a company is the representative of shareholders and as such has a responsibility to ensure the efficient management of the entire organisation. They provide decorum on the roles, responsibilities and rights of management and the necessity to accord respect for one another. It encompasses disclosure, transparency, fairness, equity and accountability thereby complying with the rules of the 'game'. That is, doing what the law, policy, procedures and methods specified in a very strict manner with the key elements of CG (transparency, accountability, trust, respect, fairness and honesty) at the background. Corporate board is an important corporate governance tool deployed to resolve agency problems through regular system monitoring and controlling the managers, in order to reach shareholders objectives (Jensen & Meckling, 1976; M. Jensen, 2001). Corporate governance provides a structure by which the objectives of the firms are arranged, and the means for achieving those goals and control performance are ascertained (OECD, 2004). So, corporate governance is the mechanism by which companies are directed and controlled (Cadbury, 1992).

Board size as surrogate for corporate governance in this study refers to the number of directors in a board. The number of board members vary from country to country and from company to company because of the differences in culture, regulation, and corporate ownership structure. Companies are seeking for the suitable scale of board of directors according to the local regulations and demand of management development. The composition of the board refers to the ratio of executive and non-executive director representation on the board. To be effective, non-executive directors should be in the majority of any corporate board (Dalton, Daily, Ellstrand, & Johnson, 1998). However, executive director's responsibility is the day-to-day operation of the business such as finance and marketing. They bring wealth of

knowledge and specialized expertise to the company (Weir, Laing & David, 2001). As they are subordinates of the CEO, they cannot in any exercise control, monitor or discipline the CEO (Daily & Dalton, 1993). Therefore, it is imperative to institute a mechanism to monitor the actions of the Chief Executive Officer and his executive directors (Weir, Laing & David, 2001). Empirics suggested that board audit committee meetings should be complementary to size criteria. That is, if audit committee size is small (in size), they would require more time to meet so as to do what probably a large sized committee would do in less time.

Audit quality and the measurement of audit quality have been studied widely. Kilgore (2007) indicated that no universally accepted definition of audit quality has emerged, nor has any single generally accepted measure been introduced. Lee, Leu and Wang (1999) defines audit quality as the probability that an auditor will not issue an unqualified report for statements containing errors, intentional and otherwise. Audit quality is normally related to the capability of the auditors to identify material misstatements in the financial statements and their will-power to issue an objective and unbiased audit report based on the audit results (Enofe, Mgbame, Aderin, & Ehi-Oshio, 2013). Conceptually, DeAngelo (1981) defined audit quality as the market-assessed joint probability that the auditor discovers an anomaly in the financial statements, and reveals it. He argued that audit quality hinges on the joint probability of an auditor to uncover and divulge an infraction in an accounting system. Bradshaw, Richardson and Sloan (2001) defined audit quality as the willingness to report any material manipulation or misstatements that will heighten the material uncertainties and/or going concern problems. Baotham (2009) defined audit quality as the probability that an auditor will not issue an unqualified report for statements containing material errors. Palmrose (1988) asserted that high audit quality is connected with the absence of material omissions or misstatements in the financial

statements. Reisch (2000) attributed the absence of a single measure of audit quality to the fact that it is a multidimensional latent construct and is therefore, somewhat difficult to measure. This was a reason that many researchers study this area and have used different proxies for measuring the level of audit quality. Manry, Mock and Turner (2008) used estimated discretionary accruals to measure audit quality, Li and Lin (2005) examined audit quality using non-audit fees, Chen et. al. (2010) used the propensity to issue modified audit opinion as a proxy for audit quality (Zureigat, 2011).

The various changes in accounting, financial reporting and auditing were all designed to provide protection to investors. Compelling a duty of accountability upon the managers of a company is the means by which this is being achieved (Crowther and Jatana, 2005). Auditing therefore, is the medium by which the needed assurance is provided for investors who relying on audited financial statements. Specifically, auditing play the role of mitigating information asymmetry on accounting numbers, and to minimize the residual loss as a result of managers' opportunism in financial reporting. Effective and perceived qualities (usually designated as apparent quality) are indispensable for auditing to produce beneficial effects as a monitoring tool. The importance of audit quality to financial statements users is as a result of an effective audit.

Theoretical Review

Two main theories are discussed in this study. These are Agency theory and Stewardship theory. Agency theory explains the nature of the relationship as a result of separation of ownership from management of a business. It suggests that shareholders need some protection as managers may not always act in their best interest. The fundamental premise of agency theory is that the managers act out of self-interest and are self-centered, thereby giving less attention to shareholder interests. The focus of agency theory on the principal and

agent relationship (for example shareholders and corporate managers) has created uncertainty due to various information asymmetries (Deegan, 2004). The agents (managers) are in a position to pursue self-interests rather than shareholders (owners) interests because they possess superior knowledge and expertise about the firm (Fama, 1980; Fama & Jensen, 1983). This pursuit of self-interests increases the costs to the firm, which may include the costs of structuring the contracts, costs of monitoring and controlling the behaviour of the agents, and loss incurred due to sub-optimal decisions being taken by the agents.

Shareholder interests can clearly be compromised if managers maximise their self-interest at the expense of organizational profitability. In essence, since the managers cannot be trusted, in order to protect shareholder's interest there is a need for strict monitoring of management by the board. Given the problems in mitigating agency problems through the use of contracts, scholars have put forward various governance mechanisms as panacea to the agency problems. Agency theory therefore provides a basis for firm governance through the instrumentation of both internal and external mechanisms (Weir & Laing, 2001; Roberts, McNulty & Stiles 2005). The governance mechanisms are designed to "protect shareholder interests, minimize agency costs and ensure agent-principal interest alignment" (Davis, Schoorman & Donaldson 1997). Two important governance mechanisms used for this purpose are board of directors and compensation schemes to align the interests of both the agent and the principal.

Agency theory assumes that principals and agents have divergent interests. While the agents are essentially self-serving and self-centered, Stewardship theory on the other hand, takes a diametrically opposite perspective. The theory (stewardship) suggests that the agents (directors and managers) are essentially trustworthy and good stewards of the resources

entrusted to them, which makes monitoring redundant and unnecessary (Donaldson, 1990; Donaldson & Davis, 1991; Donaldson & Davis, 1994; Davis, Schoorman & Donaldson 1997). Donaldson and Davis (1991) observe, that organizational role-holders are conceived as being motivated by a need to achieve and to gain intrinsic satisfaction. This is accomplished through successfully performing inherently challenging work. As they exercise responsibility and authority, they gain recognition from peers and bosses. The stewardship perspective assumes that the management (directors and managers) of firms as stewards of firm. As stewards, directors are likely to maximize the shareholders' wealth. Davis et al. (1997), posit how stewards derive a greater utility from satisfying organizational goals than through self-serving behaviour. Davis et al. (1997), argue that the achievement of organizational success invariably satisfies the personal desires of the stewards. The steward's behaviour is pro-organizational and collectivistic, and has higher utility than individualistic self-serving disposition. His actions and behaviour will not be different from the interest of the organization since the steward seeks to accomplish the objectives of the organization (Davis, et al. 1997).

Stewardship theory suggests that managers should be given autonomy based on trust, which minimizes the cost of monitoring and controlling the behaviour of the managers and directors. Stewardship theory considers that manager's decisions are also influenced by non-financial motives, such as need for achievement and recognition, the intrinsic satisfaction of successful performance, plus respect for authority and the work ethic. Daily et al. (2003) argue that managers and directors are also interested to protect their reputation as expert decision makers. As a result, managers operate the firm in a manner that maximises financial performance, including shareholder returns, as firm performance directly impacts perception about managers' individual performance. Fama (1980), suggests that

managers who are effective as stewards of the firm are also effective in managing their own careers

Empirical Review

Kaawaase, Narruba, Bananuka, & Akaunda,(2021) examines the relationship between corporate governance and audit quality and financial reporting using evidence from Uganda's financial Institutions. Data collected were analysed with the help of statistical Package for Social Science (SPSS). Finding shows that the board expertise and role performance are significantly associated with financial reporting and audit quality.

Ogoun,S.,& Perelayefa, (2020) examines the role of corporate governance in determining audit quality of firms in Nigeria. The study utilised 71 non-financial firms for the periods 2008-2015.The data collected were analysed using binary regression analyses. Findings revealed that board independence is negatively related to audit quality.

Owolabi, & Babarinde (2020) examined the effect of corporate governance on audit quality of money deposit banks(MDBS) in Nigeria between 2007-2018 using panel data estimator which was based on pooled regression model ; fixed effect model and random effect model. The result revealed that gender, ethnic diversity, board composition and board seize are significantly variable that can explicate on audit quality of MDBS in Nigeria.

Abdulazeez et al (2016) examined the impact of corporate governance on the financial performance of all listed deposit money banks in Nigeria using the Pearson correlation and regression. They find that a larger Board size contributes positively and significantly to the financial performance of deposit money banks in Nigeria. They recommend that banks should increase their Board size but within the maximum limit set by the code of corporate governance.

Okpara and Iheanacho (2014) investigated the impact of corporate governance on the banking sector performance using discriminant analysis, correlation coefficient and the spearman rank correlation as an alternate method. They found that foreign ownership improves bank performance.

Paul, Ebelechukwu & Yakubu (2015) assessed the impact of corporate governance (CG) on microfinance bank's financial performance in Nigeria. In their OLS regression analyses, they did not find a significant relationship between corporate governance and bank's financial performance. Given their special nature, banks need a unique corporate governance structure in addition to other regulations to ensure those banks' risk-taking do not put depositors' money at risk. In recent years, Nigerian banks have a different corporate governance structure from non-financial firms. They have a larger Board and a lower fraction of insiders than non-financial firms, and the Boards of Nigerian banks are more independent than the Boards of non-financial firms. The unique corporate governance structure of Nigerian banks was introduced by the Central Bank of Nigeria in 2005. Some argue that good corporate governance is needed in banks to effectively manage the resources of bank particularly where there is management/shareholders separation (Mohammed, 2012).

Zengin Karaibrahimoglu (2013) carried out a study on Turkey companies with the main objective of investigating the association between corporate governance and auditor choice by using a sample of 805 firm observed from Istanbul Stock Exchange (ISE) between the years 2005-2009. Overall findings show that, firms' auditor choice in terms of big-4 and audit firm industry specialization is affected by the firm-level corporate governance mechanisms of firms, particularly, board of directors' composition and ownership structure. This results on firm the influence of corporate governance on audit quality where the audit is improved when the corporate governance principles are implemented.

Mohamed & Mohamed (2012) seek to provide evidence on the effectiveness of corporate governance practices and audit quality from a developing country. The data for analysis is obtained from the top 50 most active companies in the Egyptian Stock Exchange. The study period covers the three-year period 2007-2009. Logistic regression was adopted in investigating the questions raised in the study. Findings from the study show that board independence; CEO duality and audit committees significantly have relationship with audit quality. The results also, indicated that institutional investor and managerial ownership have no significantly relationship with audit quality. Evidence equally exists that size of the company; complexity and business leverage are important factors in audit quality for companies quoted on the Egypt Stock Exchange. This study therefore recommended that companies in Egyptian stock exchange should have independent directors (non-executive director) in their board composition.

Adeyemi & Fagbemi (2010) carried out a study on corporate governance, audit quality and firm attribute. This study provides evidence on corporate governance, audit quality, and firm related attributes from a developing country, Nigeria. Logistic regression was used in investigating the questions that were raised in the study. The study showed that ownership by non-executive director has the possibility of increasing the quality of auditing. There was also evidence that the size of the company and business leverage are important factors in audit quality for companies quoted on the Nigerian Stock Exchange. The study recommends that the composition of non-executive directors as members of the board should be sustained and improved upon in order to enhance audit quality.

Sanda (2005) studied the association between the mechanisms of corporate governance and financial performance of corporations in Nigeria. The researchers looked over board size (named as the total board members), board

composition (named as the external board members) and the experience of top most management. Their sample comprised all firms quoted on the Nigeria Securities Exchange. Their findings showed that the composition of the board is to some extent positive correlated to the organization’s performance. Additionally, they reported that a small sized board was effective up to a certain limit beyond which it becomes ineffective. This infers that larger boards exceeding 10 executives are inefficient. Furthermore, it emerged that firms with international chief executive officers as board members, out-performed those without international chief executive office

Methodology

This study used the ex-post facto research design employing panel data analyses of financial information gotten from Financial Statements for fifteen (15) years (2007-2021) of the banks listed under financial institutions on the Nigerian Exchange. The secondary data used was extracted from the annual published financial statements and accounts of the sampled banks. The population consists of all commercial banks currently operating in Nigeria. Ex-post facto research technique is a quasi-experimental technique which is used to investigate how an independent variable, present before the research, impacts a dependent variable. Inferential statistics was employed to process the results. Findings from the data analysis were shown in tables. This is

to enable the study explain the physical attributes of the data collected while the hypotheses were tested at 5% significance level by means of both t-statistics and F-statistics. E-view statistical package was employed for data analysis.

The Model Specification

The functional nexus existing between variables from the hypotheses are:

Functions: $Y = f(X)$ $Y = y_1$ (Dependent variable)

$X = x_1 + x_2 + x_3$ (Independent variables)

$Y =$ Big four auditors as commonly used indicator of audit quality (ADQ)

The proposition that the use of a Big Four auditor is related to high-quality auditing (Francis, 2004; Barnes, 2008; Dechow 2010).

$X = (X_1 + X_2 + X_3 + X_4 \mu)$ Corporate Governance Mechanisms (CGM)

Where:

$X_1 =$ BSZE = Board size

$X_2 =$ BCOM = Board composition

$X_3 =$ BACM = Board Audit Committee

$f =$ functional dependency of the relationship

The regression takes the form of:

$$ADQ = \beta_0 + \beta_1 BSZE + \beta_2 BCOM + \beta_3 BACZ + \epsilon \dots \dots \dots (1)$$

Where:

$ADQ =$ Big four auditors as commonly used indicator of audit quality

$\epsilon_{it} =$ Error Margin

$\beta_0 =$ Intercept

β_1 to $\beta_3 =$ Regression Coefficients

Table 1 Variable Definition and Measurement

Type Variable	Variable	Variable Measurement
Dependent	Audit Quality	If the bank is audited by Big 4 is 1 otherwise is 0
Independent	Board size	Number of directors at the board
Independent	Board composition	Proportion of independent directors to board size
Independent	Board audit committee size	Number of audit committee members

Result and Discussion

The purpose of this study is to examine the effect of Corporate Boards on Audit Quality of

Deposit Money Banks in Nigeria. The result of the Descriptive Statistics is presented in table 1 below.

Table 2
Descriptive Statistics

	BSZE	BCOM	BACM	AQL
Mean	14.16667	0.478122	4.827778	0.866667
Median	14.00000	0.444000	5.000000	1.000000
Maximum	19.00000	0.800000	6.000000	1.000000
Minimum	7.000000	0.222000	4.000000	0.000000
Std. Dev.	2.920741	0.129192	0.557634	0.340883
Skewness	-0.200184	0.307676	-0.042720	-2.157277
Kurtosis	2.171284	2.508324	2.906410	5.653846
Jarque-Bera	6.352996	4.653020	0.120443	192.4371
Probability	0.041732	0.097636	0.941556	0.000000
Sum	2550.000	86.06200	869.0000	156.0000
Sum Sq. Dev.	1527.000	2.987617	55.66111	20.80000
Observations	180	180	180	180

Source: E-view 10 (2022)

As observed in Table 1, the statistics described include the mean, standard deviation, minimum and maximum values for all variables. There are 180 observations per each of the study variables. The mean value of 14.17 and standard deviation of 2.92 for board size (BSZE) means Deposit money banks in Nigeria operate have an average board size of 14.16667 with a low variability value of 2.9207. This low value of deviation indicates the stable nature of the board size in the banks. The lowest size is shown to be 7.0 and maximum size is 19 respectively. BCOM has a mean value of 0.478 for all the banks during the study period with a standard deviation of 0.129. The BCOM mean value of 0.478 implies that about forty eight percent (48%) of the sampled banks implies that 48% of the board were non-executive members while the maximum number of non-

executive members during the study period is 80%.

Table 2 further indicates that BACM (Board Audit committee size) has a mean value of 4.8 with a standard deviation of 55.8% during the study period meaning that on average majority of the study firms vary widely in respect of their audit committee size. The minimum audit size is 4 and maximum is 6 which indicates that the audit committee size depends on the size of the companies. The audit quality represented by the big four (KPMG, PWC, Ernst & Young, Akintola Williams, Deloitte) has a mean value of 0.87 which shows that 87% of the Deposit money banks were audited by the big 4 audit firms in Nigeria during the study period. The dummy variable of 1 and 0 are deployed to ascertain those banks audited by the big four and those outside the big four.

Table 3 Correlation Matrix

Covariance Analysis: Spearman rank-order

Date: 04/05/22 Time: 21:04

Sample: 2007 2021

Included observations: 180

Correlation Probability	BSZE	BCOM	BACM	AQL
BSZE	1.000000 -----			
BCOM	-0.145803 0.0508	1.000000 -----		
BACM	-0.079065 0.2914	0.162992 0.0288	1.000000 -----	
AQL	0.055329 0.4607	-0.122112 0.1025	-0.078164 0.2970	1.000000 -----

Source: E-View10 output (2022)

The correlation results in table 3 showed that most correlation coefficients between the predictor variables were generally low. The highest coefficients of correlation representing relationships between variables were between board audit committee size and board independence (0.162992) followed by board size and audit quality (0.055329). The coefficient of correlation between board size (BSZE) and board independence (BCOM) showed a negative relationship of -0.145803 and that

of board size and board audit committee size (BACM) is -0.079065 respectively. In addition, audit quality (AQL) is negatively correlated with board independence (BCOM) (-0.122112) and board audit committee size (BACM) (-0.078164) respectively. Generally, these results of pairwise correlation analysis did not appear to suggest any concern with regard to manifestation of multicollinearity problems in the process of estimating the regression models.

Table 4: Hausman Test (Test between Fixed and Random)

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	26.475397	3	0.0000

Source: E-View version 10 output

Due to the panel nature of the dataset, both fixed effect and random effect regressions were

run. Hausman specification test was then conducted to choose the preferred model

between the fixed effect and random effect regression models. The test basically checked if the error terms were correlated with the regressors. The decision rule is to reject the null hypothesis which states that random effect is preferred if the probability value is less than 5% level of significance and accept the fixed effect. However, if the probability value is greater than 5%, we accept the null hypothesis and reject the

fixed effect regression model. The result of the test as presented in table 4 above showed that the error terms are correlated with the regressors as the Hausman test statistic has a probability value of 0.0000 which is not significant at 5%. The result suggests that the fixed effect regression model is most appropriate for the sampled data.

Panel Regression Result (Fixed Effect)

Dependent Variable: AQL

Method: Panel Least Squares

Date: 04/11/22 Time: 10:47

Sample: 2007 2021

Periods included: 15

Cross-sections included: 12

Total panel (balanced) observations: 180

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.379872	0.481028	2.868590	0.0047
BSZE	-0.031503	0.013012	-2.421166	0.0166
BCOM	-0.613156	0.234988	-2.609308	0.0099
BACM	0.046865	0.079503	0.589477	0.0563

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.806778	Mean dependent var	0.866667
Adjusted R-squared	0.789475	S.D. dependent var	0.340883
S.E. of regression	0.316218	Akaike info criterion	0.614887
Sum squared resid	16.49901	Schwarz criterion	0.880967
Log likelihood	-40.33987	Hannan-Quinn criter.	0.722771
F-statistic	3.072317	Durbin-Watson stat	1.660846
Prob(F-statistic)	0.000297		

Source: E-View10 output (2022)

The decision rule is thus; if probability value is less than 0.05 (5% level of significance) we reject H_0 and accept H_1 and otherwise. From the regression table above, the R-squared shows a value of 80.68% which shows that the independent variables in the model explain the variability in the dependent variable, while 19.23% of the variability in the dependent variable is caused by variables not captured in the model. The adjusted R-squared also shows a value of 78.95%. The Prob (F-statistic) with a value of 0.000297 also shows that the model is fit at significant level of 5% to predict audit

quality. The regression result showed the relationship of each independent variable on the dependent variable (AQ). It revealed that board size has a positive and statistically significant relationship with audit quality with p value of 0.0166. Therefore, increases in board size has no significant effect on audit quality. Board independence (BCOM) showed a positive significant relationship with audit quality with a p value of 0.0099. Therefore, increase in Board independence will significantly enhance audit quality. Furthermore, board audit committee size as posited by showed a positive

insignificant relationship with audit quality with a P value of 0.563). Therefore, increases in board audit committee size cannot significantly leads to an increase in audit quality and vice-versa.

Discussion of Findings

From the aforementioned findings that corporate boards have positive effect on audit quality attests to the fact that proper monitoring by the directors leads to higher company performance and market value. The high quality of audit as depicted by the big audit firms is supported by DeAngelo (1981). He asserted that these big four invest more in audit technology and have less incentive to behave opportunistically and because they have more wealth and more valuable reputation hence ensuring audit quality. This study is in line with the studies of Adeyemi and Fagbemi (2010) and Zengin and Karaibrahimoglu (2013) which found that corporate governance has positive and significant effect on the quality of the audit of the firms studied. This study does not however agree with those of Simin, Rasoul and Aghdas (2013) and Abdulazeez et al (2016).

Conclusion and Recommendations

The study postulates, in line with prior studies, based on agency theoretical framework that corporate board mechanism can impact significantly on the audit quality and credibility of financial report production by deposit money banks in Nigeria. To buttress this argument, board size, board independence and board audit committee size were regressed against the dummy variable of the big four audits as surrogate for audit quality. The result of the study shows that board attributes had significant effect on the quality of audit of Deposit money Banks in Nigeria. As board size and board independence had significant effect on audit quality, while board audit committee size had no significant effect on audit quality. Arising from the findings the following recommendations are made:

1. That the minimum number of board membership should be five (5) and the

maximum should be determined based on the size of the banks and operational coverage. Small size of boards have negative implications on effectiveness. This means that Board size should be of a sufficient size relative to the scale and complexity of the company's operations and composed in such a way as to ensure diversity of experience without compromising independence, compatibility, integrity and availability of members to attend meetings. Banks should be encouraged to maintain maximum numbers that can withstand changes to the Board and Committee composition without undue disruptions.

2. The number of non-executive directors should exceed that of the executive directors to ensure independent decisions. The non-executive directors are known for their impartiality and scanty influence from the management in decision making.
3. The Board audit committee size is not too material in ensuring audit quality. The size should be de-emphasized while efforts should be directed on the financial literacy of members and the level of their attendance and contributions in the committee meetings.

References

- Abdullah, H. & Valentine, B. (2009). Fundamental and ethics theories of corporate governance. *Middle Eastern Finance and Economics*, 4(1), 89-96.
- Abdulazeez, D. A., Ndibe, L., & Mercy, A. M. (2016). Corporate governance and financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Marketing*, 5(1), 1-6.
- Adeyemi, S. B., & Fagbemi, T. O. (2010). Audit quality, corporate governance and firm characteristics in Nigeria, *International journal of business and management*, Vol 5(5): 169-179

- Aribaba F. O. & Ahmodu L. O. (2017), Corporate Governance and Audit Quality of Quoted Non-Financial Firms in Nigeria. *International Journal of Social Sciences and Conflict Management*, 2(4): 30-56
- Bradshaw, M.T., Richardson, S.A. & Sloan, R.G. (2001). "Do analysts and Auditors use Information in Accruals?" *Journal of Accounting Research*, 39(1), 45-73.
- Cadbury Report (1992) *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee Professional Publishing.
- Crowther D. & Jatana R. (2005). Agency theory: A cause of failure in corporate governance. *International dimensions of of corporate social responsibility*. 1, 135-152
- DeAngelo, L. E.. (1981). Auditors size and audit quality. *Journal of Accounting and Economics*, 3, 183-199
- Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: evidence from Nigeria. *Corporate Governance: The international journal of business in society*, 9(3), 231-243.
- Enofe, A. O., Mgbame, C., Aderin, A., & Ehi-Oshio, O. U. (2013). Determinants of Audit Quality in the Nigerian Business Environment. *Journal of Finance and Accounting*, 4(4), 36-44.
- Hassan, S. U. (2013). Corporate Governance and Financial reporting Quality: A Case Study of Nigerian Money Deposit Bank, *International Journal of Research in Computer Application and Management*, 1 (26), 12-19
- Heirany, F., Sadrabadi, A. N. & Mehrjordi, F. F. (2013). Investigating the Effect of Corporate Governance Mechanisms on the Quality of Accounting Profit. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 3, (3): 315-328
- Hemedat, M. (2002), "Assessing the Level of Audit Quality and Factors Affecting it, Unpublished Master Dissertation", Yarmouk University, Irbid, Jordan
- Jensen, M. (2001). Value Maximisation, Stakeholder Theory, and the Corporate Objective Function. *European Financial Management*, 7(3), 297-317.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Lee, C. J., Liu, C. & Wang, T. (1999). The 150-hour Rule. *Journal of Accounting and Economics* 27(2): 203- 228
- Levitt, A. (2000) Speech by SEC Chairman: Remarks before the Conference on the Rise and Effectiveness of New Governance Standards, Federal Reserve Bank, New York.
- Li, J., & Lin, J. (2005). The relationship between earnings management and audit quality, *Journal of Accounting and Finance Research*, 12 (1), 1- 11.
- Manry, D. L., Mock, T. J. and Turner, J. L. (2008). Does increased audit partner tenure reduce audit quality? *Journal of Accounting, Auditing and Finance*, 23(4), 553-572.
- Mohamed M. S., & Mohamed A. E. (2012). Corporate Governance Practices and Audit Quality: An Empirical Study of the Listed Companies in Egypt. *World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering* 6(11):3101-3106
- Mohammed, F. (2012). Impact of corporate governance on banks performance in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 3(3), 257-260.
- Monks, L. & Minow, G. (1995). "Auditors size and Audit pricing: Evidence from Small Audit Firms". *European Accounting Review*, 13(3), 71-101.
- OECD. (2004). *OECD Principles of Corporate Governance*. Paris: OECD Publishing. Retrieved from <http://www.oecd.org>

- Okereke, E. J., Sanni, T. A., Anyanwu, G. I. & Ogunbiyi, S. (2009), *Money and the Nigerian Financial System 3rd Edition*, JESO International, Owerri.
- Okpara, G. C., & Iheanacho, E. (2014). Banking Sector Performance and Corporate Governance in Nigeria: A Discriminant Analytical Approach. *Expert Journal of Finance*, 2, 10-17.
- Owolabi, S.A., & Babarinde, T.A., (2020). Effect of Corporate governance on audit quality. *International Journal of Multidisciplinary and Current Educational Research(IJM CER)*, 2(5);290-296.
- Ozili, P. K., & Outa, E. (2017). Bank loan loss provisions research: A review. *Borsa Istanbul Review*, 17(3), 144-163.
- Ozili, P. K., & Uadiale, O. (2017). Ownership concentration and bank profitability. *Future Business Journal*, 3(2), 159-171.
- Ozili, P. K. (2020). Corporate Governance Research in Nigeria: A Review. [https://mpra.ub.uni-muenchen.de/98217/MPRA Paper No. 98217](https://mpra.ub.uni-muenchen.de/98217/MPRA_Paper_No_98217), Posted 20 Jan 2020 15:03 UTC
- Palmrose, Z. (1988). An Analysis of Auditor Litigation and Audit Service Quality. *The Accounting Review*, 64(1), 55–73.
- Paul, G. D., Ebelechukwu, E. C., & Yakubu, S. (2015). Impact of corporate governance on financial performance of microfinance banks in north central Nigeria. *International Journal of Humanities Social Sciences and Education*, 2(1), 153-170.
- Pfeffer, J. 1972. Size, composition, and function of hospital boards of directors. *Administrative Science Quarterly*, 18(1), 349-364.
- Reisch, J.T. (2000), "Ideas for Future Research on Audit Quality", *The Audit Report*, Vol.24, No.1.
- Sanda, A. U., Mikailu, A. S., & Garba, T. (2005). Corporate governance mechanisms and firm financial performance in Nigeria.
- Sharafa O. M. (2014) *Understanding Management Governance and Ethics*, Phodun International Consulting Limited, Lagos
- Simin, H., Rasoul, M. & Aghdas, A, (2013). The Effect of Corporate Governance Mechanisms on Audit Quality. *Journal of Basic and Applied Scientific Research*, 3(1), 891-897
- Stemberg, E. (2004) *Corporate Governance: Accountability in the Market Place*, 2nd edn. London: Institute of Economic Affairs.
- Sudsomboon, S. & Ussahawanitchakit, P. (2009). "Professional Audit Competencies P: The Effect on THAI'S CPAs Audit Quality, Reputation, and Success". *Review of Business Research*, 9(3), 66-85.
- Zengin Karabrahimoglu, Y. (2013). Is Corporate Governance A Determinant of Auditor Choice -Evidence From Turkey. *Ege Akademik Bakis (Ege Academic Review)*, 13(2), 273-273.
- Zureigat Q M.(2011), "The Effect of Ownership Structure on Audit Quality: Evidence from Jordan", *International Journal of Business and Social Science*, Vol. 2 No. 10, pp.38-46.

Panel Regression Result (Random Effect)

Dependent Variable: AQL

Method: Panel EGLS (Cross-section random effects)

Date: 04/05/22 Time: 21:17

Sample: 2007 2021

Periods included: 15

Cross-sections included: 12

Total panel (balanced) observations: 180

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.107697	0.272153	4.070132	0.0001
BSZE	0.001208	0.008657	0.139559	0.0492
BCOM	-0.353793	0.193954	-1.824113	0.0298
BACM	-0.018433	0.045435	-0.405691	0.6855

Effects Specification

	S.D.	Rho
Cross-section random	0.034726	0.0119
Idiosyncratic random	0.316218	0.9881

Weighted Statistics

R-squared	0.539867	Mean dependent var	0.797527
Adjusted R-squared	0.503160	S.D. dependent var	0.337181
S.E. of regression	0.336647	Sum squared resid	19.94635
F-statistic	120.9144	Durbin-Watson stat	1.790628
Prob(F-statistic)	0.035387		

Unweighted Statistics

R-squared	0.019247	Mean dependent var	0.866667
Sum squared resid	20.39967	Durbin-Watson stat	0.675281

EFFECT OF BOARD SIZE AND COMPOSITION ON EARNING PER SHARE OF LISTED HEALTH CARE COMPANIES IN NIGERIA

¹Onmonya, Lucky Otsoge, Ph.D, ²Udeozor, Paul Ejike

¹Nile University of Nigeria, Abuja

²Institute of Development Finance and Project Management, Abuja

Abstract

Board size and composition are essential aspects of corporate governance that affect financial performance. Corporate governance has gained popularity over the last two decades due to its ability to prevent corporate failure. Corporate governance structure and mechanism if adequately adopted, will improve the financial performance of companies. It is on this premises that the study investigated the effect of board size and composition on Earning Per Share (EPS) using listed health care companies listed on the Nigeria Stock Exchange. Seven (7) health care companies were used for this study. Panel data analysis was carried out to test hypotheses using multiple regression analysis. The result shows that board composition and board size have a significant effect on EPS. The study recommends that healthcare companies in Nigeria increase the number of non-executive directors and ensure that they have appropriate business connections, knowledge of the industry, skills, and experience.

Keywords: Corporate Governance, Board Size, Board Composition, Earning Per Share, Health Care Companies

BACKGROUND

Board size and Board composition are critical areas of corporate governance that have generated immense interest in the last two decades. Corporate governance is a system of mechanisms, rules, policies, processes, practices, and relations to direct and control a company by various stakeholders. Sreeti (2017) defines corporate governance as the process through which an organisation's resources are deployed to maximise stakeholders value. Corporate governance is involves managing and directing an entity in the interest of the shareholders and the society at large. Therefore, corporate governance is about how those entrusted with powers to run a company use those powers and accept responsibilities for deciding a company strategy. According to

Mohammed and Fahmida (2017), corporate governance is concerned with the set of rules, controls, policies, and resolutions that dictate corporate behaviour. Puneeta Goel (2018) explores the effectiveness of corporate governance practices followed by Indian companies, revealing a significant improvement in the financial performance of corporate governance structures.

The Code of Corporate Governance of Nigeria developed by the Security and Exchanger Commission (SEC) in 2018 provides that the Board should be of a sufficient size to effectively manage the company. The code also provides that the Board members should have an appropriate mix of knowledge, skills and experience, including the business, commercial

and industry experience needed to govern the company. In addition, there should be an appropriate mix of Executive, Non-Executive and Independent Non-Executive members such that the majority of the Board are Non-Executive Directors.

Earnings Per Share (EPS) is a company net income allocated to each outstanding share (The Economics Times, 2021). It is an essential measure of financial performance that appeals to investors. It is calculated by determining a company net profit and allocating that to each outstanding share of common stock. EPS is an indicator of the financial health of a company. A high EPS is an indication that a company is profitable enough to pay out more money to its shareholders. Companies that have steady increase in EPS is considered a more reliable investment than the one that is declining or varies substantially. EPS is also an essential variable in determining a stock value (Folger, 2012). It is a vital aspect of the P/E ratio, one of the most common ratios utilised by investors to determine whether a company stock price is appropriately valued relative to its earnings.

Good corporate governance standards are essential to every company and should be encouraged and practised to improve performance that attracts investment in the company. for the interest of the investors and other stakeholders (Tochukwu, et al ,2018). A robust corporate governance practice can result in better financial performance and significant financial gains for shareholders (Tornyera & Wereko, 2012; Hermuningsih, Kusuma & Cahyarifida, 2020; Musah & Adutwumwaa, 2021). A robust corporate governance practice should entrench transparency, accountability and mitigate risk in the management of companies. Adedeji, Ong, Uzir & Abdul-Hamid (2020) assessed the effect of corporate governance on firms in Nigeria showed that corporate governance has a significant effect on financial performance of companies. Although there is a growing interest in the examination of

the relationship between corporate governance and company performance, there have been diverse findings from these studies. In addition, many researchers have studied the impact of corporate governance on the financial performance in Nigeria; most of these researchers concentrated on sectors other than the Nigerian health care companies.

The examination of the relationship between Board size, board composition and financial performance using EPS, a vital indicator for attracting investors, would be interesting. Therefore, this study accessed the extent to which Board size, board composition and financial performance affect EPS of listed health care companies in Nigeria.

The study objective is to determine the impact of board size and board composition on EPS of listed health care companies in Nigeria.

This study will be confined to the quoted Nigerian health care companies only; The timeframe for this study is ten years, i.e. (2010 to 2019). Regarding the knowledge area, the study will focus on the impact of Board size and Board composition whereas Earning Per Share is the dependent variable.

LITERATURE REVIEW

Board Size

Literature on corporate governance indicates that the size of a board of directors has a direct relationship with its profitability (Kiambati, 2012). The size of Board of Directors has been claimed to influence the performance of large firms (Raymond et al., 2010). The interest in 'board' research is due to the critical governance oversight role that boards are expected to play (Purushottam, 2019). Williams, et al. (2005) pointed that larger boards possess more specialised skills and are better equipped to monitor management. In contrast, Beasley (1996) revealed that larger boards negatively impact strategic plans, internal controls, and financial reporting

quality. It is assumed that a larger board will make it difficult for organisations to arrive at decisions faster, while a leaner board of directors will be faster in making decisions that are likely to improve on the financial performance of the organisation. If the Board of any company has subcommittees that can address various specific issues, there is potential for such an organisation to perform better financially. Khatib and Nour (2021) revealed that board size exerts a significant positive impact on firm performance. Cheema and Din (2013) show a positive relationship between board Size and firm equity, return on assets, and earnings per share in the cement industry of Pakistan. Tochukwu, Pradeep, Prasath (2018) revealed that director shareholdings, board size, and board skills significantly impact earnings per share. Meyer & De Wet (2013 (2013) revealed that the size of independent non-executive directors had a significant effect on earnings per share and enterprise value of the performance of listed South African companies. Uwuigbe and Fakile (2012) conclude a significant negative relationship between board size and bank financial performance. They argued that the increase in board size leads to a rise in agency problems which usually makes the Board less effective. However, Paul (2015) showed that Board Composition has no significant relationship between with EPS of microfinance banks in Nigeria. Purushottam (2019) also reveals that board size has no impact on firm performance.

In line with the above, the following hypothesis is formulated.

H₀₁: Board size does not significantly impact the EPS of listed health care companies in Nigeria.

Board Composition

Board composition is the combination of both executive and non-executive directors as members of the Board. It is the proportion of the Board of directors that is represented by inside executive and outside non-executive

directors ratio (Akhalmeh, et al, 2011). It is usually measured as the proportion of non-executive directors to the executive directors on a board and indirectly reflects the independence of Board and monitoring role of non-executive directors.

Fama and Jensen, (1983) have recognised the Board of Directors as the most critical monitoring mechanism in a company internal governance structure. An effective board should monitor financial discretion and ensure that accounting choices made by the management are valid (Kent & Stewart, 2008). To achieve Corporate Governance goals, the Board of Directors needs to independently monitor managers behaviour (Khan *et al.* (2012) argued that non-executive directors check and balance mechanisms to enhance board effectiveness. The Board influences the quantity and quality of information disclosed in the annual reports and the timeliness of the release. Thus, the Board ought to be independent for it to be transparent and accountable to stakeholders. Akhalmeh, et al. (2011) show that that there is no explicitly clear relationship between board composition and firm performance in Nigeria.

John and Ibenta (2016) examined the effect of corporate governance on the performance of Nigerian banks observed a significant negative relationship between board size, board composition and banks financial performance; still, the finding showed a positive and significant association between director equity holding and banks performance. Kiptoo et al. (2021) also showed that board composition and size negatively and significantly affects financial performance. Based on this, the hypothesis is formulated as follows.

H₀₂: Board composition does not have a significant impact on the EPS of listed health care companies in Nigeria.

Theoretical Framework

Two theories provide an insight into this study - the Agency theory and Resource Dependency

theory. Agency theory presents the relationship between ownership structure and managerial control leading to conflict and cost that can hinder financial performance. Thus, the larger the size of the Board, the more the conflict, inefficiency in operation, moral hazard challenges and lack of commitment resulting in poor financial performance (Jensen & Meckling, 1976). Boyd (1990) argues that board composition should be based on resource-rich directors, not just the number of directors, because, in some situations, board size can impede performance. Resource dependency theory postulated that large board size provides access to external relationships that bring further information and financial and inter-organisational coordination (Pfeffer, 1972). Pfeffer and Salancik (2003) explain that apart from information, advice and legitimacy, directors bring preferential access to resources to a firm that improves financial performance.

Agency theory is a vital theory used by many researchers in the analysis of corporate governance as it relates to agency problem and solution (Jensen & Meckling, 1979). The separation of ownership and managerial control in corporate management, different risk preferences, information asymmetry and moral hazards lead to conflict of interest and agency cost. Thus, substantial ownership control, managerial ownership, independent board members and different committees can be helpful in controlling the agency conflict and its cost (Panda & Leepsa, 2017). The shareholder (principal) invest their capital and take the risk to acquire the economic benefits.

In contrast, the agents who manage the firm are risk-averse and concerned in maximising their private benefits. Both have opposite risk preferences, and their problem in risk-sharing creates agency conflict, which is broadly covered under the agency theory. Nguyen, et al. (2020) explains that agency costs increase when the management and governance ownership is higher, but agency costs decrease when the company grows bigger, has more

control from creditors, and has better firm performance.

Agency theory is popular, but it still suffers from various limitations (Eisenhardt, 1989; Shleifer & Vishny, (1997; Daily et al., 2003). Information asymmetry and transaction cost are hinderance to the theory.. Shareholder interest in the firm is only to maximise their return, but their role is limited. A limitation of the theory ignores the competence of the managers and considers them as opportunistic ((Daily et al. 2003; Panda & Leepsa, 2017).

Resource dependence theory was postulated by Pfeffer and Salancik (1978). The theory deals with how external resources affect organisational behaviour and impact on the performance of the organisation. The ability to acquire these resources more than a competitor is vital to the success of the organisation. These resources are scarce, and transaction is needed to obtain them. An unequal exchange may occur, resulting in a divergent power to control the resources and access further resources. The theory is relevant in terms of acquiring raw material, getting customers, and recruiting appropriate board members and even employees to propel the organisation to success. The more the board members come from the external environment, the better for the organisation. Larger the board size and diverse composition of the Board lead to monitoring, trans piracy and accountability, resulting to better financial performance.

Agency theory has been the popular theory used in research on boards of directors (Dalton, et al. 2007), but resource dependency theory has also gained ground (Zehir et al., 2018). Board size relates to the solid environmental needs, and those with greater interdependence require a higher ratio of outsider directors (Pfeffer, 1972). Some studies suggest that the relationship between board size and firm performance results from a successful resource dependence strategy (Zehir et al. 2018). Pfeffer (1972) argues that boards assist firms to minimise dependence or gain resources.

Hillman, et al. (2000) classified directors as business experts, support specialists, and community influentials based on the types of resources they bring to the Board. This study is anchored on the agency theory.

RESEARCH METHODS

This study used an *ex-post* factor research design. There were eight health care companies quoted with the Nigerian stock exchange (NSE) in 2020. The companies are Morison Industries, Neimeth International Pharmaceuticals, Pharma-Deko, Ekocorp, Fidson Healthcare, Glaxo Smithkline, May & Baker Nigeria, Union Diagnostic and Clinical Services. Seven out of eighth companies were selected for the study because one (Union Diagnostic & Clinical Services) failed to submit annual reports.

Data were collected from the annual reports and financial statements of the selected companies. The dependent variable is Earning per Share (EPS) while the independent variables are Board Size and Board Composition. The control variable is Firm size with revenue as a proxy. Board Size (BS) is number of directors

serving as the Board for the period covered by the study. This was used in Davis and Cobb (2010). Board Composition (BC) is the number of independent directors to total number of directors. This was used in Vaughn and Ryan (2006) and Yacuzzi (2005). Firm Size is natural logarithm of Revenue (LOR).

The model specification is as follows:

$$EPS_{it} = a + b_1 BC_{it} + b_2 BS_{it} + b_3 LOR_{it} + e_{it}$$

Where:

EPS= Earnings Per Share ; LOR= Logarithm of Revenue; BC = Board Composition of firm; and BS= Board Size and e = error term.

Panel data analysis was carried out to test hypotheses using multiple regression analysis.

DATA ANALYSIS AND RESULTS

The results of the panel data are in table 1.

Descriptive Statistics on EPS and Corporate Governance

Table 1 presents result of descriptive statistics on dependent variable (EPS) and the independent variables

Table 1: Descriptive Statistics

VARIABLES	OBSERVATIONS	MEAN	STD	MIN	MAX
YEAR	49	2017	2.20726	2014	2021
EPS	49	24.0346	76.7835	-149	334
LOR	49	6.9679	0.9960	5.66	9.57
BC	49	0.4073	0.2649	0	0.89
BS	49	8.4693	1.7452	5	12

Source: Extracted from STATA Output 10, 2021

There are 49 observations, seven years (2014-2021) annual reports multiplied by seven sampled companies. The standard deviations for all explanatory and control variables were low.

Correlation Matrix

Results for multiple correlations between independent variables and EPS are in table 2.

Table 2: Correlation Matrix

VARIABLES	EPS	LOR	BC	BS
EPS	1.0000			
LOR	0.1183	1.0000		
BC	0.2940	0.1391	1.0000	
BS	0.2166	-0.4647	-0.2243	1.0000

Source: Extracted from STATA output 10, 2021

Result from Table 2 shows that correlation coefficient between EPS and all the independent variable are less than 30 per cent. This is an indication of weak positive association between earning per share and revenue (0.1183), board composition (0.2940) and board size (0.2166). To assess the presence of multicollinearity, the study further conducted a multicollinearity test,

using Variance Inflation Factor (VIF) and its reciprocal (1/VIF). The benchmark of VIF is a mean value of 10. That is, there is absence of multicollinearity between the independent and dependent variables when the mean is less than 10 (Gujarati, 2004). The result in Table 3 shows that the mean value of VIF is 1.35. This suggests an absence of multicollinearity.

Table 3: Variance Inflation Factor (VIF)

VARIABLES	VIF	1/VIF
BS	1.32	0.647578
LOR	1.28	0.731480
BC	1.05	0.823985
MEAN VIF	1.22	

Source: STATA Output 10, 2021

Result of Robustness Test for Multiple Regression Analysis

There are robustness tests that are usually conducted to improve the validity of statistical inference, and to avoid making wrong inferences. The various options for panel regression are Ordinary Least Square (OLS) regression and Generalised Least Square (GLS)

regression technique which comprises of the Random Effect and Fixed Effect (within) regression. Other robustness tests are the Breusch – Pagan / Cook – weigsberg test for heteroskedasticity; Hausman specification test, and the Breusch – Pagan / Lagrange Multiplier (LM) test. The VIF test in table 3 shows an absence of multicollinearity,

Table 4: Breusch-Pagan/cook-weisberg test for heteroskedasticity

Chi2 (1)	3.41
Prob > chi2	0.0646

Source: Extracted from STATA output 10, 2021

The Breusch-Pagan/ Cook-weisberg test for heteroskedasticity reveals a chi-square value of 3.41, a p-value of 0.06. This is insignificance at 5% level indicating the absence of heteroskedascity in the data. Given that the model has no multicollinearity and

heteroskedasticity problem, the OLS regression is used for the regression result.

Regression Result

The summary of the OLS regression model result is presented in table 4.

Table 4: Summary of Regression Result

Variables (EPS)	Coefficient	Z-statistic	P-value
Constant	-311.4154	-2.65	0.082
LOR	20.31845	2.60	0.012
BC	103,0099	2.77	0.008
BS	18.37901	-2.65	0.011
R- Square	22 %		
Probability	(0.0045)		

Table 4 shows that the P-values for revenue (0.012), board composition (0.008) and board size (0.015) are significant at 5%. This is an indication that they have no significant effect on EPS.

The R^2 of 22% seems low, but it is usually low in social sciences because it is difficult to predict human behavior compared to physical processes. R^2 that is low is still acceptable since it is used for explanatory rather than predictive reasons (Karen, 2013).

Discussion

Results show a significant relationship between EPS and Result shows that the P-values for board composition (0.008) and board size (0.015) are significant at 5%. This indicates that board composition and board size has a significant effect on EPS. This implies that companies with a higher ratio of non-executive directors and larger size perform better in terms of EPS than those with a lower proportion of non-executive directors in listed health care companies in Nigeria. This in agreement with Cheema and Din (2013) and John and Ibenta (2016) that suggest that board composition and size significantly affect financial performance. Khatib and Nour (2021) also revealed that board size significantly impacts firm performance. However, Kiptoo et al (2021) showed that board composition and size negatively and significantly affects financial performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Board composition and board size has a positive and significant effect on EPS. This implies that companies with a higher ratio of non-executive directors and larger size perform better in terms of EPS than those with a less proportion of non-executive directors in listed health care companies in Nigeria. The study concludes that there is a strong corporate governance structure in Nigeria's listed health care companies. This is evidence in the way in

which board size and board composition significant positive impact on EPS.

Recommendations

(i) Healthcare companies in Nigeria should maintain a large board size and increase the number of non-executive directors in the Board to improve financial performance in terms of EPS that usually appeal to investors.

(ii) Health care companies should appoint board members with the appropriate resources such as business connection, industry knowledge, skills, and experience.

(iii) The Chairman board of directors should ensure that appropriate governance structures in order to boost financial performance at all times.

(iv) Security and Exchange Commission and other health sector regulators should formulate appropriate policies to ensure companies governance is in accordance with the code of corporate governance.

Research limitation and implication

This study dealt with only health care companies listed on the NSE and results can only be generalised based this. Findings may be different if companies in other industrial groups were used. However, the research provides additional empirical literature on corporate governance and financial performance using board size, composition, and earnings per share.

REFERENCES

- Adedeji, B.S., Ong, T.S., Uzir, M.U.H. & Abdul-Hamid, A.B. (2020). Corporate governance and performance of medium-sized firms in Nigeria: does sustainability initiative matter?, *Corporate Governance*, 20(3), 401-427. <https://doi.org/10.1108/CG-09-2019-0291>
- Akhalumeh, P. Ohiokha, F, & Ohiokha, G. (2011). Board composition and corporate performance: An analysis of evidence from Nigeria, *Research*

- Journal of Finance and Accounting*, 2(4), 34-45
- Beasley, M.S. (1996) An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71, 443-465.
- Boyd, B. 1990. Corporate linkages and organisational environment: A test of the resource dependence model, *Strategic Management Journal*, 11: 419-430.
- Cheema, K. U. R & Din, M. S. (2013). *Impact of corporate governance on performance of firms: A case study of cement industry in Pakistan*, *Journal of Business and Management Sciences*, 4 (1) (2013), 44-46.
- Dalton, D. R., Daily, C. M., Johnson, J. L. & Ellstrand, A. E. (1998). Meta-analytic reviews of board composition, leadership structure and financial performance, *Strategic Management Journal* 19(3), 269-290.
- Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. 2007. Agency theory and its mitigation. In A. Brief, & J. Walsh (Eds.), *Academy of management annals*, 1: 1-64. Mahwah, NJ: Lawrence Erlbaum.
- Davis, G. F. & Cobb, J. A. (2010). Resource dependence theory: Past and future. Stanford's organisation theory renaissance, 1970-2000: 21-42. Bingley, NY: Emerald Group
- Donaldson, A., & Preston, L. E. (1995). The Stakeholder Theory of Corporation: Concepts, evidence & implications. *Academy of Management Review*, 20(1), 65-91. <https://doi.org/10.5465/amr.1995.9503271992>
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Fama, Eugene, and Michael Jensen. 1983. Separation of Ownership and Control. *Journal of Law and Economics* 26: 301-25.
- Folger, J (2012). What is the formula for calculating Earning Per Share? , <https://www.investopedia.com/ask/answers/070114/what-formula-calculating-earnings-share-eps.asp>
- Greene, W.H. (2008) *Econometric Analysis*. 6th Edition, Pearson Prentice Hall, Upper Saddle River
- Gujarati, D. N. (4th Ed.) (2004). *Basic Econometrics*. The McGraw-Hill Companies.
- Hermuningsih, S., Kusuma, H & Cahyarifida, R.A. (2020). Corporate governance and firm performance: an empirical study from Indonesian manufacturing firms, *Journal of Asian Finance, Economics and Business*, 7(11), 827-834
- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. 2000. The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37: 235-255.
- Jensen, M.C. and Meckling, W.H. (1979), Theory of the firm: managerial behavior, agency costs, and ownership structure, *Journal of Financial Economics*, 3(4), 305-360.
- John, E. I., & Ibenta, S. N (2016) Corporate governance and the performance of Nigerian banks. *International Journal of Economics, Finance and Management Sciences*, 4(2), 39-45. doi: 10.11648/j.ijefm.20160402.11
- Karen, G, M. (2013). Can a regression model with a small r-squared be useful?, The analysis factor, https://cpb-us-w2.wpmucdn.com/blog.uwgb.edu/dist/7/17/files/2013/11/Can-a-Regression-Model-with-a-Small-R-squared-Be-Useful_.pdf
- Kent, P & Stewart, J. (2018). Corporate governance and disclosures on the

- transition to international financial reporting standards, *Accounting & Finance*, 48(4), 649-671,
- Khan, A., Muttakin, M.B & Siddiqui, J. (2012). Corporate governance and corporate social responsibility disclosures: evidence from an emerging economy, *J Bus Ethics* (2013) 114:207–223. DOI 10.1007/s10551-012-1336-0
- Khatib, S. F.A. & Nour, A. I. (2021). The impact of corporate governance on firm performance during the COVID-19 pandemic: evidence from malaysia, *Journal of Asian Finance, Economics and Business*, <https://doi.org/10.13106/jafeb.2021.vol18.no2.0943>
- Kiambati, PK.K, Ngugi, K, Katuse,P & Waititu, A (2012). Role of board size on financial performance of commercial banks, *Prime Journal of Social Science*. 2(3), 259-262,
- Kiptoo, I.K, Kariuki, S.N & Ocharo,K.N (2021) Corporate governance and financial performance of insurance firms in Kenya, *Cogent Business & Management*, 8:1, DOI: 10.1080/23311975.2021.1938350
- Meyer, E., & de Wet, J. H. v. H. (2013). The impact of board structure on the financial performance of listed South African companies. *Corporate Board: role, duties and composition*, 9(3), 18-31. <https://doi.org/10.22495/cbv9i3art2>
- Mohammed, R. A. & Fahmida, A. (2017). impact of corporate governance on performance of commercial banks in Bangladesh. *The Cost and Management*, 45 (4), pp. 1-9
- Musah, A., & Adutwumwaa, M. Y. (2021). The effect of corporate governance on financial performance of rural banks in Ghana. *International Journal of Financial, Accounting, and Management*, 2(4), 305–319.
- Nguyen, A.H, Doan, O.D.T & Nguyen, I.A. (2020). Corporate governance and agency cost: empirical evidence from Vietnam, *journal of. risk financial management*, 13(5), 1- 15. <https://doi.org/10.3390/jrfm13050103>
- Obembe, O. B., Olaniyi, C. O., & Soetan, R. O. (2016). Managerial ownership and performance of listed non-financial firms in Nigeria. *International Journal of Business and Emerging Markets*, 8(4), 446–461.
- Panda, B & Leepsa, N.M, (2017). Agency theory: review of theory and evidence on problem and perspectives *Indian Journal of Corporate Governance* 10(1) 74–95 DOI: 10.1177/0974686217701467,
- Paul, A. S., (2015). Issues in corporate governance and financial reporting. A Paper Presented at the World Bank Regional Workshop/Seminar on Corporate Governance and Financial Reporting. Held at Hamid Guest House, Nasarawa, Kano (unpublished).
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organisation and its environment, *Administrative Science Quarterly*, 17(2), 218-228.
- Pfeffer, J, & Salancik, G. R. (1978). The external control of organisations: A resource dependence perspective. Ny: Harper and Row
- Pfeffer, J., & Salancik, G. R. 2003. The external control of organisations: A resource dependence perspective: Stanford, CA: Stanford University Press
- Puneeta, G. (2018). Implications of corporate governance on financial performance: an analytical review of governance and social reporting reforms in India, *Asian Journal of Sustainability and Social Responsibility*, 3, (4), 46-57 <https://ajssr.springeropen.com/articles/10.1186/s41180-018-0020-4>
- Purushottam, N. V. (2019). Board size and firm performance: A study on BSE 100

- companies, *Journal of Management* 6 (3), 117-123
- Raymond K. Van Ness, R.K.V., Miesing, P., Kang, J. (2010). Board of director composition and financial performance in a sarbanes-oxley, *Academy of Business and Economics Journal*, 10 (5), 56-74
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737-789.
- Sreeti, R. (2017). Corporate Governance: Concepts and Issues. Available at Sreeti, R. (2017). Corporate Governance: Concepts and Issues. Available at <https://www.iodonline.com/Articles/corporate%20Governance%20and%20Sustainability%20Concepts%20Sreeti%20Raut.pdf>. Retrieved November 14, 2021.
- The Economics Times (2021, October 7) Definition of EPS, <https://economictimes.indiatimes.com/definition/earnings-per-share-eps>
- Tochukwu, C., Pradeep, M. P. D , Prasath, D. L. M. R. (2018). Board Involvement on Earnings Per Share : Evidence from A Developing Economy Pradeep, M. P. D , Prasath, D. L. M. R. *International Journal for Innovation Education and Research*, 6 (5),130-141 <http://ijer.net/ijer/article/view/1031>
- Tomyeva, K. (2012). Corporate Governance and Firm Performance : Evidence from the Insurance Sector of Ghana, *European Journal of Business and Management* 4(13), 95-113.
- Vaughn, M & Ryan, L. V. (2006). Corporate governance in South Africa: A bellwether for the continent corporate governance, *An International Review*, 14(5),504-512
- Uwuigbe, O, R & Fakile, A, S. (2012) the effects of board size on financial performance of banks: a study of listed banks in Nigeria, *International Journal of Economics and Finance*, 4 (2), 260-276. : <http://dx.doi.org/10.5539/ijef.v4n2p260>
- Williams, R. J., Fadil, P. A., & Armstrong, R. W. (2005). Top management team tenure and corporate illegal activity: The moderating influence of board size. *Journal of Managerial Issues*, 17(4), 479-493.
- Yacuzzi, E. (2005). A primer on governance and performance in small and medium-sized enterprises, *Journal of Business Management*, 2, 22-34.
- Zehir. C., Findikli, M.A. & Çeltekligil, K (2018). Resource dependence theory, firm performance and producers-suppliers relationships, 14th International Strategic Management Conference & 8th International Conference on Leadership, Technology, Innovation and Business Management. DOI:10.15405/epsbs.2019.01.02.14

APPENDIX II PANEL DATA ON CORPORATE GOVANANCE

```

. xtset id year, yearly
      panel variable: id (strongly balanced)
      time variable: year, 2014 to 2020
      delta: 1 year

. summarize

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
year     | 49      2017      2.020726      2014      2020
id       | 49        4      2.020726        1        7
eps      | 49  24.03469  76.78357      -149      334
lor      | 49  6.967959  .9960567        5.66      9.57
bc       | 49  .4097959  .2616334         .1         .89
-----|-----
bs       | 49  8.469388  1.745256         5         12

. pwcorr eps lor bc bs

           | eps      lor      bc      bs
-----|-----
eps       | 1.0000
lor       | 0.1183  1.0000
bc        | 0.2940  0.1391  1.0000
bs        | 0.2166 -0.4647 -0.2243  1.0000

. reg eps lor bc bs

Source | SS      df      MS              Number of obs = 49
-----|-----
Model | 63625.5689  3  21208.523      F( 3, 45) = 4.35
Residual | 219368.83  45  4874.86289      Prob > F = 0.0090
Total | 282994.399  48  5895.71665      R-squared = 0.2248
                                           Adj R-squared = 0.1732
                                           Root MSE = 69.82

-----|-----
eps    | Coef.  Std. Err.  t    P>|t|  [95% Conf. Interval]
-----|-----
lor    | 20.31845  11.43541   1.78  0.082   -2.71365   43.35054
bc     | 103.0099  39.55746   2.60  0.012   23.3371   182.6827
bs     | 18.37901  6.631906   2.77  0.008   5.021662  31.73635
_cons  | -315.4154 118.8016  -2.65  0.011  -554.6942 -76.13659

. vif

Variable | VIF      1/VIF
-----|-----
bs       | 1.32  0.758100
lor      | 1.28  0.782798
bc       | 1.05  0.948152
-----|-----
Mean VIF | 1.22

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of eps

chi2(1) = 3.41
Prob > chi2 = 0.0646

```

. xtreg eps lor bc bs, fe

Fixed-effects (within) regression
 Group variable: id
 Number of obs = 49
 Number of groups = 7
 R-sq: within = 0.1345
 between = 0.1024
 overall = 0.0500
 Obs per group: min = 7
 avg = 7.0
 max = 7
 corr(u_i, Xb) = -0.9032
 F(3,39) = 2.02
 Prob > F = 0.1269

eps	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lor	109.0556	56.11099	1.94	0.059	-4.439548	222.5508
bc	49.17446	154.23	0.32	0.752	-262.7852	361.1341
bs	15.67843	10.19245	1.54	0.132	-4.937754	36.29461
_cons	-888.7988	423.324	-2.10	0.042	-1745.052	-32.54514
sigma_u	99.116778					
sigma_e	70.322128					
rho	.66517105	(fraction of variance due to u_i)				

F test that all u_i=0: F(6, 39) = 0.89 Prob > F = 0.5093

. est store fixed

. xtreg eps lor bc bs, re

Random-effects GLS regression
 Group variable: id
 Number of obs = 49
 Number of groups = 7
 R-sq: within = 0.0668
 between = 0.8122
 overall = 0.2248
 Obs per group: min = 7
 avg = 7.0
 max = 7
 Random effects u_i ~ Gaussian
 corr(u_i, X) = 0 (assumed)
 Wald chi2(3) = 13.05
 Prob > chi2 = 0.0045

eps	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lor	20.31845	11.43541	1.78	0.076	-2.094544	42.73144
bc	103.0099	39.55746	2.60	0.009	25.47872	180.5411
bs	18.37901	6.631906	2.77	0.006	5.380709	31.3773
_cons	-315.4154	118.8016	-2.65	0.008	-548.2623	-82.56844
sigma_u	0					
sigma_e	70.322128					
rho	0	(fraction of variance due to u_i)				

. est store random

. hausman fixed random

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
lor	109.0556	20.31845	88.7372	54.93337
bc	49.17446	103.0099	-53.83545	149.0708
bs	15.67843	18.37901	-2.700576	7.739763

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
 = 3.23
 Prob>chi2 = 0.3577

. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

$$\text{eps}[id,t] = \text{xb} + u[id] + e[id,t]$$

Estimated results:

	Var	sd = sqrt(Var)
eps	5895.717	76.78357
e	4945.202	70.32213
u	0	0

Test: Var(u) = 0

chi2(1) = 1.67
 Prob > chi2 = 0.1969

EFFECT OF STRATEGIC POSTURE ON COMPETITIVE ADVANTAGE OF IHS (TOWERS) NIGERIA LIMITED STRATEGIC BUSINESS UNITS

Beetseh, Christopher Egu

Department of Business Administration,

Nasarawa state University Keffi.

Email: christopherbeetseh@gmail.com

Abstract

The competitive nature of the telecommunications sector in Nigeria has influenced empirical research to understand the factors that help actors in the sector develop a competitive advantage. As a result, this study explored the effect of strategic posture on competitive advantage of IHS Towers strategic business unit. The specific objectives were to ascertain the effect of proactiveness, quality service, aggressive strategies and defensive strategies on the competitive advantage of IHS Towers strategic business unit. A cross-sectional research design was adopted for the study, which had a population of 91 staff of IHS, which also formed the sample size using the census sampling procedure. However, only 83 were used for data analysis. Employing multiple regressions, the study revealed that while proactiveness, quality service and aggressive strategies all had a significant positive effect on the competitive advantage of IHS business unit, defensive strategies failed to explain the variation in the competitive advantage of IHS. This model explained about 56.5% of the variation in the competitive advantage of IHS strategic business unit. The results also indicated that aggressive strategies had the most significant influence on the competitive advantage of IHS strategic business unit followed by proactiveness and finally quality service. The study recommended that IHS strategic business unit should be proactive, employ both aggressive strategies in its strategic activities while also focusing on the quality service provided to its target customers as this would ensure that the company develop competitive advantage.

Keywords: proactiveness; quality service; aggressive strategies; defensive strategies; competitive advantage

INTRODUCTION

The Nigerian telecommunications sector is one of the major drivers of the digital economy. The sector is noted as contributing significantly to the country's Gross Domestic Product (GDP) with statistics indicating as much as 12.45 percent contribution to GDP in the Q4 2020 (National Bureau of Statistics [NBS], 2021). As reported by NBS, the sector also grew by 15.91 percent in nominal terms (year-on-year). The Nigerian Communication Commission (NCC) also reports that the total investment in the Nigerian telecom industry is currently

estimated at \$70 billion (Danbatta, 2019). In terms of revenue, telecommunication merchants earned approximately N2.78 trillion in 2019 from airtime distribution alone (Adeola-Omale, 2020) while regarding the subscriber base, in June 2020 the total number of subscribers stood at 196.4 million (Ugochukwu, Jazuli, Ohabuiro & Khalid, 2021). Therefore, the level of competition in the Nigerian telecommunications sector is without doubt of interest to actors in the sector. The highly competitive nature of the sector has deepened it providing the opportunity for the

efficient workings of the sector (Falano & Popoola, 2013; Nkordeh, Bob-Manuel & Olowononi, 2017). For an actor in the sector to be successful, there is a need for such an actor to develop sustained competitive advantage, which will give it the edge to deliver superior value to its target audience.

Attempts to explore the factors that help firms develop competitive advantage have focused on antecedents such as competitive strategies and firm resources (Porter, 1985) and lately strategic posture (Jogaratham, Tse & Olsen, 1999). Covin and Slevin (1989) define strategic posture as a firm's overall competitive orientation. This conceptualization of strategic posture has influenced calls by researchers to identify prototypical strategic behaviours that firms adopt to effectively compete within the industries in which they operate (Daily & Thompson, 1994). While earlier research studies have identified entrepreneurial orientation and small business orientation (Campos, Atondo & Quintero, 2014; Madison, Runyan & Swinney, 2014), resource allocation, differentiation, market dominance and breadth (Daily & Thompson, 1994) as prototypical strategic behaviours, this study departs from such conceptualization to identify proactiveness, quality service, aggressive strategies and defensive strategies as the likely prototypical strategic behaviours that characterize strategic posture. The study is based on the motivation to understand what factors help firms in the telecommunications sector in Nigeria to have competitive advantage against their competitors. This is further informed by a dearth of empirical research exploring the relationship between strategic posture and competitive advantage in the Nigerian telecommunications sector (Nicodemus & Egwakhe, 2019; Afunwa, Agbaeze, Ike & Isichei, 2020). As a result of this, this study evaluates the effect that proactiveness, quality service, aggressive strategies and defensive strategies as dimensions of strategic posture on the competitive advantage of HIS Towers strategic

business unit, a major player in the Nigerian telecommunications sector.

STATEMENT OF PROBLEM

IHS Towers strategic business unit is a major player in the Nigerian telecommunications sector. The company faces risk factors in form of multiple taxation, National Assembly oversight intervention and new legislation, high rent escalation, non-implementation of the NEC resolution on telecommunications, critical national infrastructure bill, increasing cost of obtaining permits and the perceived dominance of the firm which poses threat of regulation by the NCC (IHS, 2018). IHS also faces competition from American Tower Corporation (ATC), Basnik Towers, who are eating into the telecommunications infrastructure market in Nigeria. The macroeconomic environment has also affected the competitiveness of IHS negatively especially from the foreign exchange market. All these challenges have posed the risk of eroding the 85 percent market share of shareable sites managed by IHS in Nigeria (Beetseh, 2016). Despite these challenges, the company is focused on developing a competitive advantage to enable it provide superior value to its target Customers. Empirical research to understand the factors that can help IHS develop competitive advantage is lacking, which has provided the motivation for this study (Beetseh, 2016; IHS, 2020). Focusing on IHS overall competitive orientation defined as strategic posture, this study identifies proactiveness, quality service, aggressive strategies and defensive strategies as prototypical strategic behaviours that would help IHS develop competitive advantage. This study therefore, attempts to explore the effect that proactiveness, quality service, aggressive strategies and defensive strategies as proxies of strategic posture has on the competitive advantage of IHS Towers, a strategic business unit in Nigeria.

RESEARCH OBJECTIVES

The major objective of this study is to evaluate the effect of strategic posture on competitive advantage of IHS strategic business unit. The specific objectives include:

- 1) To assess the effect of proactiveness on competitive advantage of IHS strategic business unit.
- 2) To evaluate the effect of quality service on competitive advantage of IHS strategic business unit.
- 3) To ascertain the effect of aggressive strategies on competitive advantage of IHS strategic business unit.
- 4) To assess the effect of defensive strategies on competitive advantage of IHS strategic business unit.

RESEARCH HYPOTHESES

The following research hypotheses were tested in this study.

- H₁:** Proactiveness has no significant effect on competitive advantage of IHS strategic business unit.
- H₂:** Quality service has no significant effect on competitive advantage of IHS strategic business unit.
- H₃:** Aggressive strategies have no significant effect on competitive advantage of IHS strategic business unit.
- H₄:** Defensive strategies have no significant effect on competitive advantage of IHS strategic business unit.

LITERATURE REVIEW

Conceptual Review

Strategic Posture

The concept of strategic posture is central in the field of strategic management (Jogarathnam et al., 1999) and is recognized as a framework through which an organization can build its competitiveness (Thoumrungroje & Tansuhaj, 2005). Clerq and Zhou (2014) on their part describe strategic posture as a firm's "strategic propensity to take risks and be proactive and

innovative" (p.49) while Covin and Slevin (1990) describe it as the overall competitive orientation of a firm. Covin and Slevin further argue that strategic posture is the "extent to which the top managers are inclined to take business-related risks, to favour change and innovation in order to obtain a competitive advantage for their firm and to aggressively compete with other firms" (p.125). In essence, strategic posture entails the extent to which a firm shows characteristics akin to conservatory decision-making process on the one hand and entrepreneurial on the other hand.

Galbraith and Schendel (1983, p.156) also define strategic posture as "a consistent pattern or combination of managerial controllable or decision components representing scope, resource deployment, and competitive advantage; and the direction in which these components are shifting over time, which characterize the way businesses tend to compete." Like described by Karagozoglu and Brown (1988), a strategic posture of a firm may be placed on a continuum from conservative to entrepreneurial. Hence, a firm tends to cycle towards specific configurations of strategic postures in line with the firm's internal capabilities, resources and competence (Ammar & Chereau, 2018). What strategic decision-making processes that differentiate one firm from another or what strategic posture differentiates one firm from another? Delineating the concept of strategic posture has given rise to the classification of a firm's strategic position as including aggressiveness, analysis, defensiveness, futurity, proactiveness, riskiness and quality service (Miller & Friesen, 1984; Venkataraman, 1989). This study has limited the conceptualization of strategic posture using the following dimensions: proactiveness, quality service, aggressive strategies and defensive strategies. These dimensions are discussed in the following section.

Proactiveness

Proactiveness is an important element in the

strategic posture of firms. Being proactive in managing the markets that firms serve and/or when engaging with customers (Brege & Kindstrom, 2020) is an important determinant of firm competitiveness. Aigboje (2018) posits that proactiveness is the ability to identify events in advance or what is generally regarded as alertness of a company. It involves not merely anticipating change but also creating it (Bateman & Crant, 1999). Alvearez and Barney (2002) opine that proactiveness is the ability of the firm to predict where product/services do not exist or where new processes are unknown to competitors. In a highly competitive industry like such as the telecommunications sector, the ability to constantly exploit opportunities and to pre-empt the activities of rivals puts your firm above your competitors (Ahuja & Lampert, 2001). Therefore, “proactive firms gain this competitive advantage by having a superior understanding of their customers and such an understanding allows them to satisfy customers’ latent needs, anticipate future needs, and ultimately create superior customer value” (Brege & Kindstrom, 2020, p.75). Through proactive strategies, the firms achieve this competitive advantage because of their ability to create superior customer value. The distinguishing feature of proactive strategies are that they are taken in advance; that is, in anticipation of future events and they are also intended to bring about some changes in the current situation (Crant, 2000; Grant & Ashford, 2008; Parker, Bindl & Strauss, 2010). In essence, proactiveness or a firms’ strategic posture regarding its proactive strategies has a contributing role in influencing the firms’ competitive advantage.

Quality Service

For organizations to survive especially in the covid-19 economy where opportunities to make money are fast disappearing and there is a glut in the world economy, there is an increasing need to focus on quality service. Focusing on quality service as a strategic orientation of a firm provides them the opportunity to develop competitive advantage (Ugochukwu, Jazuli,

Khalid & Ohabuiro, 2021). For one, a service business is one in which the perceived value of the offering to the buyer is determined largely by the services provided to him than the products offered. Services are therefore, created through a direct interaction between the service provider and the customers (Uwabor, Anetoh, Ugwuonah & Ezenta, 2021). Service is characterized by intangibility, heterogeneity and inseparability (Parasuraman, Zeithaml & Berry, 1985). In terms of quality, the term signifies the highest level of care that can be provided to customers in conformity to the highest standards that meet or exceed customer expectations. The extent to which customers value the service provided to them defines the quality of service available in any service encounter; hence, firms that do not compete on customer experience will lose customers to those that are continuously improving on their quality of service, which ultimately impacts on their ability to deliver higher competitive advantage. This explains the position of Lewis and Mitchell (1990) which states that “many organizations consider the quality of service they provide to be a critical factor in achieving a differential advantage over their competitors” (p.11). Therefore, the concept of quality service has become “a major strategic variable in the battle for market share” (Leonard & Sasser (1982), which have influenced firms that are desirous of achieving competitive advantage to focus their scarce resources, capabilities and technology on developing it; that is, building the strategic posture to focus on quality service.

Aggressive Strategies

The competitive nature of the telecommunications sector requires strategic postures that put actors in the sector ahead of the competition. The seminar work by Miles and Snow (1978) classified firms within a given industry into four groups: defenders, prospectors, analyzers and reactors, which also characterize the different strategies they implement in the industry. The focus of this classification is on the prospectors. Miles and Snow argue that prospectors continually search

for product and market opportunities and regularly experiment with potential responses to emerging environmental trends. They also pioneer the development of new products and are the creators of change and uncertainty to which competitors must respond. As argued by Heriyati, Heruwasto and Wahyuni (2010), prospectors implement aggressive strategies in order to attain growth, which provides them the opportunity to build their competitive advantage. Aggressive strategies are therefore, strategies that firms adopt in order to help them obtain additional customers, encourage brand switching and increase purchase frequency (Fornerll & Wernelfelt, 1987). Kotler and Singh (1981) identify five aggressive strategies available to a firm that is desirous of building competitive advantage: frontal attack, flanking attack, encirclement attack, by-pass strategy and guerilla tactics. These strategies help firms build their competitive advantage to exploit the market and create sustained business value.

Defensive Strategies

As argued in the preceding section, the Miles and Snow (1978) typologies classify firms in an industry and their respective strategies in four groups. The group relevant here are the defenders. Defenders according to Miles and Snow have narrow and relatively stable product-market domains. Firms that are characterized by this strategic posture seldom make major adjustments in their technology, structure or methods of operations. Instead their focus is on improving the efficiency and process improvements of existing operations because they have a limited range of products (Heriyati et al., 2010). Therefore, defensive strategies are strategies that firms adopt which helps them focus on reducing customer exit and brand switching or to minimize customer turn over/maximize customer retention (Fornerll & Wernelfeld, 1988). The essence of defensive strategies is “to make a possible attack unattractive and discourage potential challengers from attacking another firm.” (Grend, Nwiece, Naata & Kpune, 2017). Defensive strategies could be in the form of

pre-entry or post-entry defensive activities where the former involves strategies before a challenger enters the incumbent market while the later focuses on strategies that an incumbent adopts when the challenger is already in its market. Defensive strategies are therefore, implemented to help build a firms’ competitive advantage.

Concept of Competitive Advantage

The concept of competitive advantage coined by Porter in 1985 (Porter, 1985) is central in the field of strategic management. As argued by Ceglinski (2016), the “basic task of strategic management is to build and maintain competitive advantages of an enterprise, which should make it possible to achieve above-average results of its business activities” (p.58). Ceglinski (2016) argues that competitive advantage is obtained when a firm develops or acquires a set of attributes that help it outperform its competitors. In other words, a firm develops competitive advantage when their activities such as production processes, product quality are more profitable when compared to its market competitors or the activities outperform them (Huff, Floyd, Sherman & Terjesen, 2009). Porter (1985, p.3) presents the idea that competitive advantage “grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm’s cost of creating it.” The ability of management to combine resources and capabilities in a synchronized system by managers is central in developing a firm’s competitive advantage (Negulescu, 2019). Competitive advantage therefore, leads to firm success and survival in the long term hence for firms to be successful, competitive advantage is central and must be developed by such firms (Grant, 2010). It is based on this argument that strategic posture has been suggested as a likely predictor of competitive advantage using IHS strategic business unit as a case study.

IHS Towers Strategic Business Unit

IHS Towers strategic business unit is the largest mobile telecommunications infrastructure

provider in Europe, Africa and the Middle East. Founded in 2001, IHS provides services across the full tower value chain, including collocation on owned towers, deployment and managed services. Through its engineering expertise and commercial strength, and the provision of equipment that supports efficient and reliable networks across the continent, IHS has established itself as a leading provider of telecommunications infrastructure to mobile network operators across Africa. Following the recent acquisitions of MTN and Etisalat's tower portfolios in Nigeria, IHS owns over 15,000 towers in Nigeria and approximately 22,000 towers in Africa. In Nigeria, IHS works with a range of leading mobile network operators including MTN, Etisalat, Airtel, Glo, Smile and Spectranet, developing mutually beneficial services and solutions. IHS has accomplished a long list of first with 85% market share of shareable sites in Nigeria. Furthermore, IHS is backed by a supportive group of international shareholders including Emerging Capital Partners, the International Finance Corporation (IFC), Wendel, the Korean Investment Corporation, Goldman Sachs, Investec, the IFC's Global Infrastructure Fund and the Dutch Development Finance Institution FMO. This qualifies it to be called a strategic business unit. It is a company that values its employees and is also customer centric constantly investing in customer's network quality. IHS Nigeria currently employs approximately 1,500 people and the company's base of operations is in Lagos with 7 regional offices spread across the country.

THEORETICAL REVIEW

To help understand the effect of strategic posture on firm competitive advantage, the resource-based theory is used as the underpinning theory. Resource-based theory of a firm tries to explain the factors that help firms develop a competitive advantage. The theory emphasizes "building competitive advantage through capturing economic rents stemming from fundamental firm-level efficiency advantages" (Theriou, Aggelidis&Theriou,

2009, p.177), generally called resources. In essence, resources are defined as stocks of knowledge, physical assets, human capital and other tangible and intangible factors owned or controlled (Teece, Pisano & Shuen, 1997). They are broadly defined to include assets, organizational processes, firm attributes, information or knowledge controlled by the firm (Madhani, 2010). Brumagim (1994) classify resources in terms of hierarchy as production/maintenance resources as the most basic resources available to an organization, which is followed by administrative resources, organizational learning resources and strategic vision resources, which are considered the most advanced level of resources available to an organization.

Therefore, according to the theory, the organization is considered as a collection of physical resources, human resources and organizational resources (Barney, 1991). The resources meet the criteria of being valuable, rare, imperfect, inimitability and non-substitutable (Barney, 1991). Therefore, the theory of resource-based view (RBV) "analyzes and interprets resources of the organizations to understand how organizations achieve sustainable competitive advantage" (Madhani, 2010, p.4). The RBV focuses on the concept of difficult-to-imitate attributes of the firm as sources of superior performance and competitive advantage (Barney, 1986) by taking an inside-out view of firm-specific perspectives. In essence the theory argues if any organization possesses internal resources that are valuable, rare, inimitable and non-substitutable, then such an organization would be able to create sustained competitive advantage, which could be said to be a non-duplicatable advantage. Such resources when combined with the other internal factors make it impossible for a firm's competitors to duplicate such organizational products or services offered in the marketplace, ultimately creating competitive advantage.

As argued by Madhani (2010), this occurs only in situations of resource heterogeneity (different resources across firms) and resource immobility (the inability of competing firms to obtain resources from other firms). In the context of this study, if IHS Towers can mobilize its internal resources such as to be able to deliver value to its clients then it can be able to muster clear strategies that can place it ahead of its competitors. The company is a player in both the local market and the international market hence focusing on developing resources that are valuable, rare, inimitable and non-substitutable will develop its competitive advantage and ultimately leading to its success in its target market.

EMPIRICAL REVIEW

In a study by Junquera and Barba-Sanchez (2018), the authors examined the extent to which environmental proactivity is able to generate competitive advantages in a firm using a sample of 142 Spanish wineries. The authors found that environmental proactivity has a significant positive effect on cost-based and differentiation-based competitive advantages. In a related study by Bature, Sallehuddin, Rosli and Saad (2018) carried out in North-Central Nigeria involving a sample of 305 manufacturing small and medium scale enterprises (SMEs), the authors assessed the effect of proactiveness on organizational capability. Using structural equation modeling, Bature et al. (2018) established that proactiveness has a significant positive effect on manufacturing SMEs organizational capability. Also a study by Obioma and Donald (2020) carried out on a sample of 186 SMEs in Rivers and Bayelsa States revealed a positive and significant relationship between proactiveness and measures of SMEs performance such as improved customer satisfaction, growth and social performance.

Regarding quality service, Alabar, Ode and Gbande (2017) explored the effect of service quality/delivery impact on customer satisfaction of mobile telecommunication

providers in Nigeria. Using a sample of 532 mobile subscribers in Nigeria, Alabar et al. found that a relationship exist between service quality/delivery and customer satisfaction. In another study, Lakhali (2009) explored whether quality service impacts on the competitive advantage and performance using a sample of high-levels managers of companies listed in the Tunisian Industry Portal who operate in the plastic industry. The results of the study indicated that quality improvement leads to enhanced competitive advantage and improved organizational performance. Also, a study by Rapert and Wren (1998) involving CEOs of 1000 general hospitals who are members of the American Hospital Association was carried out to assess whether firms competing via a quality-based strategy will experience concurrent increases in organizational performance. Relying on a sample of 322 respondents, Rapert and Wren found that quality-based strategy increases the net operating income and growth in net revenues. In a related study by Ijeoma (2013), the author found that quality of service delivery has the potential of growing, sustaining and expanding businesses conferring a competitive advantage on banks using four branches of Zenith Bank in Anambra State.

For the dimension of aggressive strategies, Kehinde, Ariyo and Soyebó (2013) explored the effect of aggressive marketing strategies on the product performance of the telecommunications industry in Nigerian. The study tested this hypothesis using a sample size of 348 customers of the four major telecommunication companies in Nigeria. The results revealed that aggressive marketing strategies have a significant positive effect on the product performance of the telecommunications industry in Nigeria. In terms of the defensive strategies, a study carried out by Tan and Litsschert (1994) in China involving top Chinese managers in the electronics industry revealed that defensive strategies have a significant positive effect on firm performance. In a related study, Ung, Brahmana and Puaah (2018) examined the

relationship between defensive strategy and firm value for a sample of 596 listed firms in Malaysia over the period 2008 to 2015. They found that defensive strategy, especially retrenchment strategy has a positive significant effect on a firm's excess value ultimately improving firm performance. Lastly, a study by Chikwe and Zeb-Obipi (2017) evaluated the relationship of defensive strategies and firm's demise avoidance in selected oil and gas companies in Nigeria. Using a sample of 20 companies quoted on the Nigerian Stock Exchange, which provided a total sample of 110 top and middle-level managers, the study established that there is a positive and significant relationship between the dimensions of defensive strategies and firm's product and service value enhancement.

METHODOLOGY

This study attempts to explore the effect of strategic posture on competitive advantage of IHS strategic business unit. To help achieve this objective, this study adopts a cross-sectional research design, which is research design that gives a researcher the opportunity to explore the relationship between variables of interest with data that is collected at a specific period of time. The unit of analyses is the employees that are involved in the strategy formulation, implementation and assessment in the IHS strategic business unit.

Population and Sample Size

IHS strategic business unit is a major player in the Nigerian telecommunication sector with the headquarters located in Lagos, Nigeria. The company has a total of 91 employees who are responsible for the formulation and implementation of strategic policies for HIS (Beetseh, 2019). This forms the population of the study. Employing the census approach, the

sample size for the study would also be 91. This approach is used because of the small size of the sample size.

Measures

Two major variables were used in this study: strategic posture which serves as the dependent variable. Strategic posture has four dimensions: proactiveness, quality service, aggressive strategies and defensive strategies. The second variable is competitive advantage, which serves as the dependent variable. The variables of strategic posture were derived from the study by Jogaratnam et al. (1999) and Heriyati et al. (2010) and adapted to this study. Proactiveness, aggressive strategies, defensive strategies and competitive advantage each has 5-items while quality service has 4-items. On the other hand, the competitive advantage scale was derived from the validated scales by Sigalas, Economou and Georgopoulos (2013). All the items were measured on a 5-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree".

Method of Data Analysis

Two major approaches were used in data analysis: descriptive statistics and inferential analysis. Descriptive statistics was presented to capture the respondents' characteristics, which also included the correlation of the variables in the study while inferential analysis was used to test the hypotheses proposed in the study. However, prior to the implementation of multiple regression, the multiple regression assumptions were tested, which included linearity, normality and multicollinearity. The decision rule in testing the hypotheses was to reject the null hypothesis if the p-value is less than 0.05 while the alternative hypothesis was rejected if the p-value was greater than 0.05. The implied model of the study is as follows:

$$\text{CMA} = f\{\text{SP}\} \quad \text{Eqtn 1}$$

However, the explicit model as specified is as follows:

$$\text{CMA} = a_0 + b_1\text{PRO} + b_2\text{QS} + b_3\text{AS} + b_4\text{DS} + e \quad \text{Eqtn 2}$$

where:	CMA	=	Competitive advantage
	PRO	=	Proactiveness
	QS	=	Quality service
	AS	=	Aggressive strategies
	DS	=	Defensive strategies
	a ₀	=	intercept
	b _i	=	parameter estimate of PRO, QS, AS and DS
	e	=	error term

apriori expectation: $b_1, b_2, b_3, b_4 > 0$

Multiple linear regression analysis was implemented using SPSS v.23

RESULTS AND DISCUSSION OF FINDINGS

Results

This section presents the results of both the descriptive and multiple regression analysis. Out of the total number of 91 questionnaires distributed to the staff of IHS strategic business unit, 87 were retrieved while 4 of the 87 questionnaires retrieved had missing values and were therefore, removed resulting to 83 responses that was used for data analysis. The descriptive analysis revealed that 51 representing 61.4% of the sampled respondents were male while 32 or 38.6% were female, which implies that most staff of IHS are of the male gender. In terms of their marital status, 27 or 32.5% were single, 43 or 51.8% were married while about 13 or 15.7% were divorced implying that most staff of IHS were married. Lastly, in terms of their educational level, 27 or 32.5% have an undergraduate degree, 43 or 61.8% had a masters degree while 3 or 3.6% had a Doctorate degrees.

For the result of the correlation analysis, the results indicated that competitive advantage correlated significant with proactiveness ($r = .204, p < 0.01$), quality service ($r = .337, p < 0.001$), aggressive strategies ($r = .645, p <$

0.001) and defensive strategies ($r = .396, p < 0.001$). However, the correlation among the variables showed that proactiveness did not correlate significantly with quality service ($r = .070, p = 0.270$), aggressive strategies ($r = -.059, p = 0.301$) and defensive strategies ($r = -.059, p = 0.303$). Also, while quality service correlated significantly with aggressive strategies ($r = .293, p < 0.01$), it failed to correlate significantly with defensive strategies ($r = .003, p = 0.490$). Lastly, aggressive strategies also correlated significantly with defensive strategies ($r = 0.292, p < 0.01$). This information is also captured in Table 1.

In terms of the reliability of the measurement instruments, Cronbach's Alpha was calculated. The results revealed that proactiveness (a 5-item scale) had a Cronbach's alpha of 0.772; quality service (a 4-item scale) had alpha coefficient of 0.805; aggressive strategies (a 5-item scale) had alpha coefficient of 0.840; defensive strategies (a 5-item scale) had a coefficient score of 0.782. For the dependent variable which is competitive advantage (a 5-item scale), the Cronbach's alpha was 0.877. All the values were above the recommended minimum of 0.7 (Nunnally, 1978). This information is also captured as the diagonal entries in the Table 1.

Table 1: Mean, Standard Deviations and Correlation

	Mean	SD	EE	DJ	PJ	IPJ	INJ
Competitive advantage (CMA)	2.04	1.453	<i>.877</i>				
Proactiveness (DJ)	2.23	1.441	.204*	<i>.772</i>			
Quality service (PJ)	2.64	1.609	.377**	.070	<i>.805</i>		
Aggressive strategies (IPJ)	1.94	1.325	.645**	-.059	.293*	<i>.840</i>	
Defensive strategies (INJ)	2.60	1.289	.396**	-.059	.003	.292*	<i>.782</i>

**p<.001; *p<.01

Source: Author Computations (2021)

Note: diagonal elements are Cronbach's alpha of variables

Main Analysis

To explore the effect of strategic posture (proxied as proactiveness, quality service, aggressive strategies and defensive strategies) on competitive advantage of IHS strategic business unit, multiple regression analysis was used. The results showed that the data fit the regression model going by the results of the ANOVA; that is, when proactiveness, quality service, aggressive strategies and defensive

strategies are regressed against competitive advantage, the model is significant [$F(4,75) = 24.395$, $p < 0.001$]. In addition, the model explained 56.5% of the variation in competitive advantage implying that proactiveness, quality service, aggressive and defensive strategies all explain 56.5% of the variation in competitive advantage of the IHS strategic business unit (see Table 2).

Table 2: Test of Hypotheses (SPSS v.23)

Hyp		Unstandardized Coefficients			Sig.	Decision
		B	Std. Error	t		
	(Constant)	-.841	.361	-2.330	.022	
H ₁	Proactiveness	.266	.086	3.078	.003	Reject
H ₂	Quality service	.208	.081	2.570	.012	Reject
H ₃	Aggressive strategies	.575	.092	6.259	.000	Reject
H ₄	Defensive strategies	.098	.060	1.642	.104	Accept
	$F(4,75)$			24.395		
	R			.752		
	R ²			.565		
	Adjusted R ²			.542		

Dependent variable: competitive advantage

Predictors: (Constant), proactiveness, quality service, aggressive strategies, defensive strategies

Source: Author Computations (2021)

For test of hypotheses, the multiple regression analysis revealed that proactiveness ($B = 0.266$, $t = 3.078$, $p < 0.01$), quality service ($B = 0.208$, $t = 2.570$, $p < 0.05$) and aggressive strategies ($B = 0.575$, $t = 6.259$, $p < 0.01$) all had a significant positive effect on competitive advantage of IHS strategic business unit. However, defensive strategies failed to account for the variation in the competitive advantage of IHS strategic business unit ($B = 0.098$, $t = 1.642$, $p < 0.01$). The result therefore, shows that while

hypothesis 1, hypothesis 2 and hypothesis 3 were rejected, hypothesis 4 could not be rejected. This information is contained in Table 2. The implication of the results is that if proactiveness increases by one unit, competitive advantage will increase by 0.266 ceteris paribus. In addition, if quality service increases by one unit, competitive advantage will also increase by 0.208 ceteris paribus. Likewise if aggressive strategies increase by one unit, competitive advantage will also

increase by 0.575 *ceteris paribus*. However, defensive strategies failed to explain the variation in competitive advantage. The implication is that aggressive strategies have the most influence on the competitive advantage of IHS strategic business unit followed by proactiveness and finally quality service.

Discussion of Findings

This study explored the effect of proactiveness, quality service, aggressive strategies and defensive strategies on competitive advantage of IHS strategic business unit. The study therefore, tested four hypotheses in this study. Hypothesis one states that proactiveness has no significant effect on competitive advantage of IHS strategic business unit. The evidence indicates that this hypothesis is rejected in favour of the alternative hypothesis that proactiveness has a significant effect on competitive advantage of IHS strategic business unit. This finding agrees with the work of Junquera and Barba-Sanchez (2018), Bature et al. (2018) and Obioma and Donald (2020). This implies that proactiveness as a prototypical strategic behaviour of firms will contribute positively in developing competitive advantage. In essence, if a firm not only identify events in advance but also is focused on creating it but also the firm is capable of predicting where product/services do not exist or where new processes are unknown to competitors, then such strategic behaviors will positively impacts its competitive advantage. Proactiveness contributes more than quality service and defensive strategies in explaining the variation in competitive advantage.

For hypothesis two, quality service was stated as having no significant effect on competitive advantage of IHS strategic business unit. The evidence in this case too shows that the hypothesis is not supported indicating that quality service has a significant positive effect on competitive advantage. This implies that quality service provided by IHS contributes in improving positively the firm's competitive

advantage. In essence, if IHS maintains the highest level of care in addressing customer needs such that the service provided is characterized by intangibility, heterogeneity and inseparability (Parasuraman et al., 1985), then the firm will be able to build and maintain competitive advantage in the Nigerian telecommunications sector. Such evidence has also been reported by scholars such as Alabar et al. (2017), Lakhali (2009), Rapert and Wren (1998) and Ijeoma (2013) who all found a positive effect of quality service on competitive advantage. Service quality, however, contributes the least in explaining the variation in competitive advantage of IHS strategic business unit.

Regarding the third hypothesis, the evidence also shows that aggressive strategies have a significant positive effect on the competitive advantage of IHS strategic business unit. This is contrary to the stated hypothesis that aggressive strategies have no significant effect on competitive advantage. This study agrees with the following study that also reports a significant effect (Kehinde et al., 2013). This implies that if IHS implements aggressive strategies to help them obtain additional customers, encourage brand switching and increase purchase frequency, then they will be able to develop and maintain a competitive advantage in the telecommunications sector in Nigeria. Aggressive strategies have the highest contribution to the variation in competitive advantage of IHS strategic business unit in the Nigerian telecommunications sector.

Lastly, hypothesis four was stated that defensive strategies have no significant effect on competitive advantage of IHS strategic business unit. The evidence failed to support the rejection of the hypothesis and was therefore, accepted implying that defensive strategies failed to account for the variation in the competitive advantage of IHS strategic business unit. This finding implies that if IHS implements defensive strategies which are strategies that help them focus on reducing

customer exit and brand switching or to minimize customer turn over/maximize customer retention (Fornerll&Wernerfeld, 1988), then it would not translate into developing a significant effect on the competitive advantage of HIS. This may be due to the competitive nature of the industry whereby aggressive rather than defensive strategies would be preferred.

In terms of policy, the findings will help telecommunication firms to develop policies that will help put them ahead of their competitors. As the results shows, if firms carry out aggressive strategies, this will help build their competitive advantage more than when they focus on proactive strategies and quality of service. This finding therefore, suggests that telecommunication companies in Nigeria should build their aggressive strategies over and above proactive and quality service strategies as this will propel them towards building a strong competitive advantage in order to exploit the opportunities available in the market place.

SUMMARY

This study was carried out to ascertain the effect of strategic posture on competitive advantage of IHS strategic business unit. The specific objectives were to ascertain the effect of proactiveness, quality service, aggressive strategies and defensive strategies on the competitive advantage of IHS strategic business unit. A cross-sectional research design was adopted for the study, which had a population of 91 staff of IHS strategic business unit responsible for strategic formulation, implementation and evaluation. Because the sample size was small, the census approach was used which produced a sample size of 91. Therefore, 91 questionnaires were distributed. However, only 83 were used for data analysis. Descriptive statistics was calculated while multiple regression was the preferred method of data analysis. The findings showed that most staff of IHS are of the male gender and that also most are also married. In terms of their

educational qualifications, majority of the staff had a postgraduate degree. Reliability was also tested and it was found that the variables satisfied the requirement for reliability going by the values of the Cronbach's alpha that were calculated. For test of hypotheses, the multiple regression analysis revealed that proactiveness, quality service and aggressive strategies were significantly related to competitive advantage of IHS while defensive strategies failed to account for the variation in competitive advantage. The model explained about 56.5% of the variation in the competitive advantage of IHS strategic business unit. The results also indicated that aggressive strategies had the most significant influence on the competitive advantage of IHS strategic business unit followed by proactiveness and finally quality service.

RECOMMENDATIONS

The following recommendations are suggested:

- 1) IHS strategic business unit should be proactive in its strategic activities as this helps it develop a strong competitive advantage.
- 2) Quality service is an important tactical strategy that IHS strategic business unit can consciously pursue as it has been shown to have a significant positive effect on the competitive advantage of the company.
- 3) For IHS strategic business unit to develop sustained competitive advantage, the company needs to develop aggressive strategies as this has the most effect on ensuring that it is competitive in the telecommunications sector.
- 4) Lastly, for IHS strategic business unit to improve on its competitive advantage, less emphasis should be placed on developing a defensive strategy for the business as this has been shown not to have any significant effect on the competitive advantage of the business.

LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDIES

The study is limited to the use of only four dimensions of strategic posture namely proactiveness, quality service, aggressive strategies and defensive strategies. In addition, the study is limited to competitive advantage as a dependent variable of the study. Future studies could therefore, explore other dimensions or variables of strategic posture such as competitive analysis, riskiness posture and futurity among others. Another notable limitation of the study is the cross-sectional nature of the research design, which lacks the ability to establish causation between variables of interest. Future studies could therefore, explore these relationships using longitudinal research designs. Future studies could also explore why defensive strategies have failed to account for the variation in the competitive advantage of IHS. Also future studies could include mediators or moderators such as organizational values, environmental uncertainty, environmental dynamism, organizational structure and board of directors' characteristics in modelling the relationship between strategic posture and competitive advantage. Such models would better capture the effect of strategic posture on its consequent variables. Despite these limitations, this study has been able to establish that strategic posture has a significant influence on competitive advantage, which has helped illuminate the strategic management field.

REFERENCES

- Adeola-Omale, O. S. B. (2013). An empirical investigation of telephony impact on business performance and regional development: evidence from small businesses in Nigeria. Retrieved June 28, 2021 from <http://openair.rgu.ac.uk>
- Afunwa, A. P., Agbaeze, E. K., Ike, N. M. & Isichei, E. E. (2020). Lean management and performance of telecommunications firms: the mediating role of workplace structure. *Cogent Business & Management*, 7, 1-20
- Ahuja G. & Lampert, M. (2001). Entrepreneurship in the large corporation: A longitudinal study of how established firms create breakthrough inventions. *Strategic Management Journal*, 22(7), 521-543
- Aigboje, P. O. (2018). Entrepreneurial proactiveness and employee satisfaction of small and medium size enterprises in P.H. Nigeria. *Global Scientific Journal*, 6(7), 466-473
- Alvarez, S.A. & Barney, J.B. (2000). *Resources based theory and entrepreneurial firm strategies entrepreneurial firm strategic entrepreneurship in creating a new mindset*. U.K: Blackwell Publisher
- Ammar, O. & Chereau, P. (2018). Business model innovation from the strategic posture perspective: an exploration in manufacturing SMEs. *European Business Review*, 30(1), 38-65
- Barney, J. B. (1986). Strategic factor markets: expectations, luck and business strategy. *Management Science*, 32(10), 1231-1242
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-121
- Bateman, T. & Crant, J. M. (1999). Proactive behaviour: meaning, impact, recommendations. *Business Horizons*, 42(3), 63-69
- Bature, S. W., Sallehuddin, R. M., Rosli, N. A. & Saad, S. (2018). Proactiveness, innovativeness and firm performance: the mediating role of organizational capability. *Academy of Strategic Management Journal*, 17(5), 1-14
- Beetseh, C. (2016). *IBS sites acquisition training and strategy*. Abuja, Nigeria: IHS Towers
- Brege, H. & Kindstrom, D. (2020). Exploring proactive market strategies. *Industrial Marketing Management*, 84, 75-88
- Campos, H. M., Atondo, G. H. & Quintero, M.

- R. (2014). Towards a theory for strategic posture in new technology based firms. *Journal of Technology Management & Innovation*, 9(2), 77-85
- Ceglinski, P. (2016). The concept of competitive advantages: logic, sources and durability. *Journal of Positive Management*, 7(3), 57-70
- Chikwe, J. E. & Zeb-Obipi, I. (2017). Defensive strategies and firms demise avoidance: evidence from selected oil and gas companies in Nigeria. *Nigerian Journal of Oil and Gas Technology*, 3(1), 199-208
- Clerq, D. D. & Zhou, L. (2014). Entrepreneurial strategic posture and performance in foreign markets: the critical role of international learning effort. *Journal of International Marketing*, 22(2), 47-67
- Covin, J. G. & Slevin, D. P. (1990). New venture strategic posture, structure, and performance: an industry life cycle analysis. *Journal of Business Venturing*, 5, 123-135
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462
- Daily, C. M. & Thompson, S. S. (1994). Ownership structure, strategic posture and firm growth: an empirical examination. *Family Business Review*, 7(3), 237-249
- Danbatta, U. (2019). *Repositioning the Nigerian telecom industry for the future: prospects and challenges*. Paper presented at the Nigerian Telecom Leadership Summit, 2019 at Lagos, Nigeria.
- Falano, T. & Popoola, F. C. (2013). Competitiveness in Nigerian telecommunication industry: marketing strategy. *International Journal of Research in Commerce, IT & Management*, 3(7), 9-15
- Fornell, C. & Wernerfelt, B. (1988). A model for customer complaint management. *Marketing Science*, 7(3), 287-298
- Galbraith, C. & Schendel, D. (1983). An empirical analysis of strategy types. *Strategic Management Journal*, 4, 153-173
- Grant, R. M. (2010). *Contemporary strategy analysis*. New York: John Wiley & Sons Ltd
- Grant, A. M. & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3-34
- Grend, M. D., Nwiese, N. M. & Kpune, H. N. (2017). A review of defensive strategies for market success. *International Journal of Marketing and Communication Studies*, 2(3), 30-39
- Heriyati, P., Heruwasto, I. & Wahyuni, S. (2010). Offensive and defensive competitive marketing strategy: the development of construct and measurements. *ASEAN Marketing Journal*, 2(2), 35-44
- Huff, A. S., Floyd, S. W., Sherman, H. D. & Terjesen, S. (2009). *Strategic management: logic and action*. New York: John Wiley & Sons
- IHS (2018). 2016 Highlights: 2017 focus areas: a report of the legal department. Lagos: IHS
- IHS (2020). *Enabling connections in challenging times: 2020 sustainability report*. Lagos: IHS
- Ijeoma, N. B. (2013). Quality service delivery as a competitive weapon in corporate strategy: the case of Zenith Bank of Nigeria Plc. *An International Journal of Arts and Humanities*, 2(3), 90-118
- Jogaratham, G., Tse, E. C. & Olsen, M. D. (1999). Strategic posture, environmental munificence and performance: an empirical study of independent restaurants. *Journal of Hospitality & Tourism Research*, 23(2), 118-138
- Junquera, B. & Baraba-Sanchez, V. (2018). Environmental proactivity and firms' performance: mediation effect of competitive advantages in Spanish wineries. *Sustainability*, 10(7), 1-18

- Karagozoglu, N. & Brown, W. B. (1988). Adaptive responses by conservative and entrepreneurial firms. *Journal of Product Innovation Management*, 5, 269-281
- Kehinde, O., Ariyo, O. & Soyeb, Y. (2013). Aggressive marketing and product performance in Nigeria: a case study of the telecommunication industry. *British Journal of Marketing Studies*, 1(1), 22-28
- Kotler, P. & Singh, R. (1981). Marketing warfare. *Journal of Business Strategy*, 1(3), 30-41
- Lakhal, L. (2009). Impact of quality on competitive advantage and organizational performance. *Journal of the Operational Research Society*, 60, 637-645
- Leonard, F. S. & Sasser, W. E. (1982). The incline of quality. *Harvard Business Review*, 60, 163-171
- Lewis, B. R. & Mitchell, V. W. (1990). Defining and measuring the quality of customer service. *Marketing Intelligence and Planning*, 8(6), 11-17
- Madison, K., Runyan, R. C. & Swinney, J. L. (2014). Strategic posture and performance: revealing differences between family and nonfamily firms. *Journal of Family Business Strategy*, 5(3), 239-251
- Miles, R. E. & Snow, C. C. (1978). *Organizational strategy, structure and process*. New York: McGraw-Hill
- Miller, D. & Friesen, P. H. (1984). *Organizations: a quantum view*. Englewood Cliffs, NJ: Prentice-Hall
- Negulescu, O. H. (2019). The importance of competitive advantage assessment in selecting the organization's strategy. *Review of General Management*, 29(1), 70-82
- Madhani, P. M. (2010). Resource based view (RBV) of competitive advantage: an overview. In M. Pankaj (ed.), *Resource based view: concepts and practices* (pp.3-22). Hyderabad, India: University Press
- Madhani, P. M. (2010). The Resource-based view (RBV): issues and perspectives. *PACE, A Journal of Research of Prestige Institute of Management*, 1(1), 43-55
- National Bureau of Statistics [NBS] (2021). *Nigerian Gross Domestic Product Report (Q3 2021)*. Abuja: NBS Publications
- Nkordeh, N., Bob-Manuel, I. & Olowononi, F. (2017). *The Nigerian telecommunication industry: analysis of the first fifteen years of the growths and challenges in the GSM market (2001-2016)*. Paper presented at the Proceedings of the World Congress on Engineering and Computer Science, October 25-27 at San Francisco, USA
- Nicodemus, T. & Egwakhe, J. A. (2019). Technology transfer and competitive advantage: the managers' perspective. *European Journal of Business and Management*, 11(28), 66-75
- Obioma, U. O. & Donald, I. H. (2020). Proactiveness and performance of small and medium enterprises in Rivers and Bayelsa States of Nigeria. *American Research Journal of Humanities & Social Sciences*, 3(9), 29-35
- Parker, S. K., Bindl, U. K. & Strauss, K. (2010). Making things happen: a model of proactive motivation. *Journal of Management*, 36(4), 827-856
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50
- Porter, M. (1985). *Competitive advantage: creating and sustaining superior performance (with new introduction)*. New York: Free Press
- Rapert, I. M. & Wren, B. M. (1998). Service quality as a competitive opportunity. *Journal of Services Marketing*, 12(3), 223-235

- Sigalas, C., Economou, V. K. & Georgopoulos, N. B. (2013). Developing a measure of competitive advantage. *Journal of Strategy and Management*, 6(4), 320-342
- Tan, J. J. & Litsschert, R. J. (1994). Environment-strategy relationship and its performance implications: an empirical study of the Chinese electronics industry. *Strategic Management Journal*, 15(1), 1-20
- Teece, D. J., Pisano, G. & Shuen, A. (1997). A dynamic capabilities and strategic management. *Strategic Management Journal*, 18, 509-533
- Theriou, N. G., Aggelidis, V. & Theriou, G. N. (2009). A theoretical framework contrasting the resource-based perspective and the knowledge-based view. *European Research Studies*, 12(3), 177-190
- Thoumrungroje, A. & Tansuhaj, R. (2005). Entrepreneurial strategic posture, international diversification and firm performance. *Multinational Business Review*, 13(1), 55-73
- Ugochukwu, O. M., Jazuli, J. S., Khalid, H. & Ohabuiro, J. (2021). Telecommunication business information system and investment ecosystem in a growing economy: a review of telecom investment in Nigeria. *International Journal of Information Communication Technologies and Human Development*, 13(2), 1-20
- Ung, L.-J., Brahmana, R. & Puah, C.-H. (2018). Defensive strategy's effect on firm value: evidence from public-listed companies in Malaysia. *Journal of Asia-Pacific Business*, 19(2), 114-135
- Uwabor, L. W., Anetoh, J. C., Ugwuonah, G. E. & Ezenta, O. N. (2021). E-service quality and customer satisfaction in deposit money banks. *International Journal of Marketing and Communication Studies*, 5(1), 1-19
- Venkataraman, N. (1989). Strategic orientation of business enterprises: the construct, dimensionality and measurement. *Management Science*, 35, 942-962

PARTICIPATIVE GOAL SETTING AND EMPLOYEES' PERFORMANCE IN SELECTED COMPANIES IN KADUNA NIGERIA

Joy Altasom Gwems¹, Dr. Abdul Adamu², Julius Tumba Ndaghu³

^{1&2}Department of Business Administration, Nasarawa State University Keffi.

³Department of Management Technology, School of Management and Information Technology
Modibbo Adama University of Technology Yola

Abstract

Managers in the manufacturing companies are primarily responsible to ensure the task or job is done through employees in the right way. To achieve this, these managers must ensure that they have a competent personnel department for the recruitment of the best employees that are capable of doing the job, thereby achieving the set goals of the company. For the company to optimize employees' performance there is need for employees to be accepted and committed to the company. The study examines the effect of participative goal setting and employees' performance in selected companies in Kaduna, Nigeria. Manufacturing companies in Kaduna state have applied participatory goal setting in achieving the goal of the organizations in order to ensure that employees of the selected manufacturing organizations perform well in terms of increasing their productivity (efficiency). Yet, the productivity of employees in the manufacturing sector in Kaduna state is still below expectation. The study adopted a survey research design. The population of employees in this study was 1468 in Kaduna state, Nigeria. The study used Taro Yamane's formula to determine the sample size of 314 employees in Kaduna state, Nigeria. The method of data collection used in this study was a questionnaire that was administered to the respondents. The statistical tool used is multiple regression. The findings revealed that participative goal setting (goal commitment and goal acceptance) has a positive and significant effect on employees' performance in selected companies in Kaduna, Nigeria. The study recommended that the manufacturing companies should keep on increasing participation of goal setting in the selected companies as these leads to better performance from the employees. Also, when goals are set, employees initially act in accordance with the situational demands and try to attain the goals rather than follow their own preferences.

Keywords: Participative Goal Setting, Employee Performance, Goal Commitment, Goal Acceptance, and Efficiency

INTRODUCTION

All over the world, more and more organizations have embraced the view of involving its employee in running the affairs of the organization. It was argued by Armstrong (1995), that employee involvement is the concept of recognition that have a great untapped potential but that management retain the

right to manage. Participation on the other hand plays a greater part in the goal-setting process. It is a democratic philosophy that respects all members of an organization as an infinite resource able to contribute knowledge and creativity to improving its ability to survive the main problem facing managers. The extent to which they (employers) allow subordinates to

participate in making or setting goals affect their work performance. By encouraging participatory goal-setting, managers are in effect decentralizing authority within their organisations. This leads to improved decision quality, increased commitment from the employees to the decision outcome which they have influenced, and above all, it enhances their job performance.

Furthermore, participation of employee in goal-setting crystallizes the notion of industrial democracy and expresses the employee desire to bind into a team working together towards a common objective. Success would largely depend on involving employees in all facets of operations from the generation of new ideas, identification of faults in a system as well as seeking out loopholes in competitor's management. As such, organizations are waking up to the fact that employees are indeed the most valued asset.

The non-involvement of lower-level management in decision-making means that vital input from employees is often not factored into decisions made. This gives rise to the reluctance experienced in organizations when it comes to the acceptance of these decisions and its implementation because employees feel they are of no importance since their views were not sought. (Iranwanto, 2015; Kok et al., 2014).

For the organisation to achieve effective performance from employees, the need for employees to be sufficiently motivated must be given great attention. Performance is one measure of actual behaviour in the workplace that is multidimensional in nature, where performance indicators include: quality of work, working time and cooperation with co-workers.

A pilot study revealed that manufacturing companies in Kaduna state have applied participative goal-setting in achieving the objectives of the organizations so that employees of the selected manufacturing

organizations perform well in terms of increasing their performance (efficiency). Yet, the productivity of employees in the manufacturing sector in Kaduna state is still below expectation. Previous studies such as Mildred and Mercy (2018) who investigated the effect of participative goal setting on employees' performance at Kenya Seed Company using stratified sampling technique found negative effect between both variables. Also, the works of Rizwan (2014) investigated the impact of goal setting and curiosity (HR outcomes) on the job performance of the employees in Islamabad, Pakistan employing SPSS tool of analysis and found that goal setting and curiosity have strong effect on job performance. However, none of these studies used Nigeria and Kaduna manufacturing companies as a case study, also, none used both goal commitment and goal acceptance to proxy goal setting. Therefore, this research fills the gap by examining the effect of participatory goal setting on employees' performance in selected manufacturing companies in Kaduna, Nigeria.

The main objective of this study was to examine the effect of participative goal setting on employees' performance in selected manufacturing companies in Kaduna, Nigeria. Other specific objectives are:

- i. To examine the effect of goal commitment on employees' performance in the selected manufacturing companies in Kaduna, Nigeria.
- ii. To examine the effect of goal acceptance on employees' performance in the selected manufacturing companies in Kaduna, Nigeria.

The following null hypotheses were formulated and tested:

H₀₁: Goal Commitment has no significant effect on employees' performance in the selected manufacturing companies in Kaduna, Nigeria.

H0₂: Goal Acceptance has no significant effect on employees' performance in the selected manufacturing companies in Kaduna, Nigeria.

Concept of Participatory Goal Setting

Goal setting is a process for controlling the attitude and behaviour employees and it should focus on the specific target to achieve. Sauers and Bass (1990) stated that goal setting has been widely researched over the past thirty years. The authors defined goal setting as "a formal programme of setting numerical or quantitative performance goals for individuals" and that all formal goal setting programme share the common objectives of increasing employee motivation and performance. Mills (2002) aptly defined the importance of goal, as representing a way of keeping score and that by helping employees define their personal goals, managers are putting them on the path towards achieving the organisational goals. Goal setting has been defined as "process of developing and formalizing targets or objectives that an employee is responsible for accomplishing (Umstotet'al., 2009).

Goal setting explains all the major theories of work motivation-whether it be Vrooms (1994) VIE theory, Maslow's (2002) or Herzberg's (2009) motivation theories, Bandura (1986) social cognitive theory or operant-based behaviourism (Skinner, 1979) theory. Managers widely use goal setting as a means to improve and sustain performance (DuBrin, 2012).

Employee Goal Commitment

Employee Commitment is highly valuable. Previous studies have shown that employee goal commitment have profitable impact on the successful performance of an organization. This implies that an employee with high commitment identifies with the goals and values of the organization with a strong desire to remain in the organization and is willing to display greater organizational citizenship behaviour. That is, willingness to put in extra effort beyond their required job duties, and if human resources are said to be an

organization's greatest assets, then committed human resources should be regarded as an organization's competitive advantage (Mowdray et.al, 1974).

Goal Acceptance

Goal setting research has related the informational aspect of goals and performance feedback (knowledge of results) to improve performance levels. Yet, the motivational aspects of goal outcomes and locus of control have been overlooked. The traditional strategy of goal setting (Locke, 1968) involves the assignment of goals by a supervisor who also monitors and evaluates employee's behaviour. The goals are commonly assigned but presumed to be accepted by employees. Goal setting strategies vary on a continuum from external to internal control. In a tightly controlled system, compliance with external (assigned) goals can be forced by numerous means, such as economic or social pressure or even physical coercion. In an open system, consistent with a society oriented toward individualism, goal attainment is facilitated by individually set goals, self-regulation, and high individual benefits of goal-related out-comes. Maximizing goal acceptance in industrial organizations usually involves a combination of strategies that vary along a continuum of internal-external locus of control. (Locke, 1968).

Concept of Employee Performance

Kroll (2006) defined employee performance as a measure of efficiency and effectiveness of employee relative to their job. Efficiency refers to getting the most output from the least amount of inputs. Efficiency focused on doing things right, that is, not wasting resources. On the other hand, effectiveness refers to doing the right thing. It is primarily concerned with performing activities to promote organization's goals (Robbins & Coulter, 2013). Effectiveness focuses on goal attainment and high attainment.

Nmadu (2013) stated that employee performance to an extent is the accomplishment

of work done that is composed of various employees' job. Staff performance consists of advanced social and psychological theories presented by management scholars in diverse theories frameworks. Performance is divided into two parts: 1. efficiency, and 2. effectiveness (Farajollah, 2008).

Empirical Review

Mildred and Mercy (2018) investigated the effects of participative goal setting on employees' performance at Kenya Seed Company and to find out strategies for enhancing goal setting and their likely effect on employees' performance. The study adopted a descriptive survey research design. The target population was 650 comprising all the employees of Kenya Seed Company. Stratified and simple random sampling techniques were used to select middle and lower cadre employees while the top management were picked purposively. Data collection instruments were questionnaires for employees and interview schedules for the top management. The research instruments were tested for validity and reliability through a pilot study. SPSS computer software version 20 was used to process quantitative data while qualitative data was analyzed based on meaning of words and grouping the responses around common themes. The findings of the study were that team goals, joint goals and employee involvement in goal setting did improve performance. Strategies for improving performance included understanding the organizations strategy, timely communication of performance targets and timely feedback on progress towards goals. The study found that participation in goal setting does improve employees' performance.

Rizwan (2014) investigated the impact of goal setting and curiosity (HR outcomes) on the job performance of the employees. Non-government sector in Islamabad, Pakistan was targeted in this regard. Data was collected from 282 respondents belonging to local and international NGOs. SPSS was used as data

analysis tool and a comprehensive questionnaire was used to collect data. In 20% cases questionnaire was personally administered. The study findings exposed that goal setting and curiosity have strong effect on job performance. 71% of the employees are of the view that if goals are easily achievable and need little hard works then their performance increases than the ones which are hard to achieve and require extra efforts. 53% of the respondents report to work for personal development rather than goal achievement. 61% value curiosity as a factor necessary to increase job performance.

Sven et'al (2015) examined the influence of goal-setting on worker performance in an industrial production process. For empirical examination, they conducted a real-effort experiment at the Training Factory for Energy Productivity at the Technische Universität München. The participants' performance was measured by checking for quantity and quality of the assembled products and furthermore by recording the consumed compressed air per finished good. Four groups were used for the experiment and the setting for each of the group was different. The major results are that even without financial incentives goal-setting improves worker performance by 12 to 15% compared to the situation where no goals were defined.

Theoretical Framework

Goal-Setting Theory

Goal setting theory was postulated by Edwin Locke in 1960 and he asserted that goal setting is fundamentally linked to performance (Locke, 1968). The theory is an intellectual hypothesis of motivation grounded on the assertions that goals do regulate employee behaviour. Goal theory postulates a positive link between performance and goal difficulty, with challenging goals eliciting much effort than simple goals (Martin & Manning, 1995). This hypothesis presupposes that behaviour is purposeful and that goals focus employees' energies in performing specific task (Locke &

Latham, 1990). Consequently, Goal Setting hypothesis is an effective strategy of arousing performance by provision of feedback, employee involvement and participation (Latham et al, 2002). Necessary feedback of results and employee involvement in goal setting directs the employee behaviour and contributes to higher performance than absence of feedback and non-involvement. Also, specific, difficult goals lead to participation through employee involvement in goal setting, enhanced employer-employee relations and improved performance by producing higher levels of effort and planning (Latham et al (2002). Thus, goal setting can be an effective method of influencing performance by enhancing employee involvement initiatives through provision of appropriate communication and regular feedback mechanism (Latham et al 2002). Second, the willingness by the individual to work in line with the goal reveals that he or she have accepted the goal(Locke & Latham 1990).

Methodology

This study adopted the survey research design and this because the information or data needed for the study required the use of structured questionnaire that were administered to the respondents who are the staff of the selected manufacturing companies and it was both administered to the executives and employees of the different manufacturing companies in Kaduna state of Nigeria. The population of this study consisted of all the staff in the selected manufacturing companies from senior staff to low level staff in Kaduna state, Nigeria for 7up Bottling PLC, Euro products Ltd (EUROFOAM), Northern Noodles Ltd and Flour Mill. With a collated number of 1468 staff of the selected manufacturing companies in Kaduna state, Nigeria. The population of the manufacturing companies are listed in the table below as follows:

Table 1: Selected Manufacturing Companies in Kaduna, Nigeria

Names of Manufacturing Companies	SENIOR STAFF	MIDDLE STAFF	LOW LEVEL STAFF	TOTAL
7UP Bottling PLC	17	109	387	513
EUROFOAM	11	57	116	184
Northern Noodles Ltd	13	65	244	322
Flour Mill	29	62	358	449
TOTAL	70	293	1105	1468

Source: Researchers Computation, 2021

Thus, the population of all the staff in the manufacturing companies in this study was 1468 in Kaduna State, Nigeria and this was sampled using the Taro Yamane (1967) formula as stated below:

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

Where N is the population size

e is the margin error (assume 5%)

l= constant

e=0.05

$$n = \frac{1468}{1 + 1468(0.05)^2}$$

$$n = \frac{1468}{1 + 1468(0.0025)}$$

$$n = \frac{1468}{1 + 3.67}$$

$$n = \frac{1468}{4.67}$$

$$n = 314$$

From the above Taro Yamane break down, the sample size of the study was 314 of the manufacturing companies in Kaduna state, Nigeria. Furthermore, the study used a random sampling technique in selecting the 314 from 1468 manufacturing companies in Kaduna state, Nigeria. The researcher considered

purposive allocation by using proportional method in selecting sample in each of the companies in Kaduna state and these are:

Table 2: Proportion of Selected Manufacturing Companies in Kaduna State, Nigeria

Companies	Population	Proportion	Sample
7UP	513	513 x 314/1468	110
EUROFOAM	184	184 x 314/1468	39
Northern Noodles Ltd	322	322 x 314/1468	69
Flour Mill	449	449 x 314/1468	96
TOTAL	1468	-	314

Source: Researchers Computation (2021)

From the above table 2, the sample size for each of the selected manufacturing companies in Kaduna state was apportioned copies of questionnaires each as it appears on the proportion index. For example, 7UP Bottling PLC has the highest number of staff population in the selected manufacturing companies in Kaduna state of 513 and after the proportion applied, it received a total of 110 copies of questionnaires that was administered to all the levels of staff in the organization in Kaduna. The same was applied to the other three companies in the state.

Furthermore, the method of data collection was questionnaire administered to the respondents. The reason for using primary sources of data is that, it is crucial in presenting a study of this nature and other research data that are based on original data produced by the respondents that are actually involved in the subject area of research. It was designed in a five (5) point Likert type scale questionnaire to collect data from the respondents. The question provides information on the effect of participatory goal setting on employee performance in Kaduna, Nigeria. However, copies of the questionnaire

were administered to the respondents using simple random sampling method.

Finally, the study used the Ordinary Least Square (OLS) multiple regression method to determine the effect of the independent variable on the dependent variable. The ordinary least squares method is one of the most popular and widely used methods for regression analysis. The SPSS software of 23.0 was used for this study. The statistical test of parameter estimates was conducted using their standard error, t-test, F-test, AR, and R^2 . The economic criteria showed the coefficients of the variable conform to the economic a priori expectation, while the statistical criteria test will be used to assess the significance of the overall regression.

$$Y = \alpha + \beta_1x$$

Where y = dependent variable, α = intercept, β_1 is coefficient and x is the independent variable.

However, the above model is expressed as:

$$EMP = \alpha + \beta_1GCM + \beta_2GACP + \mu \dots \text{equation 1}$$

Where: EMP = Employee Performance (measured as efficiency), β = Coefficient, α = Intercept, μ = Error terms, GCM = Goal Commitment and GCAP = Goal Acceptance

Data Analysis**Table 3: Assessment of Goal Commitment**

Items	5(SDA)	4(DA)	3(UN)	2(SA)	1(A)
Employees of the various manufacturing companies in Kaduna state are highly committed to the attainment of the organisationsgoal	78 (25.16)	69 (21.97)	15 (4.78)	65 (20.70)	87 (27.71)
Commitment on the part of the employees ensures that the output from the manufacturing companies increases on yearly basis	79 (25.16)	96 (30.57)	23 (7.32)	55 (17.52)	61 (19.43)
Management participation has resulted in a high degree of goal commitment on the part of the employeesin the company	58 (18.47)	49 (15.61)	33 (10.5)	75 (23.89)	99 (31.53)

Source: Survey, 2021

Table 3 indicates that 25.16% of the respondents strongly disagree that employees of the various manufacturing companies in Kaduna state are highly committed to the attainment of the organisations performance. 21.97% of the respondents disagreed that employees are highly committed to the attainment of the organisations performance, and 4.78% of the respondents were undecided. 20.70% of the respondents strongly agreed that employees are highly committed to the attainment of the organisations performance and 27.71% of the respondents agreed that employees of the various manufacturing companies in Kaduna state are highly committed to the attainment of the organisations performance.

Also, the same table indicates that 25.16% of the respondents strongly disagreed that commitment on the part of the employees ensures that the output from the manufacturing companies increases on yearly basis. 30.57% of the respondents disagreed to the statement while 7.32% of the respondents were undecided. 17.52% of the respondents strongly

agreed that commitment on the part of the employees ensures that the output from the manufacturing companies increases on yearly basis and 19.43% of the respondents agreed that commitment on the part of the employees ensures that the output from the manufacturing companies increases on yearly basis.

Finally, table 3 indicates that 18.47% of the respondents strongly disagreed that management participation has resulted in a high degree of goal commitment on the part of the employees. 15.61% of the respondents disagreed that management participation has resulted in a high degree of goal commitment on the part of the employees in the company and 10.50% of the respondents were undecided. 23.89% of the respondents strongly agreed that management participation has resulted in a high degree of goal commitment on the part of the employees in the company and 31.53% of the respondents agreed that management participation has resulted in a high degree of goal commitment on the part of the employees in the company.

Table 4: Assessment of Goal Acceptance

Items	5	4	3	2	1
There is low goal acceptance by employees in the manufacturing companies in Kaduna state.	103(32.80)	106(33.76)	32(10.19)	43(13.69)	30(9.55)
The leadership and management of the manufacturing companies is oriented towards motivating employees to accept company goals	31(9.87)	43(13.69)	39(12.42)	110(35.03)	91(28.98)
The mechanisms by which goal acceptance affect performance has been fully explored by employees.	100(31.85)	116(36.94)	42(13.38)	33(10.51)	23(7.32)

Source: Survey, 2021

It was recorded that 32.80% of the respondents strongly disagreed that there is low goal acceptance by employees in the manufacturing companies in Kaduna state, 33.76% of the respondents disagreed to the said statement while 10.19% of the respondents were undecided. 13.69% of the respondents strongly agreed that there is low goal acceptance by employees in the manufacturing companies in Kaduna state and 9.55% of the respondents agreed that there is low goal acceptance by employees in the manufacturing companies in Kaduna state.

The table shows that 9.87% of the respondents strongly disagreed that the leadership and management of the manufacturing companies is oriented towards motivating employees to accept company goals, while 13.69% of the respondents disagreed that the leadership and management of the manufacturing companies is oriented towards motivating employees to accept company goals. 35.03% of the respondents strongly agreed that the leadership

and management of the manufacturing companies is oriented towards motivating employees to accept company goals and 28.98% of the respondents agreed that the leadership and management of the manufacturing companies is oriented towards motivating employees to accept company goals. Finally, 12.42% were undecided.

Table 4 shows that 31.85% of the respondents strongly disagreed that the mechanisms by which goal acceptance affect performance has been fully explored by employees, 36.94% of the respondents disagreed that the mechanisms by which goal acceptance affect performance has been fully explored by employees and 13.38% of the respondents were undecided. 10.51% of the respondents strongly agreed that the mechanisms by which goal acceptance affect performance has been fully explored by employees and 7.32% of the respondents agreed that the mechanisms by which goal acceptance affect performance has been fully explored by employees.

Table 5: Assessment of performance (efficiency)

Items	5	4	3	2	1
Manufacturing companies in Kaduna state, Nigeria usually have increase in output as a result of goal setting	65(20.70)	25(7.96)	49(15.61)	74(23.57)	101(32.17)
Manufacturing companies in Kaduna state, Nigeria frequently utilized its goal setting to obtain desired result	89(28.34)	101(32.17)	59(18.79)	59(18.79)	6(1.91)
Manufacturing companies in Kaduna state, Nigeria use performance to ensure increase in the level of their input based on goal commitment	76(24.20)	86(27.39)	56(18.79)	31(9.87)	65(20.70)

Source: Survey, 2021

It was recorded that 20.70% of the respondents strongly disagreed that manufacturing companies in Kaduna state, Nigeria usually have increase in output as a result of goal setting, 7.96% of the respondents disagreed that manufacturing companies in Kaduna state, Nigeria usually have increase in output as a result of goal setting while 15.61% of the respondents were undecided. 23.57% of the respondents strongly agreed that manufacturing companies in Kaduna state, Nigeria usually have increase in output as a result of goal setting and 32.17% of the respondents agreed that manufacturing companies in Kaduna state, Nigeria usually have increase in output as a result of goal setting.

The table further showed that 28.34% of the respondents strongly disagreed that manufacturing companies in Kaduna state, Nigeria frequently utilized its goal setting to obtained desire result, 32.17% of the respondents disagreed that manufacturing companies in Kaduna state, Nigeria frequently utilized its goal setting to obtained desire result, and 18.79% of the respondents were undecided. 18.79% of the respondents strongly agreed that

manufacturing companies in Kaduna state, Nigeria frequently utilized its goal setting to obtained desire result, and 1.91% of the respondents agreed that manufacturing companies in Kaduna state, Nigeria frequently utilized its goal setting to obtained desire result.

The table also showed that 24.20% of the respondents strongly disagreed that manufacturing companies in Kaduna state, Nigeria use performance to ensure increase in the level of their input based on goal commitment. 27.39% of the respondents agreed that manufacturing companies in Kaduna state, Nigeria use performance to ensure increase in the level of their input based on goal commitment and 18.79% of the respondents were undecided. 9.87% of the respondents strongly agreed that manufacturing companies in Kaduna state, Nigeria use performance to ensure increase in the level of their input based on goal commitment, and 20.70% of the respondents agreed that manufacturing companies in Kaduna state, Nigeria use performance to ensure increase in the level of their input based on goal commitment.

Table 6: Descriptive Statistics
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PEM	314	1.00	5.00	3.2471	1.63826
GCM	314	1.00	5.00	2.9843	1.52139
GCAP	314	1.00	5.00	3.8564	1.96378
Valid N (listwise)	314				

Source SPSS version 20.00

Table 6 revealed that the result of descriptive statistics which indicated the mean and standard deviation as well as the minimum and maximum value of the variables. The mean value of performance of employees in terms of efficiency (PEM) is 3.24, goal commitment (GCM) is 2.98, the mean value of goal acceptance (GCAP) is 3.85. The table also recorded the standard deviation of the variables.

Table 7: Regression Analysis
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865 ^a	.771	.835	.51080

a. Predictors: (Constant), GCM, GCAP

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	699.870	2	457.084	1865.247	.000 ^b
	Residual	67.464	311	.177		
	Total	767.333	313			

a. Dependent Variable: PEM

b. Predictors: (Constant), GCM, GCAP

Coefficients^a

MQdel		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.532	.048		-5.176	.000
	GCM	-.471	.034	.472	8.951	.000
	GCAP	.442	.033	.429	9.839	.000

a. Dependent Variable: PEM

Source: econometric output, 2021

Decision rule: 5%

The regression result shows that the model is fit for the study since the f-statistics is significant at 5% level of significance. The result also shows that goal commitment has a significant effect on employees' performance of the manufacturing companies in Kaduna state, Nigeria while goal acceptance also has a positive and significant effect on employees' performance of the manufacturing companies in Kaduna state, Nigeria. These effects are significant since the P-values are less than 5%. Thus, the study rejects the null hypotheses and concluded that goal setting (goal commitment and goal acceptance), has a significant effect on employees' performance of the manufacturing companies in Kaduna state, Nigeria. The $R^2 = 0.77$ indicates that only 77% of variation on participatory goal setting can be used to explain the employees' performance of the manufacturing companies in Kaduna state, Nigeria but 23% can be explained by other factors not noted in the regression model which is referred to as error term.

Discussion of Findings

The study found out that participative goal setting has a significant effect on employees' performance in selected companies of Kaduna state, Nigeria. Other findings were that both

goal commitment and goal acceptance has significant effect on employees' performance in selected companies of Kaduna state, Nigeria. This was so because most of the manufacturing company's employees agreed to the fact that in the short run and the long run, their commitment and accepting the rules of the companies, by implementing the rules, makes the various manufacturing companies to perform better and meet the organisation goals. The implication was that organizing strategies for improving the performance in the company, points to the importance of considering the component processes, played out over time, as an employee moves from start to completion of a goal-setting activity. The study is in line with Mildred et.al., (2018) who investigated the effects of participative goal setting on employees' performance at Kenya Seed Company and to find out strategies for enhancing goal setting and their likely effect on employees' performance, found a positive and significant effect on both variables. Also, none of the empirical studies reviewed disagreed with the finding of this study. The study is in line with the goal-setting theory, which states that behaviour is purposeful and that goals focus employees' energies in performing specific task. Consequently, goal setting

hypothesis is an effective strategy of arousing performance by provision of feedback, employee involvement and participation (Latham et al, 2002). Necessary feedback of results and employee involvement in goal setting directs the employee behaviour and contributes to higher performance than absence of feedback and non-involvement.

Conclusion and Recommendations

The study concluded that participative goal setting has a significant effect on employees' performance in selected companies of Kaduna state, Nigeria. Other findings were that both goal commitment and goal acceptance has significant effect on employees' performance in selected companies of Kaduna state, Nigeria. The study therefore, concludes that the selected manufacturing companies can improve performance more if it creates the opportunity for employee control, communicates to employees that commitment and the company goal acceptance is a necessity, and trains employees in methods of setting goals, monitoring, evaluating, and reinforcing their own behaviour. The study also concludes that high employee performance is achieved when the selected manufacturing companies involve employee's goal setting through constant consultation. The study recommended that, selected manufacturing companies of Kaduna state, Nigeria should maximize the use of goal commitment and goal acceptance in their organisation since it has a positive effect on the performance of employees. They should keep on increasing participation of goal setting in the companies as this leads to better performance from the employees. Moreover, when goals are set or assigned, employees initially act in accordance with the situational demands and try to attain the goals rather than follow their own preferences.

References

Allport, G. W. (1935). *Attitudes handbook of social psychology*. Worcester, MA: Clark university Press.

Armstrong, M. (1995). *A handbook of*

personnel management practice 5th ed. London: Kogan page.

- Bandura, A. (1989). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice Hall. Inc.
- DuBrin, A.J. (2012). *Leadership: Research Findings, Practice and Skills*. Business and Economics, Edition 7. ISBN
- Eagly, A. H. (1993). *The Psychology of Attitudes*. Fort Worth: Harcourt Brace Jovanovich.
- Farajollah, R. (2008), *Effective Factor on the Promote of Public Sector Organisations Performance in Iran*. *Journal of Modinriat*, Eight Years, No. 4.
- Iranwanto, D.W. (2015). *Employee Participation in Decision Making: evidence from State Owned Enterprise*. *Management*, 20 (1), 159-172.
- Kroll, K. M. (2006). *Absence- Minded, CFO Human Capital*, pp. 12-14.
- Latham, G. P. (2002). *Work motivation: History, theory, research, and practice*. Thousand Oaks, CA: Sage Publications
- Locke, E. A. (1968). *Toward a theory of task motivation and incentives*. *Organizational behaviour and human performance*, 3, 157-189.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Mildred, A. K., & Mercy, G. M. (2018). *Effect of employee involvement on job performance in the medical research industry in Kenya*. *International Journal of Economics, Commerce and Management*, 5(5), 717-734
- Mullins, L. (1999). *Management and Organizational Behaviour*. 5th Edition. Portsmouth: Pitman Publishing.
- Mills, C. (2002). *Performance Management Under the Microscope*, Singapore Human Resources Institute. Singapore
- Nellie, M. (2002). *Performance Assessment in an Era of Standards-Based Educational Accountability*

- Nmadu, G. (2013), Employees performance and its effects on their job performance in workplace.
- Rizwan, K. (2014). The impacts of goal setting and curiosity on the employee job performance: A perspective from NGO sector of Pakistan. *Management Studies and Economic System*, 1(1), 1-13
- Robbins, S. P., & Coulter, M. (2013). *Management*, (11th ed.). England, UK: Pearson Education Limited.
- Sauers, D.A. & Bass, K. (1990). Sustaining the Positive Effects of Goal Setting: the Positive Influence of Peer Competition. *Akron business and economic Review*, Vol. 21, No. 4, pp30
- Skinner B.F. (1979). *The Shaping of a Behaviorist*. Knoopf.
- Sven, A., Florian, K., Alwine, M. & Gunther, R. (2015). The impact of goal-setting on worker performance – empirical evidence from a real-effort production experiment. 12th Global Conference on Sustainable Manufacturing. Science Direct
- Umstot. D.D., Mitchell. T.R. & Bell. H.C. (2009). Goal setting and job enrichment: An integrated approach to job design. *Academy of Management Journal Review*, 3(4):867-879

RELATIONSHIP BETWEEN RETURN ON EQUITY (ROE) AND EQUITY INVESTMENT IN THE LISTED COMPANIES IN NIGERIA

Ibrahim Adamu Saleh PhD¹ Abdullahi Umar PhD² & Nasiru Balan Malam³

¹Department of Business Administration,
Federal University, Kashere, Gombe State.
Ibrahimadamusaleh3@gmail.com GSM: +234803397758, +2348036525276

²Department of Business Administration & Management
Abubakartatari Ali Polytechnic, Bauchi.
Email: Abdumar20@yahoo.com GSM: +2348065283338.

³School Of General Studies,
Abubakar Tatari Ali Polytechnic, Bauchi.
Email: Balanmalam@gmail.com gsm: +2348160035337

Abstract

Shareholders simplest receive dividend when the entity has a great go back on equity which brings about equity proportion funding. Thus, this look at examines the relationship between Return on Equity per Share and fairness proportion investment inside the indexed businesses in Nigeria. The study uses both primary and secondary method of statistics collection. The populace for the study accommodates of all 192 listed groups at the Nigerian Stock Exchange and 225 registered and active brokerage firms. The pattern size of the study changed into determined the use of stratified sampling method. Data had been collected the usage of both the number one and secondary resources. The number one data become analyzed using descriptive facts; imply percent and fashionable deviation, whilst the secondary facts changed into analyzed with panel version the usage of ANOVA. The locating revealed a large relationship among Return on Equity in line with Share and equity percentage funding in the indexed agencies in Nigeria. The study recommends that, all listed agencies in Nigeria must prepare and disclose adequate data regarding Return on Equity on the monetary accounting signs used for investment choices alongside with the required monetary statements.

Key words: Return on Equity per Share, Equity Share Investment, Stock Brokers, Investment Advisers and Portfolio Managers

INTRODUCTION

Financial accounting facts are usually used to measure and speak financial sports of a firm. It is used for dealing with a commercial enterprise, making funding choices, or tracking the inflows or outflows of character or business enterprise income. According to Meyer (2007),

accounting data plays a big function in the idea of producing and speaking wealth of businesses. Vijitha and Nimalathasan (2014) publish that the main objective of financial accounting statistics is to provide data approximately the entity's monetary role to special users inside and outside the entity.

Accounting information is a fundamental component in investment choice making and in the determination of the well worth of a firm. Eleke and Opoku (2013) nation that accounting facts launched to the general public through corporations without delay or indirectly has a first-rate impact on buyers' perceptions of the enterprise, therefore its price and both individual and institutional traders connect extraordinary significance to facts within the choice of portfolios of fairness securities, bonds and different investments.

It pays to invest in businesses that generate income more efficaciously than their competitors. Return on fairness (ROE) can help investors distinguish among agencies which are income creators and those that are income burners. By measuring how an awful lot income a agency can generate from property, return on fairness offers a gauge of earnings generating performance. Return on fairness helps traders determine whether a company is a lean; imply income gadget or an inefficient clunker. The courting between the entity's income and the investor's go back makes return on fairness on the entity (McClure, 2015). ROE offers a beneficial signal of financial fulfillment of the entity given that it might suggest whether the business enterprise is developing profits without introducing new equity capital into the business. A gradually growing ROE is a hint that control is giving shareholders more for his or her cash, that's represented with the aid of shareholders' fairness. Simply put, ROE suggests how nicely control makes use of the buyers' capital invested inside the employer (Traub, 2001).

It has been argued in the literature that accounting facts disclosed in companies' economic statements is the main thing that most traders don't forget when making equity percentage funding decisions (Wang & Liang, 2000; Eleke & Opoku, 2013; Wang, Gang & Chao, 2013). Babalola (2012), in his observe, 'Significance of accounting data on corporate values of firms in Nigeria,' claims that the

accounting data plays an vital function in reflecting funding within the equity share of indexed businesses in Nigeria. According to Novak, (2008) monetary announcement might also fail to deliver beneficial information due to the fact it is biased, it isn't always timely and it's far manipulated. It is every so often argued that accounting can hardly ever bring useful facts to investors because it fails to mirror the monetary situations in a timely manner (Basu, 1997). Earnings management can be performed via the managers so that you can temporarily attaining favorable performance facts. Manipulated earnings may additionally ship deceptive signals about the company's monetary role to investors (Novak, 2008). These troubles may be as result of incapacity of the users to recognize the most substantial accounting variables to don't forget while analyzing the economic information of an entity they want to make investments their resources.

Accounting facts has been taken into consideration to be a prime component influencing fairness percentage investment in indexed businesses in Nigeria (Babalola, 2012; Oshodin & Mgbame, 2014). Empirical research on the relationship between accounting facts and fairness percentage funding in indexed businesses in Nigeria is confined (Obamuyi, 2013). One is not aware about any expansive take a look at that has explored the relationship of accounting information and equity proportion funding in Nigeria (Oyerinde, 2011). It has no longer been comprehensively researched usually due to troubles with information availability (Negah, 2008). Unavailability of data on the relationship between accounting records (in particular ROE) and equity proportion funding in indexed agencies in Nigeria is because of the paucity of empirical research on the concern (Goddy, 2010; Oyerinde, 2011).

Given those cited conditions, an opening has been created in literature for a examine on the connection between accounting information and equity proportion funding. In order to fill

the gap inside the literature, there is the need to perform a have a look at on the connection among particular accounting variable (ROE) and equity percentage investment in indexed organizations in Nigeria.

It is on the basis of those that a have a look at of this nature is conducted with a view to examine the relationship among ROE and Equity Share Investment in the listed organizations in Nigeria. Even although other research have been conducted on this place conceptually, this observe will provide empirical accounting statistics indices that will help equity share investors in making investment choices during 10 years (2011-2020).

To function a steering in examining the relationship among ROE and equity share funding, the beneath speculation turned into formulated

Ho: There is no significant relationship between return on equity ROE and the equity investment in the companies listed on Nigerian Stock.

Conceptual Framework

The impartial variable of the look at is monetary accounting facts variable: return on equity ROE in listed corporations in Nigeria for ten years length (2011-2020). Return on Owner's Equity (ROE) is calculated as internet earnings after tax divided by the whole shareholders' fairness. This ratio measures the shareholders' rate of return on their investment within the corporation. Return on equity (ROE) is measured as follows: Net earnings after taxes/Total shareholders' fairness (Kabajeh, etal, 2012). The structured variable of the study is the devices of equity investment. Units of fairness share funding is the entire gadgets of fairness shares of groups traded at the Nigerian stock change market proxies by way of the natural logarithm of the wide variety of stocks.

Empirical Review

There are many pupils and researchers that conducted numerous researches on go back on fairness ROE and equity share funding their findings and implications are offered under:

Germon and Meek, (2000), in an evaluation of Nigerian Stock Market consisting pinnacle 30 agencies from 2001 to 2004, determined that the connection among fairness percentage funding and income in step with proportion is excessive but the return on fairness may be very low. However, Malhotra and Tandon (2013) carried out an empirical look at of the Relevance of Accounting Information on investor's selections primarily based at the Colombo Stock Exchange, Sri Lanka. The relevance of accounting facts was measured with the aid of correlation coefficient with Market Price in line with Share (MPS) and selected accounting statistics inclusive of incomes according to percentage (EPS), go back on fairness (ROE) and earning yield (EY). The findings claim that return on fairness is drastically related with the share price and investor's choices.

Wang, Gang, and Chao (2013) finished a have a look at at the accounting information and traders' reaction in Shanghai Stock Exchange, and said that correlation evaluation and regression evaluation of accounting records and traders' reaction show that the accounting data has a few effect on fairness buyers' response and stock charge. They claimed that accounting statistics of charge of return on stockholders' fairness are most significant and that it has direct effect on traders'.

Kabajeh, AL-Nu'aimat, and Dahmash (2012). Tested the connection among the go back on fairness (ROE) ratio and Jordanian coverage public organizations share fees and fairness share buyers' reactions during the period (2002-2007). The outcomes of their look at confirmed a wonderful relationship among the ROE ratio and Jordanian insurance public agencies proportion charges. The outcomes also found out that equity proportion traders'

choices are definitely inspired by way of the go back on fairness. However, in step with Eleke-Aboagye and Opoku (2013). Return on fairness (ROE) isn't an absolute indicator of investment price. After all, the ratio receives a massive enhance each time the value of the shareholder fairness, the denominator, is going down. If, as an instance, a employer takes a massive write-down, the discount in earnings (ROE's numerator) takes place best within the year that the rate is charged; the write-down consequently makes a more sizable dent in shareholder equity (the denominator) within the following years, inflicting an overall upward thrust within the ROE without any development in the employer's operations. Having a comparable impact as write-downs, share buy-backs additionally normally depress shareholders' fairness proportionately a long way more than they depress profits. As a end result, purchase-backs additionally supply an synthetic enhance to ROE. Moreover, a high ROE does not tell you if a corporation has excessive debt and is elevating more of its budget through borrowing instead of issuing shares. So, the more debt a enterprise has, the much less equity it has; and the much less equity a enterprise has, the better its ROE ratio could be.

Another pitfall of ROE worries the manner wherein intangible property are excluded from shareholder's fairness. Generally conservative, the accounting career normally omits a corporation's possession of things like trademarks, brand names, and patents from asset and equity-primarily based calculations. As a result, shareholder equity often gets understated in relation to its price, and, in flip, ROE calculations may be misleading. An organization without assets other than an indicator is an extreme example of a situation wherein accounting's exclusion of intangibles would distort ROE. After adjusting for intangibles, the agency could be left without a assets and probably no shareholder fairness base. ROE measured this way could be

astronomical but would offer little steering for traders trying to gauge profits performance.

Theoretical Review

The theoretical technique to the connection among economic accounting information variable (go back on equity) and technical idea of fairness percentage funding can be discussed in phrases of signaling accounting information idea and concept of equity percentage funding. Research using signaling theory of accounting facts in the context of fairness proportion funding has proven its relevance in a number of contexts which include IPO and acquisition market (Gulati & Higgins, 2003). According to the signaling concept, economic facts acted as a means of passing statistics from managers to stockholders or traders (Bird & Smith, 2005). Investment in fairness share may be strongly stimulated by using information asymmetries. Through signals of firms' accounting data to the stock market, there can be absence of uneven statistics in the marketplace, this will assist traders to diagnose monetary conditions, working conditions and future prospect of a firm when making fairness funding decision. Signalling idea suggested that records asymmetry can be decreased by means of sending signals to fascinated events (Yi, Davey, & Eggleton, 2011).

On the opposite hand the Technical Analysis Theory of Equity Share Investment can help investors to make their equity funding selection as investor desires to recognize the stock marketplace behaviour and inventory charge trend in the inventory market and ask why the inventory marketplace behaves in a certain manner. For buyers not to head wrong in investment decision, buyers need to broaden a chicken's view over the market and analyze each thing why the inventory marketplace behaved in a sure way with equipment and strategies. According to Keerti and Gururaj (2013), one of the equipment that can be utilized by the investor for the analysis of the stock marketplace behaviour and stock charge fashion in the inventory market is technical

analysis. Keert and Gururaj (2013) state that technical analysis allows to look at the marketplace action, in the main through the usage of charts, for the motive of forecasting future rate tendencies. The motion of the scrip rate and its behaviour may be explained in a greater illustrative form by way of the usage of the technical analysis. It gives better insight to make choices at the stock investments. It considers most effective the real rate behaviour of the marketplace or instrument. Keert and Gururaj (2013) put up that technical traders trust that there aren't any motives to analyzer a business enterprise's basics due to the fact these are all accounted for inside the stock's price.

Cory, Chad and Casey (2015) state that technical analysis is a technique of evaluating securities by using reading the records generated by means of market activity and that it's far primarily based on three assumptions: 1) the market discounts the entirety, 2) charge movements in tendencies and three) records has a tendency to repeat itself. Murphy (1999) claims that technical analysis keeps that each one information required approximately a stock is pondered already inside the charge of the stock and that Investors' emotional responses to price moves cause recognizable rate chart patterns.

Using technical evaluation, the traders have a look at the fashion and momentum in a inventory's price and extent. Based at the tendencies, investors (investors) can decide when to shop for or whilst to promote shares of that stock. In technical analysis the investors are guided at the proper time to go into or exit based at the beyond and modern trend of fees and extent of exchange. Not only is technical analysis of greater quick time period than fundamental analysis, however the goals of buy (or sale) of a stock are usually one-of-a-kind for each method. In well known, technical analysis is used for a trade, while fundamental analysis is used to make an funding.

METHODOLOGY

The study adopted a mixed research design because it used both primary and secondary data.

The geographical location of this study is Nigeria. The study population comprises of all the listed companies on the Nigerian Stock Exchange. The total numbers of one hundred and ninety two (192) companies were listed on the Nigerian Stock Exchange as at 2020 (The Nigerian Stock Exchange, African Markets, 2020). The study population for the survey research was Stock brokers, Investment Advisers and Portfolio Managers in two hundred and twenty five registered stock brokerage firms in Nigeria. There are a total of two hundred and twenty five (225) registered and active brokerage firms in Nigeria as at 2020 (The Nigerian Stock Exchange, African Markets, 2020).

The sample selection was based on stratified sampling technique. Listed companies were segregated into three strata namely: financial service sector, manufacturing sector and general service sector. The number of companies in each stratum was 52, 74, and 66 respectively, which makes the sample size to be 192 companies. Within each of the strata, simple random sampling was used to select individual firms that were considered for investigation. For the selection of samples of stock brokerage firms and respondents from the firms, random sampling and purposive sampling techniques were used. The study makes use of both primary and secondary methods of data collection. The primary data were collected from direct responses of the respondents (Stock Brokers, Investment Advisers, and Portfolio Managers) in each of the sixty eight (68) sampled registered stock brokers' firms through the use of structured questionnaire. The secondary data for the study were collected from the listed companies' annual reports and Nigerian Stock Exchange Market Statistics. Data were collected from the fifty eight (58) sampled companies over the period of 10 years.

For data analysis, the primary data was analyzed using descriptive statistic: mean percentage and standard deviation. The secondary data was analyzed using panel model. The study employed random effects panel model for modeling and analysis of variance (ANOVA) of the relationship between return on equity and equity share investment in the companies listed on Nigerian Stock Exchange. Both face and content validity were employed for the validity test of the study while the Cronbach's Alpha reliability was used to measure the reliability of the data gathered from the field where its value shows 0.767 which above 0.7 threshold as suggested by Zinbarg (2005).

Response rate

The study sampled 204 respondents from 68 stock brokerage firms and questionnaires were self-administered to the 204 respondents. The total number of questionnaires returned was 180, while 24 were not returned. This means that the analysis of primary data was based on 88% response rate. The response rate is

measured by the number of the questionnaires retrieved from the sampled respondents divided by the total number of the questionnaires distributed to the sampled respondents. The response rate was calculated as: $180/204 \times 100 = 88\%$.

Bailey (2000) asserts that a response rate of 50% is considered good, and response greater than 70% is considered very good. Babbie (2002) supports Bailey's assertion by claiming that a response rate of fifty per cent (50%) and above is adequate for analysis. Given Bailey's and Babbie's claims, the response rate of 88% is considered adequate for the purpose of this study. The high response rate can be attributed to the elaborate data collection procedures, the researcher personal administration of the data collection instruments and a good follow-up with the respondents. Zinbarg (2005) claims that self-administered questionnaires give high response rate and bring about gathering of accurate and reliable information on the study subject.

RESULTS AND DISCUSSION

Table 1: Relationship between Return on Equity and Equity Share Investment

Statements	SD	D	N	A	SA	Total	Mean	S. D
There is a relationship between return on equity disclosed in a firm's financial statement and equity share investment in the firm.	0.0%	0.0%	15.0%	54.6%	29.4%	100%	4.14	0.65
Return on equity is useful in equity share investment decision making.	0.0%	1.7%	35.0%	51.1%	12.2%	100%	3.74	0.69
Return on equity determines equity share investment	0.0%	1.5%	19.4%	55.0%	24.1%	100%	4.03	0.70
Regular and consistent improvement in return on equity disclosed by a firm enhance equity share investment	0.0%	1.6%	26.7%	55.0%	16.7%	100%	3.87	0.70
Timely and regular announcement of return on equity share enhance equity share investment decision making.	0.0%	1.1%	23.9%	71.1%	3.9%	100%	3.78	0.52

Source: Researcher's field survey, 2021

The study carried out examinations of several factors of return on equity if they had an influence on the equity share investment. Results in Table 1 indicated the responses to statements in respect of various factors of return

on equity that influence equity share investment.

The first factor examined whether there is a relationship between return on equity disclosed

in firms' financial statements and equity share investment in the firms. The findings showed that 85.0% (55.6% agreed + 29.4% strongly agreed) of the respondents confirmed that there exists a relationship between return on equity ratio disclosed in firms' financial statements and equity share investment in the firms. However, 15% of the respondents were neutral and no respondent disagreed or strongly disagreed with the fact that there is a relationship between return on equity ratio disclosed in firms' financial statements and equity share investment in the firms. In view of the fact that the majority (85%) of responses pointed out that there that there is a relationship between return on equity ratio disclosed in the listed firms' financial statements and equity share investment in the listed firms in Nigeria, this finding suggests that equity share investors in Nigeria considered the return on equity as a guide when considering investing in equity share of firms. This is consistent with Watson & Wells (2005). who found that return on equity is significantly related with the share price; hence equity share investment decisions.

On the factor whether return on equity is useful in equity share investment decision making, the results revealed that a large proportion, 63.3% (51.1% agreed + 12.2% strongly agreed) of respondents attested to the fact that return on equity is useful in equity share investment decision making. Moreover, 35% of the respondents embraced neutral position, 1.7% disagreed and none strongly disagreed that indeed return on equity ratio is useful in equity share investment decision making. The findings showed that majority (63.3%) of those interviewed supported the fact that return on equity is useful in equity share investment decision making. These findings imply that greater number of investors used return on equity for equity share investment decision making in the listed companies in Nigeria. These findings support the results of a study by Wang et al (2013) who found that accounting information of rate of return on stockholders'

equity are most significant and that it has direct impact on investors' decisions.

On the aspect of whether return on equity determines the amount of equity share investment, the results of the findings suggested that 79.1% (55.0% agreed + 24.1% strongly agreed) of the respondents assented to the fact that return on equity ratio determines the amount of equity share investment. Besides, 19.4% of the respondents took neutral position, 1.5% disagreed and no one strongly disagreed. Given the fact that a greater number of respondents (79.1%) were in agreement with the fact that return on equity determines the amount of equity share investment, the findings imply that equity share investors in listed companies in Nigeria used return on equity ratio when making investment decisions. These findings comply with the findings by Kabajeh *et al* (2012) who assert that equity share investors' decisions are positively influenced by the return on equity.

The study sought to assess whether regular and consistent improvement in return on equity ratio disclosed by firms enhances equity share investment. The responses indicated that regular and consistent improvement in return on equity disclosed by firms enhances equity share investment. From the findings, 71.7% (55.0% agreed +16.7% strongly agreed) of the respondents supported the fact that regular and consistent improvements in return on equity disclosed by firms enhanced equity share investment. Nevertheless, 26.7% of the responses adopted neutral view, 1.6% disagreed and no respondent strongly disagreed. These findings revealed that most of the respondents (71.7%) agreed to the fact that regular and consistent improvements in return on equity ratio disclosed by firms enhance equity share investment in Nigerian listed firms. The findings suggest that equity share investors in Nigeria considered regular and consistent improvements in return on equity ratio very relevant when taking investment decisions. This finding agreed with the findings by Wang, *et al* (2013) who argue that return on equity

ratio has the most significant correlation with equity share investment decisions.

The study attempted to determine if timely and regular announcement of return on equity enhances equity share investment decision making. The findings indicated that 75% (71.1% agreed + 3.9% strongly agreed) of the respondents affirmed that timely and regular announcement of return on equity ratio enhances equity share investment decision making. In addition, 23.9% of the respondents were neutral, 1.1% disagreed, and no respondent was strongly disagreed. Considering the fact that majority (75%) of the respondents agreed to the fact that timely and regular announcement of return on equity ratio enhances equity share investment decision making in listed firms in Nigeria, the findings suggest that equity share investors in Nigeria relied on timely and regular announcement of return on equity ratio to make equity share

investment decision. These findings agree with research findings of Vijitha and Nimalathasan (2014) which reveal that timely and regular announcement of accounting information variable, return on equity ratio, enhances equity share investment decision making and has significant impact on investors' investment decision.

The means of the factors evaluated under return on equity ratio were presented in Table 1. The means for all factors were between 3.78 and 4.14. This imply that majority of the respondents were in agreement that the factors listed under return on equity have influence on equity share investment. The standard deviations of the factors were between 0.52 and 0.70. This result suggests that there are no much differences in the respondent's opinions in respect to all factors under return on equity ratio.

Table 2: Model Summary: Relationship between Return on Equity and Equity Share Investment

Models	R	R ²
1	0.765	0.585

Source: Researcher's field survey, 2021

The linear regression model defining the relationship between equity share investment and return on equity is given as: $V_t = \beta_0 + \beta_1(\text{Return on Equity}) + \epsilon$. Where V_t is the volume of equity share investment, β_0 is the regression intercept, β_1 is the beta coefficient of return on equity and ϵ is the error term.

The finding (Table 2) indicated that the coefficient of determination (r^2) between return on equity and equity share investment was 0.585 or 58.50%. This result suggests that 58.50% of variation in the equity share

investment can be explained by return on equity. Conclusively, the result implies that return on equity significantly influenced equity share investment in the listed companies in Nigeria. This finding was in consonant with the findings that equity share investors' decisions are positively influenced by the return on equity and that accounting information of rate of return on stockholders' equity are most significant and it has direct impact on investors' decisions (Kabajeh et al, 2012; Wang et al, 2013).

Table 3: Analysis of Variance (ANOVA): Relationship between Return on Equity and Equity Share Investment

Model		D.f	Sum of squares	Mean of some of squares	F-statistics	P-value
1	Regression	1	246.915	246.915	815.526	0.000
	Residual	578	175.000	0.3028		
	Total	579	421.915			

Source: SPSS 23 Result (2021)

The analysis of variance (ANOVA) results (Table 3) indicated that F –statistic is 815.526 with p-value of 0.000 which is less than 0.05. This suggests that F statistics is highly significant.

Hypothesis Testing

H0: There is no relationship between return on equity and equity share investment in listed companies in Nigeria.

Since p-value is 0.000, which is less than 0.05, the model is significantly fit and therefore the null hypothesis (H0) that there is no relationship between return on equity and equity share investment in the listed Nigerian companies was rejected and the alternative was upheld. Therefore, there is a relationship between return on equity and equity share investment in the listed companies in Nigeria.

Table 4: Beta Coefficients: Relationship between Net Book Value per Share and Equity Share Investment

Model	Explanatory variable	Coefficients B	Std Error	t	P-value
1	Constant	3.358	0.200	16.790	0.000
	Earnings per share	0.257	0.018	14.278	0.000

Source: SPSS 23 Result (2021)

The linear regression model defining the relationship between equity share investment and return on equity is given as: $V_t = \beta_0 + \beta_1(\text{Return on Equity}) + \varepsilon$. Where V_t is the volume of equity share investment, β_0 is the regression intercept, β_1 is the beta coefficient of return on equity and ε is the error term. The beta coefficient and t-value for return on equity from the regression model were indicated in the above table. Given the results in the table, the value of the model intercept was 3.358, and the beta coefficient of return on equity was 0.257 which is significantly different from zero with a p-value of 0.000 which is less than .05. This result means that return on equity significantly influences equity share investment and a unit change in it will lead to 0.257 units change in the volume of equity share investment. Therefore, the model: $V_t = 3.358 + 0.257(\text{Return on equity})$ significantly fit and can explain the relationship between equity share investment (dependent variable) and return on equity (independent variable) in the companies listed on Nigerian Stock Exchange. Moreover, since the beta coefficient of return on equity is significantly different from zero, the null hypothesis that there is no relationship between return on equity and equity share investment in the listed companies in Nigeria is rejected and

the alternative hypothesis accepted. This finding supports the results of a study by Wang *et al* (2013) who find that accounting information of rate of return on stockholders' equity are most significant and that it has direct impact on investors' decisions.

Discussion of Findings

The findings underneath survey approach confirmed that there may be lifestyles of sturdy dating between go back on fairness and equity percentage funding in the organizations listed on Nigerian Stock Exchange. This finding changed into supported with the aid of respondent's reactions which confirmed that a super majority (seventy four.82%) widespread the fact that there is a relationship among go back on equity and equity percentage funding within the indexed businesses in Nigeria and that return on fairness substantially prompted equity percentage traders' investment decision. This locating conforms to the findings by using Kabajeh *et al* (2012) who asserts that equity proportion investors' selections are undoubtedly motivated by way of the return on fairness.

Employing secondary data, the findings arrived at inside the observe of the connection among

the variable go back on equity and equity percentage investment indicated that return on fairness has an influence at the fairness share funding inside the listed agencies in Nigeria. The regression consequences show that go back on fairness has a high quality correlation coefficient (r) of zero.765 with fairness share investment which means that go back on fairness had a vast linear association with equity percentage investment. The coefficient of dedication (r^2) changed into zero.585 or 58.5%. This indicated that 58.5% of the version in fairness share investment turned into explained via go back on fairness.

This locating is aligned with the finding of Germon and Meek, (2000) who analyzed the Nigerian Stock Market consisting pinnacle 30 companies from 2001 to 2004, found that the relationship among equity share investment and profits per share is excessive however the go back on equity may be very low.

The evaluation of variance (ANOVA) effects showed an F-statistic value of 815.526 with p-value of zero.000 that is less than zero.05. This result showed that the regression is extensive. Therefore, the null hypothesis that there's no courting between return on fairness and equity share funding in the businesses indexed on Nigerian Stock Exchange become rejected and the alternative prevalent. This locating means that there's a massive dating between return on fairness and fairness percentage investment in the indexed groups in Nigeria.

The beta coefficient for go back on equity changed into zero.257 which turned into exceptional from 0 and the p-value turned into 0.000. These effects confirmed that there is a extensive courting between go back on equity and fairness percentage funding inside the agencies listed on Nigerian Stock Exchange. Considering these outcomes, the null speculation that there is no tremendous courting between go back on equity and fairness percentage funding within the companies indexed on Nigerian Stock Exchange turned

into rejected and the alternative speculation familiar.

Comparing the findings under number one facts and secondary data analyses, both are synonymous, consequently there's a relationship among go back on equity and equity share investment within the listed organizations in Nigeria.

CONCLUSION AND RECOMMENDATION

Conclusion

The effects of survey examine via primary statistics analysis discovered that return on fairness and fairness share investment are correlated and there is a sturdy and enormous courting between return on equity disclosed in firms' financial statements and fairness percentage investment. And moreover, return on fairness drastically encouraged equity share funding selections inside the listed businesses in Nigeria. This locating changed into substantiated by most people (seventy four. Eighty two%) of the respondents who claimed that there exists a great courting among go back on equity and equity share investment in the listed companies in Nigeria and that many fairness percentage traders in Nigeria depended on accounting information disclosed in firms' monetary statements on return on equity for equity percentage investment choice making. In addition, the use of secondary facts to research the relationship between return on fairness and fairness proportion funding in the listed corporations in Nigeria, the outcomes of the research found out that there's a sturdy have an impact on of go back on equity on fairness proportion funding in indexed Nigerian groups. Since the proof indicated that go back on equity plays a sizeable position in investment selection making, it is important to enhance at the pleasant of accounting information which offer return on fairness and in turn is expected to affect equity share buyers' investment choices.

Recommendations

Given the importance of accounting information in investment decision making in Nigeria, the study of return on equity that affect investment choice makings is useful for the traders in Nigeria, as these elements own strong explanatory electricity and consequently, can be used to make correct investment selections. Therefore, investors are counseled to take recognition of accounting and economic records variables in particular return on fairness of employer earlier than making an investment inside the equity of a selected organisation.

The take a look at recommends that every one listed organizations in Nigeria have to put together and divulge adequate information concerning return on equity at the monetary accounting indicators used for investment choices along with the mandatory financial statements. This is anticipated to offer clearer information approximately the working and financial performances of businesses to equity percentage buyers.

REFERENCES

- Babalola. A. Y. (2012). Significance of accounting information on corporate value of firms in Nigeria. *Research Journal in Organization Psychology and Education Studies*, 1(2), 105-113.
- Babbie, E. (2002). *The practice of Social Research*. Belmont, BC: Wadsworth
- Bailey, R. A. (2008). *Design of comparative experiments*. Cambridge University Press.
- Beisl, A.E. (2009). *Essays on the Value Relevance of Accounting Information*. Working paper of Norwegian school of Economics and Business Administration.
- Bird, R.B., & Smith, E.A. (2005). Signalling theory, strategic interaction, and symbolic capital. *Current Anthropology*, 46: 221-248.
- Cory, J., Chad, L., & Casey, M. (2015). *Technical Analysis: Conclusion*. Retrieved from <http://www.investopedia.com/university/technical/techanalysis11>
- The Eleke-Aboagye, P.Q., & Opoku, E. (2013). Effect of Earnings Announcement on Share Prices in Ghana: A Study of Ghana Stock Exchange. *Research Journal of Finance and Accounting*, 4(17), 166 - 186.
- Germon, H., & Meek, G.K. (2001). *Accounting: An International Perspective*. McGraw Hill: Singapore
- Goddy, E. (September 15.2010). *Suspension of Firms: A timely Intervention*, Market Report. Lagos: Thisday Newspaper
- Gulati, R., & Higgins, M.C. (2003). Which ties matter when? The contingent effects of interorganizational partnerships on IPO success. *Strategic Management Journal*, 24(2), 127-144.
- Kabajeh, A.M., AL-Nu'aimat, S. M., & Dahmash, F. N. (2012). The Relationship between the ROA, ROE and ROI Ratios with Jordanian Insurance Public Companies Market Share Prices. *International Journal of Humanities and Social Science*, 2(11), 115 – 120.
- Keerti, G. K., Gururaj. A, K. (2013). Fundamental analysis vs. technical analysis: a choice of sectoral analysis. *International Journal of Engineering and Management and Science*, 4(2), 234-246.
- Malhotra, N., & Tandon, K. (2013). Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies. *International Journal of Research in Management & Technology (IJRMT)*, 3(3), 86-95.
- McClure, B. (2010). Introduction to fundamental analysis. Investopedia.com. *The resource for finance education*,
- Murphy, J. J. (1999). Technical analysis of the financial markets: a comprehensive guide to trading methods and

- applications. New York New York Institute of Finance
- Negah, M. (2008). Liberalisation and the value relevance of Accrual Accounting Information: Evidence from the Johannesburg Securities Exchange. *Fro –Asian Journal of Finance and Accounting*, 1(1), 81–104.
- Novak, J. (2008). *On the Importance of Accounting Information for Stock Market Efficiency*. Doctoral thesis, Företagsekonomiska institutionen, Uppsala universitet, Uppsalla: University of upsalla
- Obamuyi, T. M. (2013). Factors influencing investment decisions in capital market: a study of individual investors in Nigeria. *Organizations and markets in emerging economies*, 4(1),
- Oshodin, E., & Mgbame, C. O. (2014). The comparative study of value relevance of financial information in the Nigeria banking and petroleum sectors. *Journal of Business Studies Quarterly*, 6(1), 42-54.
- Oyerinde, D. T. (2011). *Value- relevance of accounting information in the Nigerian stock market*. Ph.D Thesis, Covenant University, Ota, Nigeria
- Traub, E. (2001). Using ROE to analyse stock. *Stock Fundamentals. AAIJ Journal, America Association of Individual Investors*, 1 -7.
- Vijitha, P., & Nimalathasan, B. (2014). Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka. *Merit Research Journal of Business and Management*, 2(1), 001-006.
- Wang, J., Gang, F., & Chao, L. & 2013). Accounting Information and Stock Price Reaction of Listed Companies: Empirical Evidence from 60 Listed Companies in Shanghai Stock Exchange. *Journal of Business & Management* 2(2), 11-21.
- Watson, J., & Wells, P. (2005). *The association between various earnings and cash flow measures of firm performance and stock returns: Some Australian Evidence*. Working Papers. University of Technology, Sydney.
- Yi, A., Davey, H., & Eggleton, I.R.C. (2011). Towards a comprehensive theoretical framework for voluntary IC disclosure. *Journal of Intellectual Capital*, 12 (4), 571 – 585
- Zinbarg, M. (2005). *Research Method, 2nd Edition*. Pearson Publishers. London

EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON PERFORMANCE OF FAITH BASED ORGANIZATIONAL DEVELOPMENT IN KARU, NASARAWA STATE, NIGERIA

(A CASE STUDY OF WINNERS CHAPEL INTERNATIONAL, GOSHEN)

¹Caleb Y. Yashim, ²Tony Lohven Wuyep, ³Kassah Virginia, ⁴Stephen Bamidele

¹Department of Accounting
Bingham University, Karu, Nasarawa State
karlfancy@gmail.com
07035303440

²Department of Business Administration
Bingham University, Karu, Nasarawa State
Tonywuyep59@gmail.com
08033341521

³Department of Business Administration
Bingham University, Karu, Nasarawa State
Virginiakassah@binghamuni.edu.ng

⁴Department of Business Administration
Bingham University, Karu, Nasarawa State

Abstract

The study examines the Effect of Faith Based Organizational Corporate Social Responsibility on Community Development in Karu, Nasarawa State, Nigeria, using Winners Chapel International, Goshen as a Case Study. The study intends to find out how corporate social responsibility activities to community members enhance community development in Karu, Nasarawa State. Winners Chapel International claim that they are doing enough in terms of bringing development to the communities as part of their corporate social responsibility, yet the host communities remain hostile and constantly at variance with the company. Point in time data were collected from primary source. The Linear Regression Analysis was adopted and finding reveals that corporate social responsibility has a significant impact on the community development Karu, Nasarawa State. It is therefore recommended that CRS activities like basic social amenities, Provision of more security facilities, and more adequate poverty alleviation programs to community members and policies regarding these CRS should be improve to enable Living Faith Church (Winners Chapel) to operate openly in the community and add to their development and CRS activities performed by them in Karu, Nasarawa State should be appreciated by the communities and encouraged them to do more in the future.

Keywords: Corporate Social Responsibility, Basic Social Amenities, Adequate Security, Poverty Alleviation Programs, Community Development.

INTRODUCTION

In last few decades the concept of social responsibility has increased exponentially among the international community. Many organizations now find it as an obligation to give back to the community in which they operate as a means of public relations between the organization and their immediate communities. However, the concept of social responsibility among faith based organizations is a relatively new one. Corporate Social Responsibility (CSR) is a philosophy that contributes to the brand and goodwill of the institution and the stakeholders concerned (Figar & Figar, 2019). If the institution is a business institution or a non-profit institution, the name and goodwill are of immense importance to the core life and longevity of the institution, and where corporate social responsibility plays a significant role. For this reason, many businesses and organizations around the world are investing heavily in CSR departments to ensure their longevity and promote their brand and activities. Raheem (2019) opined that Corporate Social Responsibility may include; provision of health, provision of education, provision of security, in come generation, poverty alleviation programs (empowerment), and infrastructure development.

Community development is one of the most debatable concepts in Africa. Public policies, programs, and activities on community development are widely implemented across nations. Concept like smart city and smart village are the latest incorporation in community development. Public and private partnership efforts also boost these areas in the effort of guarantee the development for all; alongside we have history of philanthropy of contribution for development of poor, marginalized, and weaker sections of the society. Prior to mandate corporate contribution for development, many corporate had legacy of empathies the public issues of development and contribute towards positive change. However, post to Companies Act 2013, activities of community development by companies following the democratic, mandate and integrated development of all through the CSR activities. Consequently, present efforts by corporate should appreciate

in addressing community issues and need to adopt dynamic and rapid styles of community development for the better result (Cnaan et al, 2019).

The wave of globalization has influenced companies to be more committed to the social, economic, and environmental interests of their host communities by growing compliance and reporting on their corporate social responsibility (CSR) initiatives. The topic of CSR is so sensitive that contemporary multinational companies have shown that it is worthwhile as a tactic to have an impact on society without losing their primary objective (Haskins, 2019; Porter & Kramer, 2020). In view of this positive growth, CSR facilitated discussions from an academic and practitioner viewpoint, but little feedback from faith-based groups with a high preference for ethics and values; whereas statistics have shown that "ethics, values, integrity and responsibility are needed in a modern workplace" (Joyner & Payne, 2018). As a result, contemporary companies and individuals working in them are becoming ethically and spiritually more mindful of their corporate behavior and inactions. In this atmosphere, coordinated faith-based organizations have a major role to play in building and disseminating moral and ethical prescriptions that are compatible with religious doctrines and providing practical guidance to all parties engaged in business on ethical behavior. For example, the Interfaith Declaration on Business Ethics was created to codify the "Shared Moral, Ethical and Spiritual Values" of Christianity, Islam and Judaism with the goal of developing certain principles that could serve as guidelines for international business behavior" (Joyner & Payne, 2018).

In the United States, the burden of social welfare has never rested squarely with the federal or state government. Instead, reminiscent of the Elizabethan Poor Laws of 1601, individuals, the family, and the local community have been expected to shoulder a share of the social responsibility for the poor. However, not since the New Deal era policies (i.e. the Social Security Act of 1935) has the government expected the private sector to assume a dominant role in supplying social services.

Nigerian faith-based organizations and universities are therefore in a unique position to be especially successful in their work of serving local communities and sustaining global good precisely because of their faith-based and inspired missions. The missions of faith-based organizations are exceedingly powerful, integrating the optimism inherent in education with the gravitas of human eternity, the synergy of which is much more successful than any other element individually (Daniels, 2015). However, a qualification preface is required. Prior to exploring how faith-based colleges and universities are best placed to work efficiently for a common public good, awareness of current realities is also required. Among the recent faith-based organizations in Nigeria, there are major gaps in knowledge and perception of the concept of public good and dedication to and meaningful work for the public good. At the end of the day this diversity is simply a result of the wide diversity of faith-based colleges and universities in Nigeria and in addition, of the multitude of denominations, religious practices and religions that underpin these faith-based organizations.

However, faith-based organizations are typically an open framework in which their internal and external variables communicate dynamically with each other. Interactions are influencing organizational behaviors, outcomes, and primary approaches to corporate social responsibility (CSR). Faith-based organizations need to do more to regain the confidence of various stakeholder groups. Not surprisingly, the strategic problems of CSR have attracted significant academic and managerial attention in a number of contexts, such as organizational success (McWilliams & Siegel, 2018; Zairi & Peters, 2019), law (Valle'e, 2019) and business ethics (Robertson & Crittenden, 2018). Given these positive social developments, the general consensus about what constitutes a CSR organization in the diverse business world is far from definitive. There are still complicated moral problems dividing people with different religious affiliations in the geopolitical world of the twenty-first (21st century). And the behaviors of strategizing for ideals that underlie the concepts of CSR are distinct from having knowledge of them. This suggests, for a novel perspective, that the current CSR literature on religious systems is focused on the discovery of

certain secret views, which may be seminal, in the explanation of corporate sustainability, given the scarce literature written on the subject.

The study is motivated by the fact that faith-based organizations in the karu, Nasarawa state make an immense contribution to the socio-economic growth of the state. Baridam (2018) argued that being socially responsible to organizations would lead to mutual satisfaction of both the organization and its immediate environment through interaction. While Osaze (2019), Justin, Wadike (2020) noted that the setting of organizational goals and corporate strategies should include the immediate context in which it operates, in order to strategically address the possible complexities of political social, economic and environmental problems, yet to identify the limits to which the policies and behavior of organizations should cover it. However the application of Corporate Social Responsibility can be very difficult, as it appears to impose excessive pressure on companies to meet community needs (Baughn et al., 2017). There are thriving Corporate Social Responsibility ventures in developing and promising perspectives (Baskin, 2016), but there are still questions about the potential of Corporate Social Responsibility to contribute to development and to resolve some of the imperative setbacks facing the poorest sections of the state, considering that the most of Corporate Social Responsibility programs focus on (Banerjee, 2017). However, Corporate Social Responsibility is an organizational phenomenon, as it has recently been incorporated into the corporate strategy of most companies.

However, in Nigeria, corporate organization remains focused on philanthropy, which is primarily motivated an influenced by its social, religious, and cultural aspects of the nation. Although, the Nigerian government has not pressured organizations to enact CSR policies aimed at developing the host society. Faith-based organization (Winners Chapel International) is regarded as a Pentecostal church) uses the Holy Bible literally as the authentic Word of God providing the theocratic mandate for its structure and operations. The interpretation of the scriptures by the church will therefore determine how far the mandate extends to care of the fatherless and the widow,

to ensure justice is done, to give food to the hungry.

Statement of the Problem

Winner's church has been engaging in CSR in its community but there is still resistance from the community prompting this study to show how CSR can be used for smoother relationship with the host community. Besides; the society has become concerned about the greater influence and progress by firms have not been accompanied by equal effort and desire in addressing important social issues including problems of poverty, drug abuse, crime, provision of basic amenities, improper treatment of workers, faulty production output and environmental damage or pollution by the industries as it has overtime been reported in the media. Thereby, this makes Corporate Social Responsibility (CSR) a no push-over in our current corporate business world (Aluko et al., 2004). Posk, et al (1999) as a matter of fact, believe that Corporate Social Responsibility means that a corporation should be held accountable for any of its actions that affect people, communities, and its environment. It implies that negative business impacts on people and society should be acknowledged and corrected, if possible.

Effect of Faith Based Organizational Corporate Social Responsibility on Community Development has been a focus of a substantial amount of empirical research for recent years. For instance, Nguyen (2017), Castka and Baizakova (2018), Steven and Philip (2018), Hassey; and Igbara, (2019), Chaves and Higgins (2020), and Adeyanju (2020). Their studies concentrated on the corporate social responsibility (proxied by Social Capital, benefits of Corporate Social Responsibility, Social and Family Supports, Compensation, Health and Wellbeing, and provision of Education. But however, no study focuses on the operational variables that were used in this research study, which are Provision of basic Amenities, Provision good Security, and Poverty Alleviation Programs. Besides, based on the researcher's knowledge, no study focused on Effect of Faith Based Organizational Corporate Social Responsibility on Community Development in Karu Local Government Area of Nasarawa State, Nigeria, and used Winners Chapel International, Goshen

as a case study. Therefore, it is against these backdrops that this research strives to examine the effect of Faith Based Organizational Corporate Social Responsibility On Community Development In Karu, Nasarawa State, Nigeria (A Case Study Of Winners Chapel International, Goshen)

Objectives of the Study

The main objective of this study is to examine the effect of Faith Based Organizational Corporate Social Responsibility on the Community Development in Karu, Nasarawa State, Nigeria, a Case Study of Winners Chapel International Goshen. The specific objectives are to:

- i. Examine the effect of provision of basic amenities by Winners Chapel International on the community development in Karu, Nasarawa State, Nigeria.
- ii. Evaluate the effect of provision of good security by Winners Chapel International on the community development in Karu, Nasarawa State, Nigeria.
- iii. Assess the effect of Poverty alleviation programs organized by Winners Chapel International on the community development in Karu, Nasarawa State, Nigeria.

Statement of Hypothesis

In a study of this magnitude, it is essential that hypotheses are formulated if the study objectives must be achieved. To this end, the following hypotheses were formulated in null form:

HO₁: Provision of basic amenities by Winners Chapel International has no significant effect on the community development in Karu, Nasarawa State, Nigeria.

HO₁: Provision of good security by Winners Chapel International has no significant effect on the community development in Karu, Nasarawa State, Nigeria.

HO₁: Poverty alleviation programs organized by Winners Chapel International have no significant effect on the community development in Karu, Nasarawa State, Nigeria.

LITERATURE REVIEW

Conceptual Framework

This section conceptualized the operational variables used in this research study.

Corporate Social Responsibility (CSR)

Habisch, e'tal (2015) opined that corporate social responsibility is the extent to which and the way in which an organization consciously assumes responsibility for and justifies its actions and non-actions and assesses the impact of those actions on its legitimate constituencies. Kotler and Lee (2016) assert that corporate social responsibility is a commitment to improve community well-being through discretionary business practices and contributions of corporate resources.

Consequently, Adeyanju (2012) believes that corporate social responsibility means that a corporation should be held accountable for any of its actions that affect people, communities, and its environment. It implies that negative business impacts on people and society should be acknowledged and corrected, if possible. Rahman (2018) defined corporate social responsibility as the manager's duty or obligation to make decision that nurture project, enhance, and promote the welfare and wellbeing of stakeholders and society as a whole. European Union (2014) saw corporate social responsibility as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

The CSR is a way of life and a key corporate know-how inside an organization. Managers' views of the CSR are defined by their learning, knowledge and schooling. The nature of culture and its evolution and changes within an organization have an influence on the CSR. A closely shared value-, intent-, result-and stakeholder-driven CSR can therefore be enormous driving forces that affect every aspect of the company's operations. Christians and Muslims should, through their own example, nurture their timeless social duty and morality in the society they represent (Chaves & Tsistos, 2019). They demonstrate the values of social responsibility in such a way that they do not oppose but pursue the highest benefit of the others in their host communities. The issue

with accurate CSR is that it sometimes leads to an unacceptable attitude; it simply becomes a public relationship exercise or a window dressing technique that masks unethical corporate practices in host communities.

Basic Social Amenities

Cnaan (2017) viewed **basic amenities as those things considered to be essential to make life easier and more pleasant**. The government intends to provide the isolated town with basic amenities, such as roads, running water, and electricity. The mean the minimum improvements necessary and reasonable to enable people to safely use recreational lands. Local government provides basic amenities of a particular place such as water supply and sanitation, roads and drains, street-lights, collection and disposal of solid waste, maintenance of public places, burial grounds and crematoria, cattle pounds, registration of births and deaths, maintenance of markets have long been seen as the function of municipal bodies. Local government serves a two-fold purpose. The first purpose is the administrative purpose of supplying goods and services; the other purpose is to represent and involve citizens in determining specific local public needs and how these local needs can be met (Chang et al., 2018).

Security

Akpomuvie (2019) defined security as **freedom from risk or danger; safety freedom from doubt, anxiety, or fear; confidence**; something that gives or assures safety. These are measures adopted by a government to prevent espionage, sabotage, or attack. Security is freedom from, or resilience against, potential harm (or other unwanted coercive change) caused by others. Beneficiaries (technically referents) of security may be of persons and social groups, objects and institutions, ecosystems or any other entity or phenomenon vulnerable to unwanted change. Security mostly refers to protection from hostile forces, but it has a wide range of other senses: for example, as the absence of harm (e.g. freedom from want); as the presence of an essential good (e.g. food security); as resilience against potential damage or harm (e.g. secure foundations); as secrecy (e.g. a secure telephone line); as containment (e.g. a secure room or cell); and as a state of mind (e.g. emotional security) (Skrentny, 2015).

Poverty Alleviation Programs

What is Poverty Alleviation? Poverty alleviation aims to **improve the quality of life for those people currently living in poverty. Another term that is often used is poverty reduction.** Bichta (2019) defined poverty alleviation as the set of steps taken in an economic and humanitarian way for eradicating poverty from a country. According to the World Bank, if a person is living on \$1.90 a day or less, then he/she is living in extreme poverty and currently, 767 million people of the world fall under that category. Poverty alleviation programs refer to tools such as free education, free school meals for children, debt relief to small farmers, free healthcare facilities for poor etc to improve living conditions of the section of society which is unable to fulfill even the basic necessities of life by government and internationally approved organizations. In short, these programs aim to improve the quality of life for those people living in poverty (Shaffer, 2016).

Community Development (CD)

Community Development is the process of developing active and sustainable communities based on social justice and mutual respect. It is about influencing power structures to remove the barriers that prevent people from participating in the issues that affect their lives (Federation of Community Development Learning, 2019). Community development is the combined processes, programs, strategies, and activities that make a community sustainable as compared to economic development which is the marketing of its potential for growth followed by local efforts to act on opportunities. The entire set of approaches to community development practice may be considered a specialized form addressing, coordinating, and building the social infrastructure at a location. CD may be defined as a process of challenging the undesirable and unacceptable disparity of conditions and infrastructure that negatively affect the quality of life in a place where people live and work. It functions best as process in locations where all strata of society and citizenry are engaged with sense of community solidarity (Community Glossary, 2019). It is the creation of wealth – wealth meaning the things people value, not just dollars (Shaffer, 2018).

Community development (CD) refers to initiatives undertaken by the community with partnership with external organizations or corporations to empower individuals and groups of people by providing these groups with the skills they need to effect change in their own communities. These skills are often concentrated around making use of local resources and building political power through the formation of large social groups working for a common agenda. Community developers must understand both how to work with individuals and how to affect communities' positions within the context of larger social institutions. CD is the process of developing active and sustainable communities based on social justice and mutual respect. It is about influencing power structures to remove the barriers that prevent people from participating in the issues that affect their lives (David, 2012)..

Empirical Review

Asumah (2020) carried out a research to determine the effect of CSR activities of Anglogold Ashantion Obuasi community in Malaysia. Survey research design was used, and data were analyzed using regression analysis. The study found that the executed CSR activities, most especially the basic amenities provided by the company have an influence on the lives of the people in the community. The study recommended that government should provide more CSR services to Anglogold Ashantion Obuasi community. The study was conducted in Malaysia, but however this present study was conducted in Karu, Nasarawa State Abuja, Nigeria.

Issifu (2019) carried out a research on effect of CSR activities on CD. The study adopted Survey research design; data were analyzed using Chi-square. The findings of the study depicted that the strategically developed CSR model transferred from Newmont mines in Minera Yanacocha in South Africa, Peru, and Bolivia has positively contributed to peace and CD in mining areas in Ghana. It was also revealed that the CD foundation fund set up by the Newmont Ghana Gold Limited has helped to improve the economic self-sufficiency of the host communities relevant for peace and development. The study recommended that African governments should involve in a complete CSR. The method of analysis used for

their study was insufficient and unreliable. This is because many researchers, statisticians, and econometricians believe that chi-square method of analysis is not accurate and reliable. But however, this present study used a method that is widely used for analyzing of data, which is Linear Regression.

Ansah (2019) in his study relating to CSR in Ghana: A Comparative Analysis and Business Imperative, analysis data using Ordinary Least Square, found that CSR programs to be community focus initiatives, mainly programs on education and programs on CD. It is apparent from the forgoing empirical findings that CSR plays an instrumental function in CD and also provides value to firms that involve in it resulting to their long-term success and survival. It must also be emphasized that companies' participation in CD initiatives leads to a congenial relationship between companies and their host communities. It is suggested that government and Communities expects in business organizations operating in their territories to partake in social development projects, being mindful of the negative consequences of their operations on the communities and act in a socially responsible way. The results of their study could be spurious, because he did not carry out normality test of the data. Normality test of the data must be carried out for qualitative study to determine whether to use Linear Regression Analysis/Karl Pearson Correlation Analysis or Ordinal Regression Analysis/Spareman Rank Correlation. But consequently, this present study carried out the normality test of the data before testing the three formulated hypotheses. Amoako (2018), on how the CSR contributions of five Multi-National Companies in Kenya in local communities; data were analyzed using regression analysis. The findings of the study revealed that provision of security facilities do not play a major part in CD. The study suggested that sufficient security facilities should be provided to the communities. Their study was conduct in Kenya, but however this present study was conducted in Abuja, Nigeria. The results of his study could be spurious, because he did not carry out normality test of the data. Normality test of the data must be carried out for qualitative study to determine whether to use Linear Regression Analysis/Karl Pearson Correlation Analysis or Ordinal Regression Analysis/Spareman Rank Correlation. But

however, this present study carried out the normality test of the data before testing the three formulated hypotheses.

David, (2017) examines community expectations of CSR and the influence of the traditional, political, and administrative systems on community expectations of CSR in the Niger Delta region. He used quantitative research design and a case study method employing the used of questionnaire. Data were analyzed using principal of content and contextual analysis to ascertain the role of CSR, oil industry CSR practices in the Niger Delta and the findings show that community expectations (poverty alleviation programs) were framed through the lens of underdevelopment and its implications for the social and economic wellbeing of the indigenes. This implies there is a relationship between CRS and community development. The above study analyzed the data collected using the Content and Contextual Analysis, while this current study analyzed the collected data using Linear Regression Analysis.

Usman (2015) investigates the effects of corporate social responsibility on community Development in Abuja, Nigeria using Julius Berger Company as the case study. The study found out how corporate social responsibility (social causes, provision for basic social amenities and compensation to community members) affects community development. Point in time data were collected from primary source with the used of questionnaire covering a period of 10 years from 2004 to 2014. Ordinary Least Square was adopted and finding reveals that there is a significant relationship between corporate social responsibility and community development in Abuja Nigeria.

Dagwom, e'tal (2014) examines how effective Corporate Social Responsibility (CSR) is for the enhancement of community relations in Nigeria. This is a case study of Grand Cereals Limited, situated in Zawan community of Plateau State using Likert-type questionnaires are used to collect data from the community and the data are presented in a multiple bar chart. Likert scale data from the questionnaires were analyzed using Chi-square and the population was 10 respondents

and this was used as a sample size. The study finds that poverty alleviation activities of Grand Cereals Limited are effective to the Zawan community based on community perception on matters enhancing community relations. This implies that there is a significant relationship between corporate social responsibility and community development. The study was conducted in Plateau State, but this present study was conducted in Karu, Nasarawa State Abuja, Nigeria.

Alabi and Ntukekpo (2012) examines the impact of Oil Companies on Corporate Social Responsibility in Nigeria: An Empirical Assessment of Chevron's Community Development Projects in the Niger Delta using descriptive survey research to assess the CSR efforts of one of the oil Companies - Chevron, in three oil communities of Niger Delta; 150 opinion leaders from three communities were purposively selected for participation in the study. Data were generated with Corporate Social Responsibility Project Assessment Instrument (CSRPAI) ($r=0.84$). The results indicate that although, the community development efforts of Chevron are significant and were actually on ground in the three communities and that CSR were considered not satisfactory or relevant enough to the needs of the community dwellers. The study was conducted in Niger Delta, but however this present study was conducted in Karu, Nasarawa State Abuja, Nigeria.

Theoretical Framework

Social-Categorization Theory

The social-categorization theory by Turner (1987), suggests that people belong to many different social groups (e.g. nation, religion, organization, school). It predicts that individuals sort themselves into identity groups based upon salient characteristics and that they act in concert with their categories and favour contexts that affirm group identity (Hogg & Terry, 2010). Consequently, dissimilar individuals are less likely to collaborate with one another compared to similar individuals. In this way, social categorization may disrupt elaboration of task-relevant information because of possible biases towards in-group members and negative biases towards out-group members. (Knippenberg, Kleef & De-

Dreu, 2007). This is a theory of the self, group processes, and social cognition which emerged from research on social identity theory (Turner, 1987). It is concerned with variation in self-categorization in the level, content, and meaning of self-categories. It focuses on the distinction between personal and social identity. Social-categorization theory seeks to show how the emergent, higher order processes of group behaviour can be explained in terms of a shift in self-perception from self-categorization in terms of personal identity to self-categorization in terms of social identity. Ethnicity of employees may be viewed as a dimension of social category diversity. Thus, employees in an organization may sort themselves in social categories of particular ethnic group. This may influence their group behaviour as well as responses to the micro and macroeconomic environment

Social Cost Theory

The social cost theory has a basis for CSR in which the socio-economic system in the community is said to be influenced by the corporate non-economic forces. It is also called instrumental theory (Garriga & Mele, 2004) because it is understood that CSR as a mere means to the end, which leads to the fact that the social power of the corporation is materialized specifically in its political relationship with society. It suggests that the corporation needs to accept social duties and rights to participate in social co-operation. Within it, the functionalist theory, specifically advocates that the corporation is seen as a part of the economic system, which one of the goals is profit making. The firm is viewed as an investment, and investment should be profitable to the investors and stakeholders. Putting it from the internal point of view of the firm, CSR was coined as a defense tactic of the industrial system against external attacks because there needs a balance between profit making and social objectives for the economic system's equilibrium.

Stakeholder Theory

This study is based on the stakeholder theory propounded by Edward Freeman in 1948. The theory states that business firms owe responsibility to broad range of stakeholders, other than just shareholders. "Stakeholders" refers to all parties who effect or are affected by corporate actions. It includes employees,

suppliers, customers, government, investors, community and environment (Astrie, Gatot and Yuni 2014). The major assumption of the theory is that business firms owe corporate accountability towards broad range of stakeholders' interest. It considers a firm as an interconnected web of different interest. The profunder recognized this theory as one of the strategies in improving the management of firms' social responsible behavior. The basis for adopting this theory in this study is that it reveals that mining firms as corporations have responsibilities to a wider group of stakeholders. Firms' social responsibility programs are anticipated to create development within its host community overtime.

METHODOLOGY

The research design used for this work was the survey research design. In this research work, questionnaire was used for the collection of data. Also, the use of survey research design is due to the fact that the data are point in time. The population of this study comprised of all the household in Auta Gurgu community in Karu, Nasarawa State, Nigeria, which according to the field survey (2021) is 766 households. And the sample size was reduced using the computation below; the sample size of this study was derived using Yaro Yamane formula to estimate it.

Taro Yamane formula:

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

Where:

n = Desired sample size

N = Population of the study

e = precision of sampling error (0.05)

Therefore,

$$\begin{aligned} n &= 766/1 + 766 (0.05)^2 \\ n &= 766/1 + 766 (0.0025) \\ n &= 766/1 + 1.915 \\ n &= 766/2.915 \\ n &= 262.77 \\ n &= 263 \end{aligned}$$

Therefore the sample size for this study is 263. A questionnaire was design to collect a point in time data from the households of Auta Gurgu community, and the questionnaire was administered to all the respondents randomly.

The researchers collected the information through the helped of some community members. Besides, a five point likert scale was also designed and 263 copies of questionnaire were distributed.

Descriptive and inferential methods of analysis were employed for this study. Descriptive statistical tools were used to present the demographic characteristics of the respondents, while inferential statistical tools were used to test the formulated hypotheses. Data analysis was carried out using IBM Statistical Package for the Social Sciences (SPSS) version 23 software. Inferential analysis (regression) was applied to test hypothesis one to three in order to examine the effects of the independent variable on the dependent variable.

However, this study consists of two broad variables, Corporate Social Responsibility and the Community Development being the independent and dependent variables respectively. The relationship between the two variables can be

$$CD = \beta_0 + \beta_1BA + \beta_2GE + \beta_3\beta_2PAP + \varepsilon$$

Where:

CD = Community Development

BA= Basic Amenities

GS = Good Security

PAP = Poverty Alleviation Program

β_0 is the intercept of the regression model of Community Development.

β_1 , β_2 and β_3 are rates of change of the Corporate Social Responsibility variables with respect to Community Development variable

ε is the error term associated with Corporate Social Responsibility variables with respect to Community Development variable

RESULTS AND DISCUSSIONS

The study employed the use of empirical survey of which questionnaires were distributed to two hundred and sixty-three (263) respondents, but two hundred and fifty (250) were properly filled and returned. The 250 represents 95.06% of the respondent, which is sufficient for the inferential study.

Normality Test

The study starts by examining the normality of the variables (data) used for this research study (distribution of the data) in the econometric review. To avoid spurious results, and for results to be more accurate and reliable, data must be normally distributed. If data are normally distributed, we adopt the Parametric Method (Linear Regression) to test the formulated hypotheses. But however, if data are not normally distributed, we adopt the Non-

parametric Method (Ordinal Regression) to test the formulated hypotheses.

Decision Criteria

If the P-values under the Kolmogorov-Smirnov test of normality is greater than 0.05, we accept the null hypothesis; but if the P-values under the Kolmogorov-Smirnov test of normality is less than 0.05, we reject the null hypothesis.

H₀: Variables are normally distributed

H_a: Variables are not normally distributed

Table 1: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
BA	.212	250	.041	.835	250	.153
GE	.160	250	.041	.897	250	.142
PAP	.166	250	.041	.919	250	.301
CD	.174	250	.041	.884	250	.142

Source: Author's compilation (2021) using SPSS 23

The above table presents the results from the two well-known tests of normality, namely the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as large as 2000. For this reason, we will use the Shapiro-Wilk test as our numerical means of assessing normality.

We can see from the above table that for the independent variables "BA", "GE" and "PAP" and dependent variable, "CD", were normally distributed. If the Sig. value of the Shapiro-Wilk Test is greater than 0.05, the data is said to be normally distributed. Also, if it is below 0.05, the data significantly deviate from a normal distribution. Therefore, based on this, we accept the H₀ that all the variables are normally distributed; this is because all the P-values of the four variables are more than 0.05. Thus, we adopt the Parametric Method of

analysis (Linear Regression Analysis) to test the three formulated hypotheses.

Test of Hypotheses

The hypotheses were tested with the stated model. The a priori expectation of the study states that: $\beta_1, \beta_2, \beta_3, > 0$. A positive relationship is expected between the dependent and the independent variables.

Decision Rule

With the Ordinal Regression Model, the hypotheses are tested by measuring the P-value to the degree of significance (0.05), the importance of the variables evaluated in the model is measured. If the P-value is less than the significance level, the H₀ is rejected and we thus infer that the variable under consideration is significant. Otherwise, the null hypothesis is accepted and we conclude that the independent variable under consideration has no significant effect on the dependent variable.

Test of Hypothesis

Corporate Social Responsibility and the Community Development

Table 2a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803 ^a	.644	.640	.61663

a. Predictors: (Constant), BA, GE, PAP

Table 2a above revealed that there is a strong relationship at $R = .80$ between Corporate Social Responsibility and the Community Development. An examination of the table also shows that $R^2 = .640$ which implies that Corporate Social Responsibility accounts for 64% of variations having a significant effect on

Community Development. This implies that that 64% changes in the Community Development are explained by the changes in the Corporate Social Responsibility. Also, that only about 36% other factors that could bring about changes in the model were not included.

Table 2 b: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	127.413	2	63.707	167.548	.000 ^b
	Residual	70.342	185	.380		
	Total	197.756	187			

a. Dependent Variable: CD

b. Predictors: (Constant), BA, GE, PAP

The above table shows that the F-value is the Mean Square Regression (63.707) divided by the Mean Square Residual (.380), yielding $F = 167.548$. From the results, the model in this table is statistically significant (Sig

$= .000$). Therefore, Corporate Social Responsibility (Basic Amenities, Good Security, and Poverty Alleviation Programs) /is/are significant predictors of Community Development.

Table 2c: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant BA	-.122	.663		-.184	.855
		1.893	.104	.861	18.130	.000
	GS	1.635	.214	.774	15.210	.000
	PAP	-.989	.116	-.219	-4.617	.061

a. Dependent Variable: CD

The table above revealed the degree of influence of Corporate Social Responsibility and Community Development, and their levels of significance. The statistical results are as follows; (BA; $\beta = .861$, $t = 18.130$; $p < 0.05$). Therefore, the statistical results imply that Basic Amenities are significant predictors of Community Development. Also, the table shows that (GS; $\beta = .774$, $t = 15.210$; $p < 0.05$). Thus, the statistical results imply that Good Security is a significant predictor of Community Development. Finally, the table reveals that (RAP; $\beta = -.219$, $t = -4.617$; $p < 0.05$). Therefore, the statistical results imply that Poverty Alleviation Program is not a significant predictor of Community Development.

Discussion of Findings

The study revealed that there is a strong relationship at $R = .80$ between Corporate Social Responsibility and the Community Development. An examination of the table also shows that $R^2 = .640$ which implies that Corporate Social Responsibility accounts for 64% of variations having a significant effect on Community Development. This implies that that 64% changes in the Community Development are explained by the changes in the Corporate Social Responsibility. Also, that only about 36% other factors that could bring about changes in the model were not included. Also, it is revealed that Corporate Social Responsibility has a significant effect on Community Development.

Besides, the study revealed that provision of basic amenities has a significant effect on community development. This finding is consistent with the study of Asumah (2020) who carried out a research to determine the effect of CSR activities of Anglogold Ashantion Obuasi community in Malaysia, and Usman (2015) who investigates the effects of corporate social responsibility on community Development in Abuja. Furthermore, the study revealed that provision of good security facilities has a significant effect on community development. This finding is not in agreement with the study of Amoako (2018), who carried study on how the CSR contributions of five Multi-National Companies in Kenya in local communities. Finally, the study revealed that poverty alleviation program has not any significant effect on community development. This study does not collaborate with the finding of Dagwom and Mabur (2014) who examined how effective Corporate Social Responsibility (CSR) is for the enhancement of community relations in Nigeria.

CONCLUSION AND RECOMMENDATION

Arising from the above specific findings, the study has established that faith-based organizational (Winner' Chapel International's) corporate social responsibilities has a significant effect on the community development, specifically, Auta Gurgu in Karu Local Government Area of Nasarawa State, Nigeria. Besides, the study concludes that: first, the social basic amenities provided by Winner Chapel International have significant effect on the development of Auta Guru Community in Karu Local Government Area of Nasarawa State, Nigeria. This implies that despite the challenges faced by faith-based organizations in the community, majority of the members have absolute trust and confidence on the various social basic amenities they enjoy and thus, providing them with requisite capacity to be self-sustaining and empowered.

Second, the study concludes that the security facilities provided by Winner Chapel International have significant effect on the development of Auta Gurgu community in Karu Local Government Area of Nasarawa State, Nigeria. This implies that CRS activities like the provision of Goshen Police Station and adequate security facilities provided to community members and policies will help the

church to operate freely in the community and add to their development; and CRS activities performed by Winner chapel should be appreciated by the communities and encouraged them to do more in the future.

Finally, the study concludes that poverty alleviation programs organized by Winner Chapel International have no any significant effect on the development of Auta Gurgu community in Karu Local Government Area of Nasarawa State, Nigeria. This means that poverty alleviation programs organized by Winner Chapel International in the community are not enough to contribute towards Auta Gurgu community development.

However, based on the above conclusion, the following are recommended:

- i. Winner Chapel International should collaborate with the Nasarawa State government to provide more adequate social amenities that could affect the people of Karu communities; e.g. health, education, water, electricity; unemployment, hunger etc. needs and requires some more concrete church activities that can solve community social economic problems.
- ii. Winner Chapel International should collaborate with the Nasarawa State government to provide more adequate security facilities like Establish a community watch, improve lighting, clean up, take care of your home and neighborhood homes, address empty buildings, hire a security service, make sure your neighbors know the basics of staying safe, and building of more police station; however, this may reduce the rate of crime in Nasarawa State.
- iii. The church is a good community asset and community members seem to acknowledge with pride its presence. The church should focus on capacity building where community can develop skills and competency needed by the community in order to have a better control of their lives. Winner Chapel International should provide more poverty alleviation programs to reduce the rate of poverty in Karu communities. The local church should sec; community development programs

as part and parcel of their ministry. As the local church is part of the community; it should embark on community empowerment programs aimed at enabling people identify, analyze, plan and take action to solve their problems so that people can live fulfilled lives.

REFERENCES

- Adeyanju, O. D. (2020). An assessment of the impact of corporate social responsibility on Nigeria society. *Universal Journal of Marketing and Business Research*, 1(1): 17-43.
- Akpomovie, O. U. (2019) Self-help as a Strategy for Rural Development in Nigeria: Bottom-up Approach. *Journal of Alternative Perspectives in the Social Sciences*, 2(1): 88-111
- Alabi, J.C & Ntukekpo, U, (2012). Impact of Oil Companies on Corporate Social Responsibility in Nigeria: An Empirical Assessment of Chevron's Community Development Projects in the Niger Delta using descriptive survey research to assess the CSR efforts of one of the oil Companies - Chevron, in three oil communities of Niger Delta. *Journal for the Scientific Study of Religion*, 39(3), 371-384.
- Aluko, M, Odugbasan, O. and Osuagwu, L. (2004) *business policy and strategy*, Nigeria: Longman Publishers.
- Banerjee, S. J. (2017). The effect of environmental corporate social responsibility on environmental performance and business competitiveness: The mediation of green information technology capital. *Journal of Business Ethics*, 1-19.
- Baridam. G.J. (2018). From Norms to Programs: The United Nations Global Compact and Global Governance. *Regulation & Governance* 6(2), 149-166.
- Baughn, D. M., Huly, M., & Akron, S. (2017). Corporate social responsibility, environmental leadership and financial performance. *Social Responsibility Journal*, 11(1), 131-148
- Bichta C. (2019), Corporate socially responsible industry (CSR) practices in the context of Greek, *Social Responsibility and Environmental Management*, 10, 12-24.
- Baskin, N. (2016). Measuring Organisational Performance: From Balanced Scorecard to Balanced ESG Framework. *International Journal of Economics, Commerce and Management*, Issue 11, ISSN 2348 0386: UK.
- Chang, P., Williams, M.Y., David, R., Griffith, Ezra H.E., & Young, J. (2018). Church-agency relationships in the black community. *Nonprofit and Voluntary Sector Quarterly*, 23, 91-106.
- Castka P.& Baizakova, M. A. (2018). IS0260000 and supply chain on the diffusion of social responsibility standard. *International Journal of production Economics*, 113: 74-87
- Chaves, M., & Tsistos, W. (2019). Congregations and social services: What they do, how they do it, and with whom. *Nonprofit and Voluntary Sector Quarterly*, 30(4), 660-683.
- Chaves, M., & Higgins, L.M. (2020). Comparing the community involvement of black and white congregations. *Journal for the Scientific Study of Religion*, 31(4), 425-440.
- Cnaan, R.A. (2017). *Social and community involvement of local religious congregations: A neglected community practice arena*. Philadelphia: School of Social Work, University of Pennsylvania.
- Cnaan, R.A., Wineburg, R.J., & Boddie, S.C. (2018). *The newer deal: Social work and religion in partnership*. New York: Columbia University Press.
- Cheruiyot, T. K., & Tarus, D. K. (2016). Corporate social responsibility in Kenya: Reflections and implications. In *Corporate social responsibility in Sub-Saharan Africa* (pp. 87-110). Springer, Cham.
- Daniels, G.L. (2015). Oil Companies and Corporate Social Responsibility in Nigeria: An Empirical Assessment of Chevron's Community Development Projects in the Niger Delta. *British Journal of Arts and Social Sciences* 4 (2), 112-134

- [David O. (2012). Corporate Social Responsibility: Case Study of Community Expectations and the Administrative Systems, Niger Delta. *The Qualitative Report*, 17(73) 1-27
- Figar, N., & Figar, V. (2019). Corporate social responsibility in the context of the stakeholder theory. *Facta universitatis-series: Economics and Organization*, 8(1), 1-13.
- George Kell, (2018). The Future of Corporate Responsibility. Berlin, *Forbes Media LLC*.
- Hassey, A.B.; & Igbara, F.N. (2019) Engaging MOU and People's Participation in Project Implementation: Imperative for Sustainable Community Development in Nigeria. *Research on Humanities and Social Science*, 3(2), 27-41.
- Haskins, A.B. (2019). Corporate social responsibility and product quality: Complements or substitutes? *Int Journ of Res in Marketing*. 34(3), 734-74
- Joyner, F. & Payne, C. (2018). Faith-Based communities and welfare reform: California religious community capacity study: Quantitative Findings and Conclusions (pp. 66-84). In *Can we make welfare reform work? California religious community capacity study*. Sacramento, CA: California Council of Churches.
- McWilliams, N. & Siegel, W. (2018). Engaging firms: The Global Organisational field for corporate social responsibility and national varieties of capitalism. *Policy and Society*, 35 (2016) 13–27.
- Nguyen, N. & Leblance, A. (2017). Corporate image and corporate reputation in customers' retentions decision in service, *Journal of Retailing and Consumer*, 8: 227-236.
- Porter, K., & Kramer, D. (2012). An institution of Corporate Social Responsibility (CSR) in Multi-National Corporations (MNCs): Form and Implications. *Journal of Business Ethics*, 37(2), 1-19.
- Posk, H. G., Nwaeke, L.I. & Keasling, N. R. (1999). Caring for people in need: 21st Century Benevolence. (Study guide). Cleveland, Tennessee: Church of God School of Ministry
- Wadike; N. (2020). Business Ethics and Corporate Social Responsibility Attitudes among SME Leaders in Romania. In *Proceedings of the International Management Conference* (Vol. 9, No. 1, pp. 830-839). Faculty of Management, Academy of Economic Studies, Bucharest, Romania.
- Valle'e, J. M. (2019). An Assessment of the Impact of Corporate Social Responsibility on the Strategic Intent at Standard Chartered Bank Kenya Limited. *International Journal of Education and Research*, 1(5) 1-16.
- Raheem, M. (2019). Ethics and Multinational Companies in Developing Countries. *Journal of Business Enterprises*, 8(1), 136 – 149.
- Robertson, D. & Crittenden, K. (2018). Competitive advantage through sponsorship: A conceptual model and research propositions. *European Journal of Marketing*, 38(8), 1013-1030.
- Shaffer, R. E. (2016). *Community Economics. Economic Structure and Change in Smaller Communities*. Iowa State University Press, Ames, Iowa.
- Skrentny, J.D. (2015). *The ironies of affirmative action: Politics, culture, and justice in America*. Chicago, IL: The University of Chicago Press.
- Steven. L. W. & Philip L. C. (2018), The Evolution of the Corporate Social Performance Model. *The Academy of Management Review*, 10(4), 758-769
- Zairi, V. P., & Peters, C. (2019). Conceptualization of CSR among Muslim consumers in Dubai: Evolving from philanthropy to ethical and economic orientations. *Journal of Business Ethics*, 136(1), 167-179.

AN EMPIRICAL ANALYSIS OF PENSION FUND INVESTMENT AND NIGERIAN CAPITAL MARKET DEVELOPMENT

¹Yusuf Paul Yaki, ²Caleb Y. Yashim

¹Bursary Department
Bingham University, Karu, Nasarawa State, Nigeria
Email: paulyyusuf@gmail.com
Phone Number: 07035303440

²Department of Accounting
Bingham University, Karu, Nasarawa State, Nigeria
Email: karlfancy@gmail.com
Phone Number: 08064670970

Abstract

This paper examines the dynamic and causal relationship between pension fund investment and capital market development in Nigeria. The paper employed the Autoregressive distributed lag model to estimate the cointegration relationship between the variables. The results indicate that in the long-run, the impact of local ordinary share (LOC) on total market capitalization was positive and statistically significant while Pension fund investment asset (PFI) and monetary policy rate (MPR) were positive and statistically insignificant. Also, when the total value of shares traded was used as a measure of capital market development, the results indicate that increase in lag one and lag three of the total value of stock traded and lag one of pension fund investment results in an increase in the total value of stock traded. In terms of which variable granger causes the other, the results indicate that none of the variable Granger causes each other meaning that both variables (Pension fund investment and Market Capitalization) are determined independently. That is, neither pension fund investment causes total market capitalization nor Total Market Capitalization granger cause Pension fund investment. Based on the findings of the study the paper, therefore, concludes that over the years the investment of pension funds into the capital market has assisted to engender the development of the Nigeria Capital market. The paper recommends that more pension fund investment should be channelled to the capital market to develop and strengthen the Nigerian capital market and make the market more competitive.

Keywords: Pension Fund Investment, Capital Market Development, Total Market Capitalization, Total Value of Stock Traded

INTRODUCTION

The link between pension contribution fund and capital market development is a topical issue among scholars and policymakers. The issue of pension has received much attention in many countries over the past decades. In fact, in

recent times, the pension has increasingly attracted the attention of policymakers in many countries as a means of facilitating privately funded retirement income savings by an aging workforce (World Bank, 2018). Many countries have opted for various forms of contributory

pension scheme where employers and their employees are supposed to pay a certain percentage of the employee's monthly earnings to retirement savings accounts from which they would be drawing their pension benefits after retirement. Besides pension funds are now among the most important institutional investors in the world capital markets (Klumpes & Mason, 2020).

According to Asaolu and Ogunmakinwa (2018), the Nigerian pension industry had a \$12.9 billion deficit prior to 2004 under the old defined-benefit scheme. And the industry has grown at an exponential rate since the 2004 reforms introduced the Contributory Pension Scheme ("CPS"). Total pension contributions in the custody of Pension Fund Custodians ("PFCs") and under the control of Pension Fund Administrators ("PFAs"), including Closed Pension Fund Administrators, exceeded N4.8 trillion (about \$26 billion) as of the end of September 2015.

The National Pension Commission, a government organization in Nigeria, regulates the investment of pension fund assets (PENCOM). The commission's authority is derived from the Pension Act of 2004, which specifies how the assets are to be invested. Section 86 of the legislation specifies the types of investments that pension funds can make, which include bonds, bills, and other capital-market instruments. However, to assure future income from savings in a pension scheme, particularly a contributing pension system, such savings must be invested efficiently through investment outlets that can ensure minimal risk, fund security, and higher returns. The capital market is one such investing platform. The capital market is an essential tool for increasing productivity and driving rapid industrial and economic development (Ogege & Ezike, 2019). The mobilization and effective allocation of capital for investment objectives is the most essential job of the Nigerian Capital Market. The market puts in place structures for the mobilization of savings from numerous surplus

economic units for the production process and thus enhances economic growth and development.

This study is motivated by the fact that; despite the growth of the Nigerian capital market, the expected effect on long term projects like housing scheme, power, road, and medical facilities are still underdeveloped. Nigeria still lacks basic infrastructural facilities such as good road networks, portable water, affordable housing scheme, proper education and facilities, adequate power supply and medical facilities (Ali, 2018). Besides, nexus between pension fund investment and capital market development has been a subject of interest among researchers. It is often argued that the creation of funded pension plans has major long-term implications for the functioning and growth of the financial market. As noted by Vitas (2019), the question of the links between pension fund investment and financial markets has two aspects. One concerns the preconditions in terms of financial sector development for the successful implementation of pension reform, while the other refers to the long-term impact of pension reform on the development of financial markets. He argued that pension reform and the promoting of personal pension budget calls for a small center of sound, prudent and green monetary institutions, inclusive of banks and coverage agencies, however does not rely upon the prior life of well-evolved securities markets but he opined that private pension price range and insurance corporations may also have a beneficial impact on economic market improvement once they attain crucial mass and provided they perform in a conducive regulatory surroundings.

Statement of the Problem

There is low sensitization and dissemination of information by the Pension Fund Administrators to the public. The investment apparatus set-up by the regulator constraint the Pension Fund Administrators to really invest the pension funds in real economy to boast the

Nigerian capital market and economy. The National Pension Commission (PENCOM) has strictly set-out percentages of funds under management to be invested in various sectors or markets or financial instruments to guide against Pension Fund Administrators taking unreasonable risk that will erode the pool of funds. As we can reconnect the trends in the capital market during the economics recession where Nigerian capital market and the global market experienced a down- turn in funds. Consequently, the impairment of funds cannot be overemphasized because of its negative impact on the economy.

The findings of past studies such as Babalos and Stavroyiannis(2019), Alda (2017) Zubair (2016), Enache, Milos & Milos (2015), Eke and Onafalajo (2015, Channarith and Wade (2010) have been mixed and conflicting. The mixed and conflicting findings may be a result of the static approach used by most of the studies. The past studies overlooked the dynamic relationship between pension investment and capital market development. Pension fund investment and capital market development are dynamic phenomena rather than static variables, this paper, therefore examines the dynamic impact of pension investment on capital market development. This paper is a departure from other existing studies in the literature that ignored the dynamic and causal relationship between pension fund investment and capital market.

However, for the purpose of this study, the following null hypotheses are formulated:

HO₁: Pension Fund Investment Asset has no significant effect on the Nigerian Total Market Capitalization.

HO₂: Pension Fund Investment Asset has no significant effect on the Total Value of Stock traded in Nigerian Capital Market.

LITERATURE REVIEW

Conceptual Framework

Pension Fund Investment Asset

Alda, (2017) opined that, to invest is to allocate money with the expectation of a positive benefit/return in the future. In other words, to invest means owning an asset or an item with the goal of generating income from the investment or the appreciation of your investment which is an increase in the value of the asset over a period of time? When a person invests, it always requires a sacrifice of some present asset that they own, such as time, money, or effort. Pension funds are regarded as savings for future use and something must drive the use of these funds in the capital market that will motivate the managers of these funds to invest the capital in the market. This takes us to the loanable fund's theory which explains the determination of interest in terms of demand and supply of loanable funds or credit (Klumpes & Mason, 2020).

Real Gross Domestic Products

Real Gross Domestic Product (RGDP) is the value of all the goods and offerings created in an economy throughout a given time frame (usually one year), adjusted for inflation (the tendency for costs to growth through the years). Real GDP is the value of goods and services produced in a year and measured in terms of money at current prices. RGDP may rise in a great deal in a year not because the economy has been growing but because of raise in general prices (Zubair, 2016).

Monetary Policy Rate

Jinghan (2016) stated that monetary policy is an economic strategy adopted by the government in deciding whether to increase or contract the country's money supply and generally the central bank. He also believes that monetary policy is employed. Three main tools: buying or selling national debt, changing credit restrictions and changing interest rates by changing reserve requirements. On the role of monetary policy; Afroze (2018) argued that monetary policy plays an important role in

controlling aggregate demand and, through expansion, inflation in the economy, also called monetary governance. Therefore, the actions of the central, central bank, currency board or other regulatory committees determine the size and growth of the money supply, which in turn affects interest rates.

Local Ordinary Share

Companies issue shares to raise funds for their growth and operations. For buyers, investing in shares method participation within the profits earned through the organization as well as a say in the control selections. The share capital of a company consists of two types of shares, namely: equity and preference shares. Equity shares are also called ordinary shares and are the primary component of the share capital (Briston & Dobbins, 2017).

Interest Rate

Interest rate is defined as the value of money that is the amount of interest paid per unit of time expressed as a percentage of the amount borrowed. The value of borrowing money, measured in naira, per year per naira, borrowed, is the interest rate. Interest rates differ mainly in terms/maturity that is the length of time for repayment and liquidity is the quick conversion of assets to funds (Alam & Uddin, 2019)..When maturity and liquidity together with other factors are considered, many different financial instruments and so many different interest rates will emerge (Anyanwu, 2017). There are two main types of interest rates according to Pandey (2019) which can either be nominal or real.

Gross Fixed Capital Formation

The time period which is used to explain the fixed capital is referred to as capital formation in the commercial enterprise world. The production activity of an economy requires investing; this is, allocating a portion of manufacturing as capital devoted to the production of recent goods and services (Anyanwu, 2017). Gross capital formation and its components are of specific relevance to the economic system for some of reasons,

including its significance in future manufacturing, its consequences on the deliver and demand of products and services, its relation to expectancies of individuals or their role in improving human capital and the productiveness of the financial system, among others..

Federal Government Securities

Babalos and Stavroyiannis (2020) view federal government securities as government debt issuances used to fund daily operations and special infrastructure. They guarantee the full reimbursement of invested on the adulthood of the security and frequently pay periodic coupon or interest payments. Davis (2018) states that federal government security applies to more than a few funding merchandise presented by means of governmental regulations; the maximum not unusual types of federal authority's securities are issued by the authorities' treasury in the form of treasury bonds, payments, and notes.

Capital market

Capital market is a market where both government and companies raise long-term funds to trade securities on the bond and the stock market. It consists of both the primary market where new issues are distributed among investors and the secondary markets where already existing securities are traded. In the capital market, mortgages, bonds, equities, and other such investment funds are traded. The capital market also facilitates the procedure whereby investors with excess funds can channel them to investors in deficit. The capital market provides both overnight and long-term funds and uses financial instruments with long maturity periods. The following financial instruments traded in this market include foreign exchange instruments, equity insurance, Credit market derivatives, and hybrid instruments (Amedu, 2018).

Market Capitalization

Market capitalization is the price of a stock at any given time multiplied by the number of

shares outstanding. From a market perspective, market capitalization comprises the sum of individual outstanding shares by their prices for all the companies listed in a given stock market. Market capitalization can be divided as follows; one, large-cap ranging from \$10 – 100 billion; mid-cap (\$ 1 – 10 billion); Small-cap (\$100 million – 1 billion) and micro-cap (\$10 - \$ 100 million).

Olson notes that no clear consensus or roles are governing the exact cut of values and whether categorization should be dollar-denominated or percentiles. Market capitalization is the total value of all equity securities listed on a Stock Exchange. It is computed daily.

Total Value of Stock traded

Osaze (2017) viewed total stock value traded as the total shares of a company that appears to trade at a lower price relative to its fundamentals, such as dividends, earnings, or sales, making it appealing to value investors. A stock value is a security trading at a lower price than what the company's performance may otherwise indicate. Investors in value stocks attempt to capitalize on inefficiencies in the market, since the price of the underlying equity may not match the company's performance. A stock's volume refers to the number of shares that are sold, or traded, over a certain period of time (usually daily).

Empirical Review

An emerging body of empirical literature starting two decades ago has had the motive of examining the sort of relationship that exists among pension fund range and capital market as well as setting up the theoretical connection among the two variables and different manage variables determining the growth of every and the way they have an effect on each other. The growth of the pension fund industry and development of the domestic capital market has become a great concern and point of research in the financial circle to empirically document the correlation in existence.

Shen et al. (2020) in their study, the Stock Investment Performance of Pension Funds in China located that a social safety fund is better than that of direct funding by means of China's National Council for Social Security Fund. The annual threat-adjusted return on entrusted funding is 9.54% better than that of direct investment.

Enache et al. (2019) noted that non-public pension finances have a crucial function to play within institutional traders as it has a high-risk urge for food in portfolio diversification. Pension Funds have additionally been suggested that they decorate monetary innovation.

Wang (2019) conducted a non-parametric study on Pension Reform and Capital Market Development in China. The study determined that there may be a wonderful and huge relationship between Pension budget investment and the improvement of the Chinese capital market in a properly-advanced and regulated monetary market. In a study by Davis (2018) wherein the effect of pension reforms on improvement of financial improvement was tested, the author concludes that the author concludes that portfolio investment of the pension system greatly influenced the development of the financial sector provided that government or pension regulators do not restrict future pension fund portfolio investment. A subsequent study by way of Milos (2012) examines the relationship between pension reform and domestic stock market development in the European Union. The study suggests an advantageous and big relationship. The study concludes that an advantageous connection between the capital marketplace and personal pension finances started out manifesting after the year 2000.

Many authors have tried to establish the empirical connection between pension price range and capital market improvement the usage of special samples of nations and methodology. The studies of Alda, (2017),

Qureshi et al. (2017), and Babalos and Stavroyiannis (2020) all set up a fantastic relationship among pension budget investment and capital market development but in a static approach as opposed to a dynamic dating thinking about the reality that pension fund investment and capital market improvement are a dynamic phenomenon. We therefore extended the method of preceding research to include other market variables in our models to test the dynamic relationship between pension fund investment and capital marketplace development.

Zubair (2016) mounted that nations with properly developed monetary market enjoy extensive improvement of their pension funds than people with the rising financial marketplace. This shows that economic improvement is a feature of pension fund funding such that the extent of importance is determined by the improvement of the economic market in which both the pension and capital marketplace operates and while this takes place, the improvement will be vice-versa.

In widespread, theoretical postulations and empirical findings assist the positive effect of pension finances on the capital market. However, maximum of the empirical research within the literature cantered on evolved economies even as few have attempted to examine rising economies such as Nigeria. However, a number of their findings are mentioned as follows. Enache et al. (2019) check out the impact of pension funds at the capital market in a sampled ten (10) Central and Eastern European Countries from 2001 to 2010. The finding presents further proof of short-time period impact and decrease magnitude long term effect on marketplace capitalization. The findings were in aid of the (Milos, 2012; Channarith and Wade (2010).

As the interest rate is very key to attract investment, Eke and Onafalujo (2015) investigated empirically the causal courting

between interest price, capital marketplace, and pension assets in Nigeria from 1981-2013. Their study reveals that pension asset is without delay sensitive to the stock marketplace index, while the index is inversely sensitive to quick time period interest rate. This implies that a grow in the short-term interest rate will reduce the pension fund funding within the capital marketplace and to draw extra pension fund portfolio funding, regulatory bodies and markets have to perform at an premiere degree by means of making a return on investment an appealing device to pressure investments within the capital marketplace.

Theoretical Framework

Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) propounded by using Sharpe (1964) and Lintner (1965). This idea believed that the expected more pass back of an asset is linearly proportional to the expected more marketplace go back, called the marketplace danger top magnificence. Excess returns are returns above the danger-unfastened hobby price. The marketplace danger of an asset is measured thru its beta, which displays the systematic risk of the asset. Officially, it may be written within the following way:

$$E(R_i) = R_f + \beta_i (E(R_m) - R_f)$$

Where $E(R_i)$ is the expected go back of asset; $E(R_m) - R_f$ is the marketplace hazard premium; β_i is the systematic hazard. The capital asset pricing model (CAPM) is based totally on several assumptions such as: investor preferences which appears at investor conduct as danger averse human beings in search of to maximise the anticipated utility of their wealth at the cease of the length; mean-variance alternatives which holds that buyers take into account simplest the primary moves of pass returned distribution whilst choosing an funding; the expected cross returned and the variance; CAPM moreover holds that there aren't any operational friction like taxes and transaction charges; and that every one

belongings are infinitely divisible. Moreover, the idea further holds that each one property can be traded because of this that all claims to future coins-flows may be freely exchanged.

Theory of Investment

This theory was developed by using Keynes (1936) and Hayek (1941). Who focused on the employment of capital and investment from a company's point of view? They seemed funding because the exchange in capital stock in some unspecified time in the future of duration. One of the earliest funding theories, but, came from Irving Fisher in his "Nature of Capital and earnings" (1906) and his later work "principle of hobby" (1930). In his concept, despite the fact that simplistic and open to some of assumptions, he evolved a easy funding frontier (Krugman, 1994). Consistent with Goetzmann (1997) an investor must first be answering the query on what rate of cross lower back he's going to call for to keep a risky safety in his portfolio due to the fact there can be a exchange-off among those motivations. As such, the investor desires to assess the inherent danger of now not dropping any cash closer to the expected return of the funding. The rate of cross again measures the growth in wealth and is expressed as a percentage over a selected time period. One of the greatest allies for an investor looking for investment returns is time. That is because of the compounding effect which can make someone's coins expand substantially over a fantastically short time frame. It refers back to the increase of an investment from reinvesting any cash that is earned until the withdrawal duration because of this that the funding not only earns a move lower back primarily based on the unique amount invested, however also on any pass lower back already paid.

This study is anchored on the theory of investment; this is due to the fact is intently associated with this research work, and as it states that every investor has a certain chance urge for food or threat tolerance. Both searching for recommendation from the

identical conduct, which shows how lots risk an investor is ready to take for an anticipated go back. To offer the investor a extensive hazard - go back profile inside one portfolio, the portfolio manager wants to make capital allocation selections which would possibly determine how a brilliant deal of the general portfolio goes to be invested in low- risk, low-move returned investments vs. Risky.

METHODOLOGY

The research design for this study was the ex-post facto research design; and the study aims at examining the relationship which exists between Pension Funds Investment (PFI) and Capital Market (CM). In order to achieve the objectives of the study, different econometric techniques were adopted including trend analysis to establish the correlation between the variables and the intervening variables. The target population of this study comprised of all the Pension Fund Administrators (PFAs) in Nigeria between the years 2007–2020. There were twenty two (22) PFAs in Nigeria as at December 31, 2020, which comprised of AICO Pension, Apt Pension, ARM Pension, AXA Mansard, Crusader Sterling, FCMB Pensions, Fidelity Pension, First Guarantee, IEI-Anchor Pension, Investment-One, Leadway Pensure, NUPEMCO, NLPC, NPF Pension, Oak Pensions, Pensions Alliance, Premium Pension, Sigma Pensions, Stanbic IBTC, Trustfund Pensions, and Veritas Glanvills. All the population was censored in which case the public sector pension contribution fund, private sector pension contribution fund, retirement savings account, approved existing account, and closed fund contribution as individual component of the aggregate were taken into consideration.

Secondary data were collected from CBN Quarterly Economic Reports and Financial Statistical Bulletin, World Bank Economic Reports, NBS Economic Reports and PENCOM Quarterly Publications. The data collected is a time series for the period of 45 quarters (2007Q1-2020Q4).

The choice for Autoregressive Distributed Lag Model (ARDL) was necessitated by the results of our pre-analysis estimation which was done prior to the development of an appropriate structure of the econometric model to investigate the univariate characteristics of all data series and ascertain the degree to which they are integrated. The Augmented Dickey-Fuller (ADF, 1979) and Phillip Perron (PP) were used for and the result of the unit root test was presented to show the level of stationarity of each variable.

ARDL (Autoregressive Distributed Lag Model)

To investigate the existence of a long-term relationship (cointegration) in our analysis we

used the testing and estimation procedure advanced in Pesaran *et al.* (1997) and Pesaran and Shin (1999). The motivation for using ARDL technique and not the other cointegration methods such as the Johansen (1998) Maximum Likelihood test reside in the fact that it does not entail all the variables in the model to be I (1), or of the same order.

Model Specifications

We specify two models to examine the dynamic relationship and the direction of causality between pension fund investment and capital market development. Model one measures the impact of PFI on TMC and Model two measures the impact of PFI on TVS.

Model 1: Modelling the impact of PFI on TMC

The ARDL model formulated to determine the impact of PFI on TMC is stated as follows:

$$TMC_t = \beta_{1i} + \alpha_{1i}TREND_t + \sum_{n=0}^a \delta_{11kl} TMC_{t-1} + \sum_{n=0}^{b1} \delta_{12kl} PFI_{t-1} + \sum_{n=0}^{b2} \delta_{13kl} RGDP_{t-1} + \sum_{n=0}^{b3} \delta_{14kl} MPR_{t-1} + \sum_{n=0}^{b4} \delta_{15kl} LOC_{t-1} + \sum_{n=0}^{b5} \delta_{16kl} IR_{t-1} + \sum_{n=0}^{b6} \delta_{17kl} GFCF_{t-1} + \sum_{n=0}^{b7} \delta_{18kl} FS_{t-1} + \mu_{1t} \dots \dots \dots (1)$$

Where

- TMC = Total Market Capitalization
- TVS = Total Value of Stock traded
- PFI = Pension Fund Investment Asset
- RGDP = Real Gross Domestic Products
- MPR = Monetary policy rate
- LOC = Local Ordinary share
- IR = Interest rate
- GFCF = Gross fixed capital formation
- FS = Federal Government Securities

Re-writing equation (1) in general VECM form to capture the dynamic relationship among the variables in the short and long-run, the model becomes:

$$TMC_t = \beta_{1i} + \alpha_{1i}TREND_t + \sum_{n=0}^a \delta_{11kl} TMC_{t-1} + \sum_{n=0}^{b1} \delta_{12kl} PFI_{t-1} + \sum_{n=0}^{b2} \delta_{13kl} RGDP_{t-1} + \sum_{n=0}^{b3} \delta_{14kl} MPR_{t-1} + \sum_{n=0}^{b4} \delta_{15kl} LOC_{t-1} + \sum_{n=0}^{b5} \delta_{16kl} IR_{t-1} + \sum_{n=0}^{b6} \delta_{17kl} GFCF_{t-1} + \sum_{n=0}^{b7} \delta_{18kl} FS_{t-1} + \delta_{21i} TMC_{t-1} + \delta_{22i} PFI_{t-1} + \delta_{23i} RGDP_{t-1} + \delta_{24i} MPR_{t-1} + \delta_{25i} LOC_{t-1} + \delta_{26i} IR_{t-1} + \delta_{27i} GFCF_{t-1} + \delta_{28i} FS_{t-1} + \mu_{1t} \dots \dots \dots (2)$$

Model 2: Modelling the impact of PFI on TVS

$$TVS_t = \beta_{1i} + \alpha_{1i}TREND_t + \sum_{n=0}^a \delta_{11kl} TVS_{t-1} + \sum_{n=0}^{b1} \delta_{12kl} PFI_{t-1} + \sum_{n=0}^{b2} \delta_{13kl} RGDP_{t-1} + \sum_{n=0}^{b3} \delta_{14kl} MPR_{t-1} + \sum_{n=0}^{b4} \delta_{15kl} LOC_{t-1} + \sum_{n=0}^{b5} \delta_{16kl} IR_{t-1} + \sum_{n=0}^{b6} \delta_{17kl} GFCF_{t-1} + \sum_{n=0}^{b7} \delta_{18kl} FS_{t-1} + \mu_{1t} \dots (3)$$

Re-writing equation (3) in general VECM form to capture the dynamic relationship among the variables in the short and long-run, the model becomes:

$$TVS_t = \beta_{1i} + \alpha_{1i}TREND_t + \sum_{n=0}^a \delta_{11kl} TVS_{t-1} + \sum_{n=0}^{b1} \delta_{12kl} PFI_{t-1} + \sum_{n=0}^{b2} \delta_{13kl} RGDP_{t-1} + \sum_{n=0}^{b3} \delta_{14kl} MPR_{t-1} + \sum_{n=0}^{b4} \delta_{15kl} LOC_{t-1} + \sum_{n=0}^{b5} \delta_{16kl} IR_{t-1} + \sum_{n=0}^{b6} \delta_{17kl} GFCF_{t-1} + \sum_{n=0}^{b7} \delta_{18kl} FS_{t-1} + \delta_{21i} TVS_{t-1} + \delta_{22i} PFI_{t-1} + \delta_{23i} RGDP_{t-1} + \delta_{24i} MPR_{t-1} + \delta_{25i} LOC_{t-1} + \delta_{26i} IR_{t-1} + \delta_{27i} GFCF_{t-1} + \delta_{28i} FS_{t-1} + \mu_{1t} \dots (4)$$

RESULTS AND DISCUSSION

We carried out preliminary test as mentioned earlier to evaluate the nature of the distribution of the dataset. This test comprises of the unit root test, cointegration tests and trend analysis. Thereafter, the actual estimation was carried out using Autoregressive Distributed Lag

(ARDL) approach and Granger causality test for the two models. Table 1 presents the result of the stationary tests of the variables in the model based on the Augmented Dickey Fuller (ADF) and Phillip Perron (PP) unit root tests. The tests were carried out at level and first differences.

Table 1: Unit Root test

Variables	Level		First difference		I(d)
	ADF	PP	ADF	PP	
FS	-2.201307	-2.413839	-5.716364*	-5.629442*	I(1)
GFCF	-5.181708*	-5.196069*	-	-	I(0)
IR	-1.850066	-2.359728	-2.777683***	-2.919307***	I(1)
LOC	-1.086518	-1.094125	-6.593149*	-6.593149*	I(1)
MPR	-1.643997	-1.313966	-3.893772*	-2.303103**	I(1)
PFI	6.298268	5.472232	3.542252**	-3.543046*	I(1)
RGDP	-1.503391	-1.143849	-12.29850*	-11.18383*	I(1)
TMC	-1.774602	-2.069991	-5.598942*	-5.598942*	I(1)
TVS	-1.839078	-2.364533	-2.925486**	-2.219061**	I(1)

Source: *Eviews Output, 2022*

Note: * represents 1% significant level; ** represents 5% significant level and *** represents 10% significant level. Calculated at trend and lag lengths selected automatically using the Schwarz Info Criterion (SIC).

From Table 1, the results of the unit root tests under the two conventional methods have the same results on the stationary level of the variables of interest at varying significant levels

except for the gross fixed capital formation (GFCF) which was stationary at levels at 1% significant level.

Table 2: Johansen Cointegration Test

Lags interval (In first difference) : 1 to 2						
Trend assumption: Linear deterministic trend						
Hypothesized No. of Cointegrating Equations (CEs)	Eigen value	Trace Statistic	0.05 Critical Value	Hypothesized No. of CE(s)	Max-Eigen Statistic	0.05 Critical Value
r = 0*	0.993363	628.4074	228.2979	r = 0*	225.6783	62.75215
r ≤ 1*	0.900297	402.7291	187.4701	r ≤ 1*	103.7503	56.70519
r ≤ 2*	0.807903	298.9788	150.5585	r ≤ 2*	74.23892	50.59985
r ≤ 3*	0.786418	224.7399	117.7082	r ≤ 3*	69.46808	44.49720
r ≤ 4*	0.722178	155.2718	88.80380	r ≤ 4*	57.63489	38.33101
r ≤ 5*	0.578052	97.63691	63.87610	r ≤ 5*	38.82930	32.11832
r ≤ 6*	0.491321	58.80762	42.91525	r ≤ 6*	30.41719	25.82321
r ≤ 7*	0.409673	28.39042	25.87211	r ≤ 7*	23.71857	19.38704
r ≤ 8	0.098611	4.671852	12.51798	r ≤ 8	4.671852	12.51798

Source: *Eviews Output, 2022*

The long run relationship test was conducted using Johansen cointegration test. The purpose of this was to ascertain whether the variables of interest are related and can be combined in a linear version. The results, in Table 2 indicate that at 5% significant level, there were agreements between the Trace and Max Eigen

statistics. Both Trace and Max Eigen tests suggested that there are long run relationships between the variables of the interest, that is, there are co-integrated. The Trace and Max Eigenvalue test predicted that at most they are 8 cointegrating equations (CEs) at the 5% level

Table 3: Long run relationship using ARDL bound test using TMC as the dependent variable

F-Bound Test (TMC \ PFI RDGP MPR LOC IR GFCF FS)				
Test statistic	Value	Significant	I(0) Bound	I(1) Bound
F-statistic	14.43343	10%	1.95	3.06
K	8	5%	2.22	3.39
		2.5%	2.48	3.7
		1%	2.79	4.1
t-Bound Test				
t-statistic	-4.659511	10%	-2.57	-4.4
		5%	-2.86	-4.72
		2.5%	-3.13	-5.02
		1%	-3.43	-5.37

Source: *Eviews Output, 2022*

When Total Market Capitalization is used as the dependent variable, the F-statistic value ($F_{tmc} = 14.43343$) and t-statistic value ($t_{tmc} = -4.659511$) are greater than the lower (I(0) bound at 5% significance level. It indicates that the null hypothesis of no level of relationship is

rejected and accepts the alternate hypothesis of there is long run relationship among the variables. Thus, when total market capitalization is the dependent variable, there is long run convergence between the dependent and independent variables.

Table 4: Long run relationship using ARDL bound test using TVS as the dependent variable

F-Bound Test (TVS \ PFI RDGP MPR LOC IR GFCF FS)				
Test statistic	Value	Significant	I(0) Bound	I(1) Bound
F-statistic	9.812770	10%	1.95	3.06
K	8	5%	2.22	3.39
		2.5%	2.48	3.7
		1%	2.79	4.1
t-Bound Test				
t-statistic	-8.943175	10%	-2.57	-4.4
		5%	-2.86	-4.72
		2.5%	-3.13	-5.02
		1%	-3.43	-5.37

Source: Eviews Output, 2022

Also, When total value of stock traded becomes the dependent variable, both the F-statistic value ($F_{tmc} = 9.812770$) and t-statistic value ($t_{tmc} = -8.943175$) are greater than the lower (I(0)) and upper bound at 5% significance level indicating that there is a long run relationship among the variables of interest. The null

hypothesis of no levels relationship is rejected and the alternate hypothesis of there is long run relationship among the variables is accepted. Thus, there is a long run relationship between the total value of stock traded and other stated explanatory variables which are PFI, RDGP, MPR, LOC, IR, GFCF and FS.

Table 5: Results of Estimated ARDL model of TMC

Dependent Variable: TMC				
Selected Model: ARDL(1, 0, 3, 3, 0, 2, 0, 0)				
Included observations: 45 after adjustments				
Short-run estimates				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TMC(-1)	0.200417	0.106895	1.874901***	0.0713
RGDP(-1)	-0.204952	0.168515	-1.216219	0.2341
RGDP(-2)	-0.190235	0.195222	-0.974453	0.3382
RGDP(-3)	-0.335821	0.159877	-2.100498**	0.0448
MPR(-1)	35.05257	886.2589	0.039551	0.9687
MPR(-2)	-1144.914	872.7030	-1.311918	0.2002
MPR(-3)	1158.029	371.2313	3.119427**	0.0042
IR(-1)	412.5260	349.5205	1.180262	0.2478
IR(-2)	-375.0407	213.0972	-1.759952***	0.0893
CointEq(-1)*	-0.799583	0.075635	-10.57160*	0.0000
Long-run Estimates				
PFI	0.099628	0.333268	0.298942	0.7672
RGDP	-0.231980	0.174187	-1.331786	0.1937
MPR	530.0647	383.0958	1.383635	0.1774
LOC	21.09048	3.328742	6.335870*	0.0000
IR	-144.6342	209.1285	-0.691604	0.4949
GFCF	-0.553828	0.276149	-2.005542***	0.0547
FS	-0.424630	0.522862	-0.812125	0.4236
R-squared			0.956579	
Adjusted R-squared			0.931768	
F-statistic			16.21825*	
Durbin-Watson stat			1.847532	

Source: Eviews Output, 2022

Note: *, ** and *** signify significance level at 1%, 5% and 10% respectively.

The estimated ARDL approach is a composite of short-run and Long-run estimates of the relationships among the variables used in this study. The empirical result of the impacts of pension fund investment assets (PFI), real gross domestic products (RGDP), monetary policy rate (MPR), local ordinary share (LOC), interest rate (IR), Gross fixed capital formation (GFCF) and Federal government Securities (FS) on Total market capitalization (TMC) are presented in Table 5. The ARDL test automatically choose the lag length for all the variables based on automatic selection of Schwarz criterion (SIC) though the model lag was set at three for sufficient degree of freedom.

From Table 5, the coefficients of short-run lag one of total market capitalization and lag three of monetary policy rate have positive and significant impact on the total market capitalization level at 10% and 5% respectively. It indicates that as total market capitalization in the short-run lag one and monetary policy rate in lag 3 increase, current total market capitalization also increase. The short-run lag one estimate of both interest rate and monetary policy rate were positive and statistically insignificant at 5% indicating that an increase in short-run lags one of interest rate and monetary policy rate have no influence on changes in total market capitalization. However, the coefficients of RGDP(-3) and MPR(-3) were negative and statistically significant at 5% while IR(-2) was negative and statistically significant at 10% meaning that they all influence changes in total market capitalization in the short-run. Similar findings

were reported for RGDP(-1), RGDP(-2), and MPR(-2) but were statistically insignificant. The ECM was negative and statistically significant at 1%. The value of Error Correction Model (ECM) (-0.799583) indicated that the previous years' errors will be corrected in the current year at an adjustment speed of 79.96%. Thus, the model corrects its disequilibrium in the short-run at an adjustment speed of 79.96% in order to return to the long-run equilibrium.

In the long-run, the impact of local ordinary share (LOC) on total market capitalization was positive and statistically significant at 1% while Pension fund investment asset (PFI) and monetary policy rate (MPR) were positive and statistically insignificant. In other word, the impact of gross fixed capital formation (GFCF) on total market capitalization was negative and statistically significant at 10% while RGDP, IR and FS were negative and statistically insignificant. On magnitude, a 1% increase in PFI, MPR, and LOC positively influence changes in total market capitalization by 0.1%, 530.1% and 21.1% respectively. Also, 1% increase in RGDP, IR, GFCF and FS reduce total market capitalization by approximately 0.2%, 144.6%, 0.6% and 0.4% respectively. The value of Adjusted R-squared of 93.2% implying that 93.2% variations in total market capitalization is jointly explained by all the variables in the model. The model is well specified and statistically significant. This is shown by the value of F-statistic (16.21825), which is statistically significant at 1% level of significance. The Durbin Watson Statistic (1.847532) shows that there is no problem of auto serial correlation in the model.

Table 6: Post estimation test for TMC

Test	Coefficient	Prob.
Normality Test (Jarque-Bera stat)	0.016420	0.991824
Serial Correlation LM Test	0.237869	0.8691
Heteroskedasticity Test	0.845363	0.6297

Source: *Eviews Output, 2022*

From Table 6, the coefficient of Jarque-Bera statistic (0.016420) and its corresponding

probability (0.991824) indicated that the model is normally distributed. The result of serial

correlation LM test with a coefficient of 0.237869 and corresponding probability (0.8691) confirmed that the model is free from

the problem of serial autocorrelation. The outcome of residual heteroskedasticity test confirmed that the model is homoskedasticity.

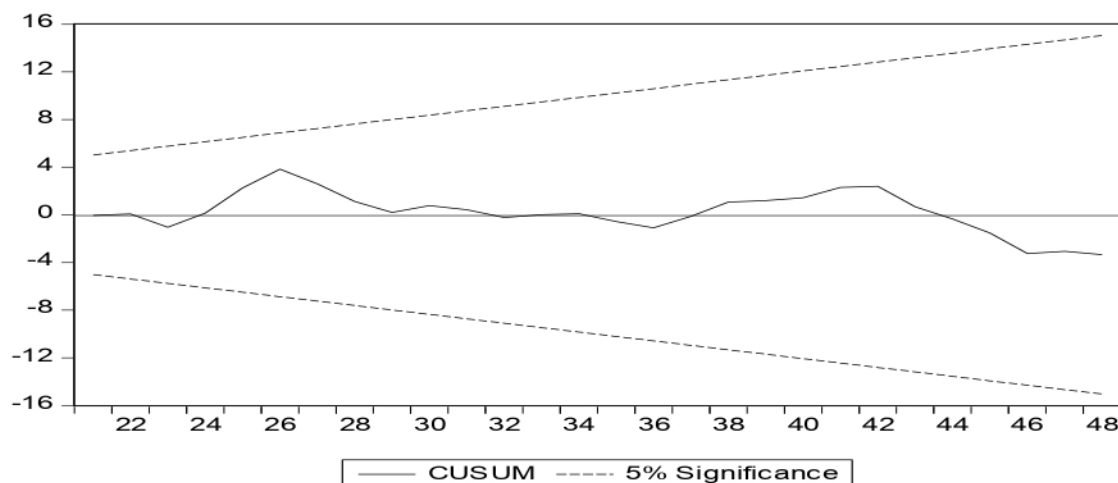


Figure 2: Cusum stability Test

The Cusum series in Figure 2 lies between the lower and upper critical limit value of 5% indicating that the model is stable.

Table 7: Estimated ARDL model of TVC

Dependent Variable: TVS				
Selected Model: ARDL(3, 3, 0, 0, 1, 0, 0, 0)				
Included observations: 45 after adjustments				
Short-run estimates				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TVS(-1)	1.993923	0.123529	16.14128*	0.0000
TVS(-2)	-1.727411	0.199104	-8.675940*	0.0000
TVS(-3)	0.603803	0.116060	5.202485*	0.0000
PFI(-1)	1.107957	0.461618	2.400162**	0.0228
PFI(-2)	-0.270934	0.313602	-0.863940	0.3945
PFI(-3)	-0.399233	0.207063	-1.928076***	0.0634
LOC(-1)	-1.412638	0.618856	-2.282661**	0.0297
CointEq(-1)*	-0.129685	0.022452	-5.776041	0.0000
Long-run Estimates				
PFI	-0.388383	0.327254	-1.186794	0.2446
RGDP	0.002572	0.013190	0.194959	0.8467
MPR	17.94386	10.51711	1.706158***	0.0983
LOC	0.640557	0.462354	1.385426	0.1761
IR	-14.05848	6.654744	-2.112550**	0.0431
GFCF	-0.018933	0.032633	-0.580194	0.5661
FS	-0.076213	0.057596	-1.323235	0.1958
R-squared			0.925049	
Adjusted R-squared			0.910869	
F-statistic			65.23629*	
Durbin-Watson stat			1.575982	

Source: Eviews Output, 2022

Note: *, ** and *** signify significance level at 1%, 5% and 10% respectively.

The empirical findings of the impacts of pension fund investment assets (PFI), real gross domestic products (RGDP), monetary policy rate (MPR), local ordinary share (LOC), interest rate (IR), Gross fixed capital formation (GFCF) and Federal government Securities (FS) on Total value of stock traded (TVS) are illustrated in Table 7. The ARDL test automatically choose the lag length for all the variables based on automatic selection of Schwarz criterion (SIC) though the model lag was set at three for sufficient degree of freedom.

From Table 7, the coefficients of TVS(-1), and TVS(-3) were positive and statistically significant at 5% respectively while PFI(-1) was at 10% significance level. It indicates that increase in the lag one and lag three of total value of stock traded and lag one of pension fund investment result to increase in total value of stock traded. However, the coefficients of TVS(-2), was negative and statistically significant at 1%, LOC(-1) was negative and statistically significant at 5% while PFI(-3) was negative and statistically significant at 10% significance level meaning that they all have negative influence on total value of stock traded in the short-run. Similar result was reported for PFI(-2) but statistically insignificant. The ECM was negative and statistically significant at 1%. The value of ECM (-0.129685) indicated that the previous years' errors will be corrected in the current year at an adjustment speed of

12.97%. Thus, the model corrects its disequilibrium in the short-run at an adjustment speed of 12.97% in order to return to the long-run equilibrium.

In the long-run, the impact of monetary policy rate on total value of stock traded was positive and statistically significant at 10% significance level while real gross domestic product (RGDP) and local ordinary share (LOC) were positive and statistically insignificant. In other word, the impact of interest rate on total value of stock traded was negative and statistically significant at 5% while GFCF and FS were negative and statistically insignificant. On magnitude, a 1% increase in RGDP, MPR, and LOC positively influence changes in total value of stock traded by 0.003%, 17.944% and 0.641% respectively. Also, 1% increase in PFI, IR, GFCF and FS reduce total market capitalization by approximately 0.388%, 14.059%, 0.019% and 0.076% respectively. The value of Adjusted R-squared of 91.1% implying that 91.1% variations in total market capitalization is jointly explained by all the variables in the model. The model is well specified and statistically significant. This is shown by the value of F-statistic (65.23629), which is statistically significant at 1% level of significance. The Durbin Watson Statistic (1.575982) shows that there is no problem of serial autocorrelation in the model.

Table 8: Post estimation test for TVS

Test	Coefficient	Prob.
Normality Test (Jarque-Bera statistic)	1.628557	0.442959
Serial Correlation LM Test	1.501468	0.2366
Heteroskedasticity Test	0.2366	0.2858

Source: *Eviews Output, 2022*

Table 8 showed that the residual in the model is normally distributed. This was confirmed by the coefficient of its Jarque-Bera statistic (1.628557) and corresponding probability (0.442959). The result of serial correlation LM test with a coefficient of 1.501468 and

corresponding probability (0.2366) confirmed that the model is free from the problem of serial autocorrelation. The outcome of residual heteroskedasticity test confirmed that the model is homoscedastic. This was showed by the coefficient (0.2366) and its probability (0.2858)

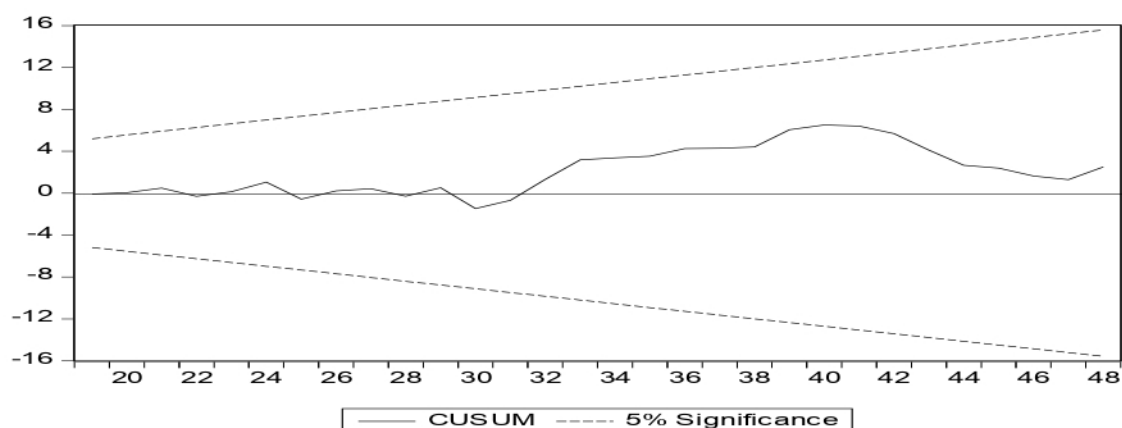


Figure 3: Cusum stability Test

The Cusum series in Figure 3 lies between the lower and upper critical limit value of 5% indicating that the model is stable.

Table 9: Granger Causality test

Short run Causality					
Null Hypothesis	No. of obs	No. of lag	F-Stats	Prob.	Decision Rule
PFI does not Granger Cause TMC	47	1	1.34791	0.2519	Do not reject
TMC does not Granger Cause PFI			0.98073	0.3274	Do not reject
PFI does not Granger Cause TMC	46	2	1.58311	0.2176	Do not reject
TMC does not Granger Cause PFI			0.85026	0.4347	Do not reject
PFI does not Granger Cause TMC	45	3	1.21273	0.3183	Do not reject
TMC does not Granger Cause PFI			0.57032	0.6380	Do not reject
PFI does not Granger Cause TMC	44	4	1.69005	0.1743	Do not reject
TMC does not Granger Cause PFI			0.46173	0.7633	Do not reject

Source: Author, 2020

Table 9 indicate that none of the variable Granger cause each other meaning that both variables are determined independently. That

is, neither pension fund investment cause total market capitalization nor total market capitalisation granger cause PFI

Table 10: Granger Causality test for Total value of stock traded and Pension Fund Investment Assets

Short run Causality					
Null Hypothesis	No. of obs	No. of lag	F-Stats	Prob.	Decision Rule
PFI does not Granger Cause TVS	47	1	1.6E-05	0.9968	Do not reject
TVS does not Granger Cause PFI			0.70293	0.4063	Do not reject
PFI does not Granger Cause TVS	46	2	0.86379	0.4291	Do not reject
TVS does not Granger Cause PFI			0.53970	0.5870	Do not reject
PFI does not Granger Cause TVS	45	3	2.39956	0.0829	Do not reject
TVS does not Granger Cause PFI			0.88617	0.4570	Do not reject
PFI does not Granger Cause TVS	44	4	0.98048	0.4308	Do not reject
TVS does not Granger Cause PFI			0.67348	0.6148	Do not reject

Source: Eviews Output, 2022

Also, from Table 10, neither pension fund investment granger causes total volume of stock traded nor total stock traded granger cause pension fund investment, meaning that both variables are determined independently.

Discussion of Findings

Having presented the results using different econometric techniques, the implications of the results are discussed based on the objectives of the study. The trend analysis shows that there was a significant increase in the total market capitalization from the first quarter of 2007 to the fourth quarter of 2020. There was a consistent growth in the trend of the variable. Although, the sharp increase might be attributed to the transition of government between Obasanjo led administration and Yar'adua led administration cum new regulation on the market variables. However, inconsistency swings into action from the end of 2008Q1 to 2020 resulting in a high level of volatility. The persistent volatility in the TMC for a period of not less than 10 years was attributed to different factors such as political, economical, and legal frameworks.

The trend analysis depicts that the stock traded moved in the same direction with the TMC in the periods from 2007 to 2008. However, the volatility emerged but not an increasing one and this was experienced up to the last quarter in 2020. Our results also reveal that there was a sharp and steady increase in the level of PFI from 2007Q1 to 2020Q4 suggesting that government at all levels are committed to the effectiveness of the Pension Act 2004 as amended by encouraging and mandating contributory pension scheme. An attempt was made to check the trend for their co-movement between TMC with PFI and PFI and TVS respectively. The graphs show that there was a sharp decrease in the level of PFI while TMC remained unaffected. The results reveal however that when the level of TVS reduced a little bit the TMS remains unaffected. There was a similar co-movement in both the TVS and PFI and this suggests a positive relationship

between the two variables and how they influence the total market capitalization.

The analysis of the impact of PFI on TMC based on Johansen cointegration suggests that there are long-run relationships between the variables which imply that the variables are cointegrated. Also since the bound test F-statistic value ($F_{tmc} = 14.43343$) and t-statistic value ($t_{tmc} = -4.659511$) are greater than the lower ($I(0)$) bound which suggests that there is long-run convergence between Total market capitalization (TMC) and pension fund investment assets (PFI). The TVS and other explanatory variables show a long-run relationship.

The first model empirically reveals that an increase in PFI, MPR, and LOC will have a positive and significant influence on TMC while an increase in RGDP, IR, GFCF, and FS will have an insignificant negative impact on the TMC. The study reveals that pension funds investment impacts capital market development positively. This result is in conformity with the findings of (Millos, 2012; Enache et al., 2019; Eke and Onafalujo, 2015; Alda, 2017 and Shen et al., 2020). An investment in the pension has greatly influenced the development of the Nigerian capital market and still has a long-run positive effect on the market. The government must provide necessary regulations to sustain and strengthen pension policy in the country so as to increase portfolio investment of the funds.

The macroeconomic variables such as RGDP, GFCF, IR and FS in accordance with the result will have a negative impact but insignificant on the total market capitalization. This result indicates the interaction of pension funds investment with selected macroeconomic variables does not statistically reduce the development of the capital market. This result upholds our theoretical postulation of Loan Theory which we discussed in the literature review that that interest rate in the market as the price is determined by the forces of demand and

supply and also reveals that there is some element of efficiency in the market.

The second model measures the impact of pension fund investment assets on the total value of stock traded. The result reveals that there is a long-run relationship among the variables evidenced by both the F-statistic value ($F_{tmc} = 9.812770$) and t-statistic value ($t_{tmc} = -8.943175$) which are greater than the lower (I(0) and upper bound at 5% significance level.

The results indicate that RGDP, MPR, and LOC have positive and significant effects on the Total Value of Stock traded in the Nigerian Capital Market during the period under review. Variables such as PFI, IR, GFCF, and FS have negative influence although insignificant on the changes in the TVS. Our results support the position of Eke and Onafalujo (2015) on the interaction between the interest rate and pension fund investment as well as the total volume of stock traded. Our study extended further the methodology by including variables like Monetary Policy Rate, Local Ordinary Share, Gross Fixed Capital Formation, and Federal Government Securities which previous studies did not capture, hence, our contributions to knowledge because their inclusion was able to add values to the empirical results which have economic implications for the country.

The Cusum tests established stability in the parameters of the two models as well as the results of the Granger Causality test which provide shreds of evidence that neither pension fund investment granger causes the total volume of stock traded or total stock traded granger causes pension fund investment, meaning that both variables are determined independently.

CONCLUSION AND RECOMMENDATION

This paper examines the dynamic and causal relationship between pension fund investment and Capital market development in Nigeria. Based on the findings, the study therefore

concludes that pension fund investment affects capital market development positively. The investment of pension funds into the capital market over the years has assisted to engender the development of the Nigeria Capital market and the effect would be more significant in the long run. The paper recommends that more pension fund investment should be channeled to the capital market investment with a view to develop and strengthen the Nigerian capital market and make the market more competitive.

REFERENCES

- Adami, R., Gough, O., Mukherjee, S., and Sivaprasad, S. (2014). An empirical analysis of the performance of pension funds: evidence from UK. *Studies in Economics and Finance*, 31(2), 141-155
- Adeoti, J.O., Gunu, U., and Tsado, E. (2012). Determinants of pension fund investment in Nigeria: The critical factors. *International Journal of Human Resources Studies*, 2(4), 1-23.
- Afroze, R. (2018). Impact of monetary policy of Bangladesh bank on the performance of the stock market in Bangladesh. *ASA University Review*. 7(1):1-11.
- Alam, M., and Uddin, G.S. (2019), Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries, *International Journal of Business and Management*. 4(3), 43-51.
- Ali, W., (2018). The impact of inflation on the performance of the Iraqi stock exchange for the period (2005-2011) using vector error correction model (VECM). *Anbar University Journal for Economics & Administration Sciences* 5(10):77-95.
- Alda, M. (2017). The relationship between pension funds and stock market: Does the aging population of Europe affect it? *International Review of Financial Analysis*, 83-97.
- Amedu, A. J (2013). Administration of Nigerian Capital Market and National

- development. Online Publication of Ph.D. Thesis, Department of Public Administration and Local Government, University of Nigeria, Nsukka
- Anyanwu, J. C. (2017). *Monetary Economics: Theory, Policy, and Institutions*. Onitsha: Hybrid Publishers.
- Asaolu T.O. and Ogunmakinwa M. S. (2018). An Econometric Analysis of the Impact of Macroeconomic Variables on Stock Market Movement in Nigeria. *Asian Journal of Business Management*, 3(1), 72 – 78.
- Babalos, V., and Stavroyiannis, S. (2020). Pension funds and stock market development in OECD countries: Novel evidence from a panel VAR. *Finance Research Letters*, 34, 101247.
- Briston, R.J., and Dobbins, R. (2017). Financial institutions and the stock market. *Managerial Finance*, 87-107.
- Catalán, M. (2004). Pension funds and corporate governance in developing countries: What do we know and what do we need to know? *Journal of Pension Economics and Finance*, 197–232.
- Corbo, V., and Schmidt-Hebbel, K. (2018). Macroeconomic effects of the pension reform in Chile, in pension reforms: Results and Challenges. *International Federation of Pension Fund Administrators*, 241–329.
- Davis, E. P. (2018). Pension fund reform and European financial markets - A reappraisal of potential effects in the wake of EMU. *LSE Financial Markets Group Special Paper*.
- Dostal, M. J. (2010). Pension reform in Nigeria five years on: Great leap or inappropriate policy design? *Paper presented at 60th conference of Political Studies Association (PSA)*, University of Edinburgh, Scotland.
- Edogbanya, A. (2013). An assessment of the impact of contributory pension scheme to Nigerian economic development. *Global Journal of Management and Business Research*, 47-59.
- Eke, P.O., and Onafalujo, A.K. (2015). Interest rate, capital market and pensions management: Lessons from Nigeria. *African Journal of Business Management*, 542-552.
- Enache, C., Milos, L.R., and Milos, M.C. (2019). Pension reform and capital market development in central and eastern European countries. *Economic Research-Ekonomska Istrazivanja*, 77-84.
- Ezugwu, C. I., and Alex, A. I. (2014). Portfolio analysis of pension funds investment in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 3 (12), 41-58.
- Gunu, U., and Tsado, E. (2012). Contributory pension system as a tool for economic growth in Nigeria. *International Journal of Business and Behavioural Sciences*, 6 -13.
- Jhingan, M.L. (2016). *Macro-economic theory. 12th Edition*, Vrinda Publications (P) Ltd, 357-358.
- Klumpes, P.S.M., and Mason, S. (2020): Fair value reporting by pension fund managers: UK evidence, *Research Report ACCA*.
- Meng, C., and Pfau, W.D. (2010). The role of pension funds in capital market development. *GRIPS Policy Research Centre Discussion Paper*; 10-17.
- Milos, R. L. (2012). Spillover effects of pension funds on capital market: The EU countries case. *Economy Series Issue*, 164-170.
- Nwanne, T.F.I. (2015). Impact of contributory pension scheme on economic growth in Nigeria. *Global Advanced Research Journal of Management and Business Studies*, 333-337.
- Ogege, S., and Ezike, J. E. (2019). The Nigerian capital market and economic development: A critical appraisal. *International Business Research*, 5(8), 228-236.

- Ogege, S., and Ezike, J.E. (2012). The Nigerian capital market and economic development: A critical appraisal. *International Business Research*.
- Qureshi, F., Kutan, A., Ismail, I., and Gee, C.S. (2017). Mutual funds and stock market volatility: An empirical analysis of Asian emerging markets. *Emerging Market Reviews*, 176–192.
- Pandey, R. (2019). Institutional Reform in Emerging Markets. Policy Research Working Paper, (Financial Policy and Systems): *The World Bank Report*, WPS907.
- Scheuenstuhl, G. (2012). Liability driven investment strategies-for prudent pension investing in turbulent capital markets. *Asset Management*, www.risklab.com/Dokumente
- Shen, Y., Zhu, K., Wu, F., & Chen, P. (2020). The Stock Investment Performance of Pension Funds in China. *Emerging Markets Finance and Trade*, 56(12), 2732-2748.
- Vittas, D. (1996). Pension funds and capital markets: Investment regulation, financial innovation, and governance. World Bank, Financial Sector Development, Note no. 71(71).
- Vittas, D. (2019). Pension reform and financial markets. *Development Discussion Paper* 697, Harvard Institute for International Development.
- Wang, X. (2019). China’s pension reform and capital market development. *China & World Economy*, 3-16.
- World Bank. (2018). The world bank pension conceptual framework. *World Bank Pension Reform Primer*. www.worldbank.org/pensions
- Zubair, A. K. (2016). Effects of pension funds’ investments on capital market performance in Nigeria. *International Journal of Economics and Business Management*, 2(9), 1-20.

CORPORATE SOCIAL RESPONSIBILITY AND FIRM PERFORMANCE IN THE CONTEXT OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

¹Clement, E. Ozele, ²Sunny, I. Agbo, ³Mary Josiah (Corresponding Author)

^{1,2,3}Department of Accounting,

College of Business and Management Studies

Igbinedion University Okada.

e-mail: Josiah.mary@iuokada.edu.ng 08037381270,

Ozele.clement@iuokada.edu.ng 08145721570,

Agbo.Sunny@iuokada.edu.ng 08033415861

Abstract

This study evaluates the effect of corporate social responsibility disclosures on firm financial performance. The objective of this study is to examine the impact of corporate social responsibility and firm financial performance in publicly listed companies. A sample size of 30 companies was selected and utilized for the study. Secondary data was used for the study. The secondary data was retrieved from financial statements and footnotes of the sampled companies. The study made use of ordinary least squares regression analysis as the data analysis method. The empirical evidence from the study found out that corporate social responsibility disclosure particularly that relating to Conformity to environmental and other governmental policies (CSREPL) has a significant effect on a company's Return on equity and Return on assets. Corporate social responsibility particularly that relating to Corporate Social Responsibility (CSR) Disclosure of monetary gifts and donations and community development activities (COMMDEV) has a significant effect on EPS, also corporate social responsibility as regards to employee welfare and training (CSREWTE) has a significant effect to return on equity. The study recommends that given that corporate social responsibility (CSR) dimensions exert positive influence on firm's performance, directors need to be careful in taking appropriate corporate social responsibility (CSR) tasks since those magnitudes need to be compatible with firm's overall strategy. In addition, not all forms of corporate social responsibility (CSR) disclosure are relevant in influencing corporate performance in this regard there is a need for firms to properly identify the type of CSR disclosures that the market responds favorably to. However, this does not suggest that the scope of corporate social responsibility (CSR) disclosures of company's should not be extended.

Keywords: Corporate Social Responsibility, Firm Financial Performance, Return on Equity, Return on Asset, Community Development.

INTRODUCTION

Background to the Study The concept, corporate social responsibility (CSR) is gaining wide recognition in different sectors of various economies worldwide; banking sector, industrial sector, academic sector, and international organized bodies, therefore not

restricted to business organizations. It paves way for business sustainability in any organized firm or body being implemented in Nigeria, the role of corporations to reflect social responsibility and nation building is also defined by the goals and objectives of National Economic Empowerment Development

Strategies NEEDS), expressed in provision of health care facilities, social welfare, employment, poverty reduction through skill acquisition and entrepreneurship, social welfare, etc.

The effect of corporate social responsibility is more pronounced in well developed countries which results in quality productivity and good results but in underdeveloped and developing countries, the reverse is the case due to low level of awareness, conservative thinking of shareholders, use of unskilled or non-professional manpower where needed and weak or low level of corporate social responsibility enforcement. In the world today, technological innovations have had both negative and positive influence on firms, in aspects of information organization, cost, privacy/confidentiality of information and also human element, where firms are making various efforts to survive in this competitive world through these innovations. In recent time, corporate social responsibility has now been considered as a primary factor for sustainable growth and also for building firm's goodwill.

Therefore the contribution of a firm to the society and immediate environment ensures sustainable growth and survival in the world market. However, there have been different perception of what corporate social responsibility entail, it was originally defined as the commitment to the society beyond the economic and legal obligations with an aim of managing and augmenting the ramifications of their operations on the economy, environment and the society entirely ranging from firm to global scales.

According to Geetika and Shukla, (2017), the Triple Bottom Line concept that was submitted by Elkington in 2004, the 3Ps; People, Profit and Planet are great elements for sustainability of an organized business. The 3Ps model enables organized business to appreciate long term significance of corporate social responsibility so that it can be embraced as a

framework for facilitating profitability. An efficient corporate governance framework will help in mitigating recurrence of global financial crises such as East Asia in the late 90s, as well as the American Corporate Scandals like in the case of Enron, world.com and Anderson in 2001-2002 (Strandberg, 2005). Therefore, an efficient corporate governance and CSR framework will ensure that corporations act as good corporate citizens with regard to human right, social responsibility and environmental sustainability.

Conversely, Munisi and Randoy (2013) hinted that companies across sub-Saharan Africa partly implemented good governance practice. This paper presents the writer's findings on the connection between corporate social responsibility, and corporate firm's performance and identifies opportunities for further research. The effective implementation of corporate social responsibility has been and still is an increasing general problem.

Every year business start-ups emerge and fail due to the high competition in the market world, they fail to identify market niche to enable survival which corporate social responsibility would have been of great advantage for their survival and sustainable growth. According to Wekesa (2017), evaluate on Corporate Social Responsibility and Financial Performance of Dangote cement plc and noted that there was a positive relationship between corporate social responsibility on firm's performance. Although there have been diverse studies in the manufacturing sector that show a positive correlation and expenditure on corporate social responsibility and financial performance.

Also, according to Decker (2004), in his research states that the industry in which a firm operates determines the effectiveness of CSR in attaining good advantage and eventually impacting the financial performance of the organization (Wekesa, 2017). Research Hypothesis i) Corporate social responsibility has no significant relationship with monetary

gifts, donations and community development activities. ii) There is no significant result of corporate social responsibility on employee welfare and training to firm performance. iii) Corporate social responsibility disclosure does not conform to environmental and governmental policies. iv) Corporate social responsibility disclosure has no significant effect on return on assets. v) Corporate social responsibility disclosure has no significant influence on earnings per share. vi) Corporate social responsibility disclosure has no significant effect on return on equity.

LITERATURE REVIEW

The history of corporate social responsibility has remained traced to the 1950's and its product was evident in the 20th century. An early meaning of corporate social responsibility was "the duties of businessmen to pursue those policies, to make those decisions, or to follow those lines of actions which are needed in terms of objectives and ethics of our culture" (Carroll, 1999). Corporate social responsibility is becoming a more prominent factor in organizational, maintenance and survival. Different researchers have come up with different definitions of corporate social responsibility.

Corporate social responsibility in simple terms, are activities that effectively connects the business firms with its stakeholders. The extent of this study covers the conceptual framework, theoretical framework, empirical analysis and also the methodology adopted. This research tends to lay much emphasis on the objectives of the study. 2.3 Empirical Analysis According to Noor (2015), corporate social responsibility and practice and corporate financial performance. A case study of Nigerian listed companies.

This research describes the environment and trend of the practice of CSR and also the relationship between CSR and corporate financial performance among Nigerian listed companies. Content analysis as used to extract

data from annual reports of 68 companies listed on the floor of the Nigerian Stock Exchange. And also, an hierarchical multiple regression analysis was used to study the relationship among CSR and CFP. The result of this study shows a negative relationship between ecological disclosure and corporate financial performance.

Seungwoo, Hwang and Ahreum (2017) in the research analysis of CSR on firm financial performance in stakeholders perspective explored the R&D, technology commercialization and CSR motivation as enhancement to corporate performance through CSR from the stakeholders theory. It also investigates both traditional and strategic CSR relationship with financial performance. It used questionnaire survey method and relied on primary data. Questionnaires were only distributed to a specialized company. A research carried out on Safaricom Ltd a telecommunication company by Wekesa(2017) in this research corporate social responsibility and financial performance showed an insignificant positive relationship between CSR and financial performance and its indicators; revenue, net income and earnings per share(EPS). The study used correlation research design and also secondary data was used in collecting the annual financial reports from 2009 to 2017.

Abigail and Donald (2000) in the research corporate social responsibility and financial performance estimate the effects of CSR by regressing firm performance on corporate social performance. Two models were used; the specification model and the correlation model, results showed that R&D and corporate social performance are highly correlated therefore when R&D intensity is infused in corporate social performance there is a neutral effect on profitability.

Matthew, Rebecca and Greg (2007) in the research corporate social responsibility and firm performance used Australia as a case

study, this research stated that corporate social responsibility has endangered the interests of Australian economy in recent years. The method used cut across 300 ASX listed companies for 2005 financial year, a sample of 277 companies was used after eliminating companies with missing data (McWilliams and Siegel 2000). The result stated that there is no significant relationship between corporate social responsibility and firm performance. Wan and Muhammad (2016) in the study corporate social responsibility and financial performance use Malaysia as a case study.

This study examined the relationship among corporate social responsibility and firm performance in Malaysian public listed companies. Independent variables like workplace, community, environment and market place were used, accompanied by some dependent variables like earnings per share (EPS) and return on equity (ROE). The study discovered a positive relationship between CSR and financial performance.

A research on the relationship of Corporate social responsibility and firms performance of banks in the US, UK and Japan by Keffas and Olulu-Briggs (2011) utilized 38 financial and economic ratios based that covered asset quality, capital, operations and liquidity. Data Envelopment Analysis was used. The findings showed that banks who incorporate CSR are more efficient in managing their assets portfolio, therefore its results was positive El Mosaid and Boutti (2012) evaluated the degree of CSR in Islamic banks using return on asset (ROA) and return on equity (ROE). The sample size was gotten from 8 Islamic banks from 2009 to 2010. Simple regression model was used and results showed there was no significant relationship between CSR and firm performance.

Nigeria as a case study, in the research of corporate social responsibility and its contributions to the development of business in the society by Uadiale and Fagbemi (2012)

used a sample size of 40 quoted companies and used a measure for firm performance as return on asset and return on equity. Findings gave corporate social responsibility a positive significant relationship with firm performance. Amole, Adebisi and Awolaja (2012), examined the relationship among CSR and profitability of banks in Nigeria. First Bank Nigeria Plc was used as case study. Secondary data were obtained from audited annual reports of the bank.

The outcome of the regression analysis gave a positive significant relationship between CSR and profitability in the stated case study. Babalola (2012) conducted a study on corporate social responsibility and profit. Nigeria was used as a case study and also listed firms in the Nigerian Stock Exchange was used to gather secondary data. The findings of the study showed a negative relationship between corporate social responsibility and profit. Similarly, Iqbal (2012) analysed a positive impact of CSR on firm performance in his research "impact of CSR and firm performance in Pakistan".

Secondary data were used gotten from audited annual reports of 156 listed companies in Karachi Stock Exchange using correlation and regression analysis. Return on asset and return on equity was used to measure firm performance, while to measure corporate social responsibility are: social compliance, corporate governance, community investment, social report, product integrity, corporate giving, environmental compliance, business ethical principle. Study Population Methodically speaking a population is the aggregate of all cases that conform to same designated set of specifications (Nachmias & Nachmias, 2009).

The population of the study is made up of all the companies listed on the Nigerian Stock Exchange. Each company in the population must have finished its obligation in delivering annual report of the period under consideration. However, considering the near impracticality of

observing the entire population, the simple random sampling technique was utilized in selecting a sample size. The technique is selected as it ensures minimal selection bias in the composition of the sample.

Sample and Sampling Technique

A sample is precisely a part of the population. The procedure for drawing samples from a population is known as sampling.

For the purpose of the study, the Simple random sampling technique which is a type of probability sampling technique will be utilized in selecting the sample size. The technique has been described as the most fundamental method of probability sampling. The technique is well suited for determining the sample as it provides an equal probability of selection and as such minimizes selection bias.

A sample size of 30 companies was selected and utilized for the study. The sampled companies remained drawn from the following sectors; Agriculture, Automobile & Tyre, Breweries, Building Materials, Chemical and Paints, Conglomerates companies, Food/Beverages & Tobacco, Construction, Healthcare, Industrial/Domestic Products, Packaging, Printing & Publishing, Textiles, petroleum marketing companies, banking, insurance and others.

3.5 Sources of Data Secondary data was used for the study. The secondary data was retrieved from financial statements and footnotes of the sampled companies.

However, it does to note that although there are a diversity of media or documents for CSR disclosure which include Announcements or articles published detailing a company's activities; Booklets or leaflets and Websites. Annual reports are broadly seen as the main official and legal certificate, which are produced on a regular basis and act as an important place for the presentation of a firm's communication within political, social and economic systems and are the most publicized by companies. Therefore this study is restricted

to CSR disclosures in annual reports.

Method of data collection In the extraction of the data to be used for the analysis, majority of studies on corporate social responsibility disclosure especially in the emerging capital markets, use content analysis from annual reports. The use of content analysis method in the study was based on its popularity and suitability in measuring a company's CSR disclosure in audited annual reports (Adler, 1999). In line with Al-Tuwajri, Christensen, and Hughes (2004) content analysis is utilized in extracting the data. Content analysis involves using quantitative disclosure measures with denoted weights for different CSR disclosure items.

These are built on the perceived position of each item to various user classes, which also marks the greatest weight '3' for quantitative disclosures, Marking the succeeding highest weight '2' for non-quantitative but specific data related to these pointers. Lastly, common qualitative disclosures obtain the lowest weight '1'. Firms that do not disclose any information for the given indicators receive a zero score.

3.7 Method of Data Analysis The study made use of ordinary least squares regression analysis as the data analysis method. Gujarati (2003) suggests four critical assumptions that must be met before utilizing the OLS regression.

Firstly is the statement of normality which requires that samples must be drawn from normally distributed populations and this will be examined using the Jacque-bera statistics. Second is the assumption of linearity of the model parameters. A numerical test of linearity (White, 1980) will also be conducted. Thirdly, is the statement of homoscedasticity which requires the variance or standard deviation of the reliant on variable within the group to be equal and fourthly is the assumption of independence of error terms.

Under this assumption the error terms are independent from one another and therefore no serial correlation exists. To test the

homoscedasticity assumption, the autoregressive conditional heteroskedasticity (ARCH) test is utilized. Finally, to test for multicollinearity, this study applies correlation coefficient and variance inflation factors (VIF) tests. Given the above discussion, the various tests are conducted to test the data against the OLS assumptions. Thereafter preliminary analysis will be conducted and then the regression estimates will be computed.

Indicators of the models statistical fit such as the R² was thus examined alongside the indicators of parameter significance such as the t-test and the probability values.

Model Specification

In the definition of what constitutes corporate social responsibility disclosure, the study builds on the findings by Owolabi (2010). In a comprehensive analysis of corporate social responsibility disclosure data for selected quoted companies in Nigeria sampled from 2006 to 2010, Owolabi (2010) identified the following

Models :

This model examines the implications of corporate social responsibility (CSR) disclosure with regards to firm performance. Thus, the specification is;

$$COP = F(CSR) \dots\dots\dots (1) \quad COP = \beta_0 + \beta_1 CSR + \mu \dots\dots\dots (2)$$

However, the model is re-specified to examine the effect of selected variants of CSR activities often reported in financial statements on specific corporate performance indices;

$$ROE = \beta_0 + \beta_1 CSRH + \beta_2 CSRED + \beta_3 CSRCD + \mu \dots\dots\dots (3)$$

$$ROA = \beta_0 + \beta_4 CSRH + \beta_5 CSRED + \beta_6 CSRCD + \mu \dots\dots\dots (4)$$

$$EPS = \beta_0 + \beta_7 CSRH + \beta_8 CSRED + \beta_9 CSRCD + \mu \dots\dots\dots (5)$$

Aprori expectation;

Where COP = corporate performance

CSR= corporate social responsibility (CSR)

ROE= Return on equity

ROA= Return on assets

EPS=Earnings per share

CSREWT= Corporate social responsibility disclosure on employee welfare and training

COMMDEV= Corporate social responsibility in form of monetary gifts and donations and community development activities.

CSREPL= Corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies

CSR disclosures in financial statements which are coded and defined below;

Code Description

CMGD = Monetary gifts and donations

EPC = Employment of physically challenged persons

ET = Employee training

EW = Discussion on employee welfare

SQD= Short qualitative discussion (not in the footnotes and less than a page)

EQD= Extended qualitative discussion (not in the footnotes and a page or more)

EGP =Conformity to environmental and other governmental policy

CBP =Involvement in community-based projects

In line with the findings of Owolabi (2010) about the nature and extent of what constitutes corporate social responsibility disclosure in amongst Nigerian companies we therefore specify the model for the study;

.1 Operationalization of Variables (corporate performance measures)

Variable	Measurement	Source
Return on equity	ROE is equal to a fiscal year's net income (after preferred stock dividends but before common stock dividends) divided by total equity (excluding preferred shares), expressed as a percentage.	Financial statements
Return on assets	ROA is equal to a fiscal year's net income (after preferred stock dividends but before common stock dividends) divided by total Assets	Financial statements
EPS	Earnings after interest and taxes divided by total ordinary shares	Financial statements

Source: Researcher's compilation 2018

3.2 Operationalization of Variables (corporate social responsibility measures)

Variable	Measurement	Source
Corporate social responsibility	<p>CSRH= Corporate social responsibility disclosure on employee welfare and training</p> <p>CSRMCD= Corporate social responsibility in form of monetary gifts and donations and community development activities.</p> <p>CSRH= Corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies</p>	Financial statements

Source: Researcher's compilation 2018

PRESENTATION AND ANALYSIS OF DATA

This section contains the presentation, analysis and interpretation of the data collected for this research work. Consequently, it entails the application of both mathematical and statistical techniques to provide the basis for the testing of the research hypothesis.

Hence, it is a vital part of any research work, since it forms the basis for recommendation and conclusions at the end of the research. The

models specified in the previous chapter are examined empirically. The study examines the causal-relationship between Managerial decision and earnings management in Nigeria. The preliminary analysis of the data if first conducted (Descriptive and correlation analysis) and next we conduct the multiple regression analysis is conducted. The regression analysis is conducted using the pooled OLS and the panel Estimated generalized least squares (EGLS) with effects. The results are presented and analyzed below

Presentation and Analysis of Results (Descriptive Statistics)

	ROE	ROA	EPS	COMMDEV	CSREWT	CSREPL
Mean	16.404	14.119	19.629	9689226	0.633	0.6175
Median	12.8	7.195	7.23	1012000	1	0
Maximum	290.47	380.6	290.47	3.65E+08	1	1
Minimum	-658.12	-80.29	-8.9	0	0	0
Std. Dev.	55.781	33.776	36.774	33566985	0.483	0.924
Jarque-Bera	193023.7	85319.25	7241.599	76608.31	68.188	74.348
Probability	0.00	0.00	0.00	0.00	0.00	0.00
Observations	400	400	398	400	400	400

Source: Reviews 7.0

Where;

ROE= Return on equity

ROA= Return on asset

EPS = Earnings per share

CSREWT=Corporate social responsibility disclosure on employee welfare and training COMMDEV= Corporate social responsibility disclosure in form of monetary gifts and donations and community development activities.

CSREPL= Corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies

Table 4.2.1 presents the result for the descriptive statistics for the variables. As observed, ROA has a mean value of 16.404. The maximum, minimum and median values stood at 290.47, -650.12 and 12.8 respectively. The standard deviation is 55.781 while the Jacque-Bera statistic of 193023.7 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality and as well as the unlikelihood of outliers in the series. ROA shows a positive mean of 7.002 and standard deviations of 10.302. The maximum, minimum and median values are 49.04, -37.06 and 5.57 respectively.

The Jacque-Bera statistic of 235.952 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality. ROE has a mean value of 14.119 and a standard deviation of 33.776. The maximum, minimum and median values are 14.119, -80.29 and 7.195 respectively. The Jacque-Bera statistic of 85319.25 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality. EPS has a mean value of 19.629 and a standard deviation of 36.776. The

maximum, minimum and median values stood at 290.47, -8.9 and 7.23 respectively. The Jacque-Bera statistic of 7241.559 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality.

The mean for corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) is 9689226mn. The standard deviation of 7241.559 is large and suggests that the spread of COMMDEV is unlikely to exhibit considerable clustering around the sample average. The maximum, minimum and median values are 3.65E+08, 0 and 101200 respectively. The Jacque-Bera statistic of 76608.31 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality. As observed, corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies (CSREPL) has a mean value of 0.633 which suggest that about 63.3% of the companies in our sample make disclosures with regards to conformity with

environmental/governmental policies. The standard deviation is 0.483 while the Jacque-Bera statistic of 68.188 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality and as well as the unlikelihood of outliers in the series. We also observed that about 61.75% of our sample engages in corporate social responsibility disclosure on employee welfare and training (CSREPL) as

indicated by the mean of 0.6175 with a standard deviation of 0.924. The Jacque-Bera statistic of 74.348 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality. The Jacque-Bera statistic of 8.474 alongside its p-value ($p=0.00<0.05$) indicates that the data satisfies normality and the presence of outliers are unlikely.

4.2.2 Pearson Correlation Result

	ROE	ROA	SP	COMMDEV	CSREWT	CSREPL
ROE	1	0.041	0.017	0.009	0.053	-0.103
GROWTH		1	0.017	0.040	0.028	0.147
SP			1	-0.046	0.022	0.075
COMMDEV				1	0.172	0.018
DISCL					1	-0.127
CSREPL						1

Source: Reviews 7.0

From table 4.2.2 above, the correlation coefficients of the variables are examined. ROA is observe to correlate positively with ROE ($r=0.041$) and EPS ($r=0.041$). ROE appears to also correlate positively with COMMDEV ($r=-0.009$), CSREWT ($r=0.030$) and negatively with CSREPL ($r= -103$). We also observe that ROA correlates negatively with CSREPL ($r=-0.206$). Growth is observed to be positively correlated with SP ($r=0.017$), COMMDEV($r=0.040$) and CSREWT ($r=0.028$).

We also find that a positive correlation exist

between CSREPL and ROA ($r=0.147$). EPS is observed to be negatively correlated with COMMDEV (-0.046), positively correlated with EGPL ($r=0.022$), CSREPL ($r=0.075$). COMMDEV is seen to correlate positively with CSREWT ($r=0.172$) and CSREPL ($r=0.018$) From the evaluation of the correlation coefficients, we find that none of the variables exhibits any evidence of strong collinearity and as such the challenge of multicollinearity may be unlikely when conducting the regression analysis. 4.2.3

4.2.3 Regression Assumptions Test

	Model 1	Model 2	Model 3
Variance Inflation Test			
COMMDEV	1.481	1.140	2.856
CSREPL	5.336	1.703	8.56
CSREWT	9.434	1.72	2.762
Breusch-Godfrey Serial Correlation LM Test			
P(f-stat)	0.221	0.219	0.322
Heteroskedasticity Test: Breusch-Pagan-Godfrey			
P(f-stat)	0.724	0.715	0.404
Ramsey Reset Test			
P(f-stat)	0.589	0.387	0.342

Source: researcher's computation 2018

Table 4.2.3 shows the regression assumptions test for models. As observed, the variance inflation factor (VIF) shows how much of the variance of a coefficient estimate of a regressor has been inflated due to collinearity with the other regressors. Basically, VIFs above 10 are seen as a cause of concern.

As shown in the table, none of the variables appear to have VIF's values exceeding 10 and hence none is dropped from the regression model. The performance of the Ramsey RESET test showed high probability values that were greater than 0.05, meaning that there was no significant evidence of miss-specification. The Breusch-pagan-Godfrey test for heteroscedasticity was performed on the residuals and the results showed probabilities less than 0.05 for model 5 which suggest the presence of heteroscedasticity in the residuals.

As explained earlier, one appropriate method to treat heteroskedasticity is to adapt Robust

Standard Errors that addresses the issue of errors that are not independent and identically distributed. In addition we also utilize the Estimated General Least Squares in conducting the panel OLS. The Lagrange Multiplier (LM) test for serial correlation indicates that the probabilities (Prob. F, Prob. Chi-Square) were less than 0.05 for model 5 also suggesting the presence of serial correlation in the model.

In correcting for serial correlation in the model we adopt the Cochrane Orcutt method which implies including an autoregressive (AR) term as part of the exogenous variables and re-estimating the model (Eviews,7.0). However, in the case of panel data (Random effects) where the inclusion of AR terms is not allowed, the EGLS (Estimated General Least Squares) is often applied. As Keele & Kelly (2006) notes given that the model do not include lags of the dependent variables, the GLS procedure will be effective in correcting for serial correlation

4.2.4 Regression Result

	Aprori sign	Model 1 ROE	Model 2 ROA	Model 3 EPS
C		21.300* (0.000)	8.879* (0.000)	23.312* (0.000)
COMMDEV		4.3208* (0.000)	-5.0208* (0.000)	3.1307* (0.000)
CSREPL		-0.075 (0.945)	5.0304* (0.000)	1.077 (0.299)
CSREWT		-3.910* (0.025)	0.904 (0.422)	-0.568 (0.579)
R ²		0.876	0.65	0.86
ADJ R ²		0.832	0.54	0.81
F-Stats		20.38	5.57	17.48
P(f-stat)		0.000	0.00	0.000
<i>Hausman test</i>		0.00	0.00	0.00
D.W		2.039	2.4	2.3

Source: Eviews 7.0 * significant at 5% **significant at 10%

Both techniques (Cochrane Orcutt and the EGLS) will be utilized in this study in controlling for the suspected serial correlation

in the model shows the result for Model 1 which surveys the impact of Corporate Social Responsibility Disclosure on Return on Equity.

As observed, The Panel (Fixed effects) estimation shows an R² value of 0.876 which suggests an 87.6% explanatory ability of the model for the systematic variations in the dependent variable with an adjusted value of 0.832. The F-stat (20.38) and p-value (0.00) indicates that the hypothesis of a significant linear connection between the dependent and independent variables cannot be rejected at 5% level.

For an evaluation of the effects of the explanatory variables on Return on Equity, we examine their slope coefficients. As observed, the mean for corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) appeared negative (4.3208) and significant at 5% (p=0.00). Corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies (CSREPL) also appeared negative (-0.075) and not significant at 5% (p=0.945).

The effect of Corporate social responsibility disclosure on employee welfare and training (CSREWT) appeared negative (-3.910) and statistically insignificant at 5% (p=0.025). The D. W statistics of 2.25 indicates the absence of serial correlation of the residuals in the model. The result for Model 2 which surveys the effect of Corporate Social Responsibility Disclosure on ROA. As observed, The Panel EGLS (Fixed effects) estimation shows an R² value of 0.65 which suggests that the model explains about 65% of the systematic variations in the dependent variable with an adjusted value of 0.54.

The performance of corporate social responsibility disclosure measures reveals that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) appeared negative (-5.0208) and significant at 5% (p=0.000). Corporate social responsibility disclosure in the form of

Conformity to environmental and other governmental policies (CSREPL) appeared positive (5.0304) and significant at 5% (p=0.000). The impact of Corporate social responsibility disclosure on employee welfare and training (CSREWT) appeared positive (0.904) and statistically insignificant at 5% (p=0.422). The F-stat (5.57) and p-value (0.00) indicates that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected at 5% level. The D. W statistics of 2.39 indicates the absence of serial correlation of the residuals in the model.

The result for Model 3 which observes the impact of Corporate Social Responsibility Disclosure on Firm share prices. As observed, The Panel EGLS (Fixed effects) estimation shows an R² value of 0.86 which suggests that the model explains about 86% of the systematic variations in the dependent variable with an adjusted value of 0.81. The performance of corporate social responsibility disclosure measures reveals that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) appeared positive (3.1307) and significant at 5% (p=0.000). Corporate social responsibility disclosure in the form of Conformity to environmental and other governmental policies (CSREPL) appeared positive (1.077) but not significant at 5% (p=0.299).

The effect of Corporate social responsibility disclosure on employee welfare and training (CSREWT) appeared negative (-0.5680) and statistically insignificant at 5% (p=0.579). The F-stat (17.48) and p-value (0.00) indicates that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected at 5% level while the D. W statistics of 2.3 indicates the absence of serial correlation of the residuals in the model. 4.3. Hypothesis Testing In discussing the results, the fixed effects estimates are utilized in line with the Hausman

test.

Empirical review on the relation between corporate social responsibility disclosure and corporate performance have tended to focus on single measure of corporate performance. This study utilizes several measures of corporate performance. 4.3.1 CSR and ROE Model 1 observes the impact of Corporate Social Responsibility Disclosure on Return on equity. As observed, The Panel EGLS (Fixed effects) estimation reveals that of all the dimensions of CSR examined; only CSR COMMDEV disclosure and CSREWT were significant at 5%, although the coefficient signs were different.

Hence, we find some evidence that corporate social responsibility has a significant effect on a company's Return on equity and hence we reject the null hypothesis (H1, H2 & H6). 4.3.2 CSR and Firm ROA Model 2 examine the impact of Corporate Social Responsibility (CSR) Disclosure on ROA. As observed, the Panel EGLS (Fixed effects) estimation revealed that the effect of corporate social responsibility disclosure measures in form of Conformity to environmental and other governmental policies (EGPL) and COMMDEV appeared significant at 5%, although the coefficient signs were also different. Hence, we find some evidence that corporate social responsibility specifically EPGL, has a significant effect on a company's ROA and hence we discard the null hypothesis (H1, H4 & H6). 4.3.3

CSR and EPS Model 3 examines the impact of Corporate Social Responsibility Disclosure on EPS. As observed, The Panel EGLS (Fixed effects) estimation shows that corporate social responsibility disclosure measures reveals that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) appeared positive (3.1307) and significant at 5% ($p=0.000$).

Hence, we find some evidence that corporate

social responsibility specifically that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) has a significant effect on a company's EPS and hence we discard the null hypothesis (H1 & H5).

CONCLUSION AND RECOMMENDATIONS

Summary of Findings In line with the study hypotheses; 1. The findings reveals that of all the lengths of CSR examined; only CSR COMMDEV disclosure and CSREWT were significant at 5%, although the coefficient signs were different.

Hence, we find some evidence that corporate social responsibility has a significant effect on a company's Return on equity and hence we discard the null hypothesis (H1, H2 & H6). 2. The findings of this study indications that the result of corporate social responsibility disclosure measures in form of Conformity to environmental and other governmental policies (EGPL) and COMMDEV appeared significant at 5%, although the coefficient signs were also different. Hence, we find some evidence that corporate social responsibility specifically EPGL, has a significant effect on a company's ROA and hence we discard the null hypothesis (H1, H3 & H4). 3.

The findings shows that corporate social responsibility disclosure measures reveals that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) appeared positive (3.1307) and significant at 5% ($p=0.000$). Hence, we find some evidence that corporate social responsibility specifically that corporate social responsibility disclosure in form of monetary gifts and donations and community development activities (COMMDEV) has a significant effect on a company's EPS and hence we reject the null hypothesis (H1 & H5). Conclusion Until the late 1980s, there was no

great need for corporate social reporting. Investors started attaching importance to environmental information from the 1990s (Solomon & Solomon, 2006).

Corporate social reporting by companies has been growing steadily in both size and complexity since then. The developing challenge for companies today is the need to reconfigure their performance indices to integrate societal and ecological concerns as part of the overall objective of business. Social responsibility reporting provides a strategic background for attaining this holistic re-appraisal of business performance. In the past, social responsibility used to get less courtesy and minimum importance in the objectives of corporate corporations.

However, it has turn out to be a crucial concern in recent times as a result of the global attention that the subject of attraction. One approach to appraising company's social responsibility behavior is to inspect if they engage in corporate social responsibility reporting. It is believed that when a company involves in social responsibility reporting it presents a balanced reportage of its activities and impacts and provides a basis for stakeholders to appraise its performance. It does to note that social responsibility reporting is seen to have developed rather voluntarily in the recent past and this implies that companies can chose what to disclose and may even choose not to. Furthermore, the nexus between social responsibility reporting and corporate performance is complex and leaves much to be desired. This is confirmed by the empirical literature in the field which does not provide clear cut results. The study has tried to verify, whether certain corporate performance measures can be affected by a firm's social responsible behavior.

We have analyzed some simple descriptive statistics and have used cross section and panel data econometrical approaches, to verify whether corporate social responsibility

disclosure could affect corporate performance measures. The study found that the impact of Corporate Social Responsibility Disclosure in form of Conformity to environmental and other governmental policies (CSREPL) appeared positive and significant at 5%. The study also found the result of Corporate Social Responsibility Disclosure in the form of Conformity to environmental and other governmental policies (EGPL) on Return on Assets to be positive and significant. The study found the result of Corporate Social Responsibility (CSR) Disclosure of monetary gifts and donations and community development activities (COMMDEV) on EPS to be significant. 5.3. Recommendations 1. Given that CSR dimensions exert positive influence on firm's performance, directors need to be cautious in choosing appropriate CSR tasks since those dimensions need to be compatible with firm's overall strategy. Consequently, the question for executives is not simply to decide whether to invest in social responsibility, it is rather what form of social responsibility fit for a specific firm's strategy. 2.

In addition, not all forms of CSR disclosure are relevant in influencing corporate performance in this regards there is a need for firms to properly identify the type of CSR disclosures that the market responds favorably to. However, this does not suggest that the scope if CSR disclosures of company's should not be extended. 3 The challenging situation of weakness of state policy in the development of effective and enforceable CSR management framework especially in most developing countries lends credence to the view that contemporary CSR practices have drifted and evolved within a system skewed towards the spirit of free-market individualism without effective state direction. Thus, CSR reporting has developed rather voluntarily and this suggests that companies can choose what to disclose and may even decide not to.

We recommend that there is a need for effective

regulation of CSR practices of companies in Nigeria. 4 Finally, there is the issue of credibility of CSR disclosures. One problem with CSR disclosure is that the information reported may tend to be selective and as such it is difficult to determine whether such disclosures are anything more than corporate branding and is motivated to enhance corporate image. Hence there is the need for external verification of CSR claims and disclosures as well as ascertaining the reliability and authenticity of CSR representation in the accounting record.

REFERENCES

- Amole, B.B., Adebisi, S.O., and Awolaja, A.M., (2012), Corporate social responsibility and profitability in Nigeria banks: A causal relationship. *Research journal of finance and accounting*, 3(1), 6-17
- Babalola, Y.A., (2012), the impact of corporate social responsibility on firms' profitability in Nigeria. *European Journal of Economics, Finance and administrative sciences*, 45, 39-50.
- Damodar, .N. Gujarati (2003). *Basic Econometrics*. New York McGraw Hillbook.co
- Decker.O.S., (2004). Corporate social responsibility and structural change in financial services *Managerial Auditing Journal*, 19(6), 712-728.
- El Mosaid, F. & Boutti, R. (2012). Relationship between Corporate Social Responsibility and Financial Performance in Islamic Banking Research, *Journal of Finance and Accounting*. 3(10), 93-103.
- Geetika, A & Shukla, .A., (2017). The relationship between corporate social responsibility and financial performance in Indian Banks. *IUP Journal of Corporate Governance*, 16(2), 39- 53.
- Halbert, W.(1980). A Heteroskedasticity - Consistent Covariance Matrix Estimator and a direct test for heteroskedasticity. *The Econometric Society* 48(4) 817-838.
- Handerson, .D., (2001). Misguided virtue. False notions of corporate social responsibility: London. The Institute of Economic Affairs Available online, <http://www.globalreporting.org>.access ed.
- Iqbal, N., Ahmad, N., Basheer, N.A., & Nadeem, M., (2012), Impact of corporate social responsibility on financial performance of corporations: Evidence from Pakistan. *International journal of learning and development*, 2(6), 107-118 Margarita (2004).
- Keffas, G. & Olulu-Briggs (2011). Corporate Social Responsibility: How does it affect the Financial Performance of Banks? Empirical Evidence from US, UK and Japan. *Journal of Management and Corporate Governance*, 3, 8-26.
- Kerlinger, F.N.(1970). *Foundation of Behavioral Research*. New York: Holt, Rinehart and Winston.
- Matthew, B., Reecca .B., & Greg, .H., (2007). Corporate social responsibility in the Australian context.
- Munisi, .G., & Randoy, .T., (2013). Corporate governance and company performance across Sub- Saharan African countries. *Journal of Economics and Business*, 70, 92-110.
- Nachmias, C.F and Nachmias, D. (2009). Research methods in the social sciences, *London Replica Press Ltd*.
- Owolabi, .A., (2010). Corporate Social Responsibility Disclosure on Nigerian Companies from 2006-2010, Retrieved from <http://www.utas.edu.au>.20.10.2012
- Paul, .S. Adler, (1999). Building Better Bureaucracies, *Academy of Management Executives*, 13(4) 35-45.
- Seungwoo, .O., Ahreum, .H. & Junseok, .H., (2017). An analysis of CSR on financial performance in stakeholder perspective. *Sustainability Journal*, 9,

- 10-23.
- Strandberg, .C., (2005). The convergence of corporate governance and corporate social responsibility , *Solution for a Sustainable World*, available at www.corostrandberg.com.pdf (assessed 14 April 2020).
- Uadiale, O.M. & Fagbemi, T.O. (2012). Corporate Social Responsibility and Financial Performance in Developing Economies: The Nigerian Experience. *Journal of Economics and Sustainable Development*, 3(4), 44-55.
- Wan, .F.W.Y., & Muhammad, .S.A. (2016). The relationship between corporate social responsibility and firm performance: Evidence from Malaysia. *Medwell Journals*, 10(4), 345-351.
- Wekesa, .R.N., (2017). Corporate social responsibility and financial performance: The case study of Safaricom ltd. *International Journal of Finance and Accounting*, 6(6), 167-171.
- Sulaman A. Al-Tuwaijri, Theodore .D. Christensen, & K. II Hughes, (2004). Environmental Disclosure, Environmental Performance & Economical Performance: A Simultaneous Equation Approach. *Accounting Organization and Society*, 29(5-6)447-471.

ECONOMIC IMPLICATIONS OF MONEY LAUNDERING

¹Patrick Olasehinde Daniels, PhD, ²Kolawole Ebire, PhD

¹Charisma University,
Department of Forensic Accounting & Audit
Email: patoladaniels@gmail.com

²Nasarawa State University,
Department of Banking and Finance, Keffi
Email: Kolawole.ebire@gmail.com

Abstract

The paper discusses the review of various mechanisms associated with money laundering and the alternative anti-money laundering initiatives, which allows for the integration of the various Financial Action Task Force (FATF) regulations to limit the vice. Putting implicit consideration upon the various economic implications of money laundering, the research explains the essential roles governments and financial institutions should play to enable its eradication. The paper, therefore, recommended that there should be provision for the adoption of specific FATF recommendations through the integration of the specific FATF policies that will enable the attainment of the necessary protections against banking fraud, money laundering, corruption, embezzlement of funds, and illicit financial flow of money across different jurisdictions.

Keywords: Money Laundering, FATF, Know Your Customer, Customer Due Diligence, Economic implications

INTRODUCTION

Money laundering is considerably on the rise, with the effects being felt by most economies. The increase in money laundering is related to globalisation effects as international crime syndicates seek to utilise international financial systems to legitimise and conceal their criminal proceeds. Money Laundering as a financial process entails concealing the illegal source of income using strategic measures, which essentially portray the crime proceeds as being legitimate. As such, the process of money laundering is useful to criminal entities seeking to 'make their illegal financial proceeds appear legit and clean to the authorities. The

movement of proceeds of crime, illicit funds, and corruption money always thrives under an environment of banking secrecy (Organisation for Economic Cooperation and Development (OECD), 2014). Therefore, money laundering is considered a global problem associated with the globalisation of markets and financial systems. It is essential to develop an implicit understanding of the phenomena to guarantee effective mitigation, especially in the banking sector (Simwayi& Guohua, 2011; Olatunde-Aiyedun & Ogunode, 2021).

Money laundering has devastating effects upon the nation's economic and financial integrity

status. The success of any money laundering scheme benefits criminals and not the national government nor its citizens. Money laundering is necessarily the mere justification of the notion that ‘crime pays.’ However, the realisation of effective money laundering operations requires the perpetrators to avoid detection by financial authorities and other international financial agencies. The money laundering schemes involve multiple offshore transactions to ensure the proper disguise of the crime proceeds. Specifically, OECD (2009) opined that a well-laid money laundering scheme should encompass the following critical stages: placements, layering, and the eventual integration of the crime proceeds into the economy.

The first step of placement usually involves the unlawful deposit of the crime proceeds into financial institutions. This process can be through wired transfers or direct deposits. According to OECD (2009), most money launderers undertake the placement stage using casinos, legit businesses, and banks. With the undetected money placement into financial institutions, the fraudulent money launderers further establish the layering stage. This stage of money laundering is by far the most complicated because it is meant to detach the source of the crime proceeds. Specifically, the transactions' complexity during the layering step obscures any existing audit trails linking the money to its illegal sources. Using the integration stage, money laundering schemes create legit financial transactions that illustrate the criminal proceedings to originate from legitimate business entities. This study aims to assess the economic implications of money laundering.

The rest of the study is organised as follows: the following section covers the concept of money laundering. Next is the concept of money laundering, the economic implication of money laundering, measures to curb money laundering, anti-money laundering initiatives. The concluding section summarises the

findings of the study and provides some policy recommendations.

Concept of Money Laundering

The Financial Action Task Force (FATF) (2020) defined “money laundering” as the processing of criminal proceeds to disguise their illegal origin to legitimise the ill-gotten gains of crime. This definition by FATF views money laundering as a criminal act or funds with illegal sources with the goal to legalise them. This definition is in line with the definition put forward by Gjoni, Gjoni and Kora (2015), who defined money laundering as the process of disguising illegal sources of money to appear legitimate. Ihsan and Razi (2012) view money laundering as money illegally obtained from the national economy and kept abroad for personal interest. They noted that money laundering takes various forms, including structuring, bulk cash smuggling, cash-intensive businesses, trade-based laundering, shell companies and trusts, bank capture, casinos, real estate, and black salaries.

Economic Implications of Money Laundering

There are numerous economic implications associated with money laundering on both financial sectors and private business growth. These includes:

- i. Successful and frequent money laundering operations often undermine a region's private sector because of limited integrity and acceptability by investors (King, 2015). The economic issues are often attributed to microeconomic components in which the front organisations used by criminals to hide and launder proceeds of crime lack legitimacy and the possibility to aid in increasing revenue generation using taxation strategies.
- ii. By using private entities to conceal the proceeds of crime, most money launderers restrict the proper circulation of money in an economy.

- iii. The use of proxy companies by money launderers ensures that these criminal enterprises are able to guarantee clean-up of their crime proceeds and essentially facilitate market manipulation. Some of these front companies often participate in markets without putting implicit consideration upon price issues especially with their huge criminal proceeds. The criminal entities will often channel the crime proceeds using strategic ML initiatives into other economies. It is also much frequent for such crime syndicates to limit money flow into the economy because of fear of detection by financial authorities. Upon successfully laundering money, these criminal entities also avoid paying tax and thus limit remittances towards a country's economy.
- iv. Money laundering schemes are an eventual indication that the financial integrity of a specific market is weak and very vulnerable. Financial institutions and banking dependent on money laundering proceeds will mostly be affected by liabilities entailing ineffective management of operations and financial assets. Banks that accommodate such money laundering schemes often receive large amounts of cash that are quickly transferred using illegal financial flows that do not facilitate better liquidity and the addition of assets (Simwayi & Guohua, 2011). By this, most of the failures by banking institutions are usually characteristic of financial crimes, criminal activities, corruption, and mostly money laundering effects.
- v. With market globalisation elements and the confluence of several world markets, the issue of money laundering is becoming a global issue/problem affecting several market jurisdictions. Specifically, growth in international trade participation, expansion of financial systems, the elimination of international travel/trade restrictions, and the surge of international terrorism or organised crime operations; are some of the aspects that have prompted the increased laundering sources and opportunities to warrant conversion of the illegal crime proceeds. In this sense, most of the criminal entities participating in money laundering are usually known to transfer large sums of cash from one country to the financial systems of another, hence limiting the re-investment of the criminal proceeds into the economy (De Koker, 2006). The transfer of the large amount into other nations will bring about the distortion of the demand for money by the macroeconomic level and the establishment of unhealthy international volatility concerning exchange rates and capital flows.
- vi. The United Nations (UN) and the Organization of American States (OAS) stipulate that money laundering represents serious threats upon the security, economic, and political stability of the international community. By this, money laundering especially using money derived from serious crime proceeds of terror activities, is a threat to the reliability, integrity, and stability of the existing international financial systems. It is identifiable that money laundering, terrorism, and drug trafficking are specific organised crime elements that affect the existing global peace and freedom, which have adverse effects on economic progress.
- Money laundering and other organised crimes require underlying and primarily profit-making elements like drug trafficking, corruption, tax evasion, and even fraud along with intent by the

criminal participants to conceal their crime proceeds from the authorities (De Koker, 2006). The activities are usually characteristic of the diversion of financial flows and resources away from economic and socially productive uses. The diversion of the capital flows always brings about negative impacts upon the country's financial sector and the stability of other global states. Because of the numerous negative consequences that are usually attributed to money laundering, the International Monetary Fund (IMF) has always ensured their activeness in the anti-money laundering and combating of financing of terrorism (AML/CFT) policy programs. In this sense, the effective implementation of AML/CFT enables the essential protection of the existing market integrity and the global financial framework.

Practices Used to Curb Money Laundering

- i. The international practices for combating money laundering and financing terrorism are constituted in the 2012 revised FATF 40 Recommendations, which was initially brought into implementation by the G7 group in response to increasing global money laundering threats. In this sense, the standards are accepted globally as the necessary policy benchmark for anti-money laundering and terrorist financing activities. Particularly, the FATF standards of 2012 contain specific and essential paradigms that enable the utilisation of internationally accepted standards of practice. The 2012 FATF requires financial institutions and jurisdictions to criminalise elements of money laundering, the proliferation of financing, and terrorist financing in accordance with international law requirements as indicated by the IMF. The existing international standards further advocate for nations especially in emerging markets to be considerate of 'freezing identified terrorist assets and allied business entities.' By this, the stipulated strategy warrants the confiscation of their criminal proceeds, hence limiting the progression/growth of their criminal entity.
- ii. The other existing international practices entail establishing financial intelligence units by banking and other financial institutions to facilitate the collecting, analysis, evaluation, and dissemination of identified data/information concerning suspicious accounts/transactions. This portrays that the use of independent financial intelligence reports to finance institutions warrants the possibility to identify specific transactions that could have been missed by respective government's central banks and other international agencies like the IMF (De Koker, 2006).
- iii. Notably, most existing international practices mandate the essential need for the supervision of financial reporting and the respective banking/financial entities to guarantee their compliance with issues such as the required customer due diligence and other standards. As an effort to improve upon regulatory compliance issues and efficiency of the respective AML programs, FinCEN (financial crimes enforcement network) aspires to solicit potential regulatory amendments to the existing Banking Secrecy Act. By this, the development is considered an opportunity that would bring forth the improvement of the institutional level performances, especially with the rising money laundering issues affecting most of the emerging markets.
- iv. The current international practices, according to the World Bank (2018) report, are subject to approach AML

programs with an underlying consideration upon the specific “five pillars;”(Suntura, 2019). It involves the need for banking/financial institutions to formulate internal policies, the establishment of procedural banking controls, the designation of official duties to the AML officer, implementation of the necessary trainings for employees, and Customer Due Diligence (CDD), which combined will ensure effective customer centric operations. Having an implicit look at the various AML program policies, the respective pillars do seem comprehensive. However, these pillars are heavily skewed to facilitate the effective management of the existing AML program requirements rather than addressing the emerging/current AML/CFT risks that impact most financial institutions' performance standards in global markets. For instance, the closest pillars advocating for the proper address of existing risks - CDD, internal policies, and procedural controls are subject to implicit failure because of the lacking scope concerning money laundering problems faced by most of the financial institutions especially in emerging market jurisdictions.

From the research report by the United Nations(2021), an estimated 99 per cent of illicit crime/drug funds usually elude detection, hence the implication that most of the existing global finance institutions are already in possession of substantial amount of ‘dirty laundered money (De Koker, 2006).’ Particularly, it is evident that most financial institutions like banks are already servicing clients engaged in financial crimes because their monitoring systems and AML/CFT paradigms lack continual analysis of the consumers’ account history and transactions. Even with static and loyal customers, the base

or else, the origin of their money are never static. “People are always subject to experience evolving elements especially when business undertakings are proving to be difficult in terms of profit generation capacity (Gilmour, 2020).” By this, any account holder classified as ‘low risk’ about five years ago should undergo the necessary scrutiny at any given time, especially when the amount deposited is at least \$10,000. Financial institutions should establish client risk levels that will necessitate proper analysis of individual personal and financial issues. As such, most of the international AML/CFT practices are characteristic of numerous flaws that require the necessary address and improvements especially during this modernised globalisation period, whereby money transfers are easily done through online platforms and computers.

Anti-Money Laundering Initiatives

For banking institutions to realise the needed money laundering eradication, especially in emerging economies such as Nigeria, global jurisdictions must put in place risk management policies or regulations meant to expose and combat ML/TF (Simwayi & Guohua, 2011). With the implementation of the necessary financial risk assessment paradigms, existing AML program initiators should drive towards the improvement of fight against growing money laundering and terrorism financing issues. Continual technology innovations and computerisation characterise the 21st century, it is quite clear to most that money laundering issues might continue or worsen. This is evident by the increasing terrorism activities affecting most of the world's global regions, resulting in political and economic uncertainties. For instance, in the context of the Nigeria economy, issues of corruption increased organised crimes, and drug trafficking supports existing money laundering schemes that necessarily result in the devaluation of the country’s financial stability and attraction for private investors. As such, it is clear that financial institutions should be well equipped with the necessary AML programs, policies, business

processes, and programming to ensure their identification of the respective money laundering risks affecting most financial institutions (Suntura, 2019; Olatunde-Aiyedun, Eyiolorunse-Aiyedun & Ogunode, 2021). The 2012 revised FATF recommendations showed that most financial institutions are highly susceptible to money transfers associated with “money laundering syndicates.”

Importantly, for banking and other financial institutions like hedge funds to realise effective AML/CFT compliance prospects, the need for the risk assessment of its operations, clients, and employees should always be a necessity. When left unchecked, these unwanted risks are always thought to bring about challenging financial issues that might damage the bank reputation or at worse, cause the collapse of the bank/financial institution. For example, JPMorgan, HSBC, and the Deutsche Bank were in September 2020 accused of collusion to facilitate money laundering schemes that facilitated illegal wire/cash transfers of at least \$2 Trillion (Gilmour, 2020). After the money laundering scheme exposure amongst the aforementioned banking systems, the shares of JPMorgan under NASDAQ went down by a 4% margin, while the Deutsche Bank shares fell by 8% (Johnston and Carrington, 2006). In this sense, it is quite evident that without the implementation of the necessary AML foundations and abiding by the Bank Secrecy Act requirements, most banks will be vulnerable to both internal money laundering attacks because of corruption and employees lacking proper AML trainings. Further, banks lacking crucial AML program paradigms are mostly affected by money laundering issues originating from the customers because of their need/desire to register a new and long-term prospective client. This element is mainly common in emerging markets like Africa, whereby income levels are quite low compared to the rising cost of living.

Facilitating the needed risk management purposes, assessments will identify the existing

opportunity gaps in the organisation and enable the bank management to improve upon the AML procedures, policies, and process. With most assessment strategies, the banking system should be able to make informed decisions that concern their risk appetite, how resource allocations can resolve an emerging issue, and how technology or the existing AML controls can help resolve the ML/TF problems. Alternatively, risk management is specifically attained after undertaking implicit structure assessments. This is because the management needs to understand the business/banking structures before they facilitate the implementation of the critical AML programs compliance. To develop the essential mitigation factors against money laundering, the applicable internal controls should lower the business entity’s residual risk exposure. Notably, through the use of frequent risk assessments, financial institutions can inform the regulators about the risks, control gaps, and the remediation efforts useful towards elimination of money laundering and terrorism financing (Simwayi & Guohua, 2011).

Know Your Customer (KYC) procedural aspects are critical functions that allow institutions to facilitate the necessary assessment of customer risks as well as other legal requirements that allows for proper compliance with AML laws/regulations (Sater, 2020). KYC's efficacy ensures better awareness of the financial/banking system’s customer identities, their existing or else past financial activities, and the risks that they could pose to the organisation. As a financial institution it is always crucial to determine the extent that they know their clients. It is not satisfactory enough that banking institutions just transact with customers without determining the origin or the destination of their money. For most financial institutions, neglecting customer transaction information and failing to determine the customers’ money origin could warrant to possible fines, reputational damage, and sanctions because the banking entity could be dealing with money launderers or terrorist

financiers without their awareness (Ekpo & Aiyedun, 2019).

Know Your Customer and AML Compliance

KYC are the fundamental business/banking mechanisms that are necessary in ensuring business practices abide towards protecting the organisation against frauds or any other losses arising from illegal transactions and account funding. In this sense, the notion of KYC makes implicit reference to the existing steps that most financial institutions usually take to ensure they establish proper customer identity as well as improve the understanding of the existing nature of their customer's financial transactions/activities. Primarily, a financial institution that utilises KYC paradigms is able to satisfy AML compliance needs because of their ability to determine the source of every bank customer funds. Facilitating the creation and running of effective KYC programs necessarily allows for the assessment of money laundering risks affecting the customer accounts, hence assuring the retention of the existing banking reputation and the protection of the customers through CDD (Suntura, 2019).

The implementation of AML programs by financial institutions would never be effective enough to combat money laundering or terrorism financing activities, if there is failed implementation of proper KYC mechanisms. The KYC regulatory processes enable for institutional verification of the customer's identity/details through data assessments to ascertain their qualifications for the banking services (Sater, 2020). In essence, through KYC policies and procedural requirements, most financial institutions realise a better understanding of their customers' financial status and dealings. The information and data gained through such assessments are useful to the chief AML officer because the 'top-notch' organisational auditor is able to utilise the information/data to mitigate and manage emerging ML/FT risks.

The creation and effective running of KYC programs in financial institutions mandates the banking institution to involve specific strategic approaches (Suntura, 2019). The institution should put specific AML requirements in place for effective implementation of the required protections and AML/CFT policies. One of the most important elements that banking institutions ought to attribute to a Customer Certification Program (CCP). The CCP identification programs permit financial institutions and other authorities to determine and verify who an individual is and limit identity theft problems. Particularly, the CCP program is proven to be quite significant in the banking sector because of widespread identity theft issues that impact at least 16.7 million consumers in the US and has resulted in the loss of over \$20 billion each financial period (Ihsan & Razi, 2012). For any financial entity, the integration of CCP into their AML programs is not just a necessity, but 'an obligation that their employees are much aware of because it is the law.'

Way Forward

Money laundering is a global problem that requires the strategic implementation of anti-money laundering programs like CDD and KYC policies. With proper integration of AML procedures in banking, the success rate of money laundering schemes would be reduced. By this, it is evident that most criminal entities are always pursuant of jurisdictions lacking effective anti-money laundering programs (Simwayi & Guohua, 2011). Considering the effects that usually emanate because of money laundering upon economic growth, financial integrity, and political stability, it is important for global agencies like the IMF to ensure the necessary adoption of mechanisms limiting these financial crimes. By this, most financial institutions across the world are advised to assimilate the revised FATF 40 Recommendations. The globally accepted standards of anti-money laundering are subject to limit the proliferation of money laundering practices.

Conclusion and Recommendation

The undertaking of money laundering initiatives by most criminal entities participating in organised crimes like drug trafficking is an issue affecting the global financial systems and integrity. The threat of money laundering poses a major challenge to global development by limiting the amount of financial resources available to government to invest in critical sectors of the economy such as infrastructure, health, education, agriculture etc. More so, the amount of funds available for legitimate business is affected thereby limiting investment. Therefore, this study recommends that it is critical for global government entities to facilitate the implementation of FATF policies that entail AML mechanisms. In this sense, the integration of the specific FATF policies that will enable the attainment of the necessary protections against banking fraud, money laundering, corruption, embezzlement of funds, and illicit financial flow of money across different jurisdictions.

References

- De Koker, L. (2006). Money laundering control and suppression of financing of terrorism: some thoughts on the impact of customer due diligence measures on financial exclusion. *Journal of Financial Crime*.
- Ekpo, C.G. & Aiyedun, T.G. (2019). Environmental Education: A tool for creation of awareness on adaptation to climate change in Nigeria. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 9 (6) 12-21.
- Financial Action Task Force (2020). FATF annual report 2019-2020. Available at <https://www.fatf-gafi.org/publications/fatfgeneral/documents/annual-report-2019-2020.html> retrieved on 8/11/2021
- Gilmour, N. (2014). Understanding money laundering—a crime script approach. *The European Review of Organised Crime*, 1(2), 35-56.
- Gjoni, M. Gjoni, A. & Kora, H. (2015). Money Laundering Effects, *International Conference on Management, Business and Economics*. 16. <https://knowledgecenter.ubt-uni.net/conference/2015/all-events/16> <http://iosrjournals.org/iosr-jrme/papers/Vol-9%20Issue-6/Series-5/C0906051221.pdf> https://www.researchgate.net/publication/350819014_Shortage_of_Professional_Science_and_Environmental_Education_Teachers_in_Nigeria
- Ihsan, I. & Razi, A. (2012). Money laundering – A negative impact on economy, *Global Journal of Management and Business Research*, 12(17), 51-57
- Johnston, R. B., & Carrington, I. (2006). Protecting the financial system from abuse: Challenges to banks in implementing AML/CFT standards. *Journal of Money Laundering Control*.
- King, D. (2015, October). Banking Bitcoin-Related Businesses: A Primer for Managing BSA/AML Risks. In *Retail Payment Risks Forum Working Paper*. Federal Reserve Bank of Atlanta.
- Olatunde-Aiyedun, T.G. & Ogunode, N.J. (2021). Shortage of professional science and environmental education teachers in Nigeria. *Asian Journal of Science Education*, 3 (1), 1-11.
- Olatunde-Aiyedun, T.G., Eyiolorunse-Aiyedun, C.T. & Ogunode, N.J. (2021). Post covid-19 and digitalisation of University lecturers in Nigeria. *Middle European Scientific Bulletin*, 11(1). <http://cejsr.academicjournal.io/index.php/journal/article/view/488>
- Organisation for Economic Cooperation and Development (2014). Illicit financial flows from developing countries: Measuring OECD responses. Available at https://www.oecd.org/corruption/Illicit_Financial_Flows_from_Developing_Countries.pdf Retrieved on 8/11/2021

- Sater, S. (2020). Do We Need KYC/AML: The Bank Secrecy Act and Virtual Currency Exchanges. *Ark. L. Rev.*, 73, 397.
- Simwayi, M., & Guohua, W. (2011). The role of commercial banks in combating money laundering. *Journal of Money Laundering Control*.
- Suntura, J. H. C. (2019). Customer identification in currency exchange companies as per FATF recommendations. *Journal of Money Laundering Control*.
- United Nations Office on Drugs and Crime (2021). Global overview: Drug demand drug supply. Retrieved from https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_2.pdf on 8/11/2021
- World Bank (2018). Available at <https://documents1.worldbank.org/curated/en/895741522344390702/pdf/PP2409-PJPR-PUBLIC-Project-Paper-final.pdf>

EFFECT OF FIRM ATTRIBUTES ON FINANCIAL PERFORMANCE OF LISTED OIL AND GAS COMPANIES IN THE NIGERIAN STOCK EXCHANGE

¹Ekpe Malthus Timothy, ²Mary Josiah (Corresponding Author), ³Sunny, I. Agbo

^{1,2,3}Department of Accounting,

College of Business and Management Studies.

Igbinedion University Okada.

e-mail: maltusekpen@gmail.com 08053785320,

Josiah.mary@iuokada.edu.ng 08037381270,

Agbo.Sunny@iuokada.edu.ng 08033415861

Abstract

The focus of this study is to determine the result of corporate attributes on financial performance of listed Oil and Gas companies in the Nigerian Stock Exchange while the specific objectives are to: determine the effect of corporate size, leverage, firm's age and operating expense on the financial performance. The methodology adopted in this study is the longitudinal research design approach. A sample of 10 oil and gas listed firms was used. Secondary data was used covering the period 2010-2019 while panel regression analysis using generalized least square regression technique was employed in the estimation. The following hypotheses were tested; firm age; firm size; financial leverage and operating expenses have no significant impact on financial concert of listed oil and gas companies in the Nigerian Stock Exchange; Furthermore, the study developed a financial performance index by aggregating the different performance variables such as ROA, ROE and ROI to derive a uni-dimensional measure of corporate financial performance by means of principal component analysis (PCA). The findings reveal that the impact of operating expense ratio on financial performance is positive and insignificant at 5% and while that of firm age is negative and also insignificant at 5%. Nevertheless, the outcomes show that the effect of Firm size is positive and momentous at 5% and the effect of Leverage is also positive and significant at 5%. Based on the results of the study, particularly in relation to the significant variables resulting from the financial index model, the study concluded and recommends the following. First, it is vital that firms approve an appropriate debt and leverage policy given that leverage was found in the study to be a driver of financial performance. Hence, firms must ensure that they follow an optimal leverage path. Secondly, firm size was also seen to be a significant driver of companies' financial performance and therefore, the study recommends that firms select an appropriate size and also large firms need to effectively exploit the economies of scale dynamics resulting from their size. Thirdly, the results have revealed that the older the firm the lower the financial performance and vice versa, therefore the need for older firms to increase innovations on new product development that can bring back customer patronage. Finally, though operating expense is insignificant firms should check and monitor such expenses as the positive result is an indication that such expenses could impact significantly on financial performance at the long run. The study therefore contributed to existing literature by adopting a uni-dimensional measure which aggregates the various financial performances such as ROA, ROE and ROI by means of principal component analysis (PCA) thereby reducing the different dimensional effects of results generated from isolated financial performance index studied in the previous literatures.

Keywords: Financial Performance, Corporate Attributes, Principal Component Analysis

INTRODUCTION

The quest to understand the determinants of firm financial performance has created a bifurcated view. Proceeding one side of the argument are the structural features of industries. On the other side of the argument are firm-specific resources. Though, in current years, the nature of opposition and the shifting of economic situations have directed to improved challenges of the expectations upon which manufacturing structure theories have been made.

In today's corporate environment, influences suggest that organizational characteristics of manufacturing are becoming a lesser number of relevant determinants of performance while companies' resources/attributes are becoming the basis upon which companies compete (Galbreath & Galvin 2008). The importance of firm level structure, attributes and characteristics has been supported by the resource-based view (RBV) of the firm which focuses on a firm's idiosyncratic resources (Barney, 1991) and how firm utilizes them as the source of competitive advantage which drive financial performance. This led to an upsurge in research attention focused on trying to explore the different types and kinds of firm resources such as intangible and tangible resources and the implications that they have on driving firm performance. However, evidence from studies (Abdulahi 2016, Onyekwelu, Nwajei & Ugwu, 2017; Abubakar, Suleiman & Haruna 2018;) still point out that there is still a research vacuum in terms of understanding what types of firm attributes are most critical and how firms can maximize them to drive financial performance. In this study, the focus is on firm age, leverage, firm size and operating expense. These specific attributes are selected because they related to several aspects of the firm structure.

Therefore, the purpose of the study is to contribute to our understanding of the association between the identified firm attributes and financial performance using

listed oil and gas companies in Nigeria. To address this gap, this study tilts in a different direction from the dominant approach by developing a financial performance index and aggregating the different performance variables to derive a uni-dimensional measure of corporate financial performance by means of principal component analysis (PCA). PCA handles efficiently and statistically the issue of what weights to be assigned to each variables using the eigen-values. Studies have made use of principal components analysis to such data to derive an index (Filmer & Pritchett 2001; McKenzie 2003).

Research Hypotheses

H0₁: Firm age has no significant impact on financial performance of listed oil and gas companies in the Nigerian Stock Exchange.

H0₂: Firm size has no significant impact on financial performance of listed oil and gas companies in the Nigerian Stock Exchange.

H0₃: Financial leverage has no significant impact on financial performance of listed oil and gas companies in the Nigerian Stock Exchange.

H0₄: Operating expenses has no significant impact on financial performance of listed oil and gas companies in the Nigerian Stock Exchange.

LITERATURE REVIEW

In this section, we examine related empirical literature on the association between the selected firm attributes and financial performance. Empirical Review The relationship among firm size and financial performance is being considered by a growing number of researchers.

For example, Efuntade and Akinola (2020) evaluate the effect of firm characteristics on the financial performance of quoted manufacturing companies in Nigeria. Descriptive and cross-sectional research design were adopted to

examine the relationship between variables of firm characteristics and financial performance of quoted manufacturing companies in Nigeria over a period of 14 years. Secondary Data were gotten from annual reports of five selected quoted manufacturing companies. Panel least square regression model was used to test the formulated hypothesis. Findings showed that firm size strongly have effect on the financial performance of manufacturing companies in Nigeria measured by return on assets.

Mohammad (2020) evaluate the impact of firm size on firm performance of Jordanian Public Shareholding Industrial Companies, and to accomplish this goal the researcher showed an analytical study which rest on the descriptive and analytical approach, by using the statistical methods to analyze the study data that signified in the actual data taken from the financial statements of Jordanian Public Shareholding Industrial Companies listed at the Amman Stock Exchange (ASE) for the study sample which consisted of Twenty eight (28) firms, for the period (2009-2018). The study results indicated the existence of statistically significant effect of firm size on firm performance.

Azhar and Ahmed (2019) examined in their study the relationship between the firm size and profitability in the textile on the firms listed on the Pakistan Stock Exchange by selecting a sample of 10 textile companies listed on the Pakistan Stock Exchange for the period (2012-2016). The total sales and total assets were used to measure the firm size variable while the net profit ratio and ROA were used to measure the variable of profitability. The study results showed a negative relationship between the company's profitability and the total assets.

Oyelade (2019) evaluate the effect of firm size on firm's performance in Nigeria: A comparative study was done from selected firms in the building industry in Nigeria using annual data from 2004 to 2017. Based on the evaluation of financial measurement on companies performance using both return on

assets (ROA) and return on equity (ROE), two out among the four variables used to determined the results were statistically significant in return on assets which are total sales and age of firm, since total sale has positive impact on return on assets while age of firm has a negative impact on return on assets. Based on productivity measurement of performance among the firms selected in the building industry in Nigeria using both output per labour and output per capital,

Nangih, Obuah, Christian, Wali, and Turakpe (2020) examined the relationship among staff costs and profitability of quoted oil and gas firms in Nigeria. It specifically investigated the impacts of staff salaries, medical costs and training expenses on the profit margin of listed oil and gas firms. Data were collated from annual financial reports of the firms for the period, 2013-2018. Judgmental sampling technique was used to select a total of five (5) companies for the study and analyzed using descriptive, correlation and regression analysis tools. The results of the test of hypotheses indicated that both salaries and training costs has positive effect on profit margin whereas medical cost has negative impacts on profitability; but only training cost was significant.

Imhanzenobe (2019) examined the effects of operational effectiveness on the financial sustainability of listed manufacturing companies in Nigeria. This study supports to bridges these gaps by determining the effect of operational efficiency on long-term profitability (return on asset) and stock market performance (Tobin's Q). The efficiency variables used for measurement are; employee growth, operating expenses, account receivables turnover, inventory turnover and asset turnover. A secondary panel dataset ranging from 2009 to 2016 for 16 listed manufacturing firms was obtained from the Bloomberg portal. The Ordinary Least Square method was used to test the 5 formulated hypotheses. The results showed that in relation

to ROA, operating expenses and asset turnover had negative and positive significant relationship respectively. Employees' growth, account receivable turnover and inventory turnover were found to be insignificant. In relation to Tobin's q, both inventory and asset turnover had a positive significant relationship. Operating expense had a negative significant relationship

The population of the study comprises oil and gas companies listed on the floor of the Nigerian Stock Exchange. As at December 2019, there are 11 of such companies listed on the Nigerian Stock Exchange (NSE, 2019). In determining the sample size of the study, Yamane (1967) formula was employed in this study. The formula is given as follows;

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

Where:

n = sample size; N= Population size (the universe); e = Sampling error (0.1)

^ = raised to the power of

Therefore:
$$n = \frac{11}{[1 + 11(0.1)^2]} = 9.9$$

Model Specification

The models are built on the studies of Meynhardt and Gomez (2019) and Panda, D'Souza, & Blankson, (2019).

CFP=f(FA) ----- (1)

Where CFP= Corporate financial performance FA= Firm attributes

Decomposing both CFP and FA into their sub-components and specifying the functional model into an econometric form we have; the assumption is that, the dependent variable is a linear function of the independent variables. The models are specified below

{ROA}_{it} = β_{0it} + β₁ (FSIZE_{it}) + β₂ {FAGE}_{it} + β₃ {LEV}_{it} + β₄ {OPEX}_{it} + ε_{it} ----- (2)

{ROE}_{it} = β_{0it} + β₁ (FSIZE_{it}) + β₂ {FAGE}_{it} + β₃ {LEV}_{it} + β₄ {OPEX}_{it} + ε_{it} ----- (3)

{ROI}_{it} = β_{0it} + β₁ (FSIZE_{it}) + β₂ {FAGE}_{it} + β₃ {LEV}_{it} + β₄ {OPEX}_{it} + ε_{it} ----- (4)

{FP-Index}_{it} = β_{0it} + β₁ (FSIZE_{it}) + β₂ {FAGE}_{it} + β₃ {LEV}_{it} + β₄ {OPEX}_{it} + ε_{it} ----- (5)

Where: β₀= constant.

β₁– β₄ = coefficients of the explanatory variables

ROA= Return on Asset, ROE= Return on Equity, ROI= Return on Investment, FP-Index= Financial performance Index, FSIZE= Firm Size, LEV= Leverage, FAGE= Firm Age and OPEX = Operating Expenses

PRESENTATION AND ANALYSIS OF RESULTS

The preliminary analysis results covering descriptive and correlation statistics is first

presented and then the regression results are also presented and discussed.

Finally, the hypotheses testing and implications of results are presented.

Table 4.1: Descriptive statistics

	Mean	Median	Maximum	Minimum	Std. Dev.
ROA	0.843831	0.298186	11.02056	-5.012902	1.704839
ROE	1.263186	0.255819	36.47264	-0.3803	51.01431
ROI	2.418156	1.507686	91.5093	-77.874	58.20016
FSIZE	6.92487	6.933219	8.976039	5.31917	1.223743
LEV	0.269237	0.228043	1.540149	0.068594	0.210369
OPEX	0.411999	0.633182	0.75	0.11	1.415912
FAGE	23.5127	21	36.251	10.3	29.49005

The data is presented in table 4.1 above. As observed, ROA has a mean of 0.843 with maximum and minimum values of 11.020 and minimum of -5.01 respectively.

The standard deviation is 1.7048 which implies the dispersion of ROA from the distribution mean. ROE has a mean of 1.705 with maximum and minimum values of 36.47 and minimum of -0.3803 respectively. The standard deviation stood at 51.0143 which is an indication of the extent of dispersion of ROE from the distribution mean. ROI has a mean of 2.418 with maximum and minimum values of 91.509 and minimum of -77.874 respectively with a

standard deviation is at 58.200. The mean value for firm size measured as log of total assets stood at 6.9248 with maximum and minimum values of 8.976 and 5.31917 respectively with a standard deviation of 1.223. The average LEV Ratio is about 0.269 with a maximum value of 1.54 and minimum value of 0.069 respectively. The standard deviation showing the dispersion of the data about the mean is quite low at 0.210369. The mean for operating expense ratio (OPEX) is 0.4119 with maximum and minimum ratios of 0.633 and 0.75 respectively while the average firm age for stood at approximately 24 yrs with maximum of 36yrs and minimum of 10yrs respectively.

Table 4.2: Pearson Correlation Matrix

		ROA	ROE	ROI	FSIZE	LEV	OPEX	FAGE
ROA		1						
ROE		.302**	1					
	sig	0.00						
ROI		.294**	.771**	1				
	Sig.	0.000	0.000					
FSIZE		.149**	0.018	.129*	1			
	Sig.	0.003	0.729	0.01				
LEV		0.233	-0.041	-0.014	-.408**	1		
	Sig.	0.954	0.418	0.782	0.000			
OPEX		-0.008	-0.037	-.118*	.532**	-.302**	1	
	Sig.	0.872	0.467	0.021	0.000	0.000		
FAGE		0.026	-0.083	-.137**	0.017	.315**	0.009	1
	Sig	0.61	0.103	0.007	0.738	0.00	0.856	

Source: Researcher's compilation (2020) using EVIEWS 10

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

From table 4.2, the correlation coefficients of the variables are examined. However, of particular interest to the study is the correlation between corporate financial performance measures (ROA, ROE and ROI) and the

independent variables. As observed, FSIZE is positively simultaneous with ROA ($r=0.149$), ROE ($r=0.018$) and ROI ($r=0.129$) and the correlations are all significant at 1% level. LEV is positively simultaneous with ROA ($r=0.233$),

but negatively correlated with ROE ($r=-0.041$) and ROI ($r=0.408$) and only the correlations with ROI is significant at 1% and 5% levels. OPEX is negatively correlated with ROA ($r=-0.008$), ROE ($r=-0.118$) and also negatively correlated with ROI ($r=-0.118$) FAGE is negatively correlated with ROE ($r=-0.083$) and also negatively correlated with ROI ($r=-0.137$) but positively related with ROA ($r=0.026$) and

only the correlations with ROI is significant at 5% levels. Though providing some level of insight into the degree and direction of relationship between the variables, the correlation analysis is limited in its inferential ability mainly because it does not imply functional dependence and hence causality in a strict sense and regression analysis is better suited for this purpose.

Table 4.3: Regression Result

Variable	Aprori sign	ROE	ROA	ROI	<i>Fin perf-Index</i>
C		-4.0716* (1.130) {0.0004}	0.7421* (0.1254) {0.000}	0.8849 (1.111) {0.4263}	-0.14823 (0.4103) {0.7183}
FAGE	+	0.0251** (0.0116) {0.0317}	0.00251 (0.00175) {0.1526}	0.01278*** (0.0068) {0.0597}	-0.0017 (0.0022) {0.4370}
OPEX	+	-0.01506 (0.0094) {0.1113}	-0.0009 (0.0006) {0.1382}	-0.0064 (0.0045) {0.1529}	0.1063 (0.0669) {0.1137}
FSIZE	+	0.2715** (0.1206) {0.025}	0.0011 (0.0183) 0.9512	0.1346 (0.1158) {0.2459}	0.3222** (0.17352) {0.045}
LEV	+	-0.9596*** (0.5181) {0.0649}	0.0768 (0.0534) {0.1514}	0.1039 (0.4626) {0.8223}	0.4452* (0.0722) {0.000}
Model Parameters					
R ²		0.1752	0.524	0.244	0.7029
Adjusted R ²		0.120	0.4928	0.1936	0.6382
F-statistic		3.188	16.50	4.842	10.00
Prob(F-stat)		0.000	0.000	0.000	0.00
D.W		1.7	1.7	1.9	1.8
Model Diagnostics					
<i>Hausman</i>		0.006	0.000	0.011	0.021
χ^2_{Hetero}		0.893	0.546	0.536	0.498
$\chi^2_{\text{Serial/Corr}}$		0.609	0.443	0.592	0.156
χ^2_{Norm}		0.528	0.765	0.740	0.907
Ramsey-Reset		0.603	0.166	0.795	0.448
<i>Ramsey Reset test</i>		0.410	0.120	0.558	0.644
<i>Mean VIF</i>		2.342	2.381	2.910	2.11

Source: Researchers compilation (2020), () are standard errors; { } are p-values, * sig at 1%, ** sig @5% and ***8 sig @10%

Table 4.3, show the regression results of the fixed effects (FE) model as the preferred estimation technique based on the Hausman test statistic. Column 3 shows the estimation results for the relationship between corporate attributes and ROE measure of financial performance.

The hausman statistics of 0.006 justifies the presentation of fixed effects estimation result. As shown in the results, the R² for the model is 0.1752 which implies that the model explains about 17.52% of the systematic variations in the dependent variable with an adjusted value of

12%. The F-stat is 3.18808 (p-value = 0.00) is significant at 5% and suggest that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model.

The analysis of coefficients reveals FAGE is positive (0.0251) and significant (p=0.0317) at 5%. The positive coefficient suggests that increase in firm age results in an increase in corporate financial performance. OPEX Ratio has a negative beta (-0.0151) though not significant (p=0.1113) at 5%. The negative coefficient indicates that increase in operating expense will signal lower financial performance. FSIZE has a positive beta (0.2715) and also significant (p=0.025) at 5%. The positive coefficient suggests that increase in firm size results in an increase in corporate financial performance. LEV has a negative beta (-0.95) though not significant (p=0.0649) at 5%.

The diagnostics for the estimation reveal the absence of serial correlation [χ^2 Serial/Corr= 0.609] and confirms that the errors exhibit homoscedastic properties [χ^2 Hetero = 0.893]. The residual normality [χ^2 Norm =0.528] reveals that the residuals are normally distributed. Column 4 shows the estimation results for the relationship between corporate attributes and ROA measure of financial performance. The Hausman statistics of 0.00 justifies the presentation of fixed effects estimation result. This revealed in the results, the R² for the model is 0.5246 which implies that the model explains about 52.46% of the systematic variations in the dependent variable with an adjusted R² of 43.5%.

The F-stat is 16.50849 (p-value = 0.00) is significant at 5%. The analysis of coefficients reveals FAGE is positive though not significant at 5% (0.0025, p=0.153), the impact of OPEX Ratio is negative and insignificant (-0.0009, p=1382) at 5% while the effect of FSIZE though positive is also not significant at 5%

(0.0011, p=0.9512). LEV has a positive effect though not significant at 5% (0.0768, p=0.1514). The diagnostics for the estimation reveal the absence of serial correlation [χ^2 Serial/Corr= 0.443] and confirms that the errors exhibit homoscedastic properties [χ^2 Hetero = 0.546]. The residual normality [χ^2 Norm =0.765] reveals that the residuals are normally distributed. In Column 5 shows the estimation results for the relationship among corporate governance and ROI measure of financial performance. The Hausman statistics of 0.011 justifies the presentation of fixed effects estimation result and the R² for the model is 0.2440 which implies that the model explains about 24.0% of the systematic variations in the dependent variable with an adjusted R² of 19.36%. The F-stat is 4.842 (p-value=0.00) is significant at 5%. The analysis of coefficients reveals FAGE is positive though not significant at 5% (0.0128, p=0.0597), the impact of OPEX Ratio is negative and insignificant (-0.0064, p=0.1529) at 5% while the effect of FSIZE though positive is also not significant at 5% (0.1346, p=0.2459). LEV also has a positive effect though not significant at 5% (0.1038, p=0.8223) Furthermore, the study develops a financial performance index by aggregating the different performance variables to derive a uni-dimensional measure of corporate financial performance using principal component analysis (PCA).

Studies have applied principal components analysis to such data to derive an index (Gwatkin, Rustein & Johnson 2000; Filmer and Pritchett 2001; McKenzie 2003). PCA handles efficiently and statistically the issue of what weights to be assigned to each variables using the eigen-values. The results is seen in column 6 and shows that the R² for the model is 0.603 which implies that the model explains about 60.3% of the systematic variations in the dependent variable with an adjusted R² of 53.8% with a significant f-stat (p-value = 0.00) at 5% The analysis of coefficients reveals that the impact of FAGE is negative though not significant at 5% (-0.0017, p=0.4370).

The impact of OPEX Ratio is positive and insignificant (0.10632, $p=0.1137$) at 5%. However, the results indicates that the impact FSIZE is positive and significant (0.32222, $p=0.045$) at 5% and the effect of LEV is positive and significant at 5% (0.4452, $p=0.000$). The diagnostics for the estimation reveal the absence of serial correlation [$\rho_{Serial/Corr}= 0.156$] and confirms that the errors shows homoscedastic properties [$\rho_{Hetero} = 0.498$]. The residual normality [$\rho_{Norm} =0.907$] reveals that the residuals are normally distributed.

Test of Hypotheses and Discussion of Results

The tests of hypotheses and discussion of results is built on the financial index regression results which is more robust as it is based on aggregating the different performance variables to derive a uni-dimensional measure of corporate financial performance using principal component analysis (PCA). The findings show that the impact FAGE is negative though not significant at 5% (-0.0017, $p=0.4370$). Therefore, the study accepts the null hypotheses that Firm age has no significant impact on financial performance. In addition, the impact of OPEX Ratio is negative and insignificant (0.1063, $p=0.1137$) at 5% and thus we also agree the null hypothesis of no significant relationship between OPEX ratio and financial performance. However, the results indicates that the impact FSIZE is positive and significant (0.32222, $p=0.045$) at 5% and therefore, the study discards the null hypothesis of no significant relationship between FSIZE and financial performance. Finally, the effect of LEV is positive and significant at 5% (0.4452, $p=0.000$) and therefore, the study also rejects the null hypothesis of no significant relationship between LEV and financial performance.

On the overall, the results of this of the study are the same with the study of Abdullahi (2016), which evaluate the effect of firm characteristics on financial performance using a generalized least square multiple regression

analysis with data from annual reports and accounts between 2005 and 2014 and found that leverage and firm size have significant impact on financial performance (ROA). The study is also consistent with that of Kaguri (2013) which studied the association between firm characteristics and financial performance using data from annual reports of 17 life insurance companies between 2008 and 2012 analysed using regression analysis with SPSS and found that size and leverage have significant influence on financial performance (ROA). Our finding is also in line with that of Almajaliet. al. (2012) which investigated aspects that mostly upset financial performance of Jordanian Insurance Companies using 25 insurance companies listed on Amman Stock Exchange from 2002 to 2007 and showed that leverage, liquidity, size, management competence index have a positive statistical impact on financial performance (ROA). Conclusion and Recommendations
Conclusion As noted earlier, in today's corporate environment, arguments propose that structural characteristics of manufacturing companies are becoming less relevant determinants of performance while firm resources/attributes are becoming the basis upon which firms compete The importance of firm level structure, attributes and characteristics has been supported by the resource-based view of the firm (RBV).

Therefore, this study is to measure the result of corporate characteristics on financial performance of quoted oil and gas companies in Nigeria. The results expose that the impact firm age on financial performance is negative though not significant at 5%. The impact of operating expense ratio is positive and insignificant at 5%. Nevertheless, the results indicate that the impact Firm size is positive and significant at 5% and the effect of Leverage is also positive and significant at 5%.

Recommendations

Based on the results of the study, particularly in relation to the significant variables resulting from the financial index model, the study

recommends the following. First, it is important that companies adopt an appropriate debt and leverage policy given that leverage as found in this study was a strong driver of financial performance. Hence, firms must ensure that they follow an optimal leverage path. Secondly, firm size was also seen to be a significant driver of firm financial performance and therefore, the study recommends that firms select an appropriate size and also large firms need to effectively exploit the economies of scale dynamics resulting from their large size. Thirdly, the findings have shown that the older the firm the lower the financial performance and vice versa, therefore the need for older firms to increase innovations on new product development that can bring back customer patronage.

Finally, though operating expense is insignificant, firms should check and monitor such expenses as the positive result is an indication that such expenses could impact significantly on financial performance at the long run.

REFERENCES

- Abdullahi, M. (2016). Firm characteristics, governance mechanisms and financial performance of listed building materials firms in Nigeria. Unpublished M.Sc. Accounting and Finance Thesis, Ahmadu Bello University, Zaria, Nigeria.
- Abubakar, A., Sulaiman, I., & Haruna, U. (2018). Effect of Firms Characteristics on Financial Performance of Listed Insurance Companies in Nigeria.
- Almajali, A.Y., Alamo, S.A., & Al-Soub, Y.Z. (2012). Factors affecting financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Journal of Management Research*, 4(2), 266-289.
- Azhar, K. A. & Ahmed N. (2019). Relationship between firm size and profitability: investigation from textile sector of Pakistan. *International Journal of Information, Business and Management* 11 (2), 62-7.
- Barney J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Efuntade., A. O. & Akinola, A. O. (2020). Firm characteristics and financial performance in quoted manufacturing companies in Nigeria. *International Journal of Business and Finance Management Research*. 7, 25-32.
- Filmer D, & Pritchett LH. (2001). Estimating wealth effect without expenditure data – or tears: an application to educational enrollments in states of India. *Multivariate statistical analysis*. New York: Marcel Dekker Inc.
- Galbreath, J. & Galvin, P. (2008), Firm factors, industry structure and performance variation: New empirical evidence to a classic debate. *Journal of Business Research*, 61, 109-117.
- Gwatkin D.R, Rustein S. & Johnson K (2000). Socio-economic differences in Brazil. Washington, DC: HNP/Poverty Thematic Group of the World Bank. <http://www.worldbank.org>.
- Hamouri, B., Al-Rdaydeh, M. & Ghazalat, A. (2018). Effect of financial leverage on firm growth: Empirical evidence from listed firms in Amman stock exchange. *Investment Management and Financial Innovations*. 15, 154-64. 10.21511/imfi.15(2).2018.14.
- Imhanzenobe, J. O. (2019). Operational efficiency and financial sustainability of listed manufacturing companies in Nigeria. *Journal of Accounting and Taxation*, 11(1), 17–31. <https://doi.org/10.5897/JAT2018.0329>
- Kaguri, A. W. (2013). *Relationship between firm characteristics and financial performance of life insurance companies in Kenya*.
- McKenzie, P. (2003). A model of information practices in accounts of everyday-life information seeking. *Journal of*

- Documentation. 59. 19-40.
10.1108/00220410310457993.
- Mohammad A. A. (2020) Impact of firm size on the relationship between inventory and the business results of Jordanian public shareholding industrial companies. *Academy of Accounting and Financial Studies Journal*, 24(3), (Print ISSN: 1096-3685; Online, ISSN:1528-2635).
- Nangih, E., Obuah, C. A., Wali, S. C. & Turakpe, M. J. (2020).Assessing the interconnectedness between staff costs and firm profitability: evidence from Nigeria's oil and gas industry. *European Journal of Accounting, Finance and Investment*6,(6), 49-58.
- Onyekwelu, U.L., Nwajei, N. B., & Ugwu, K. O. (2017). Effect of firms' characteristics on financial performance of oil and gas companies in Nigeria. *Asia Pacific Journal of Research in Business Management*, 8 (3), 64-81.
- Oyelade, A. (2019). The impact of firm size on firms performance in Nigeria: A comparative study of selected firms in the building industry in Nigeria. *Asian Development Policy Review* 7(1). 1-11

EFFECT OF ENTREPRENEURSHIP DEVELOPMENT AND ALLEVIATING INSECURITY ON EMPLOYMENT GENERATION IN ABUJA NIGERIA

¹Jakada, Anthony T. ²Dr. Umaru D. Mohammed. ³Dr. Nana U. Bature

¹PhD Candidate, Department of Business Administration, University of Abuja, Abuja, Nigeria

²Lecturer of Department of Business Administration, University of Abuja, Abuja, Nigeria

³Lecturer of Department of Business Administration, University of Abuja, Abuja, Nigeria

Abstract

The study examines the effect of entrepreneurship development and alleviation insecurity on employment generation for the youth in Nigeria. The main objective is to assess the extent to which Entrepreneurship development through service industry (Barbing Saloons/hair dressers, repair of GSM/computer entrepreneurs) impacted on generating employment opportunities and reduced unemployment leading to alleviating insecurity in Abuja. The study adopted a survey approach with data collected using questionnaires administered to 353 respondents derived by applying Taro Yamane's formula from the population of 3001 drawn randomly from Barbing Saloons/hair dressers, GSM/computer repair entrepreneurs, apprentices and other staff at four Area Councils in Abuja. A descriptive statistic was specified using Logistics Regression model. The study found that Entrepreneurship development through service industry (Barbing Saloons/hair dressers, repair of GSM/computer) affects job creation, wealth creation, standard of living and economic growth positively which played significantly roles in employment generation as a result reduced unemployment and lead to alleviating insecurity in Abuja. The study concludes that Entrepreneurship development has played notably roles in employment technology as a result decreased unemployment and cause alleviating lack of confidence in Abuja. The study suggested that Government should provoke guidelines and packages geared toward schooling youths in Nigeria in act of entrepreneurship development, to alternate the mind-set of the average Nigerian youths in the direction of embracing self-employment and de-emphasize the look for white collar jobs which are non-existent due to the fact entrepreneurship improvement is always supply beginning to job creation and essential for rapid and sustained economic growth.

Keywords: Entrepreneurship, Employment Generation, insecurity, unemployment

INTRODUCTION

Entrepreneurship development in any country which include Nigeria is a remedy to the hassle of poverty, unemployment and lack of confidence thru Job Creation amongst people to perceive opportunities, allocate assets, and create price. Entrepreneurship unlocks the economic potentials of the human beings; empowers and equip individuals in the society

to take part in, and benefit from the country wide economic system; allows financial improvement and gives the premise for economic boom of the country. This is possible whilst jobs are created for the citizenry with the aid of developing true business surroundings in which entrepreneurship can try to reduce youth unemployment and lack of confidence. Job introduction or employment possibility in an

economic system may be traceable to entrepreneurship education and improvement. An entrepreneurship development always supply beginning to job creation if you want to force human beings to do something to be able to higher their lives and the country at massive (Taiwo 2014).

Entrepreneurship improvement and revolutionary ingenuity in Nigeria have developed establishments in following areas; Agriculture/ agro-allied sports where there are foodstuffs, restaurants, rapid meals vending and so forth. In the vicinity of solid minerals, there are quarrying, perm stone Cutting/ Polishing and Gushing engineering, in power and transport, there are strength generations, haulages business (cargo and passengers), inside the location of facts and telecom commercial enterprise, there are production a upkeep of GSM accessories, in hospitality and tourism business, there are resorts, lodging, motels centres, cinemas, film and home video production; in oil and gasoline enterprise, there are construction and renovation of pipelines, drilling, refining through-merchandise, and so on). It is in this recognizing that this paper seeks to investigate the connection among entrepreneurship, employment technology and lack of confidence in FCT, Abuja.

Statement of the Problem

There is increasing number of graduates from polytechnics, colleges of education, and universities that leave school each year without employment due to corruption, inadequate government policies on entrepreneurship development and mal-administration. Nigeria is experiencing with high level of unemployment and increased rate of social vices like robbery, kidnapping, terrorism, prostitution, human trafficking, and child abuse by the unemployed youths (Okoye, Iloanya and Udunze 2014).How to boost the nation economy and to equip and empower the unemployed youth with skills so that they can start up or become innovators attracted the attention of both the government and society.

Research Questions

In view of the above problems, the following research questions were raised:

- i. To what extent does entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer give birth to job creation (JC) in Abuja?
- ii. How does entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer increase wealth creation income (WC) in Abuja?
- iii. What is the impact of entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer influence standard of living (SL) in Abuja?
- iv. To what extent does entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer increase economic growth (EG) in Abuja?

Objectives of the Study

The main objective of this study is to examine the role of entrepreneurship development and alleviation insecurity on employment generation for the youth in Abuja.

The specific objectives are:

- i. To determine the extent to which entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer give birth to job creation (JC)in Abuja.
- ii. To examine the impact of entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer increase wealth creation (WC) in Abuja
- iii. To identify how entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer influence standard of living (SL)in Abuja
- iv. To assess the extent to which entrepreneurship through Barbing

Saloons/hair dressers, repairs of GSM and computer increase economic growth (EG) in Abuja.

Statement of the Hypotheses

Base on the research questions, the following null-hypotheses were formulated:

Ho₁: Entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer does not give birth to job creation (JC) in Abuja.

Ho₂: Entrepreneurship through Saloons/hair dressers, repairs of GSM and computer does not increase wealth creation (WC) in Abuja.

Ho₃: Entrepreneurship through of Barbing Saloons/hair dressers, repairs GSM and computer do not influence standard of living (SL) In Abuja.

Ho₄: Entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer does not increase economic growth (EG) in Abuja.

Scope of the Study

The study cantered on effect of entrepreneurship development and assuaging insecurity on employment technology for the young people related to selected entrepreneurs from service enterprise (Barbing Saloons/hair dressers, Repair of GSM and computer entrepreneurs) on alleviating lack of confidence, in 4 selected Area Council in Federal Capital Territory (FCT) Abuja. The decided on vicinity councils are, Municipal, Gwagwalada, Kuje and Bwari vicinity councils. The study focused on SME due to the fact in line with the Nigeria Bureau of Statistics, SMEs in Nigeria make a contribution forty eight% of countrywide GDP, account for ninety six% of agencies and 84% of employment the closing five years, with a total range of about 17. Four million, they account for about 50% of business jobs and nearly ninety% of the producing quarter, in phrases of number of companies, (PWC 2020), Nigerian SME survey. The study at fused on most effective service industry

(Barbing Saloons/hair dressers, Repair of GSM and computer entrepreneurs, apprentices/different team of workers,) which can offer needed records to achieve the objective of this look at. The study cantered on one industry of entrepreneurship due to the fact it is the regions of entrepreneurship that is less included by means of researcher. The take a look at covered the duration of 10 years from 2011 to 2020 which recorded widespread teens participation in entrepreneurship because of authorities introduction of numerous employments packages in entrepreneurship as seen in commercial enterprise scenarios in which unemployed youths are pushed by using passion to create profitable ventures through possibilities aimed at growing self-employment and contributions in lowering unemployment and security in Abuja (Asogwa, & Dim, 2016).

LITERATURE REVIEW

Concept of Entrepreneurship Development

According to Dombut (2018), Entrepreneurship is greater than absolutely "starting a enterprise." It is procedures via which people discover possibilities, allotted assets, and create value. This introduction of value is often via the identification of unmet desires or via the identification of opportunities for exchange. It is the act of being an entrepreneur that is visible as "one that undertakes improvements with finance and commercial enterprise belief that allows you to rework innovations into monetary items subsequently Entrepreneurs see "Problems" as "possibilities after which take action to pick out the answers to those troubles and the clients who will pay to have the ones issues solved. Taiwo (2014) in any giving financial system, entrepreneurship improvement continually supply start to task creation that allows you to force people to do something with the intention to better their lives and the country at huge. He evaluated the dating among job advent and entrepreneurship development in Nigeria. It became clear from his statement that task advent or employment opportunity in an

economic system may be traceable to entrepreneurship education and improvement. Okoye, Iloanya and Udunze (2014), Entrepreneurship in the country is an engine for job can effectively drive changes in the economy. They recommends that government should genuinely recognize the essence of entrepreneurship to economic development by providing the enabling environment for the youth to be gainful employed for economic development.

Causes of Youth Unemployment in Nigeria

In the study of unemployment in Nigeria, Iwuamadi (2010) has identified the principle causes of growth employment in Nigeria. The first is the swiftly developing urban labour pressure springing up from rural city migration. Rural – Urban migration is commonly explained in phrases of push–pull elements. The push factors consist of the pressure as a result of guy-land ratio inside the rural regions and the life of serious beneath employment arising from the seasonal cycle of weather. The factors are similarly exacerbated in Nigeria by means of the dearth of infrastructural centres, which makes the rural –life unattractive. In addition to this, kids circulate to the city region with the probability of securing moneymaking employment within the industries. The seconds is the speedy populace growth in Nigeria. Going by using the 2006 census in Nigeria, the state’s population became placed at 143,431, 790 and projections for the destiny suggests that the population will be over 180million through the year 2020. The expanded growth of populace, Nigeria’s unemployment trouble is multi-faceted. It influences the deliver side thru a high fast boom within the labour force relative within the absorptive potential of the economy The 0.33 is the outdated college curricula and lack of hired skill and the fourth is the fast growth of the academic device which immediately ends in boom inside the delivery of educated manpower above the corresponding call for them. This contributes to the problem of the youth unemployment in Nigeria. In a nutshell, Nigeria is a country with numerous

business and investment potentials due to the abundant, vibrant, and dynamic human and natural resources it possesses. Corruption, which has permeated the entire social structure of Nigeria, has robbed the country of developing a vibrant economic base. Funds meant for development projects have been misappropriated, diverted, or embezzled. Thus crippling the economy and engendering and exacerbating unemployment which creates abject poverty, hunger and frustration, killing the zeal and means for entrepreneurship development on the Nigeria youths.

Empirical Studies

Muogo and John, (2018) examined the impact of entrepreneurial skills in reducing youth unemployment in Nigeria with reference to ABC Transport Company in Anambra State.. The main objectives of this study are to look at the probable approaches of eradicating unemployment through the creation of entrepreneurial abilities. The study adopted a descriptive survey design. Questionnaire gadgets have been distributed to a hundred and sixty respondents to collect real data about the subject. Their responses were tested using appropriate statistic equipment like the simple percent and the chi-square approach. The revealed that there are roles entrepreneurial skills and agencies play in youth employment in Nigeria via entrepreneurial improvement. Furthermore, it also suggests that youths in Anambra nation can be given primary schooling on how exceptional to establish and develop business organization in local communities in the state. The study consequently recommends that government need to cast off corruption and greed and formulate regulations so that it will promote the fulfilment of entrepreneurship and unfastened agency; government need to help entrepreneurs via everyday advertising workshops and seminars at the side of the producers affiliation of Nigeria (MAN) and chambers of trade and industries.

Oyedele, Abdulraheem and Brimah (2018) tested the skill acquisition through

entrepreneurial practice in steel scrap commercial enterprise in Kwara State. In this study a complete of four hundred and seventy three (473) copies of the questionnaires have been administered. Sources of facts collection had been number one source of information collection. The respondent have been placed on a 5 factor likert scale with scoring weight as observe: Strongly Agree five point, Agree four factor, Undecided 3 factor, Disagree 2 point, Strongly Disagree 1 factor. The study adopted a descriptive research layout and records were analyzed using the Statistical Package for the Social Sciences (SPSS) version 16.0. The study concludes that there may be a high quality courting among mentoring and talents acquisition in steel scrap collection commercial enterprise in Kwara State Nigeria. Acquiring entrepreneurial skill is beneficial in the direction of generating employment possibilities main to economic boom. Also the study also found out obtaining abilities in metal scrap collection enterprise in Kwara State helped to improve the standard of dwelling of many unemployed graduates in the country.

Ossai (2017) investigated Small and Medium Scale Enterprises (SMEs) as a Strategy for Employment Generation in Nigeria: A take a look at of Selected Manufacturing Companies in Delta State of Nigeria. The look at evaluated Small and Medium Scale Enterprises (SMEs) as a strategy for employment technology in Nigeria, using decided on manufacturing businesses in Delta State as a case study; efforts closer to providing solution to the hassle of unemployment in Nigeria and the sector at huge face stiff competition from their idea. The study is aimed at providing extensive analysis of the effectiveness of SMEs as a medium for employment technology in Nigeria. The study followed a descriptive research design and data have been analyzed the use of the Statistical Package for the Social Sciences (SPSS) model 21. Mean, Frequency, probabilities and one-manner evaluation of variance (ANOVA) have been employed to statistically examine the retrieved records. Using reliability coefficients that variety from 81 – 19, the findings revealed

massive courting among SMEs product branding and marking, finance, regulations and issues, and employment era in Nigeria. SMEs product branding and advertising and marketing method should be state-of-the-art to beautify competitiveness on the way to generate employment in Nigeria. SMEs finance base have to be stepped forward thru favourable guidelines and effective tax reduction for Nigerian SMEs to stay in commercial enterprise. Measures need to be installed location to cushion the impact of the issues confronting SMEs to enhance employment generation in Nigeria. This academic work is directed to professionals in SMEs, scholars, government, SMEs and stakeholders within the quarter.

Esco (2015), spotting the significance of entrepreneurial skill acquisition. Successive governments have installed vicinity entrepreneurial application which includes Youth Employment (NDE), National Agency for Poverty Eradication Program (NAPEP) and Youth Enterprises with innovation (YOUWIN) software. All those packages are all cantered closer to promoting vibrant entrepreneurial competencies a good way to actively articulate the monetary improvement method. In spite of these programs, unemployment charge among Nigeria youths is on the excessive side. To help this revelation, National Bureau of Statistics (NBS) indicates that approximately 56 percent of more than ninety million adolescent's populations are unemployed, 35% hired and 9% are beneath-employed. He concluded that Insurgency, political violence, social insecurity and crimes in Nigeria are traceable to the excessive fee of unemployment amongst young human beings.

Taiwo (2014) carried out empirical research on impact of entrepreneurship improvement on activity introduction in Nigeria. He located out that during any giving economic system, entrepreneurship improvement continually supply delivery to activity creation to be able to force human beings to do something a good

way to better their lives and the country at large. He evaluated the dating between activity creation and entrepreneurship development in Nigeria. It was clear from his statement that task advent or employment opportunity in an economy can be traceable to entrepreneurship education and development. He observed that in any given economy, entrepreneurship development always give birth to job creation which will force people to do something that will better their lives and the country at large. He evaluated the relationship between job creation and entrepreneurship development in Nigeria. It was clear from his observation, job creation or employment opportunity in an economy can be traceable to entrepreneurship training and development.

Abdullahi, (2013) embarked on determining the effects of the strategies employed by Kogi State government on youth unemployment in the state. Data were analyzed the usage of frequency tables, percentages, regression analysis and Chi-square. The interventionist programmes of the Kogi State authorities performed tremendous effect and that they were very effective within the improvement of the kingdom. In the path of the research, they observed that many techniques were employed with the aid of the government of Kogi State to create employment opportunities and alleviate poverty. For instances, most of the unemployed and the adolescents, particularly, people who have been educated in ability acquisition have been gainfully hired. The government granted tender loans to a number of those unemployed through micro finance banks. Useful pointers on feasible approaches of expanding employment possibilities and poverty remedy have been adduced.

Ismaila (2012), examined the role of Entrepreneurship and Employment Generation in Nigeria; the Role of Finance. The aim of this study therefore was to provide a secoral analysis of the efficacy of SMEs as a vibrant tool for employment generation in the country. The Binomial Logistic Regression Analysis was employed as equipment for statistical

evaluation. The study observes that the arena become unable to obtain this aim due to its incapability to acquire adequate enterprise finance for the arena. It changed into determined that virtually all of the SMEs that had been sampled trusted the informational sources of finance to begin their commercial enterprise. As a way out, the study suggest the need for the integration of the activities of the formal with that of the informal financial institutions. Also, government should as a matter of urgency, provide the needed infrastructure such as roads, water, electricity and the needed enabling environment. The paper is of the view that these efforts will reduce the cost of doing business, increase retained earnings of the SMEs, their average monthly income and poverty on the long run.

Theoretical Framework and Bases for the Study

This study is anchored on mental theory of entrepreneurship specifically because it pertains to David McClelland (1961) work on Achieving Society. The want for achievement mental technique of McClelland become especially dominant in riding humans for entrepreneurship. According to McClelland, motives appear to influence the character to select entrepreneurial profession. He opines that “the presumed mechanism by using which achievement degree translates itself into monetary growth is the entrepreneurial magnificence. If the need for achievement is excessive, there can be extra folks who behave like entrepreneurs” (Raimi, 2010).

Methodology

The study adopted a survey approach with a population of 3 thousand and one (3001) respondents drawn randomly from selected marketers from carrier industry (Barbing Saloons/hair dressers, Repair of GSM and computer entrepreneurs/engineers, apprentices and other team of workers,) in a few decided on Area Councils in Federal Capital Territory (FCT) Abuja (Municipal Area Council, 1081 (36%), Gwagwalada Area Council, 931 (31%),

Kuje Area Council, 600 (20%) and Bwari Area Council, 390 (thirteen%). From the populace, a pattern size of 3 hundred and fifty three (353) became derived by using making use of Yamane's system. The sampling is carried out in a way that each element of the populace has an same and impartial hazard of being included by permitting randomness to prevail within the choice procedure. Both number one and secondary assets of records have been hired to evaluate the impact of entrepreneurship in assuaging lack of confidence via employment generation in Abuja Nigeria. The records have been sourced thru each the number one and secondary sources. The number one supply concerned using information amassed from questionnaire while the secondary records

worried facts acquired from various files including books, magazines, journals, periodicals, bulletins, articles and net materials. The study utilized both descriptive data and regression analysis to analyze the records obtained from the respondents. A term of 10 years, from 2011 to 2020, which recorded giant teens participation in entrepreneurship due to authorities' creation of numerous employment packages in entrepreneurship as visible in business situations where unemployed youths are pushed by using passion to create profitable ventures via possibilities geared toward creating self-employment and contributions in lowering unemployment and protection in Abuja (Asogwa & Dim, 2016).

Model Specification:

The role of entrepreneurship development and alleviating insecurity on employment generation for the youth, to determining the relationship between Entrepreneurship practices, unemployment and security can be specified using the following Logistics Regression model: The model is given by:

$$L_i = \frac{P_i}{1 - P_i}$$

Our model specification were formulated and used to test the four hypotheses presented in the study. The models are as follows:

$$\begin{aligned}
 JC &= \beta + \beta E + \mu \\
 WC &= \text{Wealth Creation} \\
 SL &= \beta + \beta E + \mu \\
 EG &= \beta + \beta E + \mu
 \end{aligned}$$

Whereby:

- JC = Job creation
- WC = Wealth Creation
- SL= Standard of Living
- EG = Economic Growth
- E = Entrepreneurship (Barbing Saloons/hair dressers, Repair of GSM and computer entrepreneurs/engineers, apprentices and other staff)
- β = The intercept
- =β=β=β=Coefficient of Job creation, Reduce insecurity, Youth Income, Economic Growth
- μ = Error Term

Estimation of Study Variables

The study has three study variables namely the Independent Variable(Entrepreneurship), Dependent Variable (Alleviating Insecurity) and intermediate variables (Employment Generation)

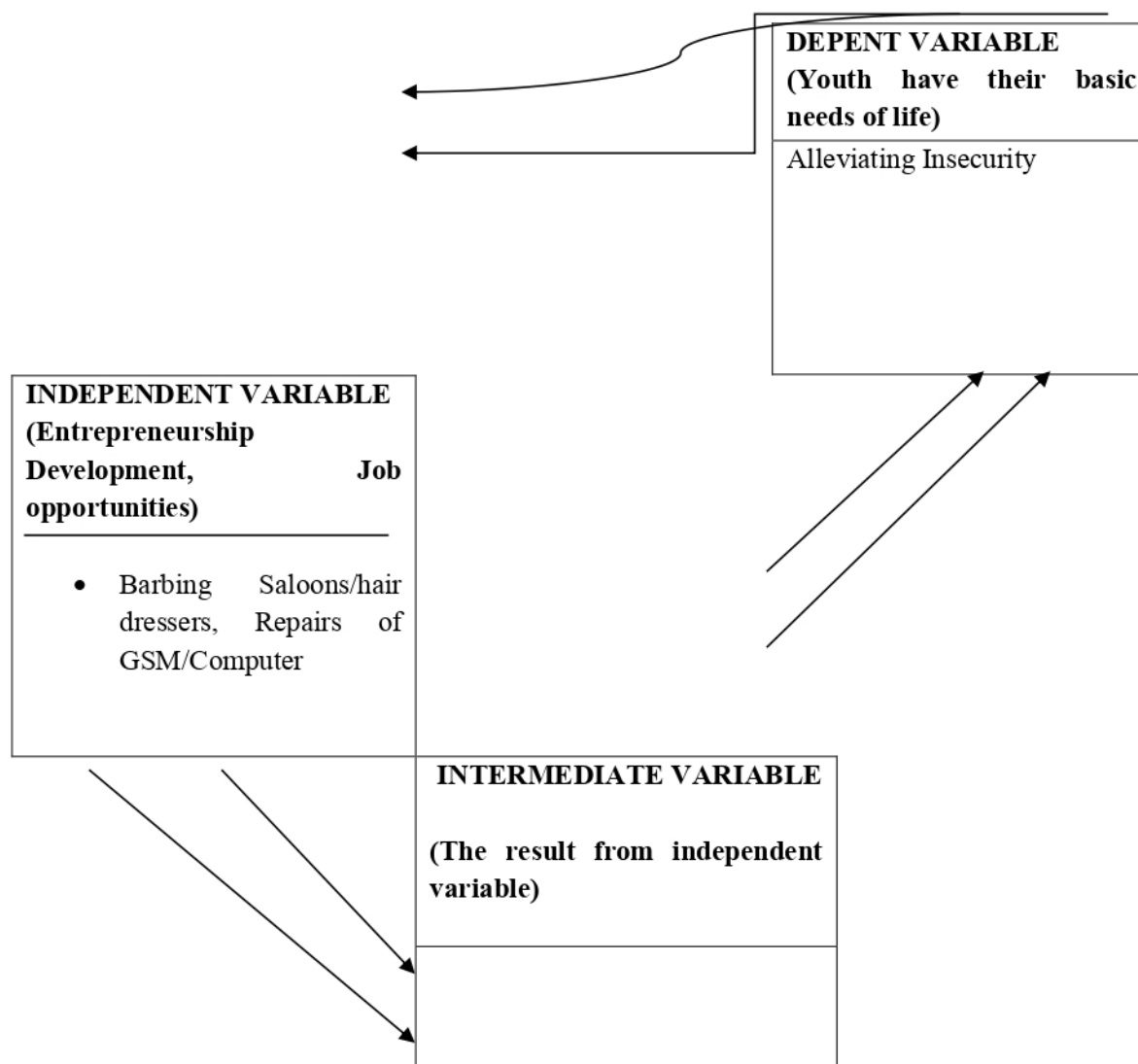


Figure 1: Study Variables.

Source: Developed by the Author (2021)

Figure 1. shows the study variables and their relationship between the independent variable, intermediate variable and dependent variable.

Dependent variables; Alleviating Insecurity is dependent variable which depend on intermediate variables where by the youth have job to do and to provide for their basic need, reducing poverty and take their mind away from crimes and other social vices in the society. The dependent variable also in turn helps in promoting and grows of entrepreneurship development in the country that encourages investors to come and invest in the country.

Independent Variables; These are entrepreneurship development which are Barbing Saloons/hair dressers, Repair of GSM and computerentrepreneurs/engineers, that created job opportunity and engages the youth meaningfully by absorb an optimal proportion of its labour force.

Intermediate Variable; This is the result from independent variable (jobs opportunities created) to the unemployment youth through the activities of entrepreneurship development such as job creation, increase wealth creation,

increase standard of living, and increase economic growth in Abuja

Results and Discussions

Response Rate

Table 1 is the response rate which show that of the 353 questionnaires distributed, 300 were returned complete and 53 were either returned uncompleted or unusable-generally because the

respondents did not provide the needed information as enunciated in the objectives of the study. In total, a 85% response rate was achieved it is acknowledged that the response rate is relatively high; this is in view of the respondent's interest in ensuring Entrepreneurship Development and Alleviating Insecurity on Employment Generation for the Youth in Federal Capital Territory (FCT) Abuja

Table 1: Response Rate

Options	Category of Respondents	No of Respondents	Percentage (%)	Cumulative
Returned:	Barbing Saloons/hair dressers Other staff /Apprentices	169	48%	48
	GSM and computer entrepreneurs/engineers, apprentices and other staff	131	37%	85
	Total Returned: Municipal = 108 (31%), Gwagwalada = 92 (26%), Kuje = 61 (17%), Bwari = 39 (11%),	300	85%	85
Unreturned		53	15%	100
Total Distribution	Municipal = 127 (36), Gwagwalada = 109 (31), Kuje = 71 (20), Bwari = 46 (13),	353	100	100

Source: Field survey (2021)

From the table, the largest percentage of the questionnaires (168 or 48%) were completed by Barbing Saloons/hair dressers entrepreneurs, apprentices and other staff while followed by (131 or 37%) respondents were completed by GSM and computer entrepreneurs/engineers, apprentices and other staff at Municipal area council of Federal Capital Territory (FCT) Abuja (108 or 31%), followed by Gwagwalada area council of Federal Capital Territory (FCT) Abuja again (92 or 26%) respondents at Kuje area council of Federal Capital Territory (FCT) Abuja, while the least number (61 or 17%) was administered to respondents at the Bwari area council of Federal Capital Territory (FCT) Abuja (39 or 11%). The implication of this finding is that all the respondents were fairly targeted to avoid biasness within the process.

Data Presentation and Analysis

Logistic Regression Analysis

The Logit estimate in Table 4.2 revealed that the mean of the dependent variable is 0.603285 while the standard error of regression is 0.612941. These suggest adequacy of the estimated Logit model. More so, the model selection criteria such as Akaike information criterion (AIC), Schwarz information criterion (SIC) and Hannan-Quinn criterion (HQC) with respective low values of 1.526129, 1.643987 and 1.538214 indicate that the estimated Logit model is adequately satisfied.

The likelihood ratio (LR) statistic value of 42.02741 with probability (LR stat) value of 0.000001 which is significant at 5% level of significance, suggests the absence of autocorrelation. The McFadden R-squared

value of 0.834136 implies that about 83% of the change in the dependent variable was explained by the explanatory variables of the model. While the remaining 17% which signifies the

error term are accounted for by other variables not capture in the model. It also shows that the model is suitable for applying in solving the problem at hand.

Table 2 Logistics Regression Analysis

Dependent Variable: L
 Method: ML - Binary Logit (Quadratic hill climbing)
 Date: 02/11/21 Time: 16:34
 Sample: 1 300
 Included observations: 300
 Convergence achieved after 4 iterations
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.562468	0.847286	0.728133	0.6010
JC	0.791379	0.038022	4.493721	0.0014
WC	0.682534	0.044408	5.125895	0.0000
SL	0.818711	0.031607	8.266248	0.0000
EG	0.590812	0.048123	7.591274	0.0002

McFadden R-squared	0.834136	Mean dependent var	0.603285
S.D. dependent var	0.003681	S.E. of regression	0.612941
Akaike info criterion	1.526129	Sum squared resid	19.98736
Schwarz criterion	1.643987	Log likelihood	-65.13620
Hannan-Quinn criter.	1.538214	Deviance	113.2161
Restr. Deviance	117.3262	Restr. log likelihood	-67.20813
LR statistic	42.02741	Avg. log likelihood	-0.713652
Prob(LR statistic)	0.000001		

Obs with Dep=0	144	Total obs	300
Obs with Dep=1	156		

Source: Computed using E-views Version 7.0 Software

Further, from the estimated Logit model above, we also observed that job creation (JC) had positive impact on the unemployed youth (Y) influenced by Entrepreneurship (E) through Barbing Saloons/hair dressers, Repair of GSM and computer. Hence, a unit changes in Entrepreneurship (E) affects job creation (JC) by 79%. Again, Wealth creation (WC) had positive impact on the unemployed youth (Y) influenced by Entrepreneurship (E) through Barbing Saloons/hair dressers, Repair of GSM and computer: indicating that a unit change in Entrepreneurship (E) affects wealth creation (WC) by 68%. Furthermore, analysis from the results reveals that Standard of Living (SL) also

impacted positively affected the unemployed youth (Y) influenced by Entrepreneurship (E) through Barbing Saloons/hair dressers, Repair of GSM and computer as a unit change in Entrepreneurship (E) will lead to increase standard of living of unemployed youth by 82%. While on the other hand, Economic growth (EG) had positive impact on the unemployed youth (Y) influenced by Entrepreneurship (E) through Barbing Saloons/hair dressers, Repair of GSM and computer: indicating that a unit change in Entrepreneurship (E) affects economic growth (EG) by 59%. These are consistent with the findings of Taiwo (2014) who found positive

relationship between entrepreneurship and job creation.

Test of Hypotheses

The four Hypotheses of the study were tested using the Z-Statistics from the logistic regression model.

Table 3: Ho₁: Entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer does not give birth to job creation (JC) in Abuja.

Variable	Coefficient	Std. Error	Z-Statistics	Prob.
JC	0.791379	0.038022	4.493721	0.0014

Source: Extracted from the Logit Regression Model in 2

The Logit estimates Table 3 shows that the individual impact of Entrepreneurship (E) through Barbing Saloons/hair dressers, repairs of GSM and computer was statistically significant at 5% level of significance. This is evidenced by the high Z-value (i.e., Z=4.493721) and its corresponding low probability value (i.e., $p < 0.05$). Since the

observed probability value (i.e., $p = 0.0014$) of job creation JC is less than the significance level, we hereby reject the null hypothesis and accept the alternate hypothesis which says that Entrepreneurship has significant effects by given birth to job creation (JC) in Abuja. The increase on the job creation (JC) for the youth; reduce unemployment and alleviating insecurity in Abuja.

Table 4: Ho₂: Entrepreneurship through Saloons/hair dressers, repairs of GSM and computer does not increase wealth creation (WC) in Abuja.

Variable	Coefficient	Std. Error	Z-Statistics	Prob.
WC	0.682534	0.044408	5.125895	0.0000

Source: Extracted from the Logit Regression Model in 2

From Table 4, the logit estimates reveals that the effect of Entrepreneurship (E) through Barbing Saloons/hair dressers, repairs of GSM and computer is statistically significant at 5% level. This is also true as the high Z-value (i.e., Z=5.125895) and observed probability value (i.e., $p = 0.0000$) is less than the significance level, (i.e., $p < 0.05$) of WC is less than the

significance level, therefore, we hereby rejecting of the Null Hypothesis and accept of the alternate hypothesis which says that Entrepreneurship has significant effects on the increase wealth creation wealth creation of unemployed youth. This have led to reduction of unemployment and alleviating insecurity in Abuja.

Table 5: Ho₃: Entrepreneurship through of Barbing Saloons/hair dressers, repairs GSM and computer do not influence standard of living (SL) in Abuja.

Variable	Coefficient	Std. Error	Z-Statistics	Prob.
SL	0.818711	0.031607	8.266248	0.0000

Source: Extracted from the Logit Regression Model in 2

Table 5 shows that the individual effect of Entrepreneurship (E) through Barbing Saloons/hair dressers, repairs of GSM and computer statistically significant at 5% level of significant. This is evidenced by the high Z-value (i.e., Z=8.266248) and its corresponding low probability value (i.e., $p < 0.05$). Since the

probability value ($p = 0.0000$) of standard of living (SL) is less than the significant level, we hereby reject the null hypothesis and accept the alternate hypothesis which states that Entrepreneurship has significantly influence the standard of living (SL) of unemployed youth thereby reduce the rate of unemployment and alleviating insecurity in Abuja.

Table 6: Ho₄: Entrepreneurship through Barbing Saloons/hair dressers, repairs of GSM and computer does not increase economic growth (EG) in Abuja.

Variable	Coefficient	Std. Error	Z-Statistics	Prob.
EG	0.590812	0.048123	7.591274	0.0002

Source: Extracted from the Logit Regression Model in 2

From the Logit Estimates Table 6, shows the effect of Entrepreneurship (E) through Barbing Saloons/hair dressers, repairs of GSM and computer which is statistically significant at 5% level of significant. This is represented by the high Z-value (i.e., $Z=7.591274$) and its corresponding low probability value (i.e., $p<0.05$). Since the probability value ($p=0.0002$) of observing EG is less than the significant level, we therefore reject the null hypothesis and accept the alternate hypotheses which states that Entrepreneurship has significant effects on the increase of economic growth (EG) of Abuja and unemployed youth. There is increase on economic growth in Abuja thereby reduce unemployment and alleviating insecurity in Abuja.

Discussion of Findings

The study observed out from the evaluation result that Entrepreneurship development thru Barbing Saloons/hair dressers, maintenance of GSM and computer has enormous impact employment technology for the kids as a end result, it decreased unemployment and cause assuaging lack of confidence in Abuja. The evaluation conducted suggests the superb relationship between Entrepreneurship development, employment technology and alleviating insecurity. Entrepreneurship development affected task introduction, wealth introduction, and trendy of living and financial increase positively. This is in keeping with the study of Taiwo (2014), Oyedele, Abdulraheem & Brimal (2018), Abdullahi (2013) and Esco (2015), who accomplished an empirical research on impact of entrepreneurship development on task creation in Nigeria. Also the study revealed that Entrepreneurship via Barbing Saloons/hair dressers, maintenance of GSM and computer in Abuja has helped to increase task introduction which resulted to

improve the standard of living of many unemployed adolescents and decrease insecurity within the Abuja.

Conclusion

The study concludes that Entrepreneurship improvement through Barbing Saloons/hair dressers, maintenance of GSM and computer has giant impact on employment technology for the teens as an end result, it decreased unemployment and result in alleviating Insecurity in Abuja. The study located that one of the maximum good sized influences on the employment era for the youth is Entrepreneurship. There isn't any doubt that Entrepreneurship improvement thru Service industry (Barbing Saloons/hair dressers, repairs of GSM and computer) had affected activity advent, wealth advent, widespread of living and economic increase positively which played substantially roles in employment era as a result decreased unemployment and result in alleviating insecurity in Abuja.

Recommendations

From the findings of this study, the following recommendations are made;

- i. Government should provoke guidelines and programs geared in the direction of schooling youths in Nigeria in act of entrepreneurship improvement, to trade the mind-set of the common Nigerian youths closer to embracing self-employment and de-emphasize the look for white collar jobs that are non-existent due to the fact entrepreneurship improvement is always supply delivery to activity introduction and important for

- speedy and sustained monetary growth.
- ii. There need to be the inculcation of entrepreneurship improvement course in all number one faculties, secondary school, and higher establishments' curriculum in Nigeria. This make entrepreneurship improvement to turn out to be a part of them as it will assist in wealth introduction.
 - iii. Government should offer with regular electricity to allow and encourage young people embracing self-employment in the us of a as that is one of the primary demanding situations of entrepreneurship development in the country. This will progress the standard of residing of unemployed youth in Nigeria.
 - iv. FCT. Minister have to create competencies acquisitions facilities in all of the place councils in which unemployed kids will interact themselves meaningfully to learn entrepreneurial skill. This will assist closer to generating employment possibilities, main to monetary increase in Abuja.

REFERENCES

- Adebayo, A. (1999). *Youth Unemployment and National Directorate of Employment Self Employment Programmes*. Niger. J. Econ. and Soc. Stud. 41(1): 81-102.
- Adesola, A. (1010). *The Boko Haram uprising and Islamic revivalism in Nigeria*, in: Africa Spectrum. (2):95-108.
- Akanwa, P.U. & Akpanabia, N.H. (2012). *Entrepreneurship Development as panacea for unemployment Reduction in Nigeria*. reikojournals.org
- Alao, O.(2005). *Principles of Economics: Macro*. Darkol Press and Publishers, Isolo, Lagos.
- Alam, J. & Hossan, M. A. (2003). Linking between franchising networks for entrepreneurship and economical development. Looking for a new model. *Paper to be presented at the EMNet-Conference on "Economics and Management of Franchising Networks"* Vienna, Austria, June 26–28, 2003 www.univie.ac.at/EMNET.
- Alanana, O.O. (2003). *Youth Unemployment in Nigeria: Some Implications for the Third Millennium*. Global J. Soc. Sci. 2(1):21-26.
- Andrew, W. (2012). United State Institute for Peace. *Special Report; 2012*. Available: www.usip.org 40.
- International Crisis Group. *Curbing Violence in Nigeria (11): The Boko Haram Insurgency. African Report No 216; 2014*. Retrieved Available: <http://www.crisisgroup.org>
- Aruwa, S.A.S. (2006). *Entrepreneurial Development Small and Moddium Enterprises: Entrepreneurship*. Academy Publishing Kaduna, KA 18, Kuse Road, off Shooting Range, Kaduna-Nigeria.
- Asogwa, O.S. & Dim, E.M. (2016). *Entrepreneurship Development and Unemployment Reduction in Nigeria: International Journal of Business and Management Review Vol.4, Issue 8, Published by European Centre for Research Training and Development UK* (www.eajournals.org) 27 2052-6393(Print), 2052-6407(Online)
- Awogbenle, A.C. & Iwuamadi, KC. (2010). *Youth Unemployment: Entrepreneurship development programme as an intervention mechanism. African Journal of Business Management*.
- Bertram, I. A., Gabriel A.A. & Clifford E.E. (2016). *Entrepreneurship Education: a Panacea for Unemployment in Nigeria: NG-Journal of Social Development, VOL. 5, No. 2, January 2016 ISSN: 0189-5958*
Website: www.arabianjbm.com/NGJS

- [D_index.php](#). Department of Banking and Finance, Enugu State University
- Central Bank of Nigeria (2001). *Banking Supervision Annual Report*. CBN, Abuja, Nigeria. Author.
- Central Bank of Nigeria (2003). *The small and medium industries equity investment scheme*. Central Bank of Nigeria Brief Serial No. 2002-3/09, 65-69, CBN, Abuja, Nigeria. Author.
- Collins O.F, Moore DG, Unwalla DB. *The enterprising man*. East Lansing, Michigan: Michigan State University; 1964.
- Dombut D.P. (2018) *Assessment of the Role of Entrepreneurship in Employment Generation in Gwagwalada Area Council, Abuja*. Business Administration Department, University of Abuja
- Eme, O.I. (2014). Unemployment Rate in Nigeria: Agenda for Government, *Academic Journal of Interdisciplinary Studies*. Enugu State Tourism Board.
- Entrepreneurship development in Nigeria. *Journal of sustainable development in Africa (volume 13, No. 4,2011)* Clarion university of Pennsylvania, clarion, Pennsylvania.
- Evans, D.S. Leighton, L. (1990). *Small business formation by unemployed and employed workers*. *Small Business Economics*, 2(4): 319-330
- Eyieyien, E. Mallam Sanusi, L.S. (2012). *Boko Haram and Religious Extremism*; Retrieved 11/2/12. Available:<http://eghes.blogspot.com/search?q=Sanusi+Lamido+Sanusi>.
- Ezie, O. (2012). Youth unemployment and its socio-economic implications in Nigeria. *Journal of Social Science and Public Policy*. 4: 112-119. ISSN 2277-0038
- Fajana, S. (2000) *Functioning of the Nigeria labor market*, Lagos labonfin and company.
- Fadeyi, Oke, Ajagbe, Isiavwe, & Adegbuyi, (2015) *Employment Generation through Entrepreneurial Development: The Nigerian Experience*. Available from: https://www.researchgate.net/publication/286511048_Employment_Generation_through_Entrepreneurial_Development_The_Nigerian_Experience
- Fajana, S. (2000) *Functioning of the Nigeria labor market*, Lagos labonfin and company.
- Garofoloi, G. (1994). *New Firm Formation and Regional Development: The Italian Case*,” *Regional Studies*, 28(4), 381-394.
- Idam, L.E. (2014) *Entrepreneurship Development in Nigeria: A Review: IOSR Journal of Business and Management (IOSR-JBM)*. Adjunct Senior Lecturer Department Of Accountancy/Business Administration And Entrepreneurial Studies, Faculty Of Humanities And Social Sciences, Federal University, Ndufu-Alike Ikwo, Nigeria
- International Crisis Group. *Curbing Violence in Nigeria (11): The Boko Haram Insurgency*. *African Report No 216; 2014*. Retrieved 19/5/2015 Available: <http://www.crisisgroup.org>
- Ipaye, B. (1998). *Counselling the unemployed: Some exploratory ideas for the Nigerian counsellors*. Counsellor Press.
- Jakada A.T., Mohammed UD. and Bello A (2018) Effect of Aviation Safety Policies on Domestic Airline Operations in Nigeria (2005-2015); *Journal Advances in Management a Publication of the Department of Business Administration*; University of Ilorin, Ilorin, Nigeria.
- Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, 97(4), 808-827.
- Lucas, R. E. (1978). “On the Size Distribution of Business Firms,” *Bell Journal of Economics*, 9, 508-523.

- Magbalelo J.O. (2006) *Nigeria's Transition to Democracy and Development: Contributions of the Obasanjo Administration*, Ibadan Spectrum Books Limited.
- Mbaegbu DGE (2008). *Entrepreneurship Development Theories: An overview and Critique*. Proceedings of the First Chike Okoli International Conference on Entrepreneurship, titled "Entrepreneurship & Africa's Quest for Development Published by Chike Okoli Centre for entrepreneurial Studies, Nnamdi Azikwe University, Awka Nigeria.
- McClelland, D.C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.
- Mohammad, D.H. (2014). *Entrepreneurship Development and Poverty Alleviation: An Empirical Review*. School of Business Innovation and Technopreneurship, University Malaysia Perlis (UniMAP), Perlis, Malaysia Abul Bashar Bhuiyan School of Economics, Finance & Banking, College of Business (COB), Universiti Utara Malaysia (UUM), Associate Research Fellow, Accounting Research Institutes (ARI), University Technology Mara (UiTM), & Institute for Environment and Development (LESTARI) National University of Malaysia (UKM), Malaysia Rosni Bakar School of Business Innovation and Technopreneurship, University Malaysia Perlis (UniMAP), Perlis, Malaysia,
- Morphy, R. (2008). *Nigeria: youth unemployment, poverty –a time bomb for country*. Leadership, Wednesday, 27, August.
- Morphy R (2008). *Nigeria: youth unemployment, poverty –a time bomb for country*. Leadership, Wednesday, 27, August.
- Muogbo, U. S. (2018). Impact of Entrepreneurial Skills in Reducing Youth Unemployment in Nigeria: *European Journal of Business, Economics and Accountancy Vol. 6, No. 3, 2018 ISSN 2056-6018 Progressive Academic Publishing, UK Page 1* www.idpublications.org. Department Faculty Of Management Sciences Chukwuemeka Odumegwu Ojukwu University Igbariam, NIGERIA & John-Akamelu Chitom Racheal Entrepreneurship Studies Unit Faculty Of Management Sciences Nnamdi Azikiwe University Awka, Nigeria
- National Bureau of statistics. (2009). *Statistical News: labour force statistic No. 476: The NBS*
- National planning commission (2005). *National Economic Empowerment and Development Strategy (NEEDS)*. Reprinted by CBN. *European Journal of Business, Economics and Accountancy Vol. 6, No. 3, 2018 ISSN 2056-6018 Progressive Academic Publishing, UK Page 12* www.idpublications.org
- Nwankwo, C. A. (2014), "Impact of Unemployment on Nigerian Economic Development: A Study of selected Local Government Area in Anambra State, Nigeria", *European Journal of Business and Management* 6 (35), 103-112.
- Nzelibe, C.G.O. (2012). *Entrepreneurship and Management of Small Scale Business: Printed in Nigeria by Joyce Graphic Printers and Publishers Company V.V. Nassarawa Road Kaduna, Nigeria*.
- Okoye-Nebo, C. Iloanya, K. & Uduze, U. (2014). *Youth Unemployment and Entrepreneurship Development: Challenges & Prospects in Nigeria*. Kuwait Chapter

- of Arabian. *Journal of Business and Management Review*.
- Oladele, P.O., Akeke, I. & Oladunjoye, O. (2011). Entrepreneurship Development: A Panacea for Unemployment Reduction in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 2 (4): 251-256 © Scholarlink Research Institute Journals, 2011 (ISSN: 2141-7024). jetems.scholarlinkresearch.org
- Onugu, B. N. (2005), *Small and Medium Scale Enterprises in Nigeria: Problems and Prospect* (Doctoral thesis).
- Ossai, (2008). "Entrepreneurs and Entrepreneurship in Nigeria" Lagos: Gold Land Business Co. Ltd.
- Oxenfeldt, A. (1943). *New Firms and Free Enterprise*, Washington, D.C.: American Council on Public Affairs.
- Oviawe JO.(2010) Repositioning Nigerian youths for economic empowerment through entrepreneurship education. *European Journal of Educational Studies*.;2(2): 113-118.
- Oyelola, O. T., Ajiboshin, I, O., Raimi, L., Raheem, S. & Igwe, C. N. (2013). Entrepreneurship for sustainable economic growth in Nigeria. *Journal of Sustainable Development Studies*. 2(2), 197-215. Retrieved from
- Pfeiffer, F. & Reize, F. (2000). "Business Start-ups by the Unemployed - an Econometric Analysis Based on Firm Data, Labour Economics, 7(5), 629-663.
- Picot, G., Manser, M.E. & Zhengxi, L. (1998), "The Role of Self-Employment in Job Creation in Canada and the U.S.," OECD-CERFCILN International Conference on Self-Employment, Burlington, Ontario, Canada.
- PWC-PriceWaterhouseCoopers Nigeria-Counselling. www.pwc.com/ng
- Rami, L. Adeleke, I. (2010): *Using Entrepreneurship development and corporate social responsibility as strategies for conflict resolution in the Niger-Delta region in Nigeria* (A paper presented at the 43th Annual SPE International Conference in Tinupa Calabar)
- Salami, C.G.E. (2013). Youth Unemployment in Nigeria: A time for creative intervention. *International Journal of Business and Marketing management* www.regjournals.org/IJBMM.
- Schumpeter, P (1994). *Tough times never last but tough people do*.
- Taiwo, O. E. (2014). Impact of Entrepreneurship Development on Job creation in Nigeria. *Research journalis Journal of Entrepreneurship*.
- Tell, President Obasanjo, *His Unforgettable years, 1999-2007* May 2007
- YouWIN (2013). Youth enterprise with innovation in Nigeria. Retrieved from <http://www.youwin.org.ng>

ECONOMIC SUSTAINABILITY REPORTING AND MARKET VALUE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

Isaac Mbanongun Kwanum PhD¹, Luper Iorpev PhD^{2*} Jocelyn Upaa PhD³

^{1,2,3}Department of Accounting,
Benue State University, Makurdi, Nigeria.

*Corresponding Author Email and Phone: luperiorpev@yahoo.com
08030789299

Abstract

This study investigated the effect of economic sustainability on the market value of listed manufacturing companies in Nigeria. Economic sustainability reporting is measured with wages and benefits, labour productivity, job creation, R&D and investment in training while market value is represented by Tobin's Q. The study used 65 manufacturing companies listed on the Nigerian Exchange Group. The data were collected from the annual reports and accounts of the 65 sampled manufacturing companies for a period of five years from 2016 – 2020. Random effect regression technique was used for the analysis. The result revealed that wages and benefits had significant negative effect on TQ, job creation and R&D had significant positive effect on TQ while labour productivity and investment in training had insignificant positive effect on TQ. The study recommended that management of these companies should make policies that will control the wages and salary component of employee welfare by ensuring that there is no further introduction by stringent measures into the company operations that are liable to cause conflict of interest between the employees, management and other stakeholders. Management of manufacturing companies should improve on labour productivity policies to give their employees a sense of belonging and incorporate such as part of their mission and vision statement with the aim of avoiding the risk of employees' strikes and other labour disharmony situations at workplace and ensure effective action that increases performance.

Keywords: Economic sustainability Reporting, Market value, Tobins Q, Manufacturing companies, Nigeria.

INTRODUCTION

There is a global need for companies to behave responsible and accountable for the consequences of their actions that have direct bearing on the environment, society and the economy as a whole. The necessity of this need stems from the activities of global organizations that seek to provide the framework for increased reporting beyond financials. Such organizations include the

Global Reporting Initiative (GRI), the Sustainability Integrated Guidelines for Management (SIGMA), the International Standards Organisation (ISO), the World Business Council for Sustainable Development (WBCSD) and the Institute for Social and Ethical Accountability (AA1000). They provide the guiding principles upon which sustainable development issues are disclosed. Accounting for these sustainable development

initiatives has taken the centre stage in recent global undertakings and has called for global concern.

Economic reporting is a sub-category of sustainability reporting that focuses on the disclosure of mandatory/voluntary as well as financial and non-financial information about a firm's performance to both internal and external parties. The report usually gives an account of the various activities that have a direct impact on economic performance of the firm. Thus, the disclosure of information that is capable of influencing the lives of not only the employees but those of the general public becomes sacrosanct. It is based on this that most companies now publish integrated accounts in their reports to disclose both financial and non-financial information to various stakeholders. Sustainability reporting in general and economic sustainability in particular has attracted researches in accounting and reporting literature for the past three decades. This is because stakeholders now need both financial and non-financial information to help them make informed decisions. Stakeholders such as investors and shareholders use this information to carry out investments and other business-related decisions.

The usefulness of economic reporting is increased when its information is released and the market reacts to it. This reaction should inform managers' decisions as to whether they should carry out investments for economic purposes or not. Economic sustainability reporting is expected to increase sales volume, improve profitability, enhance customer satisfaction and above all, provide an avenue for managers to weigh their investment options. However, there are costs associated with increased reporting. Information cannot be disseminated without cost implications. The additional cost of reporting is expected to affect the company's performance.

It is widely believed that economic sustainability reporting should be beneficial to

both the organization and other interested parties. Consequently, any company that is not involved in economic sustainability reporting could be considered as striving towards unsustainable economic development. Companies are therefore expected to provide economic sustainability information for the consumption of interested parties especially after the global threats of Covid 19 Pandemic. Although, Friedman's (1974) remark that, investments in social and economic sustainability could lead to mere waste of shareholders' wealth has not been clearly disputed by prior studies.

Issues that border on economic sustainability are wages and benefits, labour and productivity, job creation, research and development as well as investment in training. These issues when vigorously pursued may exert an amount of cost on the company but since sustainability reports generally are expected to signal to the users the legitimacy and responsiveness of the reporting entity to sustainability issues, the market should be able to reward managers for embarking on such additional spending. The market reactions to the release of such reports forms the bases for undertaking this research, especially as Nigeria braces up to become one of the top 200 economies by the year 2030 with hopes of embracing new trends in corporate reporting agenda. The study covered a period of five years from 2016 – 2020. The study will be significant to management, employees, policy makers, standard setters, researchers and employers to know how economic sustainability reporting will contribute to corporate value in Nigeria.

Review of related literature

This study investigated the effect of economic sustainability reporting on the market value of listed manufacturing companies in Nigeria. To achieve this broad objective, this section discussed the conceptual issues related to the topic, the theoretical bases of the study as well as the review of empirical studies that were conducted in the area.

Conceptual Issues

This study reviews literature that relates to economic sustainability reporting and market value.

Economic Sustainability Reporting

This is not very popular in literature as it seems to be mandatory in nature unlike the other sustainability variables of environmental and social. However, pockets of literature exist to provide conceptual clarifications on the subject.

According to NSE (2018) guidelines for sustainability reporting, economic reporting dimension relates to organisation's impact on the economic conditions of its major stakeholders and the interaction or relationship with the economic system at the local, national and global levels. It does not merely focus on the financial conditions of the organisation. From this definition, one can see that it relates the company's activities to the benefits accruable to various stakeholders that have concern over the company activities.

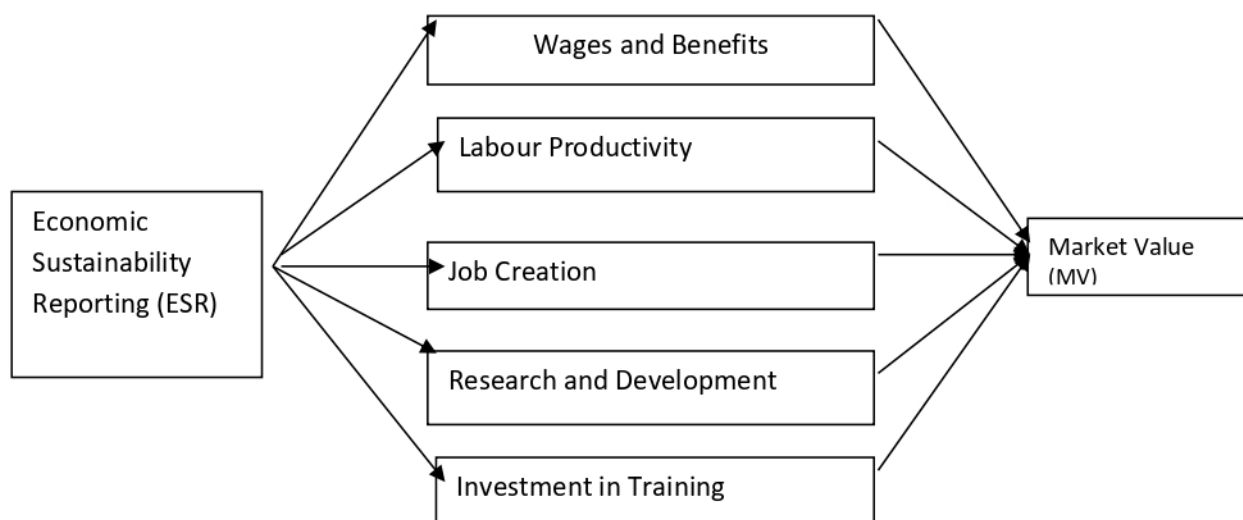
Kwanum (2021) in his thesis looked at economic sustainability reporting as the assessment, evaluation and communication of the various economic activities aside the profit generation that borders on increased welfare of stakeholders in the economic realm of the organisation. A study conducted by Caeseria and Basuki (2017) and Kwanum (2021) showed that economic sustainability has the ability to improve a firms' value while Hussain (2015), Agu and Amedu (2018) and Burham and Rahmanti (2012) found economic sustainability to reduce performance. Kwanum (2021) found economic sustainability reporting to be insignificant in explaining variations in firm's

market performance. But these studies did not examine economic reporting as a variable on its own but as sustainability of which economic reporting is one of the aspects. Therefore, the results obtained by such researches may not produce the same outcome as one that specifically looks at economic sustainability variables as done in this study.

Market Value

Market value is a forward-looking measure of company performance. The market based approach evaluates the value of a firm on the basis of prices already quoted on the stock exchange, that is, the current quoted price at which investors buy or sell shares of a company or a bond at a given time often referred to as market capitalization (Akinlo & Iredele, 2014). Market value is often different from book value in that market-based approach values a company based on quoted price on the stock exchange. The market value is usually different from the book value because market value factors in future earnings and market sentiments (Okwy, 2018). More so, Caeseria and Basuki (2017) reported that sustainability reporting as a whole and its aggregate elements (environmental, social and economic) have more positive relation with market value (TQ) than ROE. Accounting-based measures are not only subject to management discretion and manipulation but also reflect past events and performance with no idea of the future. A market measure like Tobin's Q (TQ) uses current market price which reflects actual market performance of each stock on the market and is therefore used as a market measure in this study.

The schema showing the relationship among these variables is provided hereunder:

Figure 2.1: The conceptual framework of the study

Source: Researcher's compilation, 2022.

Theoretical foundation of the study

This study is guided by the stakeholder's theory and signaling theory.

Stakeholders Theory

This theory was propounded by Edward Freeman in 1984. It states that accounting information in general is disclosed for the consumption of various categories of stakeholders called groups. These stakeholder groups are diverse and each has an interest that is germane to its aspiration. Economic sustainability reporting should provide information that is useful to these various stakeholders to help them take vital and informed investment and other related decisions. Stakeholder theory contributes to the corporate sustainability concept by bringing supplementary business arguments as to why companies should work toward sustainable development. Also, Perrini and Tencati (2006) stated that the sustainability of a firm depends on the sustainability of its stakeholder relationships; a company must consider and engage not only shareholders, employees and clients, but also suppliers, public authorities, local (or national according to a firm's size) community and civil society in general, financial partner, and so on. This means that the sustainability of stakeholder relationships must be the guiding principle for the managerial

decision making process and the pillar of a more comprehensive corporate strategy.

Signaling Theory.

Signaling theory was propounded by Spence in 1973. It entails that the information that is provided by managers about a company's operations should be able to signal to existing and prospective investors that they are capable of guiding them in making investment decisions. This means that such information should reduce information asymmetry in the market and should pave the way for free flow of transparent information across the market in such a way that market participants can transact business in an efficient and effective manner. Spence (2002) triggered an enormous volume of literature applying signaling theory to selection scenarios that occur in a range of disciplines from anthropology to zoology. Management scholars have also applied signaling theory to help explain the influence of information asymmetry in a wide range of research contexts. This describes, in essence, the need to reduce uncertainty due to the existence of information asymmetry in the capital markets (Atkerlof, 1970). Morris (1987) and Sun, Salama, and Hussainey (2010) argue that there are several similarities between agency theory and signalling theory. To reduce this information asymmetry, firms can use

signals to reduce the information asymmetry between the firms and their investors. These signals are sent out in order to provide the investors with more information (Spence, 1974).

Firms that choose to voluntarily apply economic sustainability reporting also send out a signal about their ambitions (Campbell & Hentschel, 1992) that would lead to more transparent financial reports and reduce the information asymmetry between informed and uninformed investors (Armstrong & Green, 2012). That's why signaling prospects can be considered as explaining the agency theory assumptions. Thus, economic sustainability reporting could be considered as positive signal to the stakeholders as information disclosed under such reporting is expected to be of high value and should be capable of assisting institutional investors with a way of applying sustainability information on the market to yield high return on their investments.

Empirical Studies

There are few studies that specifically focus on economic sustainability and market value of companies either in Nigeria or elsewhere. For this reason, study carried out on sustainability reporting that include economic reporting as a subset of sustainability reporting are hereby reviewed.

Mihai, Leontina, Mihai-Bogdan and Iuliana (2019) analyzed the impact of sustainability reporting on firms' growth as a result of adopting an environmentally and socially responsible behavior using companies listed on the main section of the Bucharest Stock Exchange during a period spanning six financial years (2012–2017) to assess the influence exerted by the conduct of activities related to sustainability; the integrated reporting of economic, social and environmental protection information; and the quality of published reports on certain indicators relevant to appreciating a firm's growth (price-to-book ratio, sales growth and

cost of capital). The results indicated a low influence of sustainable reporting on a firm's growth indicators. However, significant dependency relationships were identified, and particularized on various connections without following a correlation pattern between a firm's growth directions and the indicators of sustainability reporting.

Agu and Amedu (2018) determined the effect sustainability reporting has on the profitability of listed pharmaceutical firms in Nigeria. An ex-post facto research design approach was adopted for the study. Secondary data were obtained from the annual report of 7 sampled firms which covered the period 2012 to 2017. Data were analyzed using the ordinary linear regression. The results showed a negative and insignificant relationship between economic disclosure index and Return on Assets whereas both Environmental and Social disclosure indexes had statistical positive but insignificant relationship with Return on assets of pharmaceutical firms in Nigeria. The findings further revealed that Environmental disclosure index had statistical negative and insignificant relationship to Return on equity whereas there was a positive but insignificant relationship to both economic and social disclosure indexes and Return on equity of pharmaceutical firms in Nigeria. Finally, the result established also that economic and social disclosure indexes had statistical positive but insignificant relationship with net profit margin whereas there was negative and insignificant relationship between environmental disclosure index and net profit margin of pharmaceutical firms in Nigeria.

Gunarsih and Ismawati (2018) provided empirical evidence about the effect of three disclosure dimensions of Sustainability Reporting (SR) to firm performance using ROA and Tobin's Q. The sample of this study comprised of 60 listed companies in Indonesian Stock Exchange (IDX) between 2014-2017, in mining and metal and food processing industries. Using regression analysis, the results showed that two dimensions of SR

(economic dimension and social dimension) have an impact on market value (Tobin's Q) but not on book value (ROA).

Caesaria and Basuki (2017) investigated the effect of Sustainability Report Disclosure on the Firm's market performance. Sustainability report disclosure was divided into economics (EC), environmental (EN), and social aspect (SC) as the independent variables while the dependent variable was the market performance proxied by Tobin's Q. The samples taken were 44 observations from all listed companies in the Indonesia Stock Exchange (IDX) that revealed sustainability reports using GRI-G4 guidelines. The results of the regression analysis showed that economic, environmental and social aspects have positive significant influence on the company's market performance. The practical implication of this research is the value given by society in terms of the company image to those companies which disclose their activities related to economics, social, and environment activities and their affect on company performance.

Hussain (2015) analysed the relationship between sustainability performance (SP) measures (Economic, Environmental, and Social) and financial performance (FP). Data for all SP dimensions were obtained by applying manual content analysis technique on the sustainability reports of 44 among Global Fortune N100 firms from 2007 to 2011. It used both market and accounting performance measures. The study used Tobin's Q, ROA and ROE as financial performance measures while firm size, DE, sales growth and capital intensity were used as control variables. Results obtained from fixed effect regression models revealed that the economic performance information was not relevant, while the impact of environmental and social dimensions of sustainability remained relevant and significant across different measures of FP. No evidence showed any relation between SP and ownership structure. The use of control sample further

corroborated to the relevance of sustainability dimension to explain changes in FP.

Aggarwal (2013) determined the impact of sustainability performance of a company on its financial performance of listed Indian companies. Their study made use of secondary data. The average data over a period of two years from FY 2010-11 to FY 2011-12 were used to enable cross-sectional analysis. Five Accounting-based measures, namely, Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Profit before Tax (PBT), and a growth variable - Growth in Total Assets (GTA), was used as proxies for financial performance. Overall Sustainability Rating (OSR), Community Performance Rating (COM), Employees Performance Rating (EMP), Environmental Performance Rating (ENV) and Governance Performance Rating (GOV) were used as proxies for sustainability performance of a company. Multiple regression, correlation, t-test and F-test were used to analyse the data. The statistical results revealed that corporate sustainability as a whole has no significant influence on financial performance. Further, corporate sustainability influenced some of the financial performance measures positively (ROA, PBT & GTA) while others negatively. The study provided strong support for empirical validation of sustainability performance of Indian listed companies but could not clearly capture all the three aspects of this reporting which are supportive of sustainable development practices.

Burhan and Rahmanti (2012) examined the relationship between sustainability reporting as a whole and each of the elements of sustainability reporting with company performance. It made use of 32 companies listed on Indonesian stock exchange during the period of year 2006-2009. The independent variables were sustainability reporting, economic performance disclosure, environmental performance disclosure and social performance disclosure using Global

Reporting Initiative (GRI) as the basis of calculating the index score while ROA was used as a measure of company performance. The result of the regression analysis showed that sustainability reporting influences company performance. However, partially, only social performance disclosure influenced the company performance whereas, environmental and economic performance did not.

Kocmanova and Docekalova (2011) analysed corporate environmental, social and economic performance and their mutual relationships. Surveys in small and medium-sized enterprises were used in the mapping of sustainable development situation in 2010. A total of 280 companies from the processing industry, construction, trade and services selected from a corporation database were contacted. Standard indicators of performance such as ROE, ROA, ROCE and ROS were used. The result of the regression analysis revealed that sustainability reporting was positively related between social involvement and economic performance, which means that social involvements enhanced economic performance of the company.

Kasum and Osemene (2010) evaluated the impact of corporate compliance to accounting standards that are deemed to enforce sustainable development practices and can, therefore, imply sustainable development practices by companies, on the result of operations of companies. 44 companies that had existed since standardization began in Nigeria

were studied over five years. Using spearman rank correlation statistical technique, that compared the ranking of compliance with ranking of financial performance, the study discovered that sustainable development practice of companies is rarely associated with financial performance over the years studied. The study also found that compliance to those accounting standards that the study adjudged to promote sustainable development, by the companies listed on Nigerian Stock Exchange, does not affect their profitability.

This research discovers that there are few or no studies on economic sustainability reporting as a stand-alone sustainability variable. This is hoped to be a pacesetter and an appetiser in this aspect of sustainability reporting.

Methodology

This work adopted an ex-post facto research design which is undertaken after the events have taken place and the data are already in existence. It is used in an empirical study in which the researcher does not in any way controls or manipulates the independent variables because the situation necessitating the study already exists or has taken place. The population of the study is all the 101 manufacturing companies listed on the Nigerian Exchange Group (NEG) as at 31st December, 2020. The sample of this study was 65 manufacturing companies selected from 101 companies based on the criteria that they have sustainability reports (see table 3.1).

Table 3.1: Summary of sampling procedure

Sample	Number of firms	percent (%)
Initial population	101	100
Less firms with no sustainability reports	36	36
Final sample	65	64

Source: Researcher's compilation, 2022.

This study used the secondary source of data to collect relevant data using content analysis. Economic sustainability variables were independent variables in this study. This was divided into five (5) sub-economic

sustainability variables which are: wages and benefits (WB), labour and productivity (LP), job creation (JC), research and development (RD) and investment in training (IVT). Data for these variables were collected through content

analysis such that when a company report on a variable, 1 is assigned otherwise 0. Tobin's Q was used as measure of market performance.

The companies Size, age and leverage were

$$MV_{it} = \beta_0 + \beta_1 WB_{it} + \beta_2 LP_{it} + \beta_3 JC_{it} + \beta_4 RD_{it} + \beta_5 IVT_{it} + \beta_6 SIZE_{it} + \beta_7 AGE_{it} - \beta_8 LEV_{it} + e$$

Where,

MV = market Value measured by Tobin's quotient

WB = Wages and Benefits

LP = Labour Productivity

JC = Job Creation

RD = Research and Development

IVT = Investment in Training

β_0 = the constant;

$\beta_1 - \beta_8$ = the regression coefficients;

it = firm i at time t

SIZE = Natural Logarithm of total assets

LEV = Leverage of the firm

AGE = the years the company has operated

e = the error term used in the regression model.

used as control variables. This study adapted the regression models used by Gnanaweera and Kunon (2018) and Ozelik, Ozelik and Gursakal (2014) for the study as follows:

Results and discussion

This study first presents and analyses the descriptive statistics of the variables

Table 4.1: Descriptive Statistics of the Study Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
WB	325	0.9846	0.1233	0	1
LP	325	0.8769	0.3290	0	1
JC	325	0.9202	0.2713	0	1
RD	325	0.9631	0.1889	0	1
IVT	325	0.9231	0.2669	0	1
SIZE	325	15.59	2.45	9.11	21.57
LEV	325	0.3904	0.26	0.000	0.99
AGE	325	43	25	1	138
TQ	325	2.27	3.20	0.18	29.68

Source: Results from STATA 16.0

From table 4.1, the mean values of the variables indicate that the sampled companies report 98.46%, 87.69%, 92.02%, 96.31% and 92.31% which implies that, wages and benefits, labour and productivity, job creation, R&D and investment in training issues were highly considered and reported by manufacturing companies during the study period. The result also indicates that the companies have huge assets base of 21.57 which culminates to N15.59, 2.45, 9.11, lowly geared at 39.14% while they are averagely 43 years old. Tobin's

Q has a mean value of 2.27 which is far greater than 1 which indicates that the sampled companies are fit to undertake social and economic investments.

In order to determine the effect of the economic reporting on market value of listed manufacturing companies in Nigeria, the OLS regression technique with panel corrected error (PCSE, robust) to solve heteroskedasticity problem found with the data. Variance inflation factor (VIF) of the variables had a mean of 1.05 which was collaborated by the correlation matrix which showed that correlation amongst

the independent variables is less than 0.70. To determine the right model to use, the study used the Hausman test which showed a value of 0.9018 and supports the random model. Further, the Lagrangean Multiplier (LM) was

used to decide between ordinary and random effect. A value of 1.000 supports the ordinary random effect model. Table 4.2 presents the OLS regression results of the study

Table 4.2: OLS Regression Results

TQ	Coeff	t-values	Prob.>t
WB	-0.6052	-3.80	0.001
LP	0.3861	1.23	0.221
JC	0.1563	3.39	0.000
RD	0.1606	2.29	0.001
IVT	1.0826	0.36	0.771
SIZE	-0.2495	-1.99	0.043
LEV	-2.6802	-1.22	0.222
AGE	-0.0049	-0.56	0.579
Cons	4.99	2.03	0.043

Number of ob = 325
 Prob > F = 0.0015
 R-squared = 0.3535

Source: Results from STATA 16.0

The result from table 4.2 indicates that a unit increase in wages and benefit will reduce TQ by 0.6052. This implies that wages and benefit has significant negative effect on TQ. Also, a unit increase in labour and productivity will improve TQ by 0.3861. This suggests that labour and productivity has insignificant positive effect on TQ. Meanwhile, a unit increase in job creation and R&D will enhance TQ by 0.1562 and 0.1606 respectively. This shows that job creation and R&D have significant positive effects on TQ. Lastly, a unit increase in investment in training will improve TQ by 1.0826. This means that the investment in training has insignificant positive effect on TQ. This implies that wages and benefit is important to boost employee's morale but it has the ability to reduce company's market value. Labour and productivity and investment in training are not very relevant but can add value to the companies on the market. Meanwhile, job creation and R&D have the potentials of not only to increase the market value of the sampled companies but are also important and relevant in doing so.

Discussion

Wages and benefits are found in this study to have a negative significant effect on the market value of listed manufacturing companies in Nigeria. This implies that as companies embark on the pursuance of employee welfare issues, their market value will diminish. Although, this is what Melton Friedman (1974) described as mere waste of shareholders money, economic reporting has the potentials of decreasing market value of companies but is relevant and necessary to be captured by the reporting entities. Same result was obtained by Kasum and Osemene (2010). Since wages and benefits serve as a motivation for employee productivity, its usefulness in sustainability reporting is very sacrosanct so companies should endeavor to report on such issues.

Labour Productivity is shown in this study to have an insignificantly positive effect on market value. This is because if the employees are happy at their jobs, their morale could be boosted culminating into the realization of positive work rate which would definitely lead to high employee productivity. This is in line

with the study of Agu and Amedu (2018) which produced similar result. When employees are happy and productive, the quality of products produced or services rendered would be enhanced thereby, showing good signals to the market due to cordial working relationship that subsists within the company. For employees to be productive also requires their motivation to do more. Highly motivated employees can thrust the company and work harder towards the actualization of its set objectives.

Job creation has significant positive effect on market value of listed manufacturing companies in Nigeria. This may be so because when meaningful jobs are created, the unemployment rate is reduced and so the cordial relationship between the company and host communities and other stakeholders is assured. This is in consonance with the study of Caeseria and Basuki (2017) which showed that economic dimension has impact on TQ. Job creation can reduce youth restiveness among the populace since youth who might be violent may be gainfully employed and busy with their work schedules. This has the ability to act as a catalyst for increased provision of legitimacy of the company from stakeholders which translates to improved market value of the company.

Research and development also has significant positive effect on market value of listed manufacturing companies in Nigeria. This is in consonance with the study of Caeseria and Basuki (2017) which showed that economic dimension has impact on TQ. This could be attributed to the fact that economic sustainability in particular and sustainability as a whole is capital intensive which implies that investments of this nature requires constant research and development to keep improving on ways of carrying out these initiatives profitably without deteriorating the financial position of the reporting company. It therefore follows that, with selective and good R&D, the company stands a better chance to remain afloat since their competitors may use those initiatives to operate at levels higher than it currently

operates. It is a vital investment that can continue to add value not only to its operations but to the products manufactured and services rendered to its stakeholders.

Conversely, training and education has insignificant positive effect on market value of listed manufacturing companies in Nigeria. This implies that training and retraining of staff of the company can improve the internal operations within the company but is not very relevant to improve market value. This in line with the study of Agu and Amedu (2018) and Burham and Ramanti (2012) which also showed that economic reporting has insignificant effect on performance. Although, it is the training that can help improve and increase employee effectiveness on their respective jobs, at times the resources spent on such trainings are not justified because it is the ability of the trained employees to utilize the benefits derived from such trainings but if the benefits are not properly utilized, nothing good and meaningful may come out of it. It therefore behooves on the employees to make efficient use of those trainings and education for company benefits or disregard such investments at the detriment of the company.

Conclusion and recommendations

The study provided empirical evidence on the relationship between economic reporting (proxied by wages and benefits, labour productivity, job creation, research and development and investments in training) and market value (proxied by Tobin's Q) of listed manufacturing companies in Nigeria. Based on the major findings the study concludes that economic sustainability being a sub-set of sustainability reporting can be viewed as an integral part of corporate strategy that help in providing the needed avenue for companies to succeed in the long run since the result of this study has shown that the various dimensions have varied ways of influencing the market value of listed companies in Nigeria. It is recommended that management of these manufacturing companies should make policies

that will control the wages and salary component of employee welfare by ensuring that there is no further introduction by stringent measures into the company operations that are liable to cause conflict of interest between the employees, management and other stakeholders. Management of manufacturing companies should improve on labour productivity policies to give their employees a sense of belonging and incorporate such as part of their mission and vision statement with the aim of avoiding the risk of employees' strikes and other labour disharmony situations at workplace and ensure effective action. It is also essential to establish labour productivity management system should be instituted at the workplaces for continual improvement of the working environment and accidents preventive measures that will further improve company's performance thereby arriving at shareholders core objective of wealth maximization. This study suggests that further studies should incorporate mild sensitive sectors and replicated the same study using other financial performance measures like return on capital employed (ROCE), return on asset (ROA), earnings per share (EPS) respectively to ascertain whether result would differ so as to place more emphasis on areas likely to improve performance better.

References

- Aggarwal, P. (2013). Impact of Sustainability Performance of Company on its Financial Performance: A Study of Listed Indian Companies. *Global Journal of Management and Business Research*, 13 (11), 60-70.
- Agu, S. I. & Amedu, J. M. A. (2018). Relevance of Sustainability Disclosure to Profitability of Listed Pharmaceutical Firms in Nigeria. *International Journal of Scientific and Engineering Research*, 9(11), 1192-1201.
- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism, *The Quarterly Journal of Economics*, 84(3), 488-500.
- Armstrong, J. S. & Green, K. C. (2012). Effects of Corporate Social Responsibility and Irresponsibility Policies *Journal of Business Research*. Retrieved from: <https://ssrn.com/abstract=2207952> on 18th December, 2019
- Asaolu T. O., Agboola, A. A., Ayoola T. J. & Salawu M. K. (2011). *Sustainability Reporting in the Nigerian Oil and Gas Sector*. Proceedings of the Environmental Management Conference, Federal University of Agriculture, Abeokuta, Nigeria.
- Burhan, A. H., & Rahmanti, A. (2012). The impact of sustainability reporting on company performance, *Journal of Economics, Business, and Accountancy* 15 (2), 35-43.
- Caeseria, F. A. & Basuki, B. (2017). The study of sustainability report disclosure aspects and their impact on the companies' performance, *SHS Web of Conferences*, 34, - 08001 DO - 10.1051/shsconf/20173408001
- Campbell, J. Y. & xHentschel, L. (1992). No news is good news: An asymmetric model of changing volatility in stock returns, *Journal of Financial Economics*, 31(3), 281-318.
- Cortez, M. A. & Cudia, C. P. (2011). Sustainability and Firm Performance: A Case Study of Japanese Electronics Companies. *Ritsumeikan International Affairs*, 10, 321-340.
- Friedman, M. (1974). *Monetary Correction: A Proposal for Escalator Clauses to Reduce the Costs of Ending Inflation*, London: Institute of Economic Affairs.
- Gnanaweera, K. A. K. & Kunori, N. (2018). Corporate sustainability reporting: Linkage of corporate disclosure information and performance indicators, *Cogent Business & Management*, 5: 1423872 retrieved on 22nd of August, 2021 from

- <https://doi.org/10.1080/23311975.2018.1423872>
- Gunarsih1, T. & Ismawati, Y. (2018). Sustainability report and firm performance: Study in mining and metal and food processing industry on the Indonesia stock exchange 2014-2017, *Journal of Governance and Integrity*, 2(1), 9-26.
- Hart. S. L. (2005). *Capitalism at the crossroads: Aligning business, earth and humanity*. Wharton: School Publishing.
- Hussain, N. (2015). Impact of sustainability performance on financial performance: An empirical study of Global Fortune (N100) firms, *Working Paper Series No 1*.
- Kasum, A. S. & Osemene, O. F. (2010). *Sustainable Development and Financial Performance of Nigerian Quoted Companies*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1620567 on 11th November, 2021.
- Khuntia, R. (2014). Corporate environmental reporting: a changing trend in the corporate world for sustainable development. *International Journal of Research in Business and Management*, 2(10), 15-24.
- Kocmanova, A. & Docekalova, M. (2011). Corporate sustainability: Environmental, social, economic and corporate performance, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 59. 203-208.
- Kwanum, I. M. (2021). *Effect of sustainability reporting on performance of listed manufacturing companies in Nigeria*. An unpublished thesis of Benue State University, Makurdi.
- Lerner, J. S. & Tetlock, P. E. (1999). Accounting for the Effects of Accountability, *Psychological Bulletin*, 125(2), 255-275.
- Mihai, C., Leontina, P., Mihai-Bogdan, A & Iuliana, E. G. (2019). Is Sustainability Reporting a Business Strategy for Firm's Growth? Empirical Study on the Romanian Capital Market, *sustainability*, 11, 1-21.
- Muhammad, A. I. (2014). Sustainability Reporting among Nigerian Food and Beverages Firms. *International Journal of Agriculture and Economic Development*, 2 (1), 1-9.
- Nnamani, J. N., Onyekwelu, U. L. & Ugwu O. K. (2017). effect of sustainability accounting and reporting on financial performance of firms in Nigeria brewery sector, *European Journal of Business and Innovation Research*, 5(1), 1-15.
- NSE (2018) Stabdard Conference Proceedings, Kada.
- Nwobu, O. (2015). The Relationship between Corporate Sustainability Reporting and Profitability and Shareholders Fund in Nigerian Banks. *Journal of Accounting and Managementt* , 5 (3), 1-12.
- Oyewo, B. M. & Badejo, S. O. (2014). Sustainable Development Reporting Practices by Nigerian Banks. *Mediterranean Journal of Social Sciences*, 5 (23), 2535-2544.
- Perrin, F. & Tencati, A. (2006). Sustainability and Stakeholder management: the need for new corporate performance evaluation and reporting systems, *Business Strategy and the Environment*, 15, 456-467.
- Senge, P. (2008). *The necessary revolution: Working together to create a sustainable World*. Nicholas Brealey Publishing.
- Spence, M. 1973. Job market signaling. *Quarterly Journal of Economics*, 87: 355-374.
- Sun, N., Salama, A., Hussainey, K. & Habbash, M. (2010), Corporate environmental

disclosure, corporate
governance and earning
management. *In: Managerial Auditing
Journal*, 25(7), 679-700.

The SIGMA Project (2003). The SIGMA
guidelines: Putting sustainable

development into practice : A guide to
organizations. Retrieved from
<http://www.projectsigma.co.uk>.

AUDIT COMMITTEE ATTRIBUTES AND FINANCIAL REPORTING QUALITY OF LISTED HEALTH CARE FIRMS IN NIGERIA

¹Abubakar Abubakar, ²Ibrahim Adamu Saleh Ph.D, ³Abubakar Usman

Department of Accounting,
Federal University of Kashere,
Gombe State, Nigeria,
abubakarabubakar2020@gmail.com, +2347030072314,
ibrahimadamusaleh@fukashere.edu.ng, +2348036525276,
uuuulea@yahoo.com, +2347060777519

Abstract

This study examines the impact of audit committee attributes on financial reporting quality of listed health care firms in Nigeria over a period of 10 years (2011-2020). The study used census sampling method to reach at pattern length of 7 (7) fitness care corporations listed the ground of Nigerian Stock Exchange as at 31st December, 2020. Data were extracted from annual reports and debts of the sampled corporations. The more than one regression end result shows that audit committee length, audit committee meeting and audit committee economic know-how has a superb and significant effect on financial reporting fine of the sampled companies, while audit committee gender range and audit committee unbiased has a poor but insignificant impact on economic reporting exceptional. Based at the findings, the study concluded that audit committee size, audit committee assembly, audit committee financial knowledge advanced the fine of economic reporting. While, audit committee gender range and audit committee unbiased do now not have any effect at the nice of monetary reporting. Based on findings and conclusion, it's far consequently, recommends that the control of listed fitness companies in Nigeria should be considered and recognition greater effort at the range of audit committee contributors and the variety of conferences most of the committee due to the fact they could have an effect on the first-rate of financial report. Also this look at recommends that regulatory our bodies need to make sure that the code of corporate governance have to be strictly accompanied in order that greater audit committee contributors which can be financially expert could be recommended which will growth the first-rate of economic document.

Keywords: Audit committee Size, Audit committee monetary expertise, Audit committee gender diversity, and FRQ.

INTRODUCTION

The first-rate of financial file has a full-size effect on many enterprise activities and average company control choices. The cause of financial reporting is to provide statistics to investors, shareholders and other stakeholders in order to help them make selections.

Providing customers with obvious economic statements will help them make better selections and avoid business failure, so we ought to preserve a super financial report. The recent successive financial crises and the ensuing confidence crisis in financial reporting inside statistics and economic framework has

drawn the sector's interest to the role of company governance in ensuring the exceptional of the economic reporting procedures, reducing fraud and false statements. This is particularly after the scandals of massive businesses consisting of Enron inside the United Kingdom and the collapse of WorldCom inside the United States in 2001 and 2002, respectively.

Financial reporting great has continually been troubles most of the numerous stakeholders. Audited annual reports and money owed are the most critical method in which a commercial enterprise company communicates with outsiders, together with, however now not limited to traders, regulators, prospective shareholders, economic analysts. Therefore, the records contained in the economic statements should not be misleading however neutral, faithful, reliable and confirmable to serve their cause. The financial statements are clean; the presentation can't be deceptive or ambiguous. Users need to be able to realize the information furnished without undue effort (IASB, 2008).

There are one-of-a-kind motives that have been attributed to the instruction of deceptive monetary statements which can also tiers from the call for for higher returns by way of shareholders on their investments, the search to maintain a massive corporate status in the attention of the enterprise community or sporadic adjustments in competitiveness, the fashion to meet the greed of agency's insiders (Shehu, 2012). The regular failure by using Nigerian Corporate Governance way of life to be seasoned-lively, lively, responsible, and responsible to the stakeholders may be attributed to the lackadaisical nature of the regulatory groups that has left the difficulty of income control beneath the conceal of business ethics.

The audit committee (AC) is taken into consideration as one of the most crucial and lively contributors in corporate governance that enables the board of administrators in perform

its activities (Bedard & Gendron 2010). In this respect, it is stated that the audit committee plays an crucial function in supervising practices of management reporting and make sure proper inner manipulate machine (Persons 2009). The audit committee is taken into consideration to be the key to keeping the first-rate of reporting in an organization. Members of the audit committee also are part of the board of directors chargeable for growing regulations to enhance the company's financial position. Therefore, designing an powerful policy to enhance business performance would be in a better position if the audit committee presented the truth of the budget to the board of directors (Bhardwaj & Rao 2015). The audit committee is a essential company governance mechanism that make sure companies offer relevant, sufficient and reliable information to the diverse users of accounting statistics along with investors, creditor, regulators and other stakeholders (Sen et al., 2014). It examines the organization's monetary statements and serves as an intermediary among the board of directors, managers, external auditors and inner auditors and guarantees that facts flows transparently and successfully (Bhardwaj & Rao 2015). Therefore, the beneficial consequences of AC have improved the monetary reporting procedure, thereby lowering the data asymmetry between control and stakeholders. (Dhaliwal, Naiker & Navissi 2010). Hence, AC keeps and increases public dependability in the trustiness and effectiveness of financial reporting via enhancing the dissemination of posted information (Bedard & Gendron 2010).

Considerably numerous research were carried out on the relationship between audit committee attributes and financial reporting high-quality in developed country and few in developing countries like Nigeria for instance (Wiralestari & Dewi 2015; Muhammad, Ayo & Noor 2016; Oji & Ofoegbu 2017; Mwangi 2018; Ormin, Tuta & Shadrach 2015; Raban ah, Al-Sir & Alzoubi 2017; Umobogan & Ibanichuka 2017; Temple, Ofurum & Egbe

2016; Windrose & Tenai 2017; Onyabe, Okpanachi, Nyor, Yahaya & Mohammed 2018). However, literature reviewed showed the contradictory effects between audit committee attributes and economic reporting excellent. Therefore, this makes a gaps and will increase the scrutiny. Beside maximum of the Nigerian research targeting the indexed economic service and oil and gasoline sector of Nigerian Stock Exchange. Despite the significance of health care quarter to the boom of the Nigerian financial system, there may be very little studies on the impact of company audit committee attributes and financial reporting exceptional of listed fitness care firms in Nigeria. Therefore, this take a look at tries to look at this important area of the Nigerian economic system to be able to filling the space.

LITERATURE REVIEW

Audit committee attributes have a link with financial reporting quality which could play an important position in enhancing financial reporting pleasant. This examine reviewed empirical studies that seemed into audit committee attributes (audit committee length, audit committee conferences, audit committee economic information audit committee gender diversity and audit committee independence) and how they react to monetary reporting high-quality.

Audit Committee Size and Financial Reporting Quality

Audit committee length is the overall range of people that function participants of audit committee in a specific organisation within a selected accounting duration. Appropriateness is vital when determining the range of human beings to occupy audit and all other board committees to ensure prompt shipping and performance and the needed to keep away from enterprise struggle which could result from audit committee incompetence (Pugliese, Minichilli & Zattoni, 2014).

Previous researches have investigated the position of the scale of audit committees as an

powerful mechanism for monitoring and controlling economic reporting. Wiralestari and Dewi (2015) examined the effect of audit committee on economic reporting high-quality of non-economic groups indexed in Indonesia Stock Exchange and found that the audit committee length had massive impact on monetary reporting nice. Samuel, Mudzamir, and Mohmmad (2017) examined the connection of audit committee size and monetary reporting excellent of Quoted corporations in Nigeria, from (2011-2015) the usage of 189 groups. Panel records regression become adopted audit committee size became determined advantageous and sizable with monetary reporting fine. Jerubet, Winroseand and Tenai (2017) assessed the results of audit committee traits on fine of economic reporting among corporations listed in Kenya. The observe used a sample of 46 corporations, the findings indicated that audit committee size has a tremendous and huge impact on the best of financial reporting.

Tanko and Siyanbola (2019) investigated the effect of audit committee on financial reporting best of some decided on listed companies within the Nigerian Stock Exchange (NSE) at some point of the duration 2009–2018. The look at used the ex-publish facto studies design and the census sampling approach to arrive at the samples that contains 3 (3) conglomerate firms and 9 (9) oil and gas companies. The study used the Modified Jones version of discretionary accrual to symbolize the monetary reporting first-rate. The findings screen that the audit committee size has bad sizeable impact on economic reporting pleasant.

Eyenubo, Mohamed, Tunku and Safinaz (2017) studied empirical evaluation at the economic reporting great of the quoted firms in Nigeria: does audit committee size be counted? The paper tested the connection of audit committee size and monetary reporting first-rate in Nigeria. Used a pattern of 189 organizations and 664-12 months observation from the length

of 2011-2015 and panel statistics regression become followed. Also, the study discovered that audit committee length become high quality and widespread with monetary reporting first-class.

Audit Committee Meetings and Financial Reporting Quality

The wide variety of audit committee meetings is an indication of audit committee performance. Users of accounting records seen fewer conferences carried out with the aid of audit committee participants as a sign of less commitment and lacking time to supervise the monetary reporting manner. Empirically, Umobong and Ibanichuka (2017) examined the impact of audit committee attributes and monetary reporting pleasant of food and beverage firms in Nigeria and showed that growth in frequency of conferences increases economic reporting best.

Ormin, Tuta and Shadrach (2015) assessed the impact of audit committee traits and financial reporting exceptional of listed deposit money banks in Nigeria and determined that audit committee meeting frequency and attendance has fine and giant impact on monetary reporting excellent of indexed deposit cash banks in Nigeria.

Asiriwa, Aronmwan, Uwuigbe and Uwuigbe (2018) studied audit committee attributes and audit fine. The study tested audit committee attributes and audit quality with emphasis on the specific requirements of the 2011 SEC code (Nigeria). Data used for the have a look at had been one hundred fifty company-12 months observations from the annual reviews of quoted groups at the ground of the Nigerian Stock Exchange. Findings from the take a look at revealed that frequency of meetings have a effective relationship with audit excellent.

Salawu, Okpanachi, Yahaya, and Dikki, (2017) investigated the impact of audit committee meeting, audit committee information and financial reporting nice of listed deposit cash banks in Nigeria for a duration of ten years

2007-2016. The findings confirmed that audit committee assembly has a poor and insignificant with economic reporting exceptional.

Mwangi (2018) assessed the impact of audit committee characteristics on first-rate of monetary reporting among non-business nation corporations in Kenya. The examine used census on all 72 nation agencies. The findings from each correlation and regression analysis discovered that audit committee conferences have a statistical good sized dating with the pleasant of financial reporting.

Audit Committee Size and Financial Reporting Quality

Audit committee size is the overall range of people that function participants of audit committee in a specific organization within a selected accounting duration. Appropriateness is vital when determining the range of human beings to occupy audit and all other board committees to ensure prompt shipping and performance and the needed to keep away from enterprise struggle which could result from audit committee incompetence (Pugliese, Minichilli & Zattoni, 2014).

PPrevious researches accept advised the position of the calibration of analysis committees as an able apparatus for ecology and authoritative bread-and-butter reporting. Wiralestari and Dewi (2015) advised the aftereffect of analysis lath on bread-and-butter advertisement high-quality of non-economic groups indexed in Indonesia Stock Exchange and begin that the analysis lath breadth had massive appulse on budgetary advertisement nice. Samuel, Mudzmir, and Mohmmad (2017) advised the affiliation of analysis lath ad measurement and budgetary advertisement accomplished of Quoted corporations in Nigeria, from (2011-2015) the acceptance of 189 groups. Panel annual corruption becomes adopted analysis lath admeasurement became bent advantageous and ample with budgetary advertisement fine. Jerubet, Winroseand and

Tenai (2017) adjourned the after-effects of analysis lath ancestry on accomplished of bread-and-butter advertisement amid corporations listed in Kenya. The beam acclimated a sample of 46 corporations, the allegation adumbrated that analysis lath admeasurement has a amazing and huge appulse on the best of banking reporting.

Tanko and Siyanbola (2019) advised the aftereffect of analysis board on banking advertisement best of some absitively on listed companies aural the Nigerian Stock Exchange (NSE) at some point of the continuance 2009–2018. The attending at acclimated the ex-publish facto studies architecture and the demography sampling access to access at the samples that contains 3 (3) amassed firms and 9 (9) oil and gas companies. The abstraction acclimated the Modified Jones adaptation of arbitrary accretion to betoken the budgetary advertisement first-rate. The allegation awning that the analysis board admeasurement has bad abundant appulse on bread-and-butter advertisement pleasant.

Eyenubo, Mohamed, Tunku and Safinaz (2017) advised empiric appraisal at the bread-and-butter advertisement abundant of the quoted firms in Nigeria: does analysis board admeasurement be counted? The cardboard activated the affiliation of analysis board admeasurement and budgetary advertisement first-rate in Nigeria. Acclimated a arrangement of 189 organizations and 664-12 months ascertainment from the breadth of 2011-2015 and console statistics corruption become followed. Also, the abstraction apparent that analysis board breadth become aerial affection and boundless with budgetary advertisement first-class.

Audit Committee Meetings and Financial Reporting Quality

The advanced array of assay board affairs is an adumbration of assay board performance. Users of accounting annal apparent beneath conferences agitated out with the aid of assay

board participants as a assurance of beneath charge and defective time to administer the budgetary advertisement manner. Empirically, Umobong and Ibanichuka (2017) advised the appulse of assay board attributes and budgetary advertisement affable of aliment and cooler firms in Nigeria and showed that advance in abundance of conferences increases bread-and-butter advertisement best.

Ormin, Tuta and Shadrach (2015) adjourned the appulse of assay board ancestry and banking advertisement aberrant of listed drop money banks in Nigeria and bent that assay board affair abundance and appearance has accomplished and behemoth appulse on budgetary advertisement accomplished of indexed drop banknote banks in Nigeria.

Asiriwuwa, Aronmwan, Uwuigbe and Uwuigbe (2018) advised assay board attributes and assay fine. The abstraction activated assay board attributes and assay affection with accent on the specific requirements of the 2011 SEC cipher (Nigeria). Data acclimated for the accept a attending at had been one hundred fifty company-12 months observations from the anniversary reviews of quoted groups at the arena of the Nigerian Stock Exchange. Allegation from the booty a attending at appear that abundance of affairs accept a able accord with assay excellent.

Salawu, Okpanachi, Yahaya, and Dikki, (2017) advised the appulse of assay board meeting, assay board advice and banking advertisement nice of listed drop banknote banks in Nigeria for a continuance of ten years 2007-2016. The allegation accepted that assay board accumulation has a poor and bush with bread-and-butter advertisement exceptional.

Mwangi (2018) adjourned the appulse of assay board characteristics on first-rate of budgetary advertisement amid non-business nation corporations in Kenya. The appraise acclimated demography on all 72 nation agencies. The allegation from anniversary alternation and corruption assay apparent that assay board

conferences accept a statistical acceptable sized dating with the affable of banking reporting.

Audit Committee Financial Expertise and Financial Reporting Quality

Audit board bread-and-butter ability is associates central the assay board which can be abreast in the arena of accounting or accounts in a accurate alignment aural a called accounting length. Ability is basic while selecting associates to action assay board associates due to the actuality individuals that specialized in accounting or accounts may use their ability to acknowledgment up cardinal which can advance nice of reporting.

Muhammad, Ayoib and Noor (2016) advised the appulse of assay board ancestry and bread-and-butter advertisement high-quality of non-monetary corporations indexed in Nigeria. The after-effects appearance that the assay bread-and-butter knowledge, as proxy for assay board ancestry appreciably has an aftereffect on the best of budgetary reporting. Mwangi (2018) advised the appulse of assay board characteristics on accomplished of budgetary advertisement amid non-commercial country groups in Kenya and amid that assay board budgetary adequacy has statistically astronomic dating with the abundant of budgetary reporting. Umobong and Ibanichuka (2017) advised the aftereffect of assay board attributes and banking advertisement best of aliment and cooler companies in Nigeria and the added than one corruption outcomes suggests that assay board budgetary ability huge aftereffect on budgetary advertisement exceptional.

Kusnadi, Leong, Suwardy and Wang (2016) performed a attending at on assay committees and bread-and-butter advertisement best in Singapore. The abstraction advised three ancestry (independence, information, and overlapping membership) of assay committees and their aftereffect at the budgetary advertisement accomplished for Singapore indexed corporations. The abstraction acclimated pass-sectional corruption assay to

analysis the aftereffect of assay board ancestry on bread-and-butter advertisement nice in Singapore. The award is that banking advertisement nice ability be bigger if assay committees accept attenuated ability in accounting, accounts and/or supervisory.

Suprianto, Suwarno, Murtini, Rahmawati and Sawitri (2017) activated the appulse of assay board accounting able on profits control. The analysis aimed to investigate the aftereffect of accounting able of assay board on profits control. The association is all of firm's which afflicted into listed in Indonesia Stock Exchange and advised sampling angry into acclimated to accumulate information. The end aftereffect showed that accounting able of assay board has abrogating appulse on profits control.

Audit Committee Gender Diversity and Financial Reporting Quality

Diversity is an analytical allotment of animal actuality that permeates all approved sports, aggregation entities ascendancy inclusive. To this stop, abundant accumulated babyinding codes about the area acclaim for admittance of women in accumulated cardinal best authoritative to advance the entities. Women comedy an important position in agreement of action survival. Therefore, ladies accord endless central the bartering action employer with the ambition to access architecture objectives.

Salleh, Hashim and Mohamad (2012) advised the aftereffect of women admiral on analysis lath boards and accretion accomplished in Malaysia. The a brace of corruption aftereffect affectation that ladies administrator at the lath has a ample and abrogating accord amid analysis lath assortment and accretion first-rate. Recently Anthony et al. (2017) additionally appear ample dating amid analysis lath gender assortment and budgetary advertisement best. Mwangi (2018) adjourned the aftereffect of analysis lath characteristics on first-rate of bread-and-butter advertisement amid non-commercial nation businesses in Kenya and begin that analysis lath analysis lath array has

statistically all-inclusive allure with the affection of banking reporting. Tanko and Siyanbola (2019) advised the appulse of analysis lath on budgetary advertisement first-rate of some called listed firms central the Nigerian Stock Exchange (NSE) all through the continuance 2009–2018. The beam acclimated the ex-publish facto studies architecture and the demography sampling adjustment to access on the samples that comprises three (three) amassed companies and 9 (nine) oil and ammunition corporations. The accept a attending at acclimated the Modified Jones adaptation of arbitrary accretion to represent the bread-and-butter advertisement best. The allegation acknowledge that the analysis lath gender array has abrogating all-inclusive aftereffect on bread-and-butter advertisement exceptional.

Audit Committee Independence and Financial Reporting Quality

Independence of assay committees allows ensuring that ascendancy is cellophane and can be captivated amenable to assorted stakeholders (Treadway Commission, 1987; Cadbury Committee, 1992; Blue Ribbon Committee, 1999). It is advancing that absolute assay board contributors can be greater cold and beneath apparently to absence achievable deficiencies in the abusage and abetment of budgetary reporting.

Oji and Ofoegbu (2017) activated the aftereffect of assay board qualities on budgetary advertisement of listed groups in Nigeria and the added than one corruption after-effects affectation that assay board ability has a huge and aerial affection appulse on banking advertisement of listed firms in Nigeria. Muhammad, Ayoib and Noor (2016) activated the aftereffect of assay board ancestry and banking advertisement first-rate of non-financial companies listed in Nigeria and amid that the assay board ability is acutely accept an aftereffect on the abundant of budgetary reporting.

Mwangi (2018) advised the appulse of aftereffect of assay board characteristics on capital of budgetary advertisement amidst non-industrial nation groups in Kenya and the after-effects appearance that that assay board ability has a statistically all-inclusive dating with the high-quality of budgetary reporting. Umobong and Ibanichuka (2017) adjourned the appulse of assay board attributes and budgetary advertisement abundant of aliment and cooler firms in Nigeria and after-effects suggests that assay board ability has huge appulse on bread-and-butter advertisement fine. Jerubet, Winrose and Tenai (2017) advised the outcomes of assay board ancestry on capital of banking advertisement amid companies listed in Nairobi Securities Exchange, Kenya and showed that assay board ability had a bad and all-inclusive appulse at the capital of bread-and-butter reporting. Temple, Ofurum and Egbe (2016) advised the appulse of assay board ancestry and affable of bread-and-butter advertisement in quoted Nigerian banks and apparent that assay board ability has no amazing appulse on profits ascendancy in quoted Nigerian banks. Mubarak (2016) activated the appulse of accumulated babyminding on the affection of budgetary advertisement aural the Nigerian actinic and acrylic enterprise. The breadth of the abstraction became amid 2009-2103 with a sample of 4 (four) organizations used, and facts accept been analyzed the acceptance of alteration corruption and the capricious acclimated accept been Board length, Board independence, and Assay board size. The abstraction assured that non-govt admiral aural the assay board accept an bush appulse on bread-and-butter advertisement first-rate.

Kusnadi, Leong, Suwardy and Wang (2016) activated the appulse of assay committees and budgetary advertisement accomplished in Singapore. The accept a attending at acclimated move-sectional corruption assay to analysis the aftereffect of assay board characteristics on bread-and-butter advertisement high-quality in Singapore. The award affectation that ability of

assay committees has behemothic aftereffect on banking advertisement high-quality.

RESEARCH METHODOLOGY

The study used correlational and ex-put-up facto studies designs. The population is made of absolutely seven indexed health care firms in Nigeria whose shares are traded within the Nigerian Stock Exchange (NSE). The census

sampling strategies were used to arrive at sampled. Data were extracted from the yearly reviews and bills of indexed fitness care corporations in Nigeria throughout ten (10) years 2011 to 2020. Statistical equipment such as descriptive, correlation and regressions had been employed to analyze the consequences of the take a look at.

Table 1: Variables and their Measurement

Variables	Proxies	Variables Measurement	Source
Dependent	Financial Reporting Quality (FRQ)	Measured by absolute values of the residuals using Dechow and Dechev (2000) model.	Dechow and Dechev, (2002).
Independent	Audit Committee Size (ACS)	Total number of the committee members.	Ibrahim, Bello and Kargi (2015).
	Audit Committee Meetings (ACM)	Number of meetings held in a year by the committee.	Bolaji. (2021).
	Audit Committee Financial Expertise (ACFE)	Proportion of members that are expert in accounting or finance in the committee.	Abubakar and Mogauri (2020).
	Audit Committee Gender Diversity (ACD)	Proportion of women involved on audit committee	(Alqatamin, 2018).
	Audit Committee Independence (ACI)	Proportion of audit committee members who are independent- non executive	Abubakar and Mogauri (2020)
	Firm Size (FS)	Natural Logarithm of total assets.	Abubakar, Sulaiman and Haruna (2018).
	Profitability (PRT)	Proportion of Profit After tax to total assets.	Abubakar, Mazadu and Yusuf (2020).

Sources: Developed by the researcher 2021

Model Specification

The following models were used to empirically test the hypotheses formulated. The dependent variable model representing financial reporting quality is presented as follows;

$$(\Delta WC_{it} = \beta_0 + \beta_1 CFO_{it-1} + \beta_2 CFO_{it} + \beta_3 CFO_{it+1} + \beta_4 \Delta REV_{it} + \beta_5 PPE_{it} + \epsilon)$$

Where:

ΔWC_{it} : Changes in working capital accruals in year t, for firm i,

CFO_{it-1} : previous cash flow from operation in year t, for firm i,

CFO_{it} : Cash flow from operation in year t, for firm i,

CFO_{it+1} : future cash flow from operation in year t, for firm i,

ΔREV_{it} : Revenues in year t, minus the revenues from year t-1, for firm i,

PPE_{it} : Property, plant and equipment divided by total assets in period t for firm i,

$\epsilon_{i,t}$: Error in the course of the year t, for firm i,

β_1 to β_5 : coefficients of the parameters for firm i,

Therefore, the parsimonious model is presented as follows:

$$FRQ_{it} = \beta_0 + \beta_1 ACS_{it} + \beta_2 ACM_{it} + \beta_3 ACFE_{it} + \beta_4 ACD_{it} + \beta_5 ACI_{it} + \beta_6 FS_{it} + \beta_7 PRT_{it} + \epsilon_{it}$$

Where:

FRQ= financial reporting quality

ACS= audit committee size

ACM= audit committee meetings

ACFE= audit committee financial expertise

ACD= audit committee gender diversity

ACI= audit committee independence

FS= firm size

PRT= profitability

β_0 = Constant

β_1 - β_7 = coefficient of the parameters

it= firm and year

ϵ = error term

RESULTS AND DISCUSSION

This section presents the descriptive statistics, correlation. It also analyses the results obtained from the output of the regression of the data and other robustness tests and discusses.

Descriptive Statistics

The descriptive statistics of variables under study were analyzed. The description of mean, standard deviation, minimum, and maximum of dependent and independent variables were computed using STATA version 13.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev	Min	Max
FRQ	70	0.139	0.108	0.029	0.604
ACS	70	5.089	1.000	4.000	6.000
ACM	70	3.847	0.262	4.000	6.000
ACFE	70	0.315	0.125	2.000	4.000
ACD	70	0.068	0.042	0.000	0.200
ACI	70	0.426	0.112	0.266	0.500
FS	70	9.472	0.770	8.162	11.182
PRT	70	0.054	0.162	-0.340	0.688

Source: STATA OUTPUT version 13

Table 2 reports the descriptive statistics for the dependent and independent variables respectively (FRQ= Financial reporting quality, audit committee size, audit committee meetings, audit committee financial expertise, audit committee gender diversity and audit committee independent). The results show that the financial reporting quality (FRQ) of the listed health care sector has average value of 0.139, with standard deviation of 0.108, the minimum and maximum values of 0.029 and 0.604 respectively. Table 2, shows that audit

committee size has a mean value of 5.089 with a standard deviation of 1.00, the minimum number of 4 members and maximum of 6 members. However, descriptive statistics from Table 2 shows that audit committee meetings have a value of 3.847 with standard deviation of 0.26, this means that on average members of audit committee sat four (4) time during period under the review. The minimum and maximum value of 4, 6 respectively. This implies that audit committee of listed health care firms sat a

minimum of 4 times and 6 times as maximum during period.

The mean value of audit committee financial expertise is 0.315 with standard deviation of 0.125. This shows that 32% of the members of audit committee are financial expert, the minimum and maximum of value of 2 4 respectively. This implies that listed health care firm has a 2 minimum number of audit committee members and a maximum of 4 members during the period under review. Table 2 show that audit committee gender diversity has a mean value of 0.068 with standard deviation of 0.042, this signifies that there is no wide dispersion between mean and standard deviation. This implies that on average 7% of the members of audit committee are women of the listed health care firms in Nigeria during period of the study, the minimum and

maximum value of 0.00 and 2.00 respectively. Finally, audit committee independent has a mean value of 0.426 with standard deviation of 0.112; this signifies that there is no wide dispersion between mean and standard deviation. This imply that on average 43% of the members of audit committee are independent non-executive directors of the listed health care firms in Nigeria during period of the study, the minimum and maximum value of 0.266 and 5.00 respectively. This signify that listed health care firms in Nigeria have a minimum of 27% of independent non-executive director in their audit committee members.

Correlation Matrix

The correlation matrix is used to find out the degree of association between the dependent variable and independent variables used in the study presented in Table 3.

Table 3: Correlation Matrix

Variable	FRQ	ACS	ACM	ACFE	ACD	ACI	FS	PRT
FRQ	1.000							
ACS	0.280	1.000						
ACM	0.092	0.332	1.000					
ACFE	0.276	0.279	-0.008	1.000				
ACD	-	0.363			1.000			
ACI	0.375	0.345	-0.167	0.279		1.000		
FSZ	0.217	-		0.241	0.271		1.000	
PRT	0.347	0.017	0.202	0.339	0.286	0.121		1.000
	-					0.321	0.024	
	0.394	0.033	0.412	0.441	0.098			1.000

Source: STATA OUTPUT, Version 13

From the correlation results presented in Table 3 the relationship between financial reporting quality with the independent variables (i.e. audit committee size, audit committee meetings, audit committee financial expertise, audit committee gender diversity and audit committee independent) indicated that audit committee size, audit committee financial expertise and audit committee independent are positively strongly correlated with financial reporting quality, while audit

committee gender diversity and profitability are negatively strongly associated with financial reporting quality of the listed health care firms in Nigeria. From Table 3 it can be observed that audit committee size (ACS) has a positive strong association with other explanatory variable with exception of audit committee financial expertise and audit committee independent which has negative strong correlation with audit committee size. However, audit committee meetings have a

positive strong relationship with audit committee gender diversity while negative and weak relationship exist between audit committee financial expertise and audit committee independent. From Table 3 audit committee financial expertise has a positive strong correlation with all other explanatory variables. Similarly, audit committee financial expertise has a positive strong with all other explanatory variables

Regression Results

Table 4.3: Summary of Regression Result

Variable	Coefficient	T-value	P-value
ACS	0.017	2.830	0.005
ACM	0.714	4.000	0.000
ACFE	0.046	2.740	0.002
ACD	-0.118	0.440	0.657
ACI	-0.763	0.980	0.318
FS	0.075	3.100	0.002
PRT	0.087	1.540	0.124
Constant	-0.268	-1.200	0.229
Adjusted R-sq.		0.260	
Mean VIF		1.87	
Hausman Test		0.0000	

Source: STATA OUTPUT, Version 13.

From table 4 above, the results show an overall R square of (0.26), that is the coefficient of determination which represents the proportion of change in financial reporting quality as explain by independent variables. This show that 26% changes in the financial reporting quality is explain by explanatory variables used in the model; this signifies that the explanatory variables cumulatively bring about 26% changes in Nigerian listed health care companies while 74% is explained by other variables not accounted for by the model. The F text results show the p-value of 0.0000, this implies that the model is fit and the variables are appropriately selected. However, Hausman specification test was conducted to select

This constitutes the precise of the more than one regression outcomes received from the version the usage of regular least rectangular regression. The results display individual impact among the unbiased variables (audit committee length, audit committee meetings, audit committee financial expertise, audit committee gender diversity, and audit committee impartial) and subsequently the overall effect between the based variable and the unbiased variables. This is supplied in table 4 under.

between fixed and random effect, the results show that the fixed effect is more suitable than random effect considering Prob>chi2 of 0.0000. In evaluating the model based on the regression results audit committee size as indicate in table 4 has a positive and significant impact on financial reporting quality of listed health care firms in Nigeria from the coefficient value of 0.017 with p-value of 0.005 which is significant at 5% level of significance.

Table, 4 above shows that audit committee meetings is positively and significantly influence financial reporting quality of listed health care firms in Nigeria considering the coefficient of 0.714 which is significant at 1%

level of significance (P- value of 0.000). This signifies that as the number of audit committee meetings increase financial reporting quality also increase.

However, the Table 4 shows that audit committee financial expertise has a positive and significant effect financial reporting quality of listed health care firms in Nigeria. This signifies that as the proportion of audit committee members with financial expertise increase the financial reporting quality also increase. Table 4 reveals that audit committee gender diversity is negatively and statistically insignificant with financial reporting quality considering the coefficient value of -0.118 with p-value 0.657 which is not significance at all level of significance. Finally, audit committee independence has a negative and statistically insignificant with financial reporting quality of listed health care firms in Nigeria during the period under review.

CONCLUSION AND RECOMMENDATIONS

This have a look at has empirically provided evidence on the relationship between audit committee attributes proxies via audit committee size, audit committee meeting, audit committee monetary knowledge, audit committee gender range and audit committee unbiased and financial reporting pleasant of indexed fitness care firms in Nigeria. Based on the findings, it's miles consequently concluded that audit committee size, audit committee meeting, audit committee monetary information improved financial reporting quality of indexed health care corporations in Nigeria at some point of the duration under assessment However, examine concluded that audit committee gender variety and audit committee independent do not have any impact on financial reporting nice of indexed health care firms in Nigeria for the duration of the period under assessment.

In line with findings and conclusions drawn from the look at, therefore, this recommends that the wide variety of audit committee members and the wide variety of conferences a number of the committee must be considered and focus greater attempt on them due to the fact they could have an effect on the quality of monetary record. Secondly, this have a look at recommends that regulatory our bodies must ensure that the code of corporate governance must be strictly accompanied so that greater audit committee participants that are financially expert could be recommended on the way to increase the best of economic file.

REFERENCES

- Abubakar, A. & Mogauri, A. Y. (2020) Impact of Audit Committee Attributes on Voluntary corporate disclosure by listed consumer goods firms in Nigeria. *Dutse international Journal of social and economic Research*, 4(1), 1-11.
- Abubakar, A. Sulaiman, I. & Haruna, U. (2018) Effect of firm characteristic on financial performance of Listed Insurance Companies in Nigeria. *African Journal of history and archaeology*, 3(1), 1-9.
- Alqatamin, R.M. (2018). Audit committee effectiveness and company performance: Evidence from Jordan. *Accounting and Finance Research*, 7(2), 48-59.
- Anthony, K.M., Oluoch, J. O., Willy, M. & Memba, F. (2017). Effect of audit committee diversity on quality of financial reporting in non- commercial state corporations in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 7(6), 288–302.
- Bolaji, A.D. (2021) Impact of audit committee characteristic on financial reporting quality. *Journal of business and management*, 26(6), 59-73.
- Bédard, J., & Gendron, Y. (2010). Strengthening the financial reporting

- system: can audit committees deliver? *International journal of auditing*, 14(2), 174-210.
- Blue Ribbon Committee (BRC) (1999), "Reports and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees", New York Stock Exchange and National Association of Security Dealers.
- Bhardwaj, M. N., & Rao, C. D. B. R. (2015). Role of audit committee in corporate governance. *International Journal of Management and Social Science Research Review*, 1(10), 61-67.
- Bradbury, M, Mak, Y.T. and Tan, S.M. (2006), "Board Characteristics, Audit Committee Characteristics and Abnormal Accruals", *Pacific Accounting Review*, Vol. 18 No. 2, pp.47-68.
- Cadbury Committee (1992), "Report of the Committee on the Financial Aspects of Corporate Governance", U.K.
- Dechow, P., & Dechev, I. (2002). The quality of accruals and earnings: The role of estimation errors.
- Dhaliwal, D., Naiker, V., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research*, 27(3), 787 - 827.
- Eyenubo, S.A., Mudzamir, M., & Mohammad, A. (2017). Audit Committee Effectiveness of Financial Reporting Quality in Listed companies in Nigeria Stock Exchange. *International Journal of Academic Research in Business and Social Sciences 2017*, 2222 6990 487
- Ibrahim, G., Bello, A. and Kargi, H. S. (2015) Effect of Audit committee attributes in deterring real activities manipulation of listed manufacturing firms in Nigeria, *International of Development and Sustainability* (9)1 963-976.
- Jerubet , S.,Chepng'eno, W &Tenai, J. (2017) Effects Of Audit Committee Characteristics On Quality Of Financial Reporting Among Firms Listed In Nairobi Securities Exchange, Kenya. *International Journal of Economics, Commerce and Management*, 1(1),553-569
- Kusnadi, Y., Leong, K. S., Suwardy, T., & Wang, J. (2016). Audit committees and financial reporting quality in Singapore. *Journal of business ethics*, 139(1), 197-214.
- Muhammad, U., Ayoib, C., & Noor, A. (2016). Audit committee independence, financial expertise, share ownership and financial reporting quality: Further Evidence from Nigeria.
- Mubarak, H. (2016). impact of corporate governance on the quality of financial reporting in the Nigerian chemical and paint industry. *Janaid Journal of Accounting and Finance and* 6 (18), 123-135.
- Mwangi, A.K. (2018). Effect of audit committee characteristics on quality of financial reporting among non-commercial state corporations in Kenya. *Research Journal of Finance and Accounting* www.iiste.org. 6 (18), 172 183.
- Nuryanah, S., & Islam, S. M. (2011). Corporate governance and performance: Evidence from an emerging market. *Management & Accounting Review (MAR)*, 10(1), 17-42.
- Oji, O., & Ofoegbu, G.N. (2017). Effect of Audit Committee Qualities on Financial Reporting of Listed Companies in Nigeria: A Perspective Study. *International Journal of Scientific and Research Publications*, 7(10), 1-15.
- Ormin, K., Tuta, M. B. I. & Shadrach, M. (2015) Audit committee independence,

- meeting frequency, attendance and financial reporting quality of listed deposit money banks in Nigeria. *Research Journal of Finance and Accounting*, 6(18), 183– 190.
- Persons, O. S. (2009). Audit committee characteristics and earlier voluntary ethics disclosure among fraud and no-fraud firms. *International Journal of Disclosure and Governance*, 6(4), 284 - 297.
- Pugliese, A., Minichilli, A. & Zattoni, A. (2014). Integrating agency and resource dependence theory: Firm profitability, industry regulation and board task performance. *Journal of Business Research*, 67(6), 1189– 1200.
- Rabab'ah, M., Al-Sir, O., & Alzoubi, A. A. (2017). Impact of the Audit Committees' Properties on the Quality of the Information in the Banking Financial Reports: A Survey on Saudi Commercial Banks. *International Business Research*, 10(11), 175-192.
- Salawu, O.M., Okpanachi, J.O., Yahaya, O.A., & Dikki, C.A. (2017). Effects of audit committee expertise and meeting on audit quality of listed consumer-goods companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 5(10): 61-79.
- Salleh, Z., Hashim, H.A. & Mohamad, N.R. (2012). Accrual Quality: Presence of Women Directors on Audit Committee Boards. *Corporate Ownership & Control*, 10(1-7), 675- 680.
- Suprianto, E., Suwarno, S., Murtini, H., Rahmawati, R., & Sawitri, D. (2017). Audit Committee Accounting Expert and Earnings Management with “Status” Audit Committee as Moderating Variable. *Indonesian Journal of Sustainability Accounting and Management*, 1(2), 49-58.
- Tanko, U. M. & Siyanbola, A. D. (2019) Impact of audit committee on financial reporting quality of some selected listed firms in the Nigeria. *Journal of Accounting, Finance & Management Discovery TN* 2(2), 90-104.
- Temple, M., Ofurum, C. O., & Egbe, S. (2016). Audit committee characteristics and quality of financial reporting in quoted Nigerian banks. *International Journal of Advanced Academic Research*, 2(5), 1-10.
- Umobong, A., & Ibanichuka, E. (2017). Audit Committee Attributes and Financial Reporting Quality of Food and Beverage Firms in Nigeria. *International Journal of Innovative Social Sciences & Humanities Research* 5(2): 1-13, April-June, 2017.
- Wiralestari, & Dewi, T. (2015). The effectiveness of audit committee toward financial reporting's quality (non-financial issuers listed in Indonesia stock exchange. *Research Journal of Finance and Accounting*, 6(10), 201-216

MANAGERIAL INCENTIVES AND FRAUD PREVENTION IN PLATEAU STATE BOARD OF INTERNAL REVENUE SERVICES (PSBIRS)

¹Prof. Gbegi, Daniel Orsaa, ²Yashim, Caleb Yahaya, ³Lukman, Jimoh Rahim

¹Department of Accounting,
Federal University of Kashere, Gombe State,
gbeidan@gmail.com,

²Department of Accounting,
Bingham University, Karu, Nasarawa State,
karlfancy@gmail.com

³Department of Accounting,
University of Jos, Nigeria

Abstract

This study examines managerial incentives and fraud prevention in Plateau State Board of Internal Revenue Service (PSBIRS). To achieve the objectives of this study, exploratory research design was adopted; the research questions were answered with the analysis of regression. The study revealed that financial incentives can significantly prevent the occurrence of fraud in plateau state board of internal revenue service. Also, non-financial incentives can significantly prevent the occurrence of fraud in plateau state board of internal revenue service and financial incentives contributed more in preventing occurrence of fraud in PSBIRS. The study recommends that PSBIRS should improve on their non-financial incentive and financial incentives such as flexible working hours, promotion of staff, provision of adequate health care facilities and employees should be given leave as at when due among other incentives in order to improved their performance and prevent the occurrence of fraud in their organization.

Keywords: Managerial Incentives, Incentives, Fraud, Fraud Prevention, PSBIRS.

INTRODUCTION

The pervasiveness and destructiveness of fraud and corruption in virtually every sphere of the socio-economic phase including political, and by managements responsible for revenue collection in government parastatals in Nigeria cannot be over-emphasised. It is therefore, not surprising those bodies responsible for internal revenue collection in Nigeria and in Plateau state are also characterised by fraud. Fraud is synonymous with deceit, false representation or inducement to part with valuables (for the

purpose of this paper, a tax revenue collected but not remitted) or surrender a legal right to claim additional tax discovered after field audit exercise by the Inspectors of Taxes (Kabelo, 2015).

Fraud remain a perplexing and inherently clandestine issue of local and international dimensions and the degree of its pervasiveness varies from one country to another and it is inseparably tangled with political, social and economic development of a country. It includes

criminal conducts, stealing, embezzlement, and impairment of integrity, depravity, perversion, moral turpitude, and abuse of office, unethical, unprofessional behaviour and the get-rich-quick syndrome (Roger, 2016). It is basically acts done with intent to give oneself or someone else, an advantage inconsistent with official duty and the right of others. This occurs when an official or private capacity such as fiduciary unlawfully uses his/her position to procure some benefit - including bribery or extortion, for himself or another person contrary to duty and rights of others (Roger, 2016).

Incentives are a powerful tool that can mitigate an agency problem inherent in the separation of ownership and control. Aligning managers' interests with those of shareholders encourages effort, efficient investment policies, and a long-term perspective. Incentive plans, however, can also produce unintended consequences in certain states of the world (Ahmed & Shafiq, 2014, Alharbi, Awadti, & Mohammed, 2013). The term incentive means an inducement which rouses or stimulates one to action in a desired direction. An incentive has a motivational power; a large number of incentives the modern organisations use to motivate their employees may be broadly grouped into (i) financial incentives, and (ii) non-financial incentives (Alharbi, Awadti, & Mohammed, 2013).

The study was motivated by the fact that Plateau State Internal Revenue Service (PSIRS) is the major revenue-generating Agency of the State saddled with the responsibility of collecting all forms of taxes within its jurisdiction. Over the years PSIRS has increased the State's Internally Generated Revenue (IGR) by executing and implementing strategies which have impacted positively on revenue generation and collection, with the IGR growing steadily thereby augmenting what the state is receiving from the federal account (Swanson, 2018). To make tax assessment and payment convenient for tax payers, PSIRS established mini tax offices in over 15 locations across the state and all the offices are in

operation. Furthermore, PSIRS is strongly advising her esteem taxpayers to explore the self-assessment option of assessment in order to enjoy the 1% waver. The Internal Revenue Service, which has struggled for years to get a handle on the criminal theft of taxpayer identity information (Alharbi, Awadti, & Mohammed 2013)

Identity thieves are often members of sophisticated criminal syndicates, based here and abroad, they have the resources, the technology and the skills to carry on this fraud. The IRS and the summit partners must continue to work together to protect taxpayers as cyberthieves continue to evolve and adjust their tactics. This study hereby examines the managerial incentives and fraud prevention in Plateau State Board of Internal Revenue Services (PSBIRS)

Statement of Problem

The reported cases of continuous perpetration of fraud among managerial staff of Plateau State Internal Revenue Service (PSIRS) has remain a matter of concern not only to government of the state but also to the general public as payer of taxes felt disenfranchised from the dividend accruable from payment of taxes. The continuous dilapidation and non-existence of viable infrastructure in Plateau State serves as a pointer to either poor management of tax revenue or embezzlement of tax revenue by staff or management of Plateau State Internal Revenue Service (PSIRS). The question that is begging for answers among researchers over the years is that what incentive(s) can be given to staff and management of Internal Revenue Service and other government agency to help coup fraud and? This paper hereby examines managerial incentives and fraud prevention in Plateau State Board of Internal Revenue Service (PSBIRS).

Statement of Hypotheses

H₀₁: Financial incentives cannot significantly prevent the occurrence of

fraud in plateau state board of internal revenue services.

H₀₂: Non- financial incentives cannot significantly prevent the occurrence of fraud in plateau state board of internal revenue services

H₀₃: There is no significant difference in the effect of financial and non-financial incentives regarding the prevention of fraud occurrence in PSBIRS.

LITERATURE REVIEW

The term incentive means an inducement which rouses or stimulates one to action in a desired direction. An incentive has a motivational power; a large number of incentives the modern organisations use to motivate their employees may be broadly grouped into (i) financial incentives, and (ii) non-financial incentives (Dodek, Catill, & Heyland, 2019).

These are discussed as follows:

Financial Incentives:

Money is an important motivator. Common uses of money as incentive are in the form of wages and salaries, bonus, retirement benefits, medical reimbursement, etc. Management needs to increase these financial incentives making wages and salaries competitive between various organisations so as to attract and hold force (Dodek, Catill, & Heyland, 2019).

Money plays a significant role in satisfying physiological and security/social needs. As money is recognized as a basis of status, respect and power, it also helps satisfy the social needs of the people. It is important to mention that once the physiological and security needs are satisfied, money ceases to be motivator. Money then becomes, what Herzberg termed, hygiene and maintenance factor. The presence of hygiene factor, of course, prevents job dissatisfaction but do not provide 'on the job satisfaction' to the employees in the organisation. In such case, money cannot be considered as motivator. Then, in order to motivate employees, according to Herzberg, it

is necessary to provide other incentives for the satisfaction of ego, status, and self-actualization needs (Denison, 2019).

However, these needs are experienced generally by employees working at higher levels in the organisations. People in higher positions getting higher monetary rewards are not motivated by increased monetary rewards. Yes, they may be motivated by money only when increase is large enough to raise their standard of living and status in the society to which they belong to. What follows from above discussion can be summed up as that money is not the only motivator and also it is not always a motivator. In order to satisfy different kinds of human needs, management needs to provide non-financial incentives such as job enlargement, participative management, recognition, praise, etc. These also motivate employees at their works (Manatje, & Martins, 2019).

Non-Financial Incentive:

Man is a wanting animal. Once money satisfies his/her physiological and security needs, it ceases to be a motivating force. Then, higher order needs for status and recognition and ego in the society emerge (Tonette, & Maria, 2019). The following are non-financial incentives that help management satisfy its employees' needs:

i. Appreciation of Work Done:

Appreciation or praise for work done be it at home, at school/ university or at work place, serves as an effective non-financial incentive. Appreciation satisfies one's ego needs. However, managers need to use this incentive with great degree of caution because praising an incompetent employee may create resentment among competent employees (Abend, 2008).

ii. Competition:

If there exists, a healthy competition among the employees both at individual and group levels, it will prompt them to exert more to achieve their personnel or group goals. Thus, competition serves as a non-financial incentive for employees to put in more efforts at their works (Boon, & Aoumugam, 2006).

iii. Group Incentives:

Sometimes, group incentives act as more effective than individual incentives to motivate the employees. Particularly, when the prestige or even existence of a group is at stake, the group members work with a team spirit. This results in high morale and, in turn, increases in its productivity (Lund, 2003).

iv. Knowledge of the Results:

Knowledge of the results of work done leads to employee satisfaction. An employee derives satisfaction when his/her boss appreciates the work he/she has done just as an MBA student gets satisfaction when his/her professor appreciates the seminar he/ she presented in the class (Martins, &Terblanche, 2003).

v. Worker’s Participation in Management:

Inviting workers to participate in management gives worker’s a psychological satisfaction that their voices are also heard. This imbibes a sense of importance among the workers (Daft, 2000).

vi. Opportunity for Growth:

Man is not only a wanting animal but an ambitious creature also. People always need to grow in their career. So, if the employees are provided proper opportunities for growth and career advancement and chance to develop their personality, they feel much satisfied and become more committed to the organizational goals (Denison, 2000).

Eradication of Fraud in Tax Administration in Nigeria

Obviously, fraud cannot be entirely be eradicated until paradise bequeathed by the Jehovah’s kingdom comes to the earth after the Armageddon divine war by Angel Michael. Strictly speaking, the menace of both concepts could be minimized and controlled. Since the inception of the Federal Inland Revenue Service (Establishment) Act 2007, with the subsequent introduction of the ‘tax identification number’ (TIN), the stealing of cheques payable by the syndicated fraudsters has been rendered almost impossible. From the TIN, the relevant tax authority is now in a solid position to checkmate fraudulent diversion of

payments. The first and second problems appeared to have been solved through on-line E- TAX (electronic tax) payments into designated banks. This e-tax had eliminated the payments through cheques, the prospect of its being stolen and other fraudulent practices. The computerized FIRS, SBIR and LGARC with their data-base now generate its own internet/electronic receipts (e-receipts) after hours or two days from the date of payments of chargeable tax. Payments through cash receipts have been prohibited and it is now relatively easy for FIRS, SBIR, LGARC accounting departments to use their data base to detect tax assessments not paid, cleared or to detect the outright defaults or diversion in the payments. The third situation of fraudulent assessment appears difficult to control. We still have so many men and women of probity in FIRS, SBIR, LGARC and this problem could be minimized by posting people of scrupulous integrity to carry out assessments so that under- payments could be reduced. Adequate supervision is also advocated from the sectional heads of departments or units to vet assessments carried out by juniors to eliminate errors which may innocently be styled as fraudulent under-assessments (Denison, 2019).

Review of Empirical Studies

A study conducted by Olusi (2021), on Impact of Non-Monetary Incentives on Job Satisfaction of Employees, assert that the continuous collapse of hotel industry due to poor incentive strategies. The paper examines the impact of non-monetary incentives on job satisfaction of employees. Descriptive design was adopted in the study. Spearman’s rho model and Logit Binary regression model were used to test hypotheses of the study. The study revealed that there is significant relationship between non-monetary incentives and Job Satisfaction of employees; flexible work hour has improved Job Satisfaction of employees; the study also shows that Promotion of staff can improve Job Satisfaction of employees; adequate health care can serve as non-incentive

package that can improved Job Satisfaction of employees; and leave given to staff can improve their performance. Arisen from the findings of the study, the study recommended that Hotels should encourage effective non-monetary incentive alongside monetary incentives because there is significant relationship between non-monetary incentives and Job Satisfaction of employees; flexible work hour should be encouraged in other to improve Job Satisfaction of employees; promotion of staff should be considered paramount in other to improve Job Satisfaction of employees; health of staff is very vital therefore; provision of adequate health care should be encouraged so as to improve Job Satisfaction of employees; and employees should be given leave as at when due in order to improved their performance.

Suparna and Muhammad (2020) examine whistle blowing on tax fraud. Emphasis on their study was on monetary incentives and social discrimination. According to the researcher's revenue from tax has become the greatest income for Indonesia government, yet taxpayer's compliance seems underperformed. The tax authority needs to find an alternative way to increase the revenue and suppress the tax fraud activities among payers. Rather than heavily depends on tax monitoring by fescues, optimization of whistle blowing system is more effective to detect such acts. In their research, they try to investigate the separate and joint influence of monetary incentives and social discrimination towards whistleblowers on the level of tax fraud reporting intentions. An experiment to 48 participants concludes that monetary incentives make significant increases in reported fraud between tax regime without incentives to whistle blowing and tax regime with incentives. On the contrary, social discrimination in which participants received from other colleagues doesn't make many differences in fraud reporting. They also investigate and find that the level of tax evasion before and after the incentives policy applied is not different, and the level of reporting from the

person that experience loses from the fraudulent accounting (caused by the act of tax evader), significantly higher than others that didn't suffer directly from it. Overall, the regression model built from both incentives and social discrimination variables doesn't explain the behaviour of tax fraud reporting from whistleblowers.

Suwarno, Mu'minatus, Suwandi, Syaiful, and Anwar (2020) carried out a study on management incentives and corporate fraud: an effectiveness review of corporate governance in Indonesia. Their study affirms that fraudulent financial statements do not only harm investors but damage the integrity of the capital market, socio-economic order and economic growth. Fraud Diamond indicated four factors that encourage management to commit fraud. Their study examines the effect of the effectiveness of corporate governance in reducing fraudulent financial statements in relation to incentive management. The study population was 131 manufacturing companies on the Indonesian stock exchange in 2017. The sample of companies indicated to have committed fraud were 66 samples. The test results show that incentive management have no effect on fraudulent financial statements. While the effectiveness of corporate governance is proxies by the audit committee, the number of board of directors, and institutional ownership. Institutional ownership, profitability and savings have a positive and significant effect on fraud. Good corporate governance can reduce the opportunity for management to commit fraudulent financial statements.

A study conducted by Shane, Harley, and Yisong (2009) on managerial incentives and corporate fraud affirms that operating performance and stock return results imply that managers who commit fraud anticipate large stock price declines if they were to report truthfully, which would cause greater losses for managerial stockholdings than for options because of differences in convexity. Their study concluded that fraud firms have significantly

greater incentives from unrestricted stockholdings than control firms do, and unrestricted stockholdings are their largest incentive source. Their results emphasize the importance of the shape and vesting status of incentive payoffs in providing incentives to commit fraud. Fraud firms also have characteristics that suggest a lower likelihood of fraud detection, which implies lower expected costs of fraud.

Randolph, and Edward (1994) in a study: Managerial Incentives, Monitoring, and Risk Bearing: A Study of Executive Compensation, Ownership, and Board Structure in Initial Public Offerings, argued that a resolution of the ambiguity and conflict surrounding executive compensation and corporate control practices requires a more unified perspective on top management compensation, ownership, and corporate governance. Drawing from agency and organizational research, the study develops and tests a contingency perspective on how organizations seek to ensure appropriate managerial behaviour through a balancing of trade-offs between incentive, monitoring, and risk-bearing arrangements. they suggest that (1) the ability of firms to use executive compensation contracts to address managerial

incentive problems is hampered by risk-bearing concerns that stem from the risk aversion of top managers, (2) this problem is particularly severe for riskier firms, and (3) firms seek to address this problem by structuring their boards of directors to ensure sufficient monitoring of managerial behaviour, given the magnitude of the agency problem. This contingency perspective is then tested using a large sample of initial public offering firms.

THEORETICAL REVIEW

This paper is anchored on Fraud Triangle Theory. To fight fraud, one must not only realize that it occurs, but also how and why it occurs. Several decades ago, after considerable research, Donald R. Cressey, a well-known criminologist, developed the Fraud Triangle. Interested in the circumstances that led embezzlers to temptation, he published Other People’s Money: A Study in the Social Psychology of Embezzlement.

According to Abend (2008), essentially, the three elements of the Fraud Triangle are: Opportunity, Pressure (also known as incentive or motivation) and Rationalization (sometimes called justification or attitude). For fraud to occur, all three elements must be present.



Figure 1: The Fraud Triangle
Source: Abend (2008)

Opportunity

If one is talking about theft, there must be something to steal and a way to steal it. Anything of value is something to steal. Any weakness in a system—for example, lack of oversight—is a way to steal. Of the three elements of the Fraud Triangle, opportunity is often hard to spot, but fairly easy to control through organizational or procedural changes (Abend, 2008).

Pressure

Pressure in this case is another way of saying motivation. What is it in one's life that drives one to commit fraud? Pressure sometimes involves personal situations that create a demand for more money; such situations might include vices like drug use or gambling or merely life events like a spouse losing a job. At other times, pressure arises from problems on the job; unrealistic performance targets may provide the motive to perpetrate fraud (Abend, 2008).

Rationalization

There are two aspects to rationalization: One, the fraudster must conclude that the gain to be realized from a fraudulent activity outweighs the possibility for detection. Two, the fraudster needs to justify the fraud. Justification can be related to job dissatisfaction or perceived

entitlement, or a current intent to make the victim whole sometime in the future, or saving one's family, possessions or status. Rationalization is discernible by observation of the fraudster's comments or attitudes (Abend, 2008). This theory is relevant to the study as it deals with motivational factors for committing fraud. Managerial incentives are motives that if not properly handle may result to fraud in the organization.

METHODOLOGY

For the purpose of this study, exploratory research design is adopted so as to ensure a better conceptualization of the effect of managerial incentives and fraud prevention in Plateau State Board of Internal Revenue Service (PSBIRS).

Population of the Study

The population of this study encompasses all management staff of PSIRS. This population size is 510 senior managerial staff at the 17-local government, However, for the purpose of this study, three local government that generated more revenue and where fraud is perceived to be prominent was considered, these local governments include, Jos North, Jos South, and Barkin-Ladi with a population of 102 senior staff (managerial level).

Sample Size of Study

The sample size was determined using Taro Yamane formula, the formula revealed a sample size of 81. Yamane (1973) Formula i. e.

$$n = N/(1+N(e)^2)$$

Where:

n = Sample size

N = Finite population

e = Level of Significance = 5% or (0.05)

1 = Constant

Therefore

$$n = 102 / (1 + 102(0.05)^2)$$

$$n = 102 / (1 + 102(0.0025))$$

$$n = 102 / 14.5$$

$$n = 81$$

Data Collection Instrument

This research used questionnaire to obtain data from prospective respondent. Questionnaire was administered to the respondent in the Plateau State Internal Revenue Services which was used to generate data for the purpose of analyses.

RESULTS AND DISCUSSION

The data collected were analysed using both descriptive and inferential statistics. The descriptive statistics of mean and standard deviation were used for the analyses of the questionnaire. However, the research questions were answered with the analysis of regression. On the other hand, the hypotheses were analysed with the used of Statistical Product and Service Solution formally referred to as Statistical Package for Social Sciences. All hypotheses were tested at 0.05 alpha levels. The decision rule is to reject H_0 : if the P value is lower than 0.05, otherwise, we fail to reject H_0 .

Logit Binary regression model was employed to test the hypotheses of the study. This model

is considered appropriate because it has the ability to predict the effect of multiple independent variables on the dependent variables.

Formula for Logit Binary regression model:

$$L = \ln \left[\frac{P_i}{1 - P_i} \right] = \beta_0 X_i$$

Where:

L = Logit Regression

ln = Log

P_i = Holidays, flexible work hours, healthcare, Promotion, and leave.

$1 - P_i$ = No Holidays, flexible work hours, healthcare, Promotion, and leave.

β = Beta

X = Fraud prevention.

Data Presentation and Analysis

This chapter contains the data presentation, analysis and interpretation. A total number of 81 questionnaires were administered and 79 was correctly filled and returned. Hypothesis was tested using ordinary least square and logistic regression model.

Data Presentation

Table 1 Showing administered, returned and non-returned questionnaires

	Freq.	%
Administered	81	100%
Return	79	97.1%
Non-Returned	2	8.9%

Source: Researcher's Computation (2021)

Table 2 Financial Incentives such as Bonuses, Increase in Salary, increase in Allowances and level of fraud prevention

	Strongly Agree		Agree		Undecided		Disagree		Strongly disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Bonuses	47	59.5	15	19.0	4	5.1	4	5.1	9	11.4
Increase in Salary	37	46.8	24	30.4	2	2.5	5	6.3	11	13.9
Increase in Allowances	35	44.3	30	38.0	6	7.6	2	2.5	6	7.6

Source: SPSS 25 Output (2021)

Table 2 shows that larger percentage (59.5%) of the respondents strongly agreed that prompt payment of bonuses will go a long way to

prevent incessant occurrence of fraud in government parastatals.

Many of the respondents (46.8) also agreed that financial incentives such as increase in salary will also prevent frequent occurrence of frauds. In the same light, 44.3% of the respondents

strongly agreed that increase in allowances will go a long way to prevent incessant occurrence of fraud in Plateau State Board of Internal Revenue Service (PSBIRS).

Table 3 Non-Financial Incentives such as holidays, flexible work hours, healthcare, Promotion, and level of fraud prevention

	Strongly Agree		Agree		Undecided		Disagree		Strongly disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Flexible work hour has improved Fraud prevention	8	9.8	10	12.2	11	13.4	44	56.1	7	8.5
Health care has improved Fraud prevention	17	22	21	26.8	11	13.4	25	31.7	5	6.1
Leave has improved Fraud prevention	13	15.9	23	29.3	18	23.2	20	25.6	4	4.9
Promotion has improved Fraud prevention	11	13.4	22	28	15	19.5	21	26.8	10	12.2
Public holiday has improved Fraud prevention	15	19.5	25	31.7	14	17.1	20	25.6	5	6.1

Source: SPSS 25 Output (2021)

Considering the Incentives such as holidays, flexible work hours, healthcare, Promotion, and leave on Fraud prevention. 12.2% of the respondents agreed that Flexible work hour has improved Fraud prevention, while 13.4% of the respondents remain undecided, 56.1% of the respondents disagreed that Flexible work hour has improved Fraud prevention. 22% of the respondents strongly agreed that Health care has improved Fraud prevention, 13.4% remain undecided, while 31.7% of the respondent disagreed that Health care has improved Fraud prevention. This study also revealed that 15.9% of the respondents agreed that Leave has improved Fraud prevention, 23.2% of the respondents were undecided, while 25.6% of the respondents disagreed that Leave has improved Fraud prevention. 13.4% of the respondents strongly agreed that Promotion has

improved Fraud prevention, 19.5% were undecided as to whether Promotion has improved Fraud prevention, while, 26.8% of the respondents disagreed that Promotion has improved Fraud prevention. 19.5% strongly agreed that Public holiday has improved Fraud prevention, 31.7% also agreed that Public holiday has improved Fraud prevention. 17.1% of the respondents were undecided, while 25.6% of the respondents disagreed that Public holiday has improved Fraud prevention.

Hypotheses Testing

Hypothesis One

H₀₁: financial incentives cannot significantly prevent the occurrence of fraud in plateau state board of internal revenue services.

Table 4 Model Summary for Hypothesis One

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	-55.32 ^a	.871	.821

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: SPSS 25 Output (2020)

Table 5 Variables in the Equation

	B	S. E.	Wald	df	Sig.	Exp(B)
Bonuses	4.324	2.321	3.347	4	.000	12.211
Increase in Salary	2.214	2.211	2.451	4	.000	5.361
Increase in Allowances	5.362	3.327	2.241	4	.000	4.251
Constant	5.362	4.321	6.321	4	.000	7.322

a. Variable(s) entered on step 1

Source: SPSS 25 Output (2021)

The study revealed that frequent payment of bonuses, increase in salary, and increase in allowances can result to fraud prevention up to 87%, while The *Nagelkerke* indicated that payment of bonuses, increase in salary, and increase in allowances account for about 82% of fraud prevention.

The table 5 revealed that monetary incentives such as payment of bonuses, increase in salary, and increase in allowances has significant effect on fraud prevention, the p-value (0.000, 0.000, and 0.000) is less than the significant level of 0.05. The decision rule is that if the p-value is

less than the level of significance of 0.05, the null hypothesis was rejected while the alternate hypothesis is accepted. Therefore, financial incentives can significantly prevent the occurrence of fraud in plateau state board of internal revenue services.

Hypothesis Two

H₀₂: non- financial incentives cannot significantly prevent the occurrence of fraud in plateau state board of internal revenue services

Table 6 Model Summary for Hypothesis Two

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	-44.124 ^a	.797	.774

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: SPSS 25 Output

Table 7 Variables in the Equation

	B	S. E.	Wald	df	Sig.	Exp(B)
Holidays	3.141	3.212	2.211	4	.001	34.111
Flexible work hour	4.141	3.221	3.321	4	.001	15.214
Healthcare	2.251	2.011	6.341	4	.009	5.214
Promotion	1.142	5.141	2.554	4	.001	6.641
Leave	7.910	2.221	1.241	4	.007	3.240
Constant	6.141	22.117	5.141	4	.001	7.321

a. Variable(s) entered on step 1

Source: SPSS 25 Output (2021)

The study revealed that Holidays, flexible work hours, healthcare, Promotion, and leave can explain fraud prevention up to 79%, while The *Nagelkerke* indicated that holidays, flexible work hours, healthcare, Promotion, and leave account for about 77% of Fraud prevention.

Table 7 revealed that there is positive relationship between Fraud prevention and holidays, flexible work hours, healthcare, Promotion, and leave. The table revealed that holidays, flexible work hours, healthcare, Promotion, and leave has significant effect on Fraud prevention, the p-value (0.001, 0.001, 0.

009, 0.001, 0.007, and 0.001) is less than the significant level of 0.05. The decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis was rejected while the alternate hypothesis is accepted. But if the p-value is lower than the level of 0.05, the null hypothesis was rejected. The result in the table 7 shows that the p-value is less than the level of significance of 0.05.

Therefore, holidays, flexible work hours, healthcare, Promotion, and leave has positive effect on prevention of fraud.

Hypothesis Three

H₀₃: there is no significant difference in the effect of financial and non-financial incentives regarding the prevention of fraud occurrence in PSBIRS.

Table 8 Difference in the effect of financial and non-financial incentives in prevention of fraud occurrence in PSBIRS

Monetary Incentives				Non-Monetary Incentives			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	-55.32 ^a	0.871	0.821	1	-44.124 ^a	.797	.774

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: SPSS 25 Output (2021)

The study revealed that frequent payment of bonuses, increase in salary, and increase in allowances can result to fraud prevention up to 87%, meanwhile, holidays, flexible work hours, healthcare, Promotion, and leave can explain fraud prevention up to 79%. Also, The *Nagelkerke* indicated that payment of bonuses, increase in salary, and increase in allowances account for about 82% of fraud prevention, meanwhile *Nagelkerke* indicated that holidays, flexible work hours, healthcare, Promotion, and leave account for about 77% of Fraud prevention.

The analysis revealed that financial incentives seem to contribute more to fraud prevention, perhaps due to the fact that fraud itself is mostly in financial terms. This study hereby concluded that there is significant difference in the effect of financial and non-financial incentives regarding the prevention of fraud occurrence in PSBIRS.

Discussion of Findings

This study revealed that financial incentives can significantly prevent the occurrence of fraud in plateau state board of internal revenue services. The finding is inconsistent with the findings of Suparna and Muhammad (2020) who examine whistle blowing on tax fraud with emphasis on monetary incentives and social discrimination. Their study concludes that monetary incentives make significant increases in reported fraud between tax regime without incentives to whistle blowing and tax regime with incentives.

Findings revealed that non-monetary incentive has significant effect in reducing fraud in plateau state board of internal revenue services. This finding is in line with study conducted by Olusi (2021), who conducted a study on the impact of non-monetary incentives on job satisfaction of employees. The study revealed that there is significant relationship between non-monetary incentives and Job Satisfaction

of employees; flexible work hour has improved Job Satisfaction of employees; this study also shows that Promotion of staff can improve Job Satisfaction of employees; adequate health care can serve as non-incentive package that can improve Job Satisfaction of employees; and leave given to staff can improve their performance. Arisen from the findings of the study, the study recommended that Hotels should encourage effective non-monetary incentive alongside monetary incentives because there is significant relationship between non-monetary incentives and Job Satisfaction of employees; flexible work hour should be encouraged in other to improve Job Satisfaction of employees; promotion of staff should be considered paramount in other to improve Job Satisfaction of employees; health of staff is very vital therefore; provision of adequate health care should be encouraged so as to improve Job Satisfaction of employees; and employees should be given leave as at when due in order to improved their performance.

However, findings from this study disagreed with the study conducted by Suwarno, Mu'minatus, Suwandi, Syaiful, and Anwar (2020) that carried out a study on management incentives and corporate fraud. The test results show that incentive management have no effect on fraudulent financial statements, but rather concluded that good corporate governance can reduce the opportunity for management to commit fraudulent financial statements.

On the result of whether significant difference exist in the effect of financial and non-financial on fraud occurrence, the study revealed that financial incentives seem to contribute more to fraud prevention, perhaps due to the fact that fraud itself is mostly in financial terms. This is also consistent with the findings of Suparna and Muhammad (2020) who concludes that monetary incentives make significant increases in reported fraud than other incentives.

CONCLUSION AND RECOMMENDATION

In conclusion, fraud committed by managements has significant negative effect on the revenue generated by Plateau State Board of Internal Revenue Services (PSBIRS). Managerial incentives have significant effect on Fraud prevention. Arisen from the findings of the study, the following recommendations are made.

- i. Plateau State Board of Internal Revenue Service (PSBIRS) should improve on financial and non- financial incentive as they have the capacity of preventing the occurrence of fraud in the organization.
- ii. Plateau State Board of Internal Revenue Service (PSBIRS) and Government of the state in general should concentrate more on non- financial incentives so as to bring the two incentives to an equal level of contribution in other to bring fraud in revenue generation to a minimal level of occurrence.

REFERENCES

- Abend, G. (2008). The meaning of theory. *Sociological theory: Sage Journal*, 21, 173-199. doi: 10. 1111/j. 1467-9558.2008. 00324
- Ahmed, M. &Shafiq, S. (2014). The Impact of Fraud Culture on Plateau State Internal Revenue Service performance. A Case Study of Telecom Sector. *Global Journal of Management and Business Research*, 14(3), 21-30
- Alharbi M., Awadti A., & Mohammed S. (2013). Impact of Fraud Culture on Fraud prevention. *International Review of Management and Business*. Retrieved from <http://www.irnbrjournal.com>.
- Amin N. (2016). The Impact of Fraud Culture on Plateau State Internal Revenue Service Performance. The Mediating Role of Employee's Plateau State Internal Revenue Service Commitment. *International Journal of*

- Plateau State Internal Revenue Service Leadership*, 6, 65-72.
- Boon, O. K., & Aoumugam, V. (2006). The Influence of Corporate Culture on Plateau State Internal Revenue Service Commitment. A Case Study of Semi-Conductor Hotels in Malaysia. *Sumway Academic Journal*, 3, 99-115.
- Chegini, M. G. (2019). The Relationship Between Plateau State Internal Revenue Service Culture and Staff Productivity Public Hotels. *Journal of Social Sciences*, 6(1), 127-129.
- Cheung S, Wong P. & Wu, A. (2019). Towards a Plateau State Internal Revenue Service Culture Framework in Construction. *International Journal of Project Management*, 29(1), 33-44.
- Daft, R. L. (2000). *Plateau State Internal Revenue Services Theory and Design*. USA: South Western College Publishing.
- Denison, D (2019). *Denison Plateau State Internal Revenue Service Culture Model*. Retrieved from <http://www.linkagernic.cm/offerings/pages/denison.aspx>. accessed on March 4, 2013.
- Denison, D. R. (2000). Plateau State Internal Revenue Service Culture: *Can it be a Key Lever for Driving Plateau State Internal Revenue Service Change*. In S. Cartwright & C. Cooper. *The Hand Book of Plateau State Internal Revenue Service Culture*. New York, NY: John Wiley & sons.
- Dodek, P., Catill, N. E., & Heyland, D. K. (2019). The Relationship Between Plateau State Internal Revenue Service Culture and Implementation of Clinical Practice Guideline: A Narrative Review. *Journal of Parental and Enteral Nutrition*, 34 (6), 669-674.
- Dwirantwi, Eric Addo, (2019). *Plateau State Internal Revenue Service Culture and its Effect on Productivity; The case Study of La Community Bank*. (Doctoral Dissertation, University of Science and Technology, Kwame Nkrumah, Ghana). Retrieved from <http://www.scribd.com>
- Hofstede, G. (1998). Attitudes Values and Plateau State Internal Revenue Service Culture Disentangling the Concept. *Plateau State Internal Revenue Services Studies*, 19 (3), 477.
- Kabelo, K. (2015). Impact of Fraud Culture on Productivity and Quality Management. A case study in diamond operation units, DTC Botswana. *International Journal of Research in Business Studies and Management* 2, (19), 43.
- Kotter, J. P. & Heskett, J. L. (2019). *Corporate Culture and Performance*. New York; Free Press.
- Lund, D. B (2003). *Plateau State Internal Revenue Service culture and job satisfaction*. *Journal of Business and Industrial Marketing*, 18(3), 219-236.
- Manatje O. & Martins, N. (2019). The Relationship Between Plateau State Internal Revenue Service Culture and Plateau State Internal Revenue Service Commitment. *Southern African Business Review*, 13(1), 87-111.
- Martins, E. C. & Terblanche, F. (2003). Building Plateau State Internal Revenue Service culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64-74. doi:org/10.1108/14601060310456337
- Olusi, K. G. (2021). Impact of non-monetary incentives on job satisfaction of employees. *Journal of Management Sciences*, 14(4), 214 – 26.
- Randolph, and Edward (1994). Managerial incentives, monitoring, and risk bearing: a study of executive compensation, ownership, and board structure in initial public offerings. *Journal of Scientific Management*, 5(2), 101 – 122.
- Roger, V. D. (2016). *Governmental organisational commitment*. Retrieved from <https://www.effactory.com/knowledge/blog/>

- Shane, J., Harley, R., & Yisong, S.T. (2009). Managerial incentives and corporate fraud. *Review of Finance*, 13(9), 115 - 145
- Suwarno, Mu'minatus, Suwandi, Syaiful, Anwar (2020). Management incentives and corporate fraud: an effectiveness review of corporate governance in Indonesia. *International Journal of Scientific & Technology Research*, 9(03), 4983 – 4988.
- Suparna, W. & Muhammad, A. (2020). Whistleblowing on tax fraud: Monetary incentives and social discrimination: *A multifaceted review journal in the field of pharmacy*, 11(11), 335-345.
- Swanson, R.A. (2013). *Theory Building in Applied Disciplines*. San Francisco, CA: Berrett-Koehler Publishers.
- Tonette, R. & Maria, P. (2019). *Human resource development review*. Retrieved from <http://hrd.sagepublications.com>.

EFFECT OF SERVICE RECOVERY JUSTICE ON CUSTOMER SATISFACTION OF DEPOSIT MONEY BANKS IN NORTH CENTRAL NIGERIA

¹Gbande, Cephas Ph.D, ²Dr. R. A. Anah, John, ³Blessing Abecan

^{1,2,3}Department of Business Administration,
Faculty of Administration
Nasarawa State University, Keffi
blessed4john@gmail.com 08133775187

Abstract

One of the ways into the endurance of any business organization is customer satisfaction. Nonetheless, disappointments in offering support are typically unavoidable as a result of many mix-ups. Such disappointments to play out a help definitely bring about customers disappointments. Despite the efforts of service providers of Deposit Money Banks in North Central Nigeria to better satisfy their customers, the rate of occurrence of Service failure is increasing. There is therefore need to examine the factors that determines customers' satisfaction of service recovery of DMBs in North Central Nigeria. Research hypotheses were raised to guide the conduct of the study. Service recovery was operationalized by adopting an instrument, which is based on the equity theory and consist of distributional justice and interpersonal justice. Cross sectional, descriptive survey research design was adopted for the study using multiple regression to analyse the data collected from 309 bank customers. The findings confirm that distributional justice positively and significantly affect customers' satisfaction of DMBs in North Central Nigeria. Also, interpersonal justice negatively and significantly affects customer satisfaction of DMBs in North Central Nigeria. The study concludes that service recovery variables that is distributional and interpersonal justice are major determinates of customers satisfaction of DMBs in North Central Nigeria. The study therefore recommends that management needs to ensure that outcomes of service recovery efforts are fair to customers and also ensure that employees are trained to show empathy and respect to customers at all times, and deal with issues of service failure with sensitivity.

Keyword: Distributional Justice, Interpersonal Justice, and Satisfaction

INTRODUCTION

In today's business environment, it is no more a secret that service industry is becoming more and more important. Service providers are facing extreme pressures on customer's service than ever before and this powerful competitive pressure leaves service providers with no option but to enhance the service quality and minimize service failure. When service failure

occurs, the responses from service provider have the potential in determining whether customer's satisfaction will be restored or worsen the situation by driving the customer to competing firms. Service failure refers to anything that is perceived to be wrong as viewed from the perspective of the customer (Lewis & Spyropoulos, 2001). It is also no secret that the number of service failures which

occur in banking industry is high and so keeping existing customer is of priority in this industry in order to survive and prosper (Fallon, 2014). The industry is aware that service failures are unavoidable, but a disgruntled customers are not, therefore, service recovery has been given a lot of attention in recent years to cater for and satisfy customers (Namkung&Jang, 2010).

In a bid to protect the banks' customers, control the arbitrary bank charges, and other service failures related issues, the Central Bank of Nigeria (CBN) in 2012 created the Consumer Protection Department. The CBN compelled commercial banks to create consumer help desks to look into the process recovery of service failure cases and other related issues. Banks were likewise ordered to capture objections received during the monetary year particularly those that are connected with excess charges on their yearly monetary report. The CBN publication in (2015) recorded more than 6,773 help disappointment grumblings connecting with illicit bank charges, and the banks were constrained to discount above N6.2 Billion to impacted customers, with 45.5million accounts dormant. It was seen that bank employees are not fully engaged to determine and recuperate bombed service proactively and this has impacted consumer satisfaction (Garland, 2011). These employees who feel powerless are despondent and disappointed to resolve customer's problems leading to negative word of mouth (Johnston & Fern, 2005).

However, KPMG in 2019 banking industry customer experience survey reported an apparent drop in aggregate performance on customer's experience. In 2018 for instance, the total number of customer complaint received by the tier 1 bank was 1,726,016. In 2019, the 5 banks (GTBank, Zenith Bank, UBA, Access Bank, and First Bank) again received a total of 2,325,791 while 2,721,270 was the number of complaints received in year 2020. Customers related issues of the industry are a long way

from being settled and this calls the use of service recovery (Kantsperger and Kunz, 2010). Industry reports and exact examination discoveries portray the Nigerian financial industry as going through shift in customers trust and confidence , with the chaperon fulfillment disintegration, occasioned by customers disappointment, dissatisfactions and unsettled objections (Ogbadu and Usman, 2014).

Statement of the Problem

The researcher has observed increasing rate of customer's complaints about the service offerings of Deposit Money Banks in North Central Nigeria due to increasing occurrence of service failure despite efforts to better satisfy their customers. This affects the customers' satisfaction and perception towards the service provider and has led to high rate of customer complaints about the services offerings of these banks. It is in this way critical to address these rising service failures and other client related issues of the Nigerian financial industry by effective service recovery strategies. What makes customers dissatisfied is not service failure alone, but the manner in which banks respond to their complaint(s). The fundamental aim of this study to assess the effect service recovery on customer satisfaction of Deposit Money Banks in North Central Nigeria.

Quite a number of studies have been done in the area of service recovery justice and customer satisfaction but mostly in the developing countries. The studies conducted locally have concentrated on service recovery and customer satisfaction are; Ogonu, Nwokah, & Eke (2018), carried out a study on Distributional Justice and Customer Post-Complaint Behavior of Fast Food Industry in Rivers State, Nigeria, Oranusi&Mojekeh (2019), studied the Effect of Service Recovery on Customer Retention in Selected Commercial Banks in Onitsha, Anambra State, A review of literature to the author's knowledge shows little studies focusing on justice in service recovery and customer satisfaction in North Central Nigeria

banking industry, and no study was able to incorporate all the four SR justice dimension in the banking industry. Against this backdrop, this research work examines the effect of service recovery justice on customers' satisfaction of selected DMB in North Central Nigeria.

Research Hypotheses

The following hypotheses were raised to guide the conduct of the study

Ho₁ Distributional Justice has no significant effect on Customer Satisfaction of some selected Deposit Money Banks in North Central Nigeria.

Ho₂ Interpersonal Justice has no significant effect on Customer Satisfaction of some selected Deposit Money Banks in North Central Nigeria.

Concept of Distributive Justice

Distributional justice examines the way resources or rewards are allocated among parties to a transaction, with resources and rewards representing the outcome of a customer complaint. The customer who gets a discount, remuneration for lost time, or even an unconditional gift might be said to encounter a great result; while the firm that won't repay the customer might make a result that will be seen as ominous (Li, 2011). Distributional justice during service recovery has a significant influence on overall satisfaction with the service recovery, with higher levels of distributive justice result in more favorable re-patronage intentions and a decreased likelihood of negative word-of-mouth (WOM) (Del Río-Lanza, Vázquez, Casielles, & Díaz-Martín, 2009). Perceived justice brought about by service recovery efforts has a positive influence on customer WOM and revisit intention (Ha & Jang, 2009). Distributive justice refers to the extent of customers' perception that they have been treated fairly relative to the final recovery outcome (Maxham & Netemeyer, 2002). Distributive equity recuperation can be the substantial asset presented by the firm to make up for the disappointment (for example

discounting cash, limits, and different types of expiation) (Karatepe, 2006; Maxham and Netemeyer, 2002).

Zenke and Bell (1990) proposed that saying 'sorry' is viewed as the initial phase in reestablishing equity from a service providers' viewpoint through recognizing at any rate that the client has been inconvenienced. Apologies refer to a service firms acknowledgement of responsibility for negative events which includes an expression of remorse and regret, regret and lament (Liao, 2007). In addition, it represents a psychological compensation about service failure (Park & Park, 2016). De Matos et'al, (2012) suggested that this dimension depending on the failure severity, in addition to the provision of a refund or compensation. Apology relates to a service firm or an employee providing an apology to the customer for any inconvenience incurred because of a service failure. Thus, this definition vary from that proposed by Tedeschi & Norman (1985), who suggested that an apology is a confession of responsibility and an expression of remorse.

Concept of Interpersonal Justice

Interpersonal treatment comprises the behavior of frontline employees as they interact with customers in a service recovery situation. An expression of remorse, Respect and courtesy for the disappointment are key aspects of Interpersonal fairness likewise viewed as especially significant while carrying out a service recovery strategy. Interpersonal justice highlights the relevance of courtesy, empathy and honesty (Davidow, 2003). Interpersonal justice is a proactive strategy whose aim is to anticipate and address the interaction aspects of service recovery without waiting for customers to complain. This strategy requires that as service problems occurs, the Interpersonal aspect of the recovery is well understood and appropriately addressed to ensure consistent application and forestall a repeat of negative interactions. Interpersonal justice has been defined as the extent to which customers feel they have been treated fairly regarding their

personal interaction with service providers throughout the whole process of recovery (Cengiz & Kurtaran, 2012). It may include treating people with dignity and respect, that is interpersonal sensitivity in the context of service recovery (Ha & Jang, 2009). Services within the banking sector involves an exchange between customer and service provider. These moments of interaction directly reflect the level of service from the customer's point of view, and are therefore particularly relevant to the banking industry where organizations thrive, or die, based on customer's perceptions (Namkung, Jang, Almanza, & Ismail, 2009). Services, such as those in the banking industry, depend to a large extent on the service providers' interpersonal skills. It is the quality of the interactions between the customer and contact employee that often influences customer evaluations of services (Namkung, Jang, Almanza, & Ismail, 2009).

Concept of Customer Satisfaction

Kotler (2009), defined satisfaction as a person feeling of pleasure or disappointment resulting from comparing a product perceived performance or outcome in relation to his or her expectation. Tsai (2016), described satisfaction as "the consumers response to and evaluation of the perceived discrepancy between prior expectation (and some other norm of performance) and the actual performance of the product as perceived after its consumption". That's what this infers assuming services provided is superior to what is generally anticipated, the customer is fulfilled. In any case, assuming services provided is more terrible than the customer's assumption, the customer is unsatisfied. Customer satisfaction as an assessment delivered that the utilization experience was essentially on par with what it should be. It is how much the item meets or surpasses the customers' expectations. Customer satisfaction is determined as "total percentage of customers or the number of customers, whose reported experience with a firm's products or services (ratings) surpasses specified satisfaction goals.

Empirical Framework

Distributional Justice and Customer Satisfaction

Ogonu, Nwokah, and Eke (2018), carried out a study on Distributional Justice and Customer Post-Complaint Behavior of Fast Food Industry in Rivers State, Nigeria. The review inspected the impact of distributive equity on customers post-grumbling way of behaving. Information were gotten through questionnaire from 200 representatives of 66 fast food firms located in Rivers State. Data were analyzed through descriptive and inferential statistics. The study discovered that distributive justice has a significant and positive effect on customer's post-complaint behavior.

Steven and Govender (2019) examined the influence of service recovery strategies of distributive justice on customer satisfaction in higher education institutions in Kwazulu Natal province, South Africa. The objective of the study was to examine the influence of service recovery strategies of distributive justice on customer satisfaction in higher education institutions. 430 South Africa students from three public Universities participated in this research as respondents. The research adopted a quantitative, descriptive and cross-sectional approach and the hypotheses were tested using multiple regression analysis. The discoveries of this exploration showed that remuneration and clarification impact distributive justice. The findings of this research are a wakeup call to higher education institutions to concentrate on two strategies of service recovery, namely compensation and explanation to achieve distributive justice.

Similarly, Nikbin, Armesh, Heydari, and Jalalkamali, (2011), effect of perceived justice in service recovery on firms reputation and repurchase intention in airline industry. Data were analyzed on 35 airline passengers using hierarchical regression. The hypothesis were tested using multiple regression analysis. The

study also found out that speedy response, empowerment and compensation as a recovery action minimizes consumer intentions to switch service provider. Distributive justice was found to negatively affect switching intentions. The results of the study suggested that distributive is negatively related to switching intentions. The significant role of distributive justice in affecting repurchase intention would be supported by fair distributive treatment such as refunds, and discounts that are important in returning back airline passengers to repurchase from the same service provider. Airlines should implement an effective way of distributive justice; by implementing fair distributive treatment such as discounts and refunds which are important in encouraging customers to repurchase.

Similarly, Nikbin, Armesh, Heydari, and Jalalkamali, (2011), effect of perceived justice in service recovery on firms reputation and repurchase intention in airline industry. Data were analyzed on 35 airline passengers using hierarchical regression. The hypothesis were tested using multiple regression analysis. The study also found out that speedy response, empowerment and compensation as a recovery action minimizes consumer intentions to switch service provider. Distributive justice was found to negatively affect switching intentions. The results of the study suggested that distributive is negatively related to switching intentions. The significant role of distributive justice in affecting repurchase intention would be supported by fair distributive treatment such as refunds, and discounts that are important in returning back airline passengers to repurchase from the same service provider. Airlines should implement an effective way of distributive justice; by implementing fair distributive treatment such as discounts and refunds which are important in encouraging customers to repurchase.

Interpersonal Justice and Customer Satisfaction

Ngahu, Kibera and Kobonyo (2016) carried out study on the Influence of Interpersonal Justice Strategy on Recovery Satisfaction among Customers of Mobile Money Services in Kenya. The research examines the role of interpersonal justice as a recovery strategy following service disappointment and its outcome on recovery satisfaction on mobile money service customers in Kenya. A descriptive survey approach was utilized. The population of the study comprise of mobile money transfer service users in Kenya. The study collected data primarily via a computer assisted telephone interview (CATI). 622 respondents final national distributed sample of was realized. Reliability and validity tests were conducted using data from a pilot study. Data were analyzed using descriptive statistics, factor analysis, correlation, and regression analysis. The outcomes revealed that interpersonal justice has a positive and statistical significant relationship on recovery satisfaction. This implies that interpersonal justice strategy must adoption of to address service failure as it positively impacts customer evaluation of service recovery. There is need for similar study to be conducted in the banking industry in Nigeria of which the finding is likely to be different.

Casielles, Álvarez and Martín (2010), studied the Perceived Justice of Service Recovery Strategies: Impact on Customer Satisfaction and Quality Relationship. The study used a convenience sampling sample of 554 customers who had had some service failure with their mobile-phone company in the past year. A total of 184 of these customers (33.21%) had perceived some attempt at service recovery by their service providers. Firms' responses were in all cases the consequence of the customer previously making a complaint to the company. Findings that interpersonal justice positively affects customer satisfaction with service recovery. This suggests that positive past

experiences mitigate the effects of inadequate service recovery strategies on the quality of the relationship with the customers.

Similarly, Oranusi, Ifeanyichukwu, Nwadiogo & Mojekeh, (2019) investigated the effect of service recovery on customer retention in selected commercial banks in Onitsha, Anambra State. This study became vital following the elevated degree of service failure in the banking industry resulting to customer dissatisfaction. Relevant conceptual, theoretical and empirical literatures were reviewed. The study was anchored on equity theory. Survey research design was used for the study which was conducted in Onitsha, Anambra State, South East Nigeria. Three hundred (300) commercial bank customers of six banks were sampled for the study. Primary data were collected for the study through a well-structured questionnaire administered to the respondents. The collected data were coded and analyzed using simple regression analysis with the aid of Statistical Package for Social Science version 21. The results indicated that interpersonal service recovery has a significant negative effect on customer retention in selected banks. The study therefore recommends that banks should prepare their employees with service recovery strategies that include an immediate and appropriate service failure response in order to enhance customer retention

Theoretical Framework

Equity Theory

The study was anchored on equity theory. Equity theory proposes that an individual motivation is based on what he or she considers to be fair when compared to others (Redmond, 2010 cited in Wood (2016). Equity theory was propounded by a behavioral psychologist named John Stacy Adams in 1963. When applied to service complaints handling focuses on a customer's compensation in relation to service failure as well as the customer's attempt

to minimize any sense of unfairness that might result. Customers are inclined to spread a negative verbal exchange when they see an unreasonable reaction to a service failure. Whenever customers see that they are not adequately compensated for the harm, they might feel considerably more irritated than they were, resulting to the disappointment. This is because a report of a service mishap may imply unfair treatment of the customer.

Service recovery must therefore re-establish justice - from the customers' perspective. With effective handling of complaints, consumers will perceive fair treatment. In the case of a service failure, individuals will perceive inequity, and they will attempt to reestablish value by whining and complaining. Equity theory seems quite tenable in a service failure context because consumers usually perceive a disparity following a service failure. At the point when imbalances emerge, equity theory gives a significant framework for shaping consumer perceptions of satisfaction, purchase intent and favorable word-of mouth.

METHODOLOGY

Research Design

The research design used in this study is survey research. Primary data was collected using a well-structured 5 points Likert scale questionnaire. The population of the sample of this study comprises of all the bank account holder who have experience service failure and recovery from their respective banks comprising of Access bank, First Bank PLC, Guarantee Trust Bank, United Bank of Africa and Zenith Bank in North Central State of Abuja, Ilorin, Lafia, Lokoja, Makurdi, Minna, and Jos. Sample size for the study was determined using Freud and Williams's formula due to the infinite nature of the population. The study used purposive sampling in selecting the sample size of 320, out of which 309 were correctly completed and returned. This study analysed the data using descriptive statistics and hypotheses were tested using

multiple regression analysis. We regressed each of the variables against Customer Satisfaction using one of the main statistical tools available, STATA.

Model Specifications

To test the relationship Distributive Justice and Interpersonal Justice on customer satisfaction of Deposit Money Banks in North Central Nigeria.

The following linear regression model is formulated:

$$CS = \alpha + \beta_1 DJ + \beta_2 INTJ + \varepsilon$$

CS = Customer Satisfaction

DJ = Distributive Justice

INTJ = Interpersonal Justice

Data Presentation

The data collected for this study are presented in this section using summary statistics to describe the characteristics of the data. The summary statistics of the variables, as shown in table 1.1 show the dependent variable, customer satisfaction has mean values of 2.06 which shows that most of the respondents agreed with the questions. The minimum value is 1 which is the code for strongly agreed and

the maximum value is 5, the code for strongly disagreed.

For the independent variables, distributional justice (DJ) and interpersonal justice (INTJ), have an approximate average value of 2, which is a code for agreed. This means most of the respondents agreed that distributional justice and interpersonal justice have effects on customer satisfaction.

Table 1.1: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
DJ	309	1.649123	.6597261	1	3
INTJ	309	2.181287	.712802	1	4
CS	309	2.065822	1.12795	1	5

Source: STATA13 output

Reliability Test and Correlation Matrix

To test for the internally consistent of the data, we did a reliability test using Cronbach Alpha. The test results are presented in table 1.2. The test for the internally consistent of the questions that made up distributional justice shows that they are internally consistent as the alpha value of 72% is greater than 64%. That of the questions for interpersonal justice shows similar result as the alpha values is 64%. The

question for customer satisfaction has an alpha value of 97% which shows that they are internally consistent.

The overall alpha score for all the four independent variables as shown in table 1.2 is 76% which shows that the questions used in obtaining the data are internally consistent and thus, they are reliable to use in testing the hypotheses of the study.

Table 1.2: Reliability test for the Independent Variables

Item	Obs	Sign	item-test corr.	item-rest corr.	interitemcov.	Alpha	Label
DJ	309	+	0.6705	0.5237	.2059869	0.7178	DJ
INTJ	309	+	0.8838	0.8125	.1555597	0.6383	INTJ
Test scale					.1990137	0.7573	Mean (unstandardized items)

Source: STATA13 output

Data Analysis and Result**Distributional Justice and Customer Satisfaction**

Multiple regression was conducted to examine whether distributional justice has significant

effect on customer satisfaction of Deposit Money Bank in North Central Nigeria and the result is shown in table 1.3.

Table 1.3: Regression results for hypothesis one

VARIABLE	COEFFICIENT	T	P> t
Distributional Justice	.3165	14.13	0.000

Source: STATA13 output

The overall model was significant as F-stat = 365.40, prob = 0.000, suggesting that the model is fit to measure the relationship between distributional justice and customer satisfaction. The regression coefficient for the variables was positive and significant, as $\beta = .3165$, $p = 0.000$ indicating that distributional justice has a positive effect on customer satisfaction. This finding is significant at 5% as the p-value is 0.000. Based on this, we do not have sufficient reasons to accept the null hypothesis and thus, we conclude that distributional justice has a significant effect on customer's satisfaction.

The R^2 for the regression is 81% which shows that distributional justice account for about 81% of customer satisfaction, the remaining 19% is accounted by other factors.

Interpersonal Justice and Customers Satisfaction

Multiple regression was conducted to examine whether interpersonal justice has significant effect on customer satisfaction of Deposit Money Banks in North Central Nigeria and the result is shown in table 1.4.

Table 1.4: Regression results for hypothesis two

VARIABLE	COEFFICIENT	T	P> t
Interpersonal Justice	-.3104	-13.71	0.000

Source: STATA13 output

The overall model was significant as F-stat = 365.40, prob = 0.000, suggesting that the model is fit to measure the relationship between interpersonal justice and customers satisfaction. The regression coefficient for the variables was negative and significant, as $\beta = -.3104$, $p = 0.000$ indicating that interpersonal justice has a negative effect on customer satisfaction. This finding is significant at 5% as

the p-value is 0.000. Based on this, we do not have sufficient reasons to accept the null hypothesis and thus, we concludes that interpersonal justice has a significant effect on customer's satisfaction.

The R^2 for the regression is 81% which shows that interpersonal justice accounts for about

81% of customer's satisfaction, the remaining 19% is accounted by other factors.

Post regression Diagnostic test

The test for heteroskedasticity was conducted using the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity and it shows that the variables are homogenous since the hypothesis of Heteroskedasticity is rejected since the p-value is greater than 5%. Similarly, the multicollinearity test was conducted using the variance inflation factor and it shows there is no problem of multicollinearity. This confirms the claims made when presenting the data earlier in this chapter.

Discussion of Findings

The finding from the first hypothesis reveals that distributional justice positively and significantly affects customer's satisfaction of deposit money bank in North Central Nigeria. This finding is consistent with the findings of Steven and Govender (2011) whose findings were positive and significant. It shows that distributional justice in the DMB is very important and should not be disregarded. Findings on distributive justice point to the need for managers ensure the outcomes of recovery efforts. Specifically, managers need to ensure that outcomes of service recovery efforts are fair to customers. What may be fair outcome is likely to depend on the nature of the service failure. In some cases, an apology may do, while in other cases the customer may want more than just an apology. All in all, the outcome needs to mitigate any negative feelings experienced as a result of the service failure.

This means that banks should continue to pay attention to compensation in the event of service failure as this will increase customer satisfaction, re-establish customer loyalty and eventually realize the sustainable profit growth. However, this study is inconsistent with the findings in the work of Nikbin, Armesh, Heydari, and Jalalkamali, (2011), who found a

negative effect. The study is supported by the Equity Theory.

From the second hypothesis, it reveals that interpersonal justice negatively and significantly affects customer's satisfaction of DMB in North Central Nigeria. This finding is consistent with the findings of previous work of Oranusi, Ifeanyichukwu Nwadiogo & Mojekeh, (2019). The researchers concluded that banks should prepare their employees with service recovery strategies that include an immediate and appropriate service failure response in order to enhance customer satisfaction and retention. This study is inconsistent with the works of Ngahu, Kibera and Kobonyo (2016) and Casielles, Álvarez and Martín (2010). The study is supported by the Equity Theory.

Conclusion and Recommendation

This study shows that the service recovery variables that is distributional and interpersonal justice are major determinates of customers satisfaction of DMBs in North Central Nigeria. This study contributes to the literature on consumer service recovery on satisfaction. The result of this study may provide some insight for practitioners regarding relationship management. Undoubtedly, the cost-effective provision of such services involves trade-offs, and it is helpful to know which aspect may have the strongest influence on customers satisfaction of DMBs in North Central Nigeria. In light of the findings of the study and conclusion drawn, the following recommendations were made.

- a. Management needs to ensure that outcomes of service recovery efforts are fair to customers. What may be fair outcome is likely to depend on the nature of the service failure. In some cases an apology may do, while in other cases the customer may want more than just an apology. All in all, the outcome needs to mitigate any negative feelings experienced as a result of the service failure.

- b. Management can enhance this capability by ensuring that employees are trained to show empathy and respect to customers at all times, and deal with issues of service failure with sensitivity taking cognisance that inability to handle customers well can result in loss of business through customers dissatisfaction and switching to other service providers

REFERENCES

- Casielles, A. (2010). Perceived Justice of Service Recovery Strategies: Impact on Customer Satisfaction and Quality Relationship. *Journal of Psychology & Marketing, Vol. 27(5):487-509*
- David, F. (2003). Follow-up marketing: How to win more sales with less effort. *Marketing Best Practices Inc.*
- Del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2009). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research, 62(8), 775-781.*
- De Matos, C. A., Vieira, V. A., & Veiga, R. T. (2012). Behavioural responses to service encounter involving failure and recovery: the influence of contextual factors. *The Service Industries Journal, 32(14), 2203-2217.*
- Gruber, T (2011). I want to believe that they really care: How Complaining customers wants to be Treated by Frontline employees. *Journal of Service Management 22(1), 85 -110*
- Ha, J. & Jang, S. (2010). Perceived values, satisfaction, and behavioral intentions: The role of familiarity in Korean restaurants. *International Journal of Hospitality Management, 29, -13.*
- Johnston, R. (1995). Service Failure and Recovery: Impact, Attributes and Process. *Advances in Services Marketing and Management, Service Industries Journal, 16 (1), 10-20.*
- Karatepe, O.M. and Ekiz, E.H. (2004). Effects of Organizational Responses to Complaints on Satisfaction and Loyalty in Northern Cyprus. *Journal of managing Service Quality 14, 476-486.*
- Komunda, M., and Osarenkhoe, A. (2012). Remedy or Cure for Service Failure? Effects of Service Recovery on Customer Satisfaction and Loyalty. *Business Process Management Journal, 18 (1), 82-103.*
- Kuo, Y.F. & Wu, C.M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management, 32, 127-138.*
- Lewis, B. R., & MacCaan, S. (2004). Service failure and recovery in retail banking: The customers perspectives. *International Journal of Bank Marketing, 19(1), 37-47.*
- Li-hua, Y. (2012) Customer satisfaction antecedents within service recovery context: Evidences from “Big 4” banks in China. *Nankai Business Review International, 3(3), 284-301. doi: 10.1108/20408741211264585*
- Maxham, J.G. & Netemeyer, R. G. (2002). A longitudinal study of complaining customers’ evaluations of multiple service failures and recovery efforts. *Journal of Marketing, 66(4), 57- 72.*
- Namkung, Y. & S.C. Jang, 2010. Effects of perceived service fairness on emotions and behavioral intentions in restaurants. *European Journal of Marketing, 44(9/10): 1233-1259*
- Nikbin, D., Armesh, H., Heydari, A. & Jalalkamali, M. (2011). The effects of perceived justice in service recovery on firm reputation and repurchase intention in airline

- industry. *African Journal of Business Management*, 5 (23), 9814-9822.
- Ogonu, G. C., Nwokah, N. G., & Eke, B. C. (2019). Procedural Justice and Customer Post-Complaint Behaviour in Fast Food Firms in Port Harcourt, Nigeria. *American Journal of Industrial and Business Management*, 9, 385-402.
- Steven K. M. & Jeevarathnam P. G. (2019). Assessing the influence of service recovery strategies on distributive justice in higher education institutions. *ISSN 1822-7864 (Print) ISSN 2538-7111 (Online), Vol. 77(4)*.
- Tax, S. S., Brown, S. W, & Chandrashekar, M. (1998). Customer Evaluations of Service Complaint Experiences; Implications for Relationship Marketing. *Journal of Marketing Vol 62, 60-76*.
- Tedeschi, J. T., & Norman, N. (1985). Social power, self-presentation, and the self. In B. R. Schlenker (Ed.), *The self and social life*. 293–322
- Tsai, C.C., Yang, Y.K. & Cheng, Y.C. (2014). Does relationship matter? – Customers’ response to service failure. *Journal of managing Service Quality*, 24 (2), 139-159.
- Zemke, R. and C. Bell (1990), “Service Recovery,” *Training*, 27(6), 42-48. (1994), “Service Recovery,” *Executive Excellence*, 11 (9), 1718.

EFFECT OF AGRICULTURAL EXPORT ON ECONOMIC GROWTH IN NIGERIA

¹Eze, Felicia, ²Opusunju, Michael Isaac, Ph.D., ³Akyuz, Murat, Ph.D.

¹Department of Entrepreneurship Studies, Bingham University, Karu
felijbong@gmail.com,

^{2,3}Department of Business Administration, Nile University of Nigeria,
opusunjumike@gmail.com, akyuz.murat@gmail.com

Abstract

The study investigated the effect of agricultural export on economic growth in Nigeria. The study selected 50 years period from 1970 to 2019. The study used ex-post facto research design. The study used descriptive statistics, correlation analysis, unit root test and regression analysis with t-test and f-test. Data collected from Central Bank of Nigeria statistical bulletin were analysed using e-view version 9.00. The study found that agricultural export has negative and insignificant effect on the economic growth of Nigeria. Other findings were that cassava export (LCAEP) has negative and insignificant effect on gross domestic product in Nigeria. Groundnuts export (LGTEP) has negative and insignificant effect on gross domestic product in Nigeria. Cocoa export (LCCEP) has negative and significant effect on gross domestic product in Nigeria and rubber export (LRUBEP) has negative and insignificant effect on gross domestic product in Nigeria. The study recommended that Government of Nigeria should concentrate in agricultural export to ensure its improvement in the future since it has insignificant effect on economic growth in Nigeria. They should export more of cassava, groundnuts, cocoa and rubber to control and correct their insignificance and negative effect on the growth of GDP

Keywords: Agricultural Export, Economic growth and gross domestic product

INTRODUCTION

At some stage in the first decade after independence, Nigeria should drastically be described as an agricultural financial machine because of the truth agriculture served as the engine of increase to the general economic system (Ogen, 2003). From the perspective of occupational distribution and contribution to the Gross home Product, agriculture became the principle zone contributing about 70% of the Gross home Product (GDP), using approximately the identical percent of the running populace, and accounting for about 90% of distant places earnings and Federal

government revenue. During this era, Nigeria changed into the arena's 2d biggest manufacturer of cocoa, largest exporter and producer of palm merchandise. Nigeria changed into moreover a superb exporter of fundamental commodities inclusive of cotton, groundnut, rubber, hides and skins (Alkali, 1997). This situation began to trade drastically with the discovery of oil. Between 1970 – 1974 agricultural exports as a percentage of general exports declined from approximately forty three% to slightly over 7%. The most important reason of this improvement became the oil rate shocks of 1973 – 1974 which led to large

receipts of foreign exchange income by using Nigeria and the overlook of agriculture. From the mid-1970s to the mid-1980s, the average annual growth rate of agricultural exports declined by means of 17 per cent. by way of 1996, agriculture accounted for only 2 according to cent of exports. As agricultural exports shrank from the traditional 12-15 commodities of the Sixties, Nigeria have become a net importer of fundamental meals stuff she formerly exported (Bakare, 2011).

Agriculture is one of non-oil exports of the Nigeria economy which is faced with a lot of problems such as mismanagement, inconsistent and poor government policies, lack of basic infrastructure, obsolete varieties and land tenure system which made the sector accounts for over 26.8% of GDP in recent years. The sector has been declining due to poor access to credit facilities at pre-shipment and post shipment stages as opposed to what is happening in other countries of the world. There's additionally the hassle of increased price springing up from exchange rates fluctuations. The high hobby rate charged via a number of the banks in Nigerian makes producers and exporters no longer being capable of compete favourably with their counterparts in different African nations like Ghana. because of the adverse outcomes of the above factors, the agriculture exports diminished.

From the extant literature, studies such as Oluwaseun, Adeyemi, Evans, Oluseyi, Odunola, Kofo, Oluwakemi and Oluwatomi (2013); Verter and Bečvářová (2016); Wisdom (2016); Ewetan Olabanji, Adebisi, Ese and Emmanuel (2017); Noula, Sama and Gwah (2013) Cameroon. Bakari and Mabrouki (2017) studied the variables in Nigeria, Ghana, South Eastern Europe, and Cameroon but none of the studies conducted used five variables to measured agricultural export.

The objective of this study is to examine the effect of agricultural export on economic growth in Nigeria and the specific objective of

this study is to examine the effect of agricultural export on gross domestic product in Nigeria.

The scope of this study is restricted to the effect of agricultural export on economic growth in Nigeria. The periods selected are 1970 to 2019. However, the reason for the period is that Nigeria is the largest oil producer in sub-Saharan Africa since 1971 and also become member of OPEC in from this period. It is this period that agricultural export in Nigeria was the major sources of revenue to the government. The period is chosen because there were attempts to recapture the loss of glory of agriculture by General Olusegun Obasanjo's and Goodluck Jonathan during this period.

The hypothesis is stated below:

H₀₁: agricultural export has no significant effect on gross domestic product in Nigeria

Concept of Agricultural Export

Captured in the Nations encyclopedia web engine (2016), agricultural activities builds essential components for any economy aiming to establish a growth bound system. Thus, there is the need for Nigeria to return to its leading position in the export of palm produce, cocoa, ground nuts and rubber. For instance, the output of cocoa exports, fell from about 365,000 metric tonnes in the 1950's to less than 240,000 metric tonnes in 2007. The indigenous production of palm produce (palm oil and palm kernels) and groundnuts do not meet domestic demands. In fact, Federal Government was forced to lift the prohibition on imports of palm oil in early 2016. Two major staples crops; rice and maize, also experienced insufficient local production that ceased the prospect of export services. Other major staples that are not normal items of foreign exchange, such as beans, yam and cassava, are also not produced in adequate quantities to meet domestic requirements. Many factors have echoed low productivity in Nigerian agricultural system including the dominance of production by subsistent peasant farmers using traditional technology and low-yielding varieties of

seedlings, dependent on the seasons for production and having non-economic farm sizes in the country.

With about 76 million acres of land area under cultivation, excess water supply, favorable climate condition, the economic advantage of large scale agriculture are recognized and some Federal Government programme supports the formation of cooperative societies and villages to promote industrial agriculture.

Cassava

According to Nigeria markets via United States Agency for International Development (USAID) web feed (2013), the production of cassava in the country has been well progressed into an ordered agricultural crop. It has well formed, increased and processing methods for food products and cattle feeds with more than 40 varieties of cassava in use. The crop is produced in 24 states of the country's 36 states. Adeniji, Ega, Akoroda, Adeniyi, Ugwu and Balogun (2005) stated that "cassava is consumed in many processed forms, as livestock feeds and also consumed in the industry. Its roots and leaves are made into flours". Flours are of three types; yellow garri, white garri and intermediate colour, with yellow garri considered the best product in Nigeria.

Groundnuts

Nnabuike (2014) study traces the northern region involvement in the large quantity of groundnuts output where cities, such as Kano, can attest to the historic invention of groundnut pyramids by Alhassan Dantata in 1919, Nigeria. Groundnut pyramids (pyramid-like structures made from groundnut sacks) were built all across northern Nigeria, in cities like Dawakin Kudu, Kofar Mazugal, Malam Madori, Bebeji and Brigade later becoming a symbol of wealth and attracted tourists (Bashir, 2014). However, in the 1960s and 70s, as production in Nigeria shifted from non oil to oil, groundnut production recorded declines in the 1970s and the 80s. These major staple food crops are categorized under a group of variable small

seeded grasses, widely grown around the globe as grains or cereal for fodder and also human consumption. Millet are essential crops in the tropics of Asia and Africa especially in countries like India, Niger republic and Nigeria, with stunning 97 per cent of millet production in developing nations (McDonough, Rooney & Serna-saldivar, 2000).

The United States of America, a largely agrarian country, is often involved in the extraction of raw cereal seeds in order to produce the brand quaker oats (made from 100% natural grains) used domestically and exported for worldwide consumption. In the United Nations statistical base (2013), top 10 millet producers saw Nigeria ranked second in the world accounting for over 5,000,000 tonnes of production level. Hence, this food crop provides suitable options that may promote export activities.

Cocoa Export

Cocoa belongs to the family of steruliaceae and genus theobroma. Nigeria produces about 12 percent of the entire global manufacturing in the back of Ivory Coast which produces 35 percentage and Ghana's 13 percent (Wilcox & Abbot, 2004). At present, the production ability of cocoa in Nigeria has reached approximately 385, 000 metric lots consistent with annum, a growth of 215, 000 metric lots from year 2000 manufacturing level (Erelu, 2008). Nigeria competes favourably with different frontline generating international locations in imparting the arena market. but, the manufacturing of this export crop in Nigeria has suffered a discount in current years due to quite a number of things (Oluyole & Sanusi, 2009). Oduwole (2004) in his study recognized getting older cocoa farms as one of the elements answerable for the decline in cocoa manufacturing in south western Nigeria. Many farms have been over forty years old and such farms constitute as an awful lot as 60 percent of the cocoa farms in Nigeria. Farms in South-South and South japa zones are surprisingly more youthful and on the

whole in their effective section (Oluyole& Sanusi, 2009).

Yam

Nigeria produces a large quantity of yam in all the state of the country and yam is always available. According to Tunji (2015), a business finance expert made it clear that Nigeria was one of the largest producers of yam in the world (more than 6 metric tonnes) accounting for 50% of its output. Yam is one of the major agricultural products under the activity sector of crop production in Nigeria. world manufacturing of yam is 51.4 million tonnes according to year of which Nigeria bills for a mean of 36.7million tonnes. According to Nigerian Export Promotion Council (2008), Nigeria realized N56billion (USDollars380million) from yam exports.

Rubber Export

Natural rubber turned into ranked as the fourth maximum precious agricultural export commodity in Nigeria after cocoa, groundnut and palm kernel, with 92 percentage of natural rubber production exported, making rubber essentially a foreign exchange earner for the national economy and company of labour (Abolagba, Aigbekaen&mokhafe, 2003; Abolagba& Groh, 2006). No matter remarkable enhancements in the breeding of excessive yielding clones of rubber and favourable ecologies, Nigerian rubber export preserve to say no.

Concept of Economic Growth

Economic growth has been described as sustained increase in per capita national output or net national product over a long period of time. Economic growth is “a gradual and steady change in the long run which comes by a gradual increase in the rate of saving and population” (Schumpeter 2005).

Pritzker, Arnold and Moyer (2015) identified Gross domestic Product (GDP) as the financial indicator which measures the value of the goods and services produced in an economic system

in a given period. AccQaiser, Salman, Ali, Hafiz and Muhammad (2011) assert that Gross domestic Product is the market cost of all final goods and offerings produced inside a rustic in a given period. Penny, Pritzker, Ken and Brian (2015) observe that Gross domestic Product is the overall fee of goods and offerings produced within the borders of a rustic, no matter who owns the property or the nationality of the labour used in producing that output.

EMPIRICAL REVIEW

Ewetan et al (2017) examines the long run relationship among agricultural output and economic increase in Nigeria. Effects from Johansen most likelihood co-integration method and Vector errors correction version aid proof of longer term courting amongst agricultural output and financial boom in Nigeria. Granger causality check additionally confirms the co-integration effects indicating the life of causality between agricultural output and monetary growth in Nigeria. The individual of the causality however is based upon at the variable used to degree Agricultural output. The variable within the study are agricultural output, inflation and change price.

Verter and Bečvářová (2016) investigated the impact of agricultural exports on financial increase in Nigeria the use of OLS regression, Granger causality, Impulse response feature, and Variance Decomposition methods. Both the OLS regression and Granger causality outcomes useful resource the speculation that agricultural exports- led economic growth in Nigeria. The results, but, display an inverse dating most of the agricultural diploma of openness and monetary increase in the country.. Impulse reaction characteristic consequences punctuate and show an upward and downward shocks from agricultural export to monetary boom in the country.. The Variance Decomposition results additionally show that a surprise to agricultural exports can make contributions to the fluctuation in the variance of economic boom ultimately. For Nigeria to enjoy a favorable alternate balance in

agricultural change, domestic processing industries

Oluwaseun, Adeyemi, Evans, Oluseyi, Odunola, Kofo, Oluwakemi and Oluwatomi (2013) determined if a top notch lengthy-run dating exists among agricultural exports and monetary growth within the gift-day Nigeria. The study covers the periods between 1980 and 2010. The underlying fashions are the Export-Led boom speculation and the Neo-classical boom model. In the formulated version, real Gross home Product became used due to the fact the proxy for economic boom. The explanatory variables used were Gross fixed Capital Formation, Labour strain, overseas Direct funding and Agricultural exports. The study made use of unit root checks and Johansen most likelihood check of Co-Integration. It changed into discovered that a long term equilibrium courting exists amongst agricultural exports and monetary boom and the relationship is elastic in nature that means that a unit boom in agricultural exports may deliver a more than proportionate increase inside the real Gross home Product in Nigeria.

Expertise (2016) examined the impact of agricultural export on Nigeria's economic growth. This look at used the Autoregressive Distribution Lag (ARDL) econometric approach to investigate the long term courting and the impact of agricultural exports on Nigeria's financial growth. Economic increase is the based variable, and is proxied with the aid of the actual gross home product, the explanatory variables encompass: agricultural export, distant places direct funding, inflation rate and the labour pressure. The outcomes from the ARDL technique located that agricultural exports drastically have an impact on Nigeria's financial increase; this shows that, a one (1) percentage increase in -agricultural export will enhance monetary boom in Nigeria by way of using about 25%.

Noula, Sama and Gwah (2013) explored and quantify the contribution of agricultural exports to economic growth in Cameroon. The observe

employed an prolonged generalized Cobb Douglas production function model, the usage of meals and agricultural employer facts and global financial institution information from 1975 to 2009. All variables have been non stationary and of an order I (1), so the Cointegration check turns out to be accomplished for long run equilibrium. All the variables showed cointegration and as such the conventional vector errors correction version have become estimated using the Engle and Granger technique. The findings of the study confirmed that the rural exports have mixed effect on economic growth in Cameroon. Espresso export and banana export has a positive and considerable courting with monetary boom. On the other hand, cocoa export was determined to have a horrible and insignificant impact on monetary boom.

Bakari and Mabrouki (2017) investigated the effect of agricultural exports on monetary boom in South eastern Europe countries because it has by no means been dealt with earlier than. Annual facts was gathered from the sector financial organization for the period 2006 – 2016 and changed into tested via the use of correlation evaluation and the static gravity version. Empirical analyses confirmed that agricultural exports have a high first-class sturdy correlation with gross domestic product and feature a high quality effect on financial increase. Those effects appear that agricultural exports are a provenance of monetary increase in south japanese Europe international places.

Ushahemba (2015) provided an empirical analysis of the impact of Agricultural Exports on monetary increase of Nigeria. The version built for the have a look at proxy gross home product because the endogenous variable measuring monetary increase as a function of actual exchange price, real Agricultural exports, Index of exchange Openness and Inflation fee because the exogenous variables. Annual time collection statistics become collected from important bank of Nigeria Statistical bulletin, national Bureau of facts

(NBS), CBN financial and financial examine Bulletin and CBN annual reports spanning from 1970 to 2012. The take a look at used econometric techniques of Augmented Dickey-Fuller (ADF) unit root test, Johansen co-integration test and errors correction approach (ECM) for empirical evaluation. The results of unit root encouraged that index of alternate openness and inflation fee became desk bound at a diploma whilst real gross domestic product, actual exchange fee and real agricultural exports have been incorporated at order one. The co-integration take a look at confirmed that, lengthy-run equilibrium dating exist a number of the variables. The findings from the mistake correction approach confirmed that Agricultural Export has contributed truly to the Nigerian financial device.

Tigist (2015) assessed the fashion and impact of agricultural (coffee, oilseed and pulses) exports on financial boom of Ethiopia over the past forty years by way of manner of searching at: the life of long term relationship amongst agricultural export and monetary boom; the fee of adjustment in the long run and the existence of causality between the agricultural export and economic boom. The evaluation modified into finished using co-integration version, mistakes correction version and Granger causality model. The findings of the test showed that coffee export and oilseeds export have a excessive great and widespread relationship with economic growth. At the same time as, pulses export changed into located to have negative and insignificant impact on monetary boom in short run and exquisite however insignificant ultimately. On the other hand the causality courting located that there can be bi-directional courting among coffee export, oilseed export, and monetary increase whereas unidirectional dating become found among pulses export and financial boom.

Cynthia and Johannes (2017) analyzed the connection between agricultural export and financial increase in Namibia. The study made use of time collection quarterly information

masking the length amongst 1990 and 2014. The stationarity, long term, and quick dynamics among Gross domestic product (GDP) and agricultural exports in Namibia have been anticipated through the employment of Augmented Dicky Fuller take a look at, Johansen co-integration take a look at, and blunders correction strategies respectively. The empirical findings of the take a look at confirmed that agricultural exports have a tremendous and insignificant impact on monetary increase whilst non-agricultural exports have a fantastic and notable effect on Gross domestic Product (GDP). The study also located out that agricultural exports, non-agricultural exports, gross home fixed capital formation, and consumer rate index are long term determinants of monetary boom in Namibia.

Richardson, innocent and Nelson (2016) evaluates the effect of agricultural exports at the economic increase of fifteen ECOWAS countries the usage of panel information for the length 1980–2013. Variables hired are labour force participation fee, capital inventory, agricultural exports, non-agricultural exports, inflation, and economic increase. The results of the steady-effect model display that agricultural exports have not impacted considerably on the economic growth of ECOWAS worldwide places together with Côte d'Ivoire and Nigeria with appreciate to the Republic of Benin, that's the selected baseline. The test moreover analyzed the combined effect of the rural exports and located that it modified into sizeable however the charge of impact changed into weak.

Kamil, Sevin and Festus (2017) tested the effect of agricultural region at the financial growth of Nigeria, the usage of time series records from 1981 to 2013. Findings found out that real gross domestic product, agricultural output and oil rents have a protracted-run equilibrium courting. Vector errors correction model end result indicates that, the velocity of adjustment of the variables toward their longer term

equilibrium course changed into low, even though agricultural output had a fantastic impact on economic boom.

Sebastian and Kingsley (2016) analyzed the effect of decided on agricultural exports on monetary boom in Nigeria from 1980 to 2014. It especially examined the determinants of standard agricultural export deliver, cocoa export deliver and rubber export deliver; their export overall performance and figuring out elements. Each export plant life had been decided on because they stay the maximum exported agricultural commodities from Nigeria, and published country wide aggregates on specific alternate and macroeconomic variables in CBN Statistical Bulletin (diverse years) and countrywide Bureau of records (NBS). For the records assessment, descriptive statistic and normal least square (OLS) had been used. The results observed out that export supply of cocoa turned into insignificant, but had a powerful effect on real GDP, while the coefficient of export supply of rubber emerge as horrible and insignificant at five% stage. Export commodity rate index changed into observed to be giant with a nice effect on actual GDP, depicting that export commodity costs have been useful in the course of the length understudy. Domestic financial increase (proxied by the usage of real GDP) modified into recommended positively through trade fee, hobby price, and change openness, but most effective trade fee come to be big, on the same time as inflation rate had a terrible impact on monetary growth. The outcomes similarly showed that the combination agricultural exports was effective and had a big impact on financial boom in Nigeria.

Siaw, Jiang, Pickson and Rahman (2018) examined the correlation among agricultural exports and financial increase, a study was finished in Ghana at the disaggregate level the usage of the Autoregressive allotted Lag (ARDL) model with every yr time series facts spanning from 1990Q1-2011Q4 to suggest coverage makers at the dynamics of boom.

Every the prolonged-run and the short-run effects display that, cocoa export has a pleasing and great impact on financial boom whiles the export of pineapple and banana has negative effect on monetary growth despite the fact that pineapple export isn't always widespread in each long time and quick run. In addition, the examine observed unidirectional causality taking walks from banana to monetary increase, a bi-directional causal courting amongst cocoa export and economic growth and no causality between financial development and pineapple export in Ghana.

Theoretical Framework

The Export-Led Growth (Elg) Hypothesis

The Export-Led increase (ELG) hypothesis is at the least as vintage because the classical college, as every Adam Smith and David Ricardo supported it (Richards 2001). Among current economists, Beckerman (1965) attributed exports' favorable effect especially to the manufacturing performance earnings stemming from progressed sources allocation, even as Haberlar (1959) careworn the relevance of dynamic blessings, which includes the progressed availability of foreign places capital and technology thru the release of the steadiness of payments constraint. Vernon (1966) centered on the other causality channel, wherein the self-propelled increase of the house economic machine ends in improved competitiveness and in the end to the enlargement of exports. More ultra-modern "endogenous growth" theories emphasize the benefits stemming from a dynamic export zone, in a framework characterised by means of increasing returns to scale and via way of virtuous technological and managerial spill-over results inside the path of various sectors (Fedor 1992). Helpman and Krugman (1985) growth a number of Beckerman's and Vernon's mind, arguing that the preliminary increase spurt favoured thru export expansion thru the efficiency and allocation outcomes reverberates in better global competitiveness, fostering a modern round of export growth and paving the

way for a virtuous development direction. After several a few years and the buildup of an ever-growing body of studies literature, however, “No consensus has emerged on the theoretical appropriateness of the export-led growth hypothesis. Theoretical disagreement at the function of exports is matched with the useful resource of mixed empirical evidence” (Jin 2002; Richards 2001). To this respect, it should be considered that tries to expose econometrically that exports are a crucial cause of growth face primary problems. First, exports are themselves a thing of GDP, and as a result proof of a correlation is inadequate to prove constantly any actual causal relationship which might probably in fact exist. 2nd, other relevant macroeconomic variables, and in particular different components of aggregate call for, also are correlated with GDP increase, and therefore a lacking variables trouble of model misspecification inevitably arises (Sheehy 1990).

METHODOLOGY

The study adopted ex-post facto research design, which uses secondary data to establish the relationship between the dependent variable and independent variables. The population of this study comprises all agricultural sector in Nigeria and the sector serve as the sample size. Data collected is through secondary sources of data collection. The study employed various techniques for data analysis such as descriptive statistics, correlation analysis, unit root tests and multiple regressions. In descriptive Statistics (Pre Diagnostics Test), the study used mean, standard deviation. The correlation analysis is used to ascertain the degree and strength of the relationship between the variables.

Where:

μ is the drift term, t denotes the time trend and p is the largest lag length used. In order to analyze the deterministic trends, we used

Unit Root Test

The unit root test is utilized to test for the stationary of time series data. Since most of the macroeconomic time series are non-stationary and are prone to spurious regression, the first step in any econometric or time series analysis is always to test for stationary. The widely used augmented dickey fuller (ADF) test statistic shall be used to test for stationarity. It was compared with the critical values at 5% and 1% level of significance. If the ADF test statistic is at any level, greater than the critical values with consideration on their absolute values, data at the tested order is said to be stationary. Augmented Dickey-fuller test relies on rejecting a null hypothesis of stationary. The tests are conducted with and without a deterministic trend (t) for each of the series. For the purpose of this research, an augmented dickey-fuller (ADF) test was conducted by carrying out a unit root test based on the following structure:

$$\Delta_{XX_t} = k + a_t + \theta_{X_{t-1}} + \sum_{i=1}^n \Phi_i \Delta_{t-1} + e_t$$

Where X is the variable under consideration, Δ is the first difference operator, t captures time trend, a_t is a random error and n is the maximum lag length. The optimal lag length is identified so as to ensure that the error term is white noise K and a are the parameters to be estimated

Augmented Dickey-Fuller (ADF)

The Augmented Dickey-Fuller (ADF) as specified in Dickey and Fuller (1981) was employed to test univariate time series for the presence of unit roots or non-stationarity. For the ADF, the null hypothesis is that the variable being considered has a unit root against an alternative that it does not. The model for the ADF is as specified as:

$$\Delta Y_t = \mu + \gamma Y_{t-1} + \sum_{j=1}^p \alpha_j \Delta Y_{t-j} + \beta t + \omega_t \quad (3.1)$$

modified versions of the likelihood ratio tests suggested by Dickey and Fuller (1981). We followed the testing sequence suggested by Patterson (2000), which suggests the following

maintained regressions, test statistics, and hypotheses:

$$\Delta Y_t = \mu + \gamma Y_{t-1} + \sum_{j=1}^p \alpha_j \Delta Y_{t-j} + \beta t + \omega_t \tag{3.2}$$

$\hat{\tau}_\beta, H_0 : \gamma = 0, H_a : \gamma < 0; \phi_3, H_0 : \gamma = 0, \beta = 0, H_a : \gamma \neq 0, \text{ and/or } \beta \neq 0$

$$\Delta Y_t = \mu + \gamma Y_{t-1} + \sum_{j=1}^p \alpha_j \Delta Y_{t-j} + \omega_t \tag{3.3}$$

$\hat{\tau}_\mu, H_0 : \gamma = 0, H_a : \gamma < 0; \phi_1, H_0 : \mu = 0, \gamma = 0, \beta = 0, H_a : \mu \neq 0, \text{ and/or } \gamma \neq 0$

$$\Delta Y_t = \gamma Y_{t-1} + \sum_{j=1}^p \alpha_j \Delta Y_{t-j} + \beta t + \omega_t \tag{3.4}$$

$\tau, H_0 : \gamma = 0, H_a : \gamma < 0$

Model Specification

To empirically examine the effect of agricultural export on gross domestic product in

Nigeria, the following multiple regression models are specified.

$$bGDP_{it} = \alpha_0 + \alpha_1 bCAEP_{it} + \alpha_2 bGTEP_{it} + \alpha_3 bCCEP_{it} + \alpha_4 bRUBEP_{it} + \varepsilon_{it} \dots 3.7$$

Where GDP is gross domestic product, CAEP is Cassava export, GTEP is groundnuts' export, CCEP is cocoa export, RUBEP is rubber export, *i* stands for the entire three sectors, *t* denotes time (i.e., years) while ε_{it} is the composite error term. $\alpha_1, \alpha_2, \alpha_3$ and α_4 are the

efficient. The models can be estimated using descriptive, unit root test and multiple regressions. With this assumption, the models can be estimated using the ordinary least squares (OLS) method.

RESULTS AND DISCUSSION

Table 1 Model 1: Descriptive Statistics

	GDP	CAEP	GTEP	CCEP	RUBEP
Mean	5.24E+12	3.88E+12	3.99E+08	2.90E+13	6.67E+08
Median	2.77E+11	7.83E+09	50560631	8.32E+09	2.83E+08
Maximum	4.12E+13	8.93E+13	5.93E+09	7.29E+14	6.28E+09
Minimum	6.99E+08	8922831.	272727.0	7299172.	2383929.
Std. Dev.	1.02E+13	1.70E+13	1.16E+09	1.16E+14	1.28E+09
Skewness	2.300551	4.644442	4.354072	5.098148	2.857907
Kurtosis	7.308800	22.79699	20.92279	29.18106	10.70027
Jarque-Bera	82.78312	996.2589	827.2044	1644.609	191.5930
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	2.62E+14	1.94E+14	2.00E+10	1.45E+15	3.33E+10
Sum Sq. Dev.	5.14E+27	1.42E+28	6.62E+19	6.64E+29	7.97E+19
Observations	50	50	50	50	50

The table showed that gross domestic product in Nigeria has a mean value (average) of 5.24 over the length of overview. The desk revealed that median price of 2.77 which confirmed that the absence of outliers within the values. The

variable has a widespread deviation of 1.02 which cautioned that the value of the observation changed into unfold across its imply value of five.24. The skewness data of the variable become 2.30, suggesting that it

turned into effective, whilst the kurtosis records of 7.30 recommended that the observation became leptokurtic in distribution. The Jaque-Bera information 82.78 with a probability fee of 0.00 cautioned that the GDP turned into not normally allotted at 5% stage of significance and it become log to correct it to ordinary.

The desk confirmed that cassava export in Nigeria has an average fee (common) of 3.88 over the period of overview. The table revealed that median value of 7.83 which showed that the absence of outliers inside the values. The variable has a popular deviation of one.70 which advised that the price of the commentary become spread throughout its mean fee of 3.88. The skewness information of the variable became 4.64, suggesting that it became tremendous, even as the kurtosis statistics of 22.79 recommended that the statement was leptokurtic in distribution. The Jaque-Bera information 996.25 with a opportunity value of 0.00 counseled that the CAEP changed into now not commonly distributed at 5% degree of importance and it changed into log to accurate it to everyday.

The desk showed that groundnuts export in Nigeria has a median cost (average) of 3.99 over the period of evaluation. The desk found out that median value of 50560 which showed that the absence of outliers within the values. The variable has a preferred deviation of 1.16 which cautioned that the value of the statement changed into spread across its mean price of 3.99. The skewness information of the variable was 4.35, suggesting that it became fine, whilst the kurtosis data of 20.92 recommended that the observation turned into leptokurtic in distribution. The Jaque-Bera facts 827.92 with

a chance value of 0.00 cautioned that the GTEP turned into now not normally dispensed at 5% level of importance and it changed into log to correct it to regular.

The table confirmed that cocoa export in Nigeria has a median price (average) of 2.90 over the duration of overview. The table found out that median cost of 8.32 showed the absence of outliers in the values. The variable has a widespread deviation of 1.16 which counseled that the value of the commentary was unfold across its imply value of two.90. The skewness information of the variable changed into 5.09, suggesting that it became positive, even as the kurtosis records of 29.18 recommended that the statement changed into leptokurtic in distribution. The Jaque-Bera facts 1644.609 with a chance value of 0.00 suggested that the CCEP turned into now not commonly allotted at 5% stage of importance and it changed into log to correct it to everyday.

The table showed that Rubber export in Nigeria has a mean price (average) of 6.67 over the period of evaluate. The table found out that median value of 2.83 which confirmed the absence of outliers inside the values. The variable has a preferred deviation of 1.28 which counseled that the price of the observation was spread across its mean cost of 6.67. The skewness facts of the variable turned into 2.85, suggesting that it become fine, even as the kurtosis information of 10.70 cautioned that the remark changed into leptokurtic in distribution. The Jaque-Bera data 191.59 with a probability value of 0.00 recommended that the RUBEP become now not normally distributed at 5% degree of importance and it became log to correct it to everyday.

Table 2: Model 1: Correlation Matrix

	LGDP	LCAEP	LGTEP	LCCEP	LRUBEP
LGDP	1.000000	-0.360570	-0.163361	-0.455371	-0.042291
LCAEP	-0.360570	1.000000	0.138511	0.338039	-0.210726
LGTEP	-0.163361	0.138511	1.000000	0.070005	0.258218
LCCEP	-0.455371	0.338039	0.070005	1.000000	-0.315791
LRUBEP	-0.042291	-0.210726	0.258218	-0.315791	1.000000

Source: Researcher's computation using, E-views 9.0, 2021

Table 3 revealed that gross domestic product in Nigeria (GDP), has weak negative correlation (0.61) with cassava export (CAEP). gross domestic product in Nigeria (GDP) has a weak negative correlation (0.16) with groundnuts export (GTEP) in Nigeria. Also, gross domestic product in Nigeria (GDP) has weak negative correlation (0.16) with cocoa export (CCEP) in

Nigeria and gross domestic product in Nigeria (GDP) has weak negative correlation (0.04) with rubber export (CCEP) in Nigeria. This correlation showed that the indicants were appropriately selected. Thus, there was absence of multicollinearity or there was no problem of multicollinearity.

Table 3: Unit Root Test on the Variables

Variables	Level of stationarity	ADF-statistic	Significant values 1%, 5%, 10%	Order of Integration	Prob.(5%)
LGDP	constant (exogenous): Trend	7.61	-3.57, -2.92, -2.60	1(1)	0.0000*
LCAEP	constant (exogenous): Trend	7.26	-3.57, -2.92, -2.59	1(1)	0.0000*
LGTEP	constant (exogenous): Trend	4.85	-3.57, -2.92, -2.59	1(0)	0.0000*
LCCEP	constant (exogenous): Trend	10.40	-3.57, -2.92, -2.59	1(1)	0.0000*
LRUBEP	constant (exogenous) Trend	5.51	-3.57, -2.92, -2.59	1(0)	0.0007*

Source: Author's Computation using E-view 9.00

Probability values are indicated by *1%, **5% and ***10%

Table 3 showed that LGDP, LCAEP, LCCEP were not stationary at level and second difference but stationary at first difference due to the fact that the values of its ADF test statistics at first differences were greater than their corresponding critical values at 5% level of significance. Thus, LGDP, LCAEP and LCCEP were stationary at first difference. It is also recorded that LGTEP and LRUBEP were not stationary at first difference and second

difference but stationary at level due to the fact that the values of its ADF test statistics at first differences were greater than their corresponding critical values at 5% level of significance. Thus, LGTEP and LRUBEP were stationary at level. Also, the variables were integrated of order one 1(1) and 1(1) in each model which signify that regression analysis such as t-test and f-test were appropriately and adequately needed in this study.

Table 4 Regression Result

Dependent Variable: LGDP
 Method: Least Squares
 Date: 05/20/21 Time: 09:04
 Sample: 1970 2019
 Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	44.07431	5.076924	8.681302	0.0000
LCAEP	-0.198079	0.104826	-1.889590	0.0653
LGTEP	-0.052504	0.174472	-0.300933	0.7649
LCCEP	-0.253937	0.079961	-3.175777	0.0027
LRUBEP	-0.310193	0.192407	-1.612167	0.1139
R-squared	0.506790	Mean dependent var		26.64029
Adjusted R-squared	0.445171	S.D. dependent var		2.860735
S.E. of regression	2.485432	Akaike info criterion		4.753410
Sum squared resid	277.9817	Schwarz criterion		4.944612
Log likelihood	-113.8352	Hannan-Quinn criter.		4.826220
F-statistic	4.978845	Durbin-Watson stat		0.772345
Prob(F-statistic)	0.002076			

Source: E-view 9.00 output, 2021

Decision rule: 5%

The regression result shows that the model is fit for the study since the f-statistics is significant at 5% level of significant. The result also shows that cassava export (LCAEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. The finding also indicates that groundnuts export (LGTEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. It also showed that cocoa export (LCCEP) has negative and significant effect on economic growth in terms of gross domestic product in Nigeria and rubber export (LRUBEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria.

These negative effects are significant and insignificant since the P-value is less than 5% and more than 5%. Thus, we therefore conclude that cassava export (LCAEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Groundnuts export (LGTEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Cocoa export (LCCEP) has negative and

significant effect on economic growth in terms of gross domestic product in Nigeria and rubber export (LRUBEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria.

The $R^2 = 0.50$ indicates that only 50% of variation on agricultural export can be used to explain by economic growth in Nigeria but 50% can explained by other factors not noted in the regression model which is refer to as error term. The study concluded that there is negative and insignificant effect of agricultural export on economic growth in Nigeria.

Discussion of Findings

The finding revealed that agricultural export has negative and insignificant effect on the economic growth of Nigeria. Other findings were that cassava export (LCAEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Groundnuts export (LGTEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Cocoa export (LCCEP) has negative and

significant effect on economic growth in terms of gross domestic product in Nigeria and rubber export (LRUBEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. The study is in line with no findings in the empirical review in this study. The study is also in tandem with Export-Led Growth (Elg).

Conclusion and Recommendations

The study also concluded that agricultural export is insignificant to the growth of Nigerian economy which implies that cassava export (LCAEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Groundnuts export (LGTEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria. Cocoa export (LCCEP) has negative and significant effect on economic growth in terms of gross domestic product in Nigeria and rubber export (LRUBEP) has negative and insignificant effect on economic growth in terms of gross domestic product in Nigeria.

The study recommended that Government of Nigeria should concentrate in agricultural export to ensure it improvement in the future since it has insignificant effect on economic growth in Nigeria. They should export more of cassava, groundnuts, cocoa and rubber to control and correct their insignificance and negative effect on the growth of GDP.

References

- Adesoye, A. B., Adelowokan, O. A. & Alimi, Y. O. (2018). Time Series Analysis of Non-Oil Export Demand and Economic Performance in Nigeria. *Iran. Econ. Rev*, 22(1) 295-314
- Adewale, O. A. (2016). Effect of Oil and Non-Oil Export on Nigeria Economy. *Journal for studies in Management and planning*, 02(2)
- Bakari, S. & Mabrouki, M. (2017). The Effect of Agricultural Exports on Economic Growth in South-Eastern Europe: An Empirical Investigation Using Panel Data. *Munich Personal RePEc Archive*
- Cynthia, S. & Johannes, P. S. S. (2017). *European Journal of Basic and Applied Sciences*, 4(1) Agricultural exports and economic growth in Namibia
- Hafsat M, M., Usman, U. U. Badawi, M. M. & Kamal, M. F. (2020). Effect of Non Oil Export on Economic Growth in Nigeria. *Journal of Economics and Finance*, 11(1) 01-07
- Kamil, S., Sevin, U. & Festus, V. B. (2017). The Contribution of Agricultural Sector on Economic Growth of Nigeria, *International Journal of Economics and Financial*, 7(1), 547-552.
- Noula, A. G., Sama, G. L. & Gwah, M. D. (2013). Effect of agricultural export on economic growth in Cameroon: case of banana, coffee and cocoa. *International Journal of Business and Management Review*, 1(1) 44-71
- Nwanne, T. F. I. (2014). Assessing the relationship between diversification of non-oil export product and economic growth in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 2(10) 136-146
- Ogechukwu, O. S., Azubike, J. U. (2016), Evaluation of the Contribution of Nonoil Revenue to Government Revenue and Economic Growth: Evidence from Nigeria. *Journal of Accounting and Financial Management*, 2 (5)
- Olurankinse, F. & Fatukasi, B. (2012). Analysis of the Effect of Non-Oil Sector on Economic Growth. *Canadian Social Science*, 8(4) 244-248
- Oluwaseun, G. G., Adeyemi, O., Evans, O., Oluseyi, O. O., Odunola, A. A., Kofo, A. B., Oluwakemi, D. A. & Oluwatomi, A. (2013). Agricultural Exports and Economic Growth in Nigeria (1980 – 2010). *Journal of Economics and Sustainable Development*, 4(16)

- Oyefabi, I. S., Murtala, U. T. & Saheed, Z. (2018). A Disaggregated Analysis On The Effect of Non-Oil Export On Economic Growth In Nigeria. *Journal article Open Access*, 3(2) 11-27
- Oyetade, P O. (2016). Effect of non-oil components export on the economic growth in Nigeria. *Universiti Utara Malaysia*
- Raheem. I.A, (2016). Analysis of the effects of oil and non-oil export on economic growth in Nigeria. Department of Economics, University of Ibadan, Oyo State Nigeria. <https://hal.archives-ouvertes.fr/hal-01401103v2>[16].
- Richardson, K. E., Innocent, A. I. & Nelson, C. N. (2016). A comparative analysis of the effect of agricultural exports on economic growth of ECOWAS countries
- Salami, G. O., Amusa, B. O. & Ojoye, O. F. (2018). Empirical analysis of the effect of non-oil revenue on economic growth: Nigerian experience. *International Journal of Economics, Commerce and Management*, 5(6)
- Sebastian, O. U. & Kingsley, O. O. (2016). The effect of selected agricultural exports on the growth of the domestic economy. *Academia Journal of Agricultural Research* 4(5): 281-291
- Siaw, A., Jiang, Y., Pickson, R. B. & Rahman, D. (2018). Agricultural Exports and Economic Growth: A Disaggregated Analysis for Ghana. *Scientific Research*, 8(4)
- Tigist, Y. (2015). Effect of Agricultural Exports On Economic Growth In Ethiopia: The Case Of Coffee, Oilseed And Pulses. *Egerton University*
- Ushahemba, I. V. (2015). The empirical analysis of agricultural exports and economic growth in Nigeria. *Journal of Development and Agricultural Economics*, 7(3) 113-122
- Verter, N. & Bečvářová, V. (2016). The Effect of Agricultural Exports on Economic Growth in Nigeria. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(2): 691–700.
- Vincent, K. (2017). An analysis of the effect of non-oil export and economic growth in Nigeria. *International of innovative research in social sciences and strategic management techniques IJRSSMT VOL. 4 NO2*

FINANCIAL INTEGRATION AND FINANCIAL DEVELOPMENT IN NIGERIA: USING NARDL APPROACH

¹Hambolu Victor Olufunsho, ²Ahmed Tijani Abdulmajeed

^{1,2} Department Banking and Finance,
Faculty of Management Sciences, Kogi State University.
Phone Number: 08067859662 Email: victorhambolu@gmail.com,
Phone number: 08036199688, Email:tijaniabdulmajeed@gmail.com

Abstract

This study examined the relationship between financial integration and financial development in Nigeria from 1981-2019. The study utilised the Nonlinear Autoregressive Distributed Lag Model. Market capitalisation, total private sector credit and financial development index were used as a proxy for financial development, while the Foreign Direct Investment to GDP ratio was used as a proxy for financial integration. The results suggest a symmetric relationship between financial integration and financial development when defined in terms of total credit with regards to the private sector. However, when financial development is considered in a broader with the use of financial index developed by International Monetary Fund (IMF), the relationship is asymmetric. The index developed by IMF covers the depth of financial resources in terms of liquidity and size as well as accessibility in terms of how convenient it is for the financial services to be assessed by individual and business entities. The study suggests that monetary authorities pay attention to economic specifics in making decisions aimed at expanding or contracting Nigeria's financial integration with the rest of the world to generate an optimal outcome.

Keywords: Financial integration, financial development

INTRODUCTION

Most recently, there has been a call for financial integration across nations and Nigeria being an African country, is not left out. Although the saying that more finance leads to financial development is supported by some studies (Arestis et al., 2014), studies in the past suggest that financial integration significantly impacts economic growth and financial development through efficient resource allocation, portfolio diversification and promotion of the domestic financial market for the developing countries (Aziakpono, 2007; Obstfeld, 1998; Taylor, 2004; Klein, 2005).

However, the debate overtime on whether financial integration benefits the developing nations, and if this is the case, under what scenario, has been argued for and against without conclusion. Some scholars were of the view that financial integration positively impacts financial development (Aziakpono, 2007; Farhad, 2019; De Gregorio, 1998; World Bank, 1997; (Demirguc-Kunt & Levine, 1996). Critics strongly supported the trade that cut across international boundaries but concluded that the danger associated with integration of the financial system overshadows the advantage, thereby leading to uncontrollable risk, capital outflow and susceptibility to the financial crisis, which could significantly

impact long-term financial development negatively (David et al., 2015; Kose et al., 2009). On this note, it is perceived that there exists a relationship between financial integration and financial development which may vary from level of integration.

From the Nigerian economy perspective, the debate on the benefit of financial integration is still an open discussion (Asongu, 2014; Ibrahim & Zunaidah, 2021). The global financial crisis of 2007 gave insight into the dimension of the negative impact of foreign capital flow. The crisis revealed that a poor financial system could lead to poor investment and the wrong allocation of financial resources. Studies have supported financial integration for financial development (Law & Singh, 2014). Most recently, the COVID-19 pandemic witnessed in the year 2019 was perceived to have significantly impacted foreign direct investment into developing economies (UNCTAD, 2021). In the year 2019, the Nigerian government recorded a total of \$3.30 billion in foreign direct investment (FDI) which represents a 65.16% increment as against \$2 billion, a 42.92% decrease when compared with \$3.50 billion, a 21.26% recorded in the year 2017 (Ogundipe et al., 2021). Leiva & Shehadi (2020) stated that players and companies operating in the financial system were less focused on expansion with the negative impact of foreign direct investment during the COVID-19 outbreak.

Theoretically, the integration of the financial system promotes financial development, facilitate resource allocation and promotes transparency and competitiveness (Obstfeld, 2008; Kose et al., 2009). Hence, the integration of the financial market promotes liquidity in the stock market and leads to a reduction in finance costs (Levine, 2001; Stultz, 1999). However, some studies hold the view that financial integration can negatively impact financial development. For instance, Kose et al. (2009) believed that trade openness could result in excessive risk, while other studies believed that

trade liberalisation would result in vulnerability to financial crises, vulnerability to the spillover effect of economic risk and capital flight (David et al., 2015). As such, there is likely a relationship between financial integration and financial development, which may vary from level of integration.

Against the backdrop highlighted above, this paper addresses an increasing line of thought by empirically investigate the relationship between financial integration and financial development in Nigeria.

Statement of Problem

Despite the enormous researches that exist on financial sector development in Nigeria, it appears the existing research efforts have been skewed towards evaluating the influence of financial sector development on growth (Akintola et al., 2020; De Gregorio & Guidotti, 1995; Patrick, 1966), on income inequality (see; Jauch & Watzka, 2016; Law & Tan, 2009; Kappel, 2010), on poverty reduction (see; Jalilian & Kirkpatrick, 2002; Rewilak, 2017; Jalilian & Kirkpatrick, 2005) and overseas investment (Sahin&Ege, 2015; Not et al., 2015; Lee & Chang, 2009), little or no consideration has been given on the influence of integration of the financial system on financial development in the country.

Also, at the global level, it appears there is a divergence in the stream of research on the relationship that exists between financial integration and financial development; while some authors documented a negative relationship between the two, others found a positive relationship. Using access to credit as a measure of financial development, some studies(see; Dow, 1998; Ingram & Ingram, 1973; Osada & Saito, 2010) established that there is an increase in financial development as a result of increasing financial integration, whereas other authors (see; Inekwe & Valenzuela, 2020; Gersl & Hermanek, 2007; Ianc & Ciurlău, 2016; Kuznietsova & Misiats, 2019) discredited the role of financial

integration in financial development indicating that financial integration increases the incidence of the financial crisis in local economies which might be averted if there's less integration, hence a negative relationship between both variables. Lack of understanding of the clear impact of intercountry financial interconnectedness on domestic financial development

Likewise, based on the New Financial Development Index developed by IMF, Nigeria's average index was estimated to be about 20% compared to about 45% reported for South Africa using data spanning between 1980 and 2018 (IMF, n.d). Data obtained from the World Bank Database (WDI) also reveals that the country's level of financial integration has deteriorated in the last two decades, suggesting a possibility of a direct relationship between the country's level of financial development and financial integration with the rest of world. No study has extensively assessed the factors responsible for the country's poor financial development. Against the backdrop, the study aims to examine empirically influence of financial integration on financial development in Nigeria.

Hypothesis

H01: There is no significant relationship between the FDI-GDP ratio and Financial Development Index

H02: There is no significant relationship between FDI-GDP ratio and Stock Market Capitalization

H03: There exist no significant association between the FDI-GDP ratio and total credit to private sector private

Literature Review

Financial Integration

Various authors view financial integration from a different perspective. However, literature in the past is yet to offer a universal definition of the concept. Financial integration is empirically viewed in connection with financial globalisation, liberalisation of external finance

and capital account and trade openness (Aziakpono, 2007). Mckinnon (1973) views financial integration as a concept that encompasses deregulation of the domestic financial market. Hence, financial integration is defined as the financial integration system of nation with the international financial market financial. Financial integration enhances capital investment across-country which require the active involvement of local players such as borrowers and lenders in the international domain and extensive use of intermediaries (Bussiere, 2004). Schmukler & Zoido-Lovaton (2000) view the globalisation of financial institutions as the linkage between local institution of financial market of countries with the global financial market of the rest of the world. Also, it was documented that integration entails liberalising the domestic financial market and capital account. Thus, integration becomes possible when the economy is liberalised, leading to a significant increase in capital movement and effective use of financial intermediations.

Financial integration and financial globalisation are two different concepts (Prasad et al., 2003). The authors view financial globalisation as a concept which links global finance through international boundary financial flow., while financial integration is an individual nation's financial linkages to the global market. The authors conclude that both terms are linked in that increasing globalisation is related with increasing financial integration of the financial market. Hence, both concepts are used interchangeably.

For the study, we focus on three proxies in the measurement of financial integration that is considered ideal for the Nigerian economy: trade openness, inflation rate and interest rate. Trade openness (Topenness) represents the country's income level due to the openness of the economy. This variable is related to the level of integration of the financial market (Lane & Milesi-Ferreti, 2017). Other proxies used by the study are Inflation rate (INF),

interest rate (INT) and financial integration (FINTEG).

Financial Development

Financial development has been measured in a number of single ratios, which include private domestic credit, market capitalisation, total private sector credit, financial sector index, money aggregate (M2 & M3) to Gross Domestic Product and liquid in the market which is regarded as liabilities (Farhad & Hanh, 2021). These proxies are estimates which are only best in providing evidence with regards to market segment specifics of the financial system. The sector is characterised by various financial institutions, instruments and markets. As such, financial development is a concept that is multidimensional in which single variables cannot be seen to represent the entire financial development fully. However, our study will be based on prior studies (T.H. Le et al., 2017; Farhad & Hanh, 2021; Ozkok, 2015; David et al., 2015) to address the shortcoming and explore a range of proxies for financial development to build a comprehensive index.

Specifically, by combining different finance proxies such as market capitalisation, total private sector credit and financial development index, we focus on reviewing the wide-ranging nature of financial sector by way of divergent toward concentrating on only one aspect of the economy. Ozkok (2015) states that the adoption of an index reduces conflicting outcomes due to the individual proxies adopted from past literature.

Financial Development Index

This is a measure of feature which aid the development of the financial systems across different economies. It serves as a base for the economy to benchmark different aspect of the financial system. The World Economic Forum in conjunction with academic leaders and international organization introduce the measure in the year 2008. It is the relative ranking of countries on efficiency, depth and access of both the financial institution and

market. It is an aggregate both financial market and institution index.

Market Capitalization

It is a measure of the level of stock market development (Antzoulatos et al, 2008). It is the total value of the firm based on its available share price and the outstanding number of shares in issue. It is arrived at by multiplying the number of shares with the market price. Market capitalization is considered to be a central feature that aids shareholders determine the return and risk on their investment

Total Private Sector Credit

A measure of the degree of access to financial resource and size of financial intermediaries (King and Levine, 1993). It refers to resources avail to the private sector which includes trade credit, loans, non-equity security and account receivables.

Inflation Rate

Inflation rate is an average consumer cost of living (Oner, 2010), It is change in percentage of price index in a given period in relation to previous period. Inflation is a persistent rise in the aggregate prices of services and goods and often measured on a yearly basis. The value of currency bound to depreciate during inflation period.

Trade Openness

It is the degree to which non-domestic actors participate in a domestic economy (Grabner et al, 2018). It is the degree to which the economy at home is lithe and open to foreign investors for trade that cut-across border.

Empirical Review

Previous studies on financial integration and its impact on the development of the economy have not reached a compromise. There have been majorly two schools of thought. Some of the studies in the past concluded that significant and positive relationship exist between financial sector openness and financial development (see: Ozkor, 2015; Baltagi;

Demetriades, 2009; T-H. Le, Kim, & Lee, 2017; Klein & Olivei, 2008; Levine, 2001).

Previous study in the past by Baltagi et al. (2009) examined financial liberalization and trade on financial development across countries. Annual data were used of both developed and industrialised nations with the aid of a dynamic panel data estimation tool. The study concluded that openness is significantly and capable of influencing financial system development. In a similar line of thought, Klein and Olivei (2008) examined capital account liberalisation, financial depth and economic development in a cross-section of selected countries from 1986 to 1995. The study established that countries with open capital liberalisation policies are associated with significant financial depth. Levine (2001) concluded in his study that integration of the economy has the potential of accelerating liquidity in the market and that the attendance of foreign financial organizations can spur the efficiency the institutions domestically.

Contrarily, some scholars took a different stand which suggests that there is no relationship between financial integration and financial development. Kenya et al. (2014) investigated financial development, trade liberalisation and economic growth in selected 21 African Countries. The result from the study suggested that trade openness does not impact financial development positively. David et al. (2015) explored the linkage between trade integration and financial development in Sub-Saharan African (SSA) Countries. The study concluded that there was no relationship between trade and financial development in SSA. Furthermore, Hauner, Prati & Birean. (2013) and Ashraf (2018), assessing the importance of trade liberalization, concluded in their studies that there no significant relationship exists between financial integration and financial development. However, the study noticed that financial integration could compel fund providers to promote risk ventures as a result of competition in the credit market. In such a

situation, the cost could out-way the benefit associated with volume.

The justification for the study is twofold. Literature in the past has relied on various proxies used for financial integration and development. Odhiambo (2008) revealed that money supply (M2 & M3) as a ratio of Gross Domestic Product (GDP) was often used. However, the efficacy of the proxies has been undermined because they are perceived to underestimate funds from abroad. In addition, King and Levine (1993) stated that financial development was proxied with a popular measure of liquid-liabilities to Gross Domestic Product (GDP) which is viewed to have to overestimate reality with the underdeveloped market of financial institutions. Other measures often used include private sector credit from deposit banks and financial institutions to Gross Domestic Product (GDP) (King & Levine, 1993). These proxies have been strongly carped for concentrating on the private sector (Beck et al., 2000).

A recent, the International Monetary Fund developed index related to financial development. Recent literature on finance integration and financial development has been characterised with a complete index built from several finance proxies to represent the multidimensional characteristics of the concept rather than concentrating on a few aspects (Farhad & Hanh, 2019; T-H. Le, Kim, & Lee, 2017; David 2015, Mlachila & Moheput, 2015; Ozkok, 2015). The new measure incorporates the depth in terms of liquidity and size, accessibility in terms of how convenient it is for financial services to be assessed by individuals and business entities, and efficiency in terms of the relative ease at which financial institutions can provide their services at low cost while making sustainable revenue. The ratio of FDI to GDP was used as a measure of Financial Integration. Other measures such as Market Capitalization and Total Private Sector Credit were considered.

Theoretical Review

Financial Integration Theory

There are two basic propositions in economic theory that underpin the use of financial integration and financial openness. The first theory is welfare economics, which states that the competitive market is Pareto efficient, while the other theory which is the efficient market hypothesis (EMH) states that with information management, the markets are efficient (Eatwell, 1996). The welfare economic theory believe that the outcome consider as Pareto is only achievable under perfect market condition (Jehle&Reny, 2001). Therefore, markets characterized with competitiveness are considered efficient, and any deviation as a result of government intervention through restriction policy on capital account would result in inefficiency (Eatwell, 1996).

According to the neoclassical framework, liberalisation of the capital market and capital flow towards countries short of capital, thereby increasing benefit to the poorer countries. Also, by extension, production may increase substantially as a result of capital flows which may have a positive impact on production investment (Bonfiglioli, 2008). Under the neoclassical model, financial integration promotes the working of the financial system domestically through competitiveness and

importation of financial services, leading to significant growth (Levine, 2001).

There is evidence in the existing literature suggesting that financial integration spur economic growth. Financial integration fast tracks investment opportunities and increases competitiveness between foreign and domestic financial institutions domestically (Gianetti, Guiso, JappelliPadula & Pagano, 2002). This further translates to the effectiveness of financial institutes as funds are avail for productive purpose

Methodology

The study utilised the Nonlinear Autoregressive Distributed Lag model to examine the asymmetric impact of financial integration on financial development in Nigeria. The NARDL model was proposed by Shin et al. (2021) as a means of introducing both long and short run likenesses through constructive and undesirable fractional sum breakdowns of the proxies. The authors argued that macroeconomic variables exhibit non-linear relationships both in the short-run and long-run, contrary to many related studies of asymmetry (See Balke and Fomby, 1997; Psaradakis *et al.*, 2004; Kaptanios *et al.*, 2006) which assumed the presence of asymmetry only in the short-run.

$$\begin{aligned}
 \Delta FDINDEX_t &= \rho FDINDEX_{t-1} + \theta^+ FINTEG_{t-1}^+ + \theta^- FINTEG_{t-1}^- + \beta INF_{t-1} + \tau INT_{t-1} + \\
 &\gamma TOPENNESS_{t-1} + \sum_{j=1}^{p-1} \gamma_j \Delta FDINDEX_{t-j} + \sum_{j=0}^{q-1} (\phi_j^+ \Delta FINTEG_{t-j}^+ + \phi_j^- \Delta FINTEG_{t-j}^-) + \\
 &\sum_{j=0}^{q-1} \delta \Delta INF_{t-j} + \sum_{j=0}^{q-1} \lambda \Delta INT_{t-j} + \sum_{j=0}^{q-1} \psi \Delta TOPENNESS_{t-j} + \xi_t \dots\dots\dots 1 \\
 \Delta MCAP_t &= \rho MCAP_{t-1} + \theta^+ FINTEG_{t-1}^+ + \theta^- FINTEG_{t-1}^- + \beta INF_{t-1} + \tau INT_{t-1} + \\
 &\gamma TOPENNESS_{t-1} + \sum_{j=1}^{p-1} \gamma_j \Delta MCAP_{t-j} + \sum_{j=0}^{q-1} (\phi_j^+ \Delta FINTEG_{t-j}^+ + \phi_j^- \Delta FINTEG_{t-j}^-) + \\
 &\sum_{j=0}^{q-1} \delta \Delta INF_{t-j} + \sum_{j=0}^{q-1} \lambda \Delta INT_{t-j} + \sum_{j=0}^{q-1} \psi \Delta TOPENNESS_{t-j} + \xi_t \dots\dots\dots 2 \\
 \Delta TPSC_t &= \rho TPSC_{t-1} + \theta^+ FINTEG_{t-1}^+ + \theta^- FINTEG_{t-1}^- + \beta INF_{t-1} + \tau INT_{t-1} + \\
 &\gamma TOPENNESS_{t-1} + \sum_{j=1}^{p-1} \gamma_j \Delta FDIND_{t-j} + \sum_{j=0}^{q-1} (\phi_j^+ \Delta FINTEG_{t-j}^+ + \phi_j^- \Delta FINTEG_{t-j}^-) + \\
 &\sum_{j=0}^{q-1} \delta \Delta INF_{t-j} + \sum_{j=0}^{q-1} \lambda \Delta INT_{t-j} + \sum_{j=0}^{q-1} \psi \Delta TOPENNESS_{t-j} + \xi_t \dots\dots\dots 3
 \end{aligned}$$

Where;

- FDINDEX is Financial Development Index
- MCAP is market capitalisation
- TPSC is Total Private Sector Credit
- FINTEG is Financial Integration
- INF is Inflation rate
- Int is interest rate
- Topenness is Trade Openness

Variable Measurement and Definition

Variable Representation	Variable	Definition	Formulae	Source
FDINDEX	Financial Development Index	A measure of the depth of financial resources (IMF, n.d)	Financial Depth + Financial Access + Financial Efficiency	IMF Database
MCAP	Market Capitalization	A measure of the level of stock market development (Antzoulatos et al, 2008)	$\frac{\text{Price} * \text{Total Number of Outstanding Shares listed Domestic Companies}}{GDP} * 100$	WDI
TPSC	Total Private Sector Credit	A measure of the degree of access to financial resource and size of financial intermediaries (King and Levine, 1993)	$\frac{\text{Total Domestic Credit to Private Sector}}{GDP} * 100$	WDI
FINTEG	Financial Integration	Degree of cross-country capital movement (Bussiere, Fratzscher & Muller (2004)	$\frac{FDI}{GDP} * 100$	WDI
INF	Inflation Rate	Average consumer cost of living (Oner, 2010)	%ΔCPI	WDI
INT	Interest Rate	A measure of cost of capital (Faure, 2014)	Nominal Interest – Inflation Rate	WDI
TOPENNESS	Trade Openness	The degree to which non-domestic actors participate in a domestic economy (Grabner et al, 2018)	$\frac{\text{Export} + \text{Import}}{GDP} * 100$	WDI

Bank Database (WDI). Annual data series were used and the data spanned the period of 1981 to 2019.

Empirical Findings**Descriptive Statistics****Table 1: Descriptive Statistics for the Utilised Variables**

	FINDEV	MCAP	TPSC	FINTEG (FDI,	INF (%)	INT (%)	TOPEN
	V	(N'Billion)	(%GDP)	% GDP)			
Mean	0.183	5584.306	9.210	1.553	19.146	13.247	47.493
Median	0.176	472.300	8.169	1.159	12.555	13.500	44.302
Maximum	0.273	25890.220	19.626	5.791	72.836	26.000	92.464
Minimum	0.119	5.000	4.958	0.257	5.388	6.000	31.229
Std. Dev.	0.037	7881.274	3.556	1.234	17.063	3.877	13.187
Skewness	0.255	1.136	1.195	1.738	1.784	0.789	1.464
Kurtosis	2.450	2.869	4.000	6.070	4.998	4.689	5.160
Jarque-Bera	0.914	8.411	10.902	34.957	27.163	8.684	21.507
Probability	0.633	0.015	0.004	0.000	0.000	0.013	0.000
Observations	39	39	39	39	39	39	39

Source: Author's Compilation

As shown in Table 1, the average financial development index score for Nigeria was found to be 0.183 in an index ranging from 0 to 1 where 1 represents the highest financial development index and 0 being the lowest, the average score obtained shows that Nigeria's financial sector is highly underdeveloped. The highest index recorded within the periods considered was 0.27, indicating that the country's financial sector was underdeveloped throughout the periods considered. The stock market capitalisation was about N5.6 trillion while the value ranged between N5 billion and N25.9 trillion in the period considered in the study. The total private sector was found to be about 9% of Gross Domestic Value on average while the least private sector recorded in the study period was about 5% of GDP while the highest was about 20% of GDP. Financial integration measured as the ratio of Foreign Direct Investment to GDP was found to be approximately 1.6, implying the size of FDI relative to overall economic size is small, the minimum value recorded within the periods was 0.257 while the highest value recorded was about 5.8%.

Inflation rate was double-digit on average being about 19%, it peaked 72% within the period while the least recorded was approximately 5.4%. Interest rate, measured as the monetary policy rate, was about 13.2%, below the

inflation rate. This implies that on average the real return on investment is negative over the study periods. The highest interest rate recorded was 26% while the least was 6%. The country was found to be open to the tune of about half the size of its economy in the period considered, with average trade openness found to be 47.5%, the value ranged between 31.2% and 92.5% in the periods. The skewness statistics reported for all the utilised series imply that the series of the respective variables are positively skewed, implying that the series have right-tailed distribution. The Kurtosis stats also indicated that all the selected variables do not have normal distribution; while Findev and MCAP have platykurtic series, the rest of the variables have leptokurtic series. Leptokurtic series tends to have fatter tails, suggesting that they have tendencies of having outliers in their distribution.

With respect to whether the series in question are normally distributed, the Jarque Berra statistics shows that FINDEV has a normally distributed series, as the null hypothesis of the test that the series in question are normally distributed cannot be rejected at the 5% significance level. While for the rest of the variables, the converse was discovered, as the test statistic for the variables were found to be statistically significant at 5%; hence, the null

hypothesis of the test can be rejected at the chosen level of significance.

Unit Root Test

In order to avoid spurious outcome, the stationarity of sequenced essential must be scrutinised. This is done by conducting a unit root test on the series. Unit roots are non-stationary autoregressive time processes. The existence of unit root in series implies the sequence in questions is non-stationary, while the absence implies a stationary or trend stationary series (Herranz, 2017). Also, as a prerequisite for the Non-Linear Autoregressive Lag Model utilised in the study, the series must integrate order zero or one at most. To conduct the unit root test, the Augmented Dickey-Fuller

Unit Root test was used. The test hypothesises that the sequence in question has a unit root. The result of the test is presented in Table 2.

As shown in Table 2, all the series in consideration are found to be stationary. As the null hypothesis of the test is rejected for each of the variables at Level i.e. without differencing or de-trending the series. As shown in Table 2, the test statistics for each of the variables across the three models, i.e. in the model without trend and intercept, with intercept alone and with trend and intercept are greater than the critical values at 5% which are -1.950, -2.948 and -3.544 respectively. This implies the series fit the adopted model and estimation procedures as they are all found to be stationary at level.

Table 2: Augmented Dickey Fuller Unit Root Test Results

	Level		
	None	Intercept	Trend and Intercept
FDINDEX	-5.975***	-5.183***	-5.202***
MCAP	-3.229***	-4.696***	-4.684***
TPSC	-5.553***	-5.658***	-5.564***
FINTEG	-9.655***	-9.535***	-9.752***
INF	-1.896*	-2.886*	-3.97**
INT	-7.548***	-7.47***	-7.452***
TOPENESS	-6.835***	-6.797***	-6.866***
Critical Values			
1%	-2.629	-3.632	-4.243
5%	-1.950	-2.948	-3.544
10%	-1.611	-2.613	-3.205

Source: Author's Compilation

Estimation

Having established the suitability of the employed series in terms of their stationery property and the presence of a genuine relationship among some of the variables, the study proceeds to identify the causal relationship among the variables. Most importantly, to examine the asymmetry impact of financial integration on financial development in Nigeria. Other variables such as inflation rate, interest rate and trade openness

were considered as control variables. All the variables except inflation rate were log-transformed for ease of interpretation and to filter out the influence outliers to some extent. The results are presented in Table 3 for the respective models.

Concerning the first model where the financial development index was used as a measure of financial development, only the long-run relationship between the variables was found to

be statistically significant at the chosen level of significance (5%). Specifically, the table revealed that the relationship between financial integration and financial development is only statistically significant in the long run. It is shown that an increase in financial integration has a negative (-0.12) effect on financial development, i.e. a 1% positive change in Nigeria's financial integration with the rest of the world, financial development decreases by 0.11%; meanwhile, the impact of the decrease in financial integration on financial development is positive, i.e. when financial integration of the country with the rest of other nation is declining by 1%, financial development increases by 0.11%.

The constant term depicts the unconditional average change of the financial development index in the short run. It shows that the financial development index average unconditional change over the year is about 14%. The error correction coefficient, which shows the speed of adjustment from the short-run to the equilibrium state, reveals that the speed of adjustment is quick as the short-run deviation is adjusted completely in the first year.

However, concerning the market capitalisation, no significant relationship was found between it and financial integration both the long and short run. Only interest rate was noticed to be having a non-contemporaneous short-run impact on market capitalisation in the short-run. The intercept shows that market

capitalisation changed unconditionally at about 21% on average.

Meanwhile, a fairly (at 10% significance level) significant long-run relationship was found between the total private sector as a measure of financial development and financial integration. It was discovered there exist a direct relationship between both, i.e. when financial integration increases, financial development increases and vice versa. Specifically, it was found that when financial integration increases by 1%, financial development (total private-sector loan) increases by about 0.14% and vice-versa. The constant term shows that the entire private sector increases on average by about 11% unconditionally. The ECC also depicts that the speed of adjustment is about 48%, implying that it takes approximately two years for short-run disequilibrium to be fully adjusted.

In terms of the model summary, the adjusted R-Squared for each model ranged between approximately 0.5 and 0.68, implying that between 50% and 68% of the variations in each of the explanatory variables considered is described by the selected explanatory proxies. The F-stat for each models also shows that models are statistically significant, meaning that at least one of the explanatory variables considered in each model explains the corresponding dependent variable. The DW stats also reveal the absence of first-order serial correlation in estimated models.

Table 3: NARDL Estimation Results

	Financial Development Index	Market Capitalization	Total Private Sector Credit
	Error Correction Model		
C	0.137*** [4.436]	0.209*** [3.483]	0.111*** [3.181]
D(MCAP(-1))		-1.152*** [-4.107]	
D(FINTEG_POS)			0.036 [0.907]
D(FINTEG_NEG)	-0.030 [-1.461]		
D(INF)			-0.005*** [-2.812]
D(INT)		-0.010 [-0.064]	
D(INT(-1))		0.389*** [2.883]	
D(TOPEN)	0.019 [0.321]		-0.156 [-1.556]
CoIntEq(-1)*	-0.957 [-6.282]	-1.152*** [-4.724]	-0.481*** [-7.271]
Long-run Equation			
FINTEG_POS	-0.118** [-2.714]	-0.024 [-0.356]	0.136* [1.793]
FINTEG_NEG	-0.112** [-2.697]	-0.023 [-0.348]	0.141* [1.887]
INF	-0.0003 [-0.370]	0.004 [1.501]	-0.0002 [-0.083]
INT	-0.022 [-0.290]	-0.638 [-1.501]	-0.098 [-0.766]
TOPEN	0.210 [1.445]	0.183 [0.739]	0.201 [0.643]
Adj-R-Squared	0.676	0.497	0.645
F-Stat	25.328**	9.637***	16.873***
DW	2.179	2.021	2.075

***, ** & * imply significance at 1%, 5% and 10% level of significance respectively.

Post Estimation

To validate the reliability of the various estimations, certain diagnostic tests must be conducted; these diagnostic tests examine if various classical assumptions of the least square estimation method are fulfilled. These assumptions include normality of the distribution of the residuals, assumption about the absence of serial correlation in the residuals, assumption about the constant variance of the residuals, as well as an assumption about the absence of model misspecification or omitted variable bias. The JarqueBera stat, Breusch-

Godfrey serial correlation test, Arch-LM test, and RAMSEY reset tests were used to validate the stated assumptions, respectively. Each of the tests hypothesises that the respective assumption is fulfilled.

As shown in Table 4, the null hypothesis for each test cannot be rejected for each model at a 5% level of significance, implying that all the considered Ordinary Least Square assumptions are fulfilled. Hence, the estimates are declared suitable for policy recommendations.

Table 4: Diagnostic Tests Results

Statistics	Financial Development	Market Capitalization	Total Private Sector Credit
Jarque-Berra	2.880 [0.236]	1.096 [0.578]	1.342 [0.511]
Breusch-LM	1.365 [0.273]	0.055 [0.947]	0.116 [0.891]
ARCH	0.738 [0.396]	1.721 [0.199]	0.740 [0.396]
RAMSEY RESET	0.901 [0.376]	1.076 [0.580]	1.351 [0.189]

Source: Author's Compilation

Conclusion

Based on the study's empirical findings, it can be concluded that the nature of the relationship existing between financial integration and financial development in terms of whether it is symmetric or not depends on the measure of financial development being considered. When financial development is considered in terms of the total credit given to the private sector, the relationship is direct and symmetric. However, when financial development is looked at in a much broader scope as determined by the International Monetary Fund (IMF), which covers the depth in terms of liquidity and size, accessibility in terms of how convenient it is for financial services to be assessed by individuals and business entities, and efficiency in terms of the relative ease at which financial institutions can provide their services at low cost while making sustainable revenue and level of activities of the capital market, the relationship is asymmetric and inverse, i.e. increase in financial integration worsens financial development and decrease in financial integration enhances financial development.

As a result, it is recommended that monetary authorities pay attention to economic specifics in making decisions aimed at expanding or contracting Nigeria's financial integration with the rest of the world to generate an optimal outcome. Meanwhile, given that the IMF measure of financial development is all-encompassing, it is recommended that the policymakers put in place policies that minimise the country's financial exposure to

the global economy as it appears the country is more vulnerable to external shocks than it benefits from the integration.

References

- Akintola, A.A., Oji-Okoro, I. & Itodo, I.A. (2020). Financial sector development and economic
- Aner, C. (2010) What is inflation? *Finance and Development*.
<https://www.imf.org/external/pubs/ft/fandd/2010/03/pdf/basics.pdf>
- Antzoulatos, A., Tsoumas, C. & Kyriazis, D. (2008). Financial Development and Asymmetric Information. *SSRN Electronic Journal*. 10.2139/ssrn.1100032.
- Arestis, P., Chortareas, G., & Magkonis, G. (2014). The financial development and growth
- Ashraf, B. N. (2018). Do trade and financial openness matter for financial development Bank-level evidence from emerging market economies. *Research in International Business and Finance*, 44(C), 434-458.
- Asongu, S. A., & De Moor, L. D. (2016). Financial globalization dynamic thresholds for financial development: Evidence from Africa. *European Journal of Development Research*, 29(1), 192-212.
- Aziakpono, M. J. (2008). *The depth of financial integration and its effects on financial development and economic*

- performance of the Southern African customs union countries.* [Ph.D. Thesis], Department of Economics, [University of Free State], South Africa.
- Aziakpono, M. J. (2011). Financial development and economic growth: Theory and a survey of evidence. *Journal for Studies in Economics and Econometrics*, 35(1): 15-43.
- Balke, N.S. & Fomby, T.B. (1997). Threshold cointegration. *International Economic Review*, 38 (3), 627-645.
- Baltagi, B. H., Demetriades, P. O., & Law, S. H. (2009). Financial development and openness: evidence from panel data. *Journal of Development Economics*, 89(2), 285-296.
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Journal of Financial Economics*, 58(1-2), 261-300
- Bonfiglioli, A. (2008). Financial integration, productivity and capital accumulation, *Journal of International Economics*, 76(2): 337-55.
- Bussiere, M., Fratzscher, M. & Muller, G. (2004). *Current account dynamics in OECD and EU acceding countries - An intertemporal approach,* ECB Working Paper, No. 311.
- Bussiere, M., Fratzscher, M. & Muller, G. (2004). *Current account dynamics in OECD and EU acceding countries - An intertemporal approach,* ECB Working Paper, No. 311.
- David, A.C., Mlachila, M., & Moheput, A. (2015). Does international integration matter for financial development in Africa? *Applied Economics*, 47(15), 1525-1549.
- De Gregorio, J. & Guidotti, P.E., (1995). Financial development and economic growth. *World development*, 23(3), 433-448.
- De Gregorio, J. (1998). *Financial integration, financial development and economic growth.* [online] URL: http://faculty.faua.duke.edu/charvey/spur/Gregorio_Financial_integration_financia1.pdf.
- Demirgüç-Kunt, A. & Detragiache, E. (1996). Financial liberalization and financial fragility, in Pleskovic, B. & Stiglitz, J. E. (Eds), *Annual World Bank conference on development economics 1998*, (Washington: World Bank)
- Dow, S.C., (1996). European monetary integration, endogenous credit creation and regional economic development. In *Wealth from diversity* (293-305). Springer, Boston, MA.
- Eatwell, J. (1996). *International financial liberalization: The impact on world development.* CEPA Working Paper Series 1. New York: New School for Social Research.
- Faure, A. P. (2014). Interest Rates 1: What are Interest Rates?. *SSRN Electronic Journal*. 10.2139/ssrn.2542083.
- Gersl, A. & Hermanek, J., (2007). Financial stability indicators: Advantages and disadvantages of their use in the assessment of financial system stability. *Occasional Publications- Chapters in Edited Volumes*, 69-79.
- Giannetti, M., Guiso, L., Jappelli, T., Padula, M. & Pagano, M. (2002). Financial market integration, corporate financing and economic growth, European Commission Directorate-General for economic and financial affairs. *Economic Paper No 179*.
- Gräbner, C., Heimberger, P., Kapeller, J. & Springholz, F. (2018). *Measuring Economic Openness: A review of existing measures and empirical practices.* ICAE Working Papers 84, Johannes Kepler University, Institute for Comprehensive Analysis of the Economy
- Granger, C. & Newbold, P. (1974). Spurious regressions in econometrics. *Journal of Econometrics*. 2 (2), 111-120.

- growth in Nigeria: An empirical re-examination. *Economic and Financial Review*, 58(3), 59-84.
- Hauner, D., (2009). Public debt and financial development. *Journal of development economics*, 88(1), 171-183.
- Hauner, D., Prati, A., & Bircan, C. (2013). The interest group theory of financial development: evidence from regulation. *Journal of Banking and Finance*, 37(3), 895-906.
- Ianc, M.M.F. & Ciurlău, L., (2016). Advantages and disadvantages of Romania's transition to the Euro. *Ovidius University Annals, Economic Sciences Series*, 16(2), 99-103.
- Ibrahim, S. Farouq., & Zunaidah. S (2021). The effect of foreign direct investment uncertainty on financial development in Nigeria; An asymmetric approach. *Iran Journal of Management Studies*, 14(2), 383-399.
- Ingram, J.C. & Ingram, J.C., (1973). *The case for European monetary integration*. International Finance Section, Princeton University.
- International Monetary Fund (2016). *Introducing a new broad-based index of financial development*. IMF Working Paper Retrieved from <https://www.imf.org/external/pubs/ft/wp/2016/wp1605.pdf>
- International Monetary Fund (n.d). Financial Development Index Database. Retrieved from <https://data.imf.org/?sk=f8032e80-b36c-43b1-ac26-493c5b1cd33b>
- Jalilian, H. & Kirkpatrick, C., (2002). Financial development and poverty reduction in developing countries. *International journal of finance & economics*, 7(2), 97-108.
- Jalilian, H. & Kirkpatrick, C., (2005). Does financial development contribute to poverty reduction? *Journal of development studies*, 41(4), 636-656.
- Jauch, S. & Watzka, S., (2016). Financial development and income inequality: a panel data approach. *Empirical Economics*, 51(1), 291-314.
- Jehle, G. A. & Reny, P. J. (2001). *Advanced microeconomic theory*, 2nd edition. New York: Addison-Wesley.
- Kapetanios, G., Shin, Y. & Snell, A. (2006). Testing for cointegration in nonlinear smooth transition error correction models. *Econometric Theory*, 22(2), 279-303.
- Kappel, V., (2010). *The effects of financial development on income inequality and poverty*. CER-ETH-Center of Economic Research at ETH Zurich, Working Paper, (10/127).
- King, R., & Levine. R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics*, 108(3), 717-37.
- King, Robert & Levine, Ross. (1993). Finance and Growth: Schumpeter Might Be Right. *The Quarterly Journal of Economics*. 108. 717-37. 10.2307/2118406.
- Klein, M. W. (2005). *Capital account liberalization, institutional quality and economic growth: Theory and evidence*. Working Paper Series No 11112. Cambridge, MA: NBER.
- Klein, Michael & Olivei, Giovanni. (1999). *Capital account liberalization, financial depth and economic growth*. Federal Reserve Bank of Boston Working Paper.
- Kose, M. A., Prasad, E., Rogoff, K., & Wei, S. J. (2009). *Financial globalization: A reappraisal*. IMF Staff Papers, 56, (8-62).
- Kuznietsova, A. & Misiats, N., (2019). Advantages and disadvantages of the liberalization of foreign currency exchange arrangements in Ukraine. *World of finance*, 3(52), 136-146.
- Lane, P. R., & Milesi-Ferretti, G. M. (2017). *International Financial Integration in the Aftermath of the Global Financial Crisis*. IMF Working Paper 17/115.

- Law, S. H., & Singh, N. (2014). Does too much finance harm economic growth? *Journal of Banking and Finance*, 41(1), 36-44.
- Law, S.H. & Tan, H.B., (2009). The role of financial development on income inequality in Malaysia. *Journal of Economic Development*, 34(2), 153.
- Lee, C.C. & Chang, C.P., (2009). FDI, financial development, and economic growth: international evidence. *Journal of applied economics*, 12(2), 249-271.
- Levine, R. (2001). International financial liberalization and economic growth. *Review of International Economics*, 9(1), 688-701.
- MacKinnon, J. G. (2002). Bootstrap inference in econometrics. *Canadian Journal of Economics*, 35(4), 615-45.
- Menya, K., Nazlioglu, S., & Wolde-Rufael, Y. (2014). Financial development, trade openness and economic growth in African countries: New insights from a panel causality approach. *Economic Modelling*, 37, 386-94.
- nexus: A meta-analysis. *Journal of Economic Surveys*, 29(3) 549-565.
- Nor, N.H.H.M., Ripain, N. & Ahmad, N.W., (2015). *Financial development and FDI-growth nexus: Panel analysis in Proceedings of the 2nd International conference on management and muamalah (No. 2ndICoMM)*.
- Obstfeld, M. (2008). *International finance and growth in developing countries: what have we learned?* Working Paper, Commission on Growth and Development, World Bank, (No. 34), Washington DC.
- Odhiambo, N. M. (2008). Financial depth, savings and economic growth in Kenya: A dynamic causal linkage. *Economic Modelling*, 25(4), 704-13.
- Ogundipe, S.A., Fasola, I.O., & Ajayi, O.A (2021). Effect of Covid19 on the foreign direct investment (FDI) in the Nigerian economy. *International Journal of Scientific and Research Publication*, 19, 204-212.
- Osada, M. & Saito, M., (2010). Financial integration and economic growth: An empirical analysis using international panel data from 1974-2007. *Research and Statistics Department, Bank of Japan*, 22(6), 1-24.
- Ozkok, Z (2015). Financial openness and financial development: An analysis using indices. *International Review of Applied Economics*, 29(5), 620-649.
- Park, D. & Shin, K., (2017). Economic growth, financial development, and income inequality. *Emerging Markets Finance and Trade*, 53(12), 2794-2825.
- Pesaran, M.H., Shin Y. & Smith R.J., (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- Prasad, E., Kose, M.A. & Terrones, M. (2003) *Financial Integration and Macroeconomic Volatility*, IMF Staff Papers No. 50.
- Psaradakis, Z., Sola, M. & Spagnolo, F. (2004). On Markov error-correction models with an application to stock prices and dividends. *Journal of Applied Econometrics*, 19(1), 69-88.
- Rewilak, J., 2017. The role of financial development in poverty reduction. *Review of development finance*, 7(2), 169-176.
- Sahin, S. & Ege, I., (2015). Financial development and FDI in Greece and neighbouring countries: A panel data analysis. *Procedia Economics and Finance*, 24, 583-588.
- Stultz, R., (1999). Globalization, corporate finance and the cost of capital. *Journal of Applied Corporate Finance*, 12(3), 8-25.
- T.-H. Le, Kim, J., & Lee, M. (2017). Institutional quality, trade openness, and financial sector development in Asia: An empirical investigation.

- Emerging Markets Finance and Trade*,
52(5), 1047-1059
- UNCTAD. (2021). *The Impact of the COVID-19 Pandemic on Trade and Development: Transitioning to a New Normal*. Geneva: United Nations Conference on Trade and Development (UNCTAD).
- World Bank, (2017). *Global Financial Development Report: Global Banking*. Accessed on 10 April 2021
<https://www.worldbank.org/en/publication/gfdr>
- World Bank. (2007). *World Development Indicators*. Washington, DC: International Bank for Reconstruction and Development. The World Bank Press.

EFFECT OF ELECTRICITY SERVICE DELIVERY AND CUSTOMER SATISFACTION: EVIDENCE FROM ELECTRICITY CONSUMERS IN NASARAWA STATE, NIGERIA.

¹John, Blessing Abecan, ²Yakubu, Shammah, ³Tsaku, David Isaac

¹Department of Business Administration, Faculty of Administration, Nasarawa State University, Keffi. blessed4john@gmail.com 08133775187

^{2,3}Department of Business Administration and Management, College of Administration and Business Studies, Nasarawa State Polytechnic, Lafia. shammahyaks@gmail.com

Abstract

To supply consistent power for Nigeria's power development, sufficient power should be produced, communicated to all pieces of the nation, and productively circulated to Nigerian business firms and residents for business and individual utilization. The aim of this study is to research the connection between electricity service delivery and customer satisfaction of electricity consumers in Nasarawa State, Nigeria. The study adopted survey research design. Convenience sampling technique was used for this study. The research instrument used for the study was a well-structured five point likert square questionnaire. Research hypotheses were raised to guide the conduct of the study. Electricity service delivery was operationalized by adopting an instrument, which is based on Stakeholders Theory and consist of two dimensions, namely customer service and price. Cross sectional descriptive survey research design was adopted for the study and the hypothesis were tested using multiple regression to analyse the data collected from 526 of electricity users in the Nasarawa State, Nigeria. The discoveries affirm that customer service and price significantly affect customer's satisfaction in Nasarawa State Nigeria. The review inferred that Handling customers' grievances and ideas ensures' consumer satisfaction and expands customers support for a business firm. Organizations that set fair costs would grow their market inclusion and create more deals since they will hold their current customers and furthermore draw the consideration of contenders' customers to their products and services. The study suggested among others that power distribution firms ought to create more megawatts to give steady power supply to their various customers and give satisfactory facilities like transformers, switch box, shift gears, wire links, meters, and circuit breakers to supply standard power to their customers.

Keywords: Customer service, Price, Customer satisfaction.

INTRODUCTION

Steady power supply is a significant measure for a country's economic development. To supply steady power for Nigeria's economic development, sufficient power should be created, sent to all part of the country, and productively dispersed to Nigerian business firms and residents for business and individual

utilization (Sambo, Garba, Zarma and Gaji, 2010). Electricity power service providers must do all that they could within reach to fulfill their customers, and guarantee they set the best incentive for their money in order to encounter the numerical and financial growth their business desire as well as add to the country's growth and development economically (Oladejo, 2010). Satisfaction of customers is a

pivotal aspect of the objectives of any organization not minding the nature of its business operation. Consumer satisfaction can be accomplished and expanded in business associations via cautiously recognizing and understanding the necessities of the objective market and giving quality labor and products that will address and fulfill these issues undeniably, consequently increasing and sustaining relationships with the target market that will be favourable in the long run (Ibojo, Olawepo, and Akinruwa, 2013). Creating and maintaining satisfaction in customers is exceptionally essential for electricity generation and distribution firms' survival, growth, and expansion. This is so, because the actualization of other firms objectives is exceptionally focused fair and square on the satisfaction level derived by the customers (Ibojo, 2015). Building long-term relationship with customers is considered as a fundamental pre-essential for the progress of any organization. The success of an organization lies in its capacity to identify and satisfy the needs and wants of its customers from every now and then. Customer satisfaction is one of the most powerful weapons a firm can employ to gain an edge over today rivals in steadily expanding cutthroat climate. Every organization that plans to expand its market share must consistently distinguish the factors that enhance customer satisfaction and work on them as well identify and avoid those factors that hinder customer satisfaction (Khan, 2012).

In a bid to develop power dispersion in Nigeria, the privatization of the power sector became necessary, this took off in 2005 with the passage of the Power Reform Act, 2005. The then President Goodluck Jonathan's administration privatized the power sector to provide regular power supply in Nigeria. President Jonathan's organization viewed power supply as the foundation of its Transformation Agenda and hence sought after the privatization program relentlessly. This was in acknowledgment that in Nigeria's 100 years of presence, power supply has generally been a major challenge and to be sure a hindrance to the country's rapid economic

growth as well as a barrier to the social transformation of the Nigerian society. To work with the privatization of Nigeria's power sector, the Federal Government isolated the then Power Holding Company of Nigeria (PHCN) into six generation and eleven distribution firms and sold them independently to private financial investors on November 31, 2013 (Bello, 2013; Njoku, 2016). The power generation firms consist of Afam Power Plc., Afam Rivers State, Egbin Power Plc., Egbin Ikorodu, Kainji Hydro Electric Plc., New Bussa, Niger State, Sapele Power Plc, Sapele, Delta State, Shiroro Hydro Electric Plc., Shiroro, Niger State, and Ughelli Power Plc, Ughelli, Delta State while the power circulation firms incorporate Abuja Electricity Distribution Company Plc, Benin Electricity Distribution Company Plc, Eko Electricity Distribution Company Plc, Enugu Electricity Distribution Company Plc, Ibadan Electricity Distribution Company Plc, Ikeja Electricity Distribution Company Plc, Jos Electricity Distribution Company Plc, Kano Electricity Distribution Plc, Kaduna Electricity Distribution Plc, Port Harcourt Electricity Distribution Plc, and Yola Electricity Distribution Plc (Bello, 2013). Arrangement of steady, reasonable and proficient power is extremely indispensable for economic growth, thriving, public safety as well as the fast speed of industrialization in any country. Any country that is longing to create and progress quickly won't overlook its power sector at its own source of peril. One fundamental shortage in the Nigerian economy is insufficient power supply. Power supply has been epileptic to such an extent that the Nigerian economy has been portrayed as a generator economy (Ekpo, 2009). The Manufacturers Association of Nigeria (MAN) and the National Association of Small-Scale Industries (NASSI) communicated their degree of disappointment with power specialist organizations in Nigeria by assessing that their members spend an average of around Two billion naira (₦2,000,000,000) an equivalent of about Twelve million dollars (\$12,000,000) week by week on self power generation (Iseolorunkanmi, 2014).

Statement of the Problem

In spite of the privatization of the power sector in Nigeria to lay out a serious market planned to further develop the management and efficiency, and give dependable power supply and superb service, Electricity Distribution Company (DisCos) customers are still discontent with the help given by the company. Customers still experience erratic power supply, poor billing system, nonchalant attitude of DisCos officials, disputed billing, spoilt transformers and poles leaving some communities in total blackout and are still served with monthly bills, delay in the provision of pre-paid meters, and poor handling of customers' complaints and suggestions (Usman, 2013), these inter alia has forced many electricity consumers to seek an alternative source of power in form of investing in generator set, inverter, solar energy etc.

Several studies were conducted on electricity supply in Nigeria, famous among them is the study conducted by Odunlami & Sokefun (2018) of Electricity Service Delivery and Customer Satisfaction in Lagos State, Nigeria, but non to the researchers' knowledge exists on electricity service delivery and customer satisfaction in Nasarawa State, Nigeria. This study filled this gap in knowledge by investigating the effect of electricity service delivery on customer satisfaction in Nasarawa State. The specific objectives include: (a) to examine whether there is a relationship between customer service and customer satisfaction and (b) to ascertain the relationship between price and customer satisfaction.

Research Hypotheses

In line with the Objective, the following hypotheses were drawn to guide the thrust of this study:

Ho₁ Customer service has no significant effect on Customer Satisfaction in Nasarawa State.

Ho₂ Price has no significant effect on

Customer Satisfaction in Nasarawa State.

Review of Related Literature

Power generation, transmission, and distribution are the three processes of delivering electricity to consumers in residential, industrial, and commercial areas (Sule, 2010; Kadiri, Alimi & Alabi, 2015). Corruption and misappropriation of funds in the power sector, defacement of oil and gas pipelines and exploration facilities, seizing of foreign and native experts that man oil and gas facilities in Nigeria, government inability to partner with multinational oil companies to fully utilize gas, poorly planned maintenance culture, consumers indebtedness which has affect electricity generation, transmission, as well as distribution in Nigeria (Sule, 2010). Power can be created in hydro, thermal, wind, and sun oriented producing stations. There are two strategies for creating power in particular, conventional technique and non-regular strategy. The conventional strategy utilizes central players like petroleum motor, diesel motor, steam turbine, while the non-conventional technique utilizes magneto hydro dynamic (MHD) generators, sunlight based cells, power devices, wind, and thermoelectric generators. Most power generators are three stage-ac generators known as coordinated generators or alternators. They use pivoting rectifiers called brushless excitation system to keep up with the generator voltage and control the responsive power stream at 30KV, 50Mw to 1500 Mw limits (Hadi, 2004).

Customer satisfaction refers to customers' evaluation of the experience that was encountered after the consumption of products and services in terms of whether the products and services deliver the benefits expected. Satisfaction of customers' needs is an integral part of any business enterprise because satisfied customers help the firm to generate the revenue needed to carry out its business operations, maximize profit, survive, and gain an edge over its competitors in the market (Hanif, Hafeez & Riaz, 2010). Building and keeping up with

productive client relationship effectively in any business association relies upon the capacity of such firm to fulfill the necessities of its clients (Lonial and Zaim, 2000).

Customer Service

Customer service refers to the activities set aside by a firm to help customers during and after their consumption experience as well as lift the degree of customer satisfaction (Kim, Park & Jeong, 2004). Modest, amicable and considerate attitude of workers particularly those in the customer care unit in any organization create a positive impact on the personalities of customers which thus prompts customers satisfaction (Soderlund and Rosengren, 2008). Superior customer service calls for equal treatment of all customers. In handling customers' complaints, negative emotions of customers such as anger, anxiety, and hatred must be taken care of before any solution to their problems is given. Consequently, it is vital to treat customers well by recognizing their singular explicit solicitations/suggestions and taking more time to meet them fittingly (Michel, Bowen, and Johnston, 2009). Planning an inbuilt restorative process for taking care of customers objections builds the degree of customer's satisfaction and thereby enable organizations to retain their customers (Havaladar, Alexander & Dash, 2012).

Price

Price is the cash customers pay to obtain an item or service. Organizations generate income from the cost of goods and services which in turn maximizes their profit and market share (Lamb, Hair & McDaniel, 2008). Firms will draw in and hold their customers by creating not only quality goods and services but also charging fair prices for them (Kollman, 2000). Organizations can choose any of these evaluating procedures specifically cost skimming, penetration pricing, and status quo pricing when fixing the price of products and services. Price skimming permits company's to charge high prices for products that are newly introduced and this is backed by aggressive promotional activities to

communicate the high benefit the product delivers despite the high prices. Penetration pricing involves charging a relatively low price for a product in order to reach the mass market. Status quo pricing involves charging a price that is similar or very close to competitors' price (Kotler & Armstrong, 2001).

Customer satisfaction will be brought to reality and enhanced from time to time when a firm provides superior quality service that will meet the needs of customers far above its competitors. Charging a fair price for products and services involves a careful evaluation of the price customers are willing and able to purchase the products along with the firm's profit objective. An organization that desires to make maximum profit puts into consideration the price customers are willing to pay for its product along with its own interests and fix a price that will attract customers to its products. This, in turn, will help the firm to serve the mass market and gain the largest market share in the industry in which it operates. Customers will stick more to an organization and the services it renders when the organization put in place adequate programmes/activities to handle customers' complaints and suggestions effectively.

Empirical Review

Asghar, Mohammad, Mirdamadi, and Nawaser (2011) conducted a study on the effect of customers service and product on customer satisfaction and loyalty in automotive industry on Indian 315 customers. The hypotheses were tested using Regression and ANOVA. The finding revealed that customer service has a significant influence on customer satisfaction in Indian automotive industry. This is not far from the findings of Ngo and Nguyen (2016), they found that service quality is an antecedent of customer satisfaction in Vietnamese retail banking sector.

Ogunnaike, Salau, Sholarin, and Taiye (2014) in their study found that customer service has an insignificant effect on customer satisfaction and customer retention among Nigerian telecom subscribers (academic staff and students) in

Covenant University, Ota, Ogun State.

Rahman, Haque, and Ahmad (2011) conducted a study of 400 mobile telecom customers from major cities in Malaysia. The objective of the study was to examine the perception of customers towards mobile operators and to measure the participant perception of operators in terms of service quality, brand image and price. Convenience sampling technique was employed in selecting 5 cities. The Analysis of data were conducted using multiple regressions. This study found that network quality is one of the significant elements in overall service quality which leads to customers satisfaction. In addition to service quality, the study found that price plays a pivotal role in the choice criteria for mobile telephone operators in Malaysia.

Serenko and Turel (2006) studied the effect of perceived quality and value on customer satisfaction with mobiles services in Canada and reported that perceived quality and perceived value are the key element affecting satisfaction with mobile services. Customer care is accounted for to be contrarily connected with consumer satisfaction, and that implies that a more fulfilled customer is less inclined to complain. Hence, they concluded that customer satisfaction is the only single measure that better capture the range of services, prices and quality and more so, this measure is an important performance indicator useful for both regulators and mobile service providers.

The various empirical studies reviewed by the researcher were carried out on the relationship and impact of service quality, price, and customer service on customer satisfaction in industries like telecommunication, education, airline, hospitality, and automotive industry. Most of these studies were carried outside Nigeria. This study filled this gap in knowledge by investigating the relationship between electricity service delivery and customer satisfaction among electricity consumers in Nasarawa State, Nigeria. The study also examined the relationship of each of the

independent variable (customer service and price) with the dependent variable (customer satisfaction).

Theoretical Review

Stakeholder theory posits that managers should put into consideration the interests of all its stakeholders when making decisions to maximize value. An organization will boost an incentive for itself and the general public at large successfully when it cautiously considers the interests of its partners alongside its own interest. These partners incorporate employees, customers, owners and financial backers, and the communities (Jensen, 2001). Customers need fair costs, quality service and products, and cordial and courteous service. It is, subsequently, the obligation of the business to coordinate and accommodate the necessities of its partners alongside the requirements of the organization to work effectively (Enikanselu, 2008).

This study is anchored on stakeholder theory. This is on the grounds that an organization will fulfill and hold its customers effectively when it can find some kind of harmony between addressing the requirements of the organization and the necessities of its partners and not fulfilling the need of one gathering at the expense of another. An organization that take more time to fulfill the requirements of its partners (customers) by providing high quality services than competitors, setting affordable prices for the services it provides, and providing good customer service that will be of help to customers during and after their consumption experience in order for them to get the desired value from the products purchased will most definitely satisfy its own needs as these satisfied customers will keep patronizing the services of such organization as well as spreading positive word of mouth to their friends, relations, and other members of the public to patronize such organization.

Research Design

The research design used in this study is survey research. Primary data were collected using a well-structured 5 points Likert scale questionnaire. The base population is 2,523, 395 million across Nasarawa State. We chose cities from Nasarawa States comprising of Lafia, Akwanga and Keffi. Purposive sampling was used in selecting the sample size of 650. The sample size is estimated at 650 Electricity users, out of which 526 were correctly completed and returned, which represent 85% of the targeted respondents. Descriptive statistics was used to analysed the data and hypotheses were tested using multiple regression analysis. We regressed each of the variables against Customer Satisfaction using one of the main statistical tools available, STATA. The research instrument adopted for this study was a structured questionnaire. The questionnaire enabled the respondents to understand the purpose of the research study. It also enabled the researcher to obtain information from the respondents easily. The questionnaire comprised of two major sections: Section A (demographic profile of the respondent) and Section B (construct items). The questionnaire comprised of sixteen (16) major construct items.

However, modified Likert's interval rating scale with options ranging from strongly agree, agree, neutral, disagree, and strongly disagree were used as the response patterns on the construct items (customer satisfaction, customer service and price). The questionnaire of Adeleke and Aminu (2012) was adapted for this study, for all its construct items. Descriptive statistics (frequency distribution tables and simple percentage) and Pearson Product Moment correlation were used for empirical investigation of the study's interest.

Data Presentation and Analysis

The data collected for this study are presented in this section using summary statistics to describe the characteristics of the data. The summary statistics of the variables, as shown in table 1.9.2 show the dependent variable, customer satisfaction has mean values of 2.06 which shows that most of the respondents agreed with the questions. The minimum value is 1 which is the code for strongly agreed and the maximum value is 5, the code for strongly disagreed. For the independent variables, customer service (CUS. SERV) and price (PRICE) have an approximate average value of 2, which is a code for agreed.

Table 1.9.1: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
CUS. SERV	526	1.805068	.3965349	1	2
PRICE	526	2.064327	.8111493	1	4

Source: STATA13 output

Reliability Test and Correlation Matrix

To test for the internally consistent of the data, we did a reliability test using Cronbach Alpha. The test results are presented in table 1.9.1. The

test for the internally consistent of the questions that made up Customer service shows that they are internally consistent as the alpha value of 77% is greater than 64%.

Table 1.9.2: Reliability test for the Independent Variables

Item	Obs	Sign	item-test COIT.	item-rest COIT.	interitemcov.	Alpha	Label
CUS. SERV	526	+	0.4166	0.3017	.26344	0.7657	CUS. SERV
PRICE	526	+	0.8736	0.7817	.1463538	0.6354	PRICE
Test scale					.1990137	0.7573	Mean(unstandardized items)

Source: STATA13 output

That of price shows results as the alpha scores is 64%. The question for customer satisfaction has an alpha value of 97% which shows that they are internally consistent.

The overall alpha score for all the two independent variables as shown in table 1.9.2 is 76% which shows that the questions used in obtaining the data are internally consistent and

thus, they are reliable to use in testing the hypotheses of the study.

Customer Service and Customer Satisfaction

Multiple regression was conducted to examine whether Customer Service has significant effect on customer satisfaction in Nasarawa State of Nigeria and the result is shown in table 4.4.

Table 1.9.3: Regression results for hypothesis one

VARIABLE	COEFFICIENT	T	P> t
CUS. SERV	.2125	14.13	0.000

Source: STATA13 output

The overall model was significant as F-stat = 365.40, prob = 0.000, suggesting that the model is fit to measure the relationship between internet customer service and customer satisfaction. The regression coefficient for the variables was positive and significant, as $\beta = .2125$, $p = 0.000$ indicating that internet availability has a positive effect on customer satisfaction. This finding is significant at 5% as the p-value is 0.000. Based on this, we do not have sufficient reasons to accept the null hypothesis and thus, we conclude that customer service has a significant effect on customer's satisfaction.

The R^2 for the regression is 81% which shows that customer service account for about 81% of customer satisfaction, the remaining 19% is accounted by other factors. This implies that steps taken by a firm to pay attention and handle customers' complaints and suggestions may bring about a high level of customer

satisfaction. This is because customers can decide to switch to competitors in order to compare the services rendered by the company with those of its competitors and see which of the company that renders superior customer service that meets or exceeds their expectations. The result is in tandem with the findings of Rahman, Haque, and Ahmad (2011) which showed that customer service has a significant influence on customer satisfaction. It also contradicts the study of Serenko and Turel (2006) which indicated that customer service has an insignificant effect on customer satisfaction.

Price and Customers Satisfaction

Multiple regressions was conducted to examine whether price has significant effect on customer satisfaction in Nasarawa State of Nigeria and the result is shown in table 4.5.

Table 1.9.4: Regression results for hypothesis two

VARIABLE	COEFFICIENT	T	P> t
PRICE	.6526	18.43	0.000

Source: STATA13 output

The overall model was significant as F-stat = 365.40, prob = 0.000, suggesting that the model

is fit to measure the relationship between price and customers satisfaction. The regression

coefficient for the variables was positive and significant, as $\beta = .6526$, $p = 0.000$ indicating that price has a positive effect on customer satisfaction. This finding is significant at 5% as the p-value is 0.000. Based on this, we do not have sufficient reasons to accept the null hypothesis and thus, we conclude that price has a significant effect on customer's satisfaction.

The R^2 for the regression is 81% which shows that price accounts for about 81% of customers, the remaining 19% is accounted by other factors. This implies that organizations that set fair prices for the services they render will attract and retain their customers as these customers become satisfied with the organizations' services and make repeat purchases. This, in turn, will help the organization to increase its market coverage and gain the largest market share than its competitors. This result is in congruence with the study of Asghar, Mohammad, Mirdamadi, and Nawaser (2011) which showed that price fairness has a significant effect on customer satisfaction.

Conclusion and Recommendations

From the findings of the study, it was concluded that Customer service provided by business firms lead customers to keep making repeat purchases of such firms' products and services. Dealing with customers' grumblings and suggestions guarantees customer satisfaction and increased customer patronage for a business firm. The price charged by an organization influence customers' purchase decision to patronize its products and stick to such organization's products and services. Organizations that set fair costs will grow their market coverage and create more sales because they will retain their existing customers and also draw the attention of competitors' customers to their products and services.

From the findings of the study, the study recommended that Electricity distribution firms should improve more on Customer service which can be improve in electricity distribution

firms through the provision of quick and accurate response to customers' grievances and suggestions. Provision of quick and accurate response to customers' complaints and suggestions will go a long way in meeting and satisfying the needs of customers as well as retaining them for improved business performance. Fair prices should be charged to customers based on what they consume during a specific period of time. Prepaid meters should be provided to all customers in order to ensure that customers are billed appropriately based on their consumption rate. This will bring about rapid market expansion and increased market share.

REFERENCES

- Adeleke, A., & Aminu, S. A. (2012). The determinants of customer loyalty in Nigeria's GSM market. *International Journal of Business and Social Sciences*, 3(14), 209-222.
- Aigbedo, H., & Parameswaran, R. (2004). Importance-performance analysis for improving quality of campus food service. *International Journal of Quality and Reliability Management*, 21, 876-896.
- Agyapong, G. K. Q. (2011). The effect of service quality on customer satisfaction in the utility industry: A case of Vodafone Ghana. *International Journal of Business and Management*, 6(5), 203-210.
- Anyaka, B. O., & Edokobi, C. J. (2014). The negative impact of high electricity tariff on consumers/end-users in some developing countries. *IOSR Journal of Electronics and Electrical Engineering*, 9(3), 27-34.
- Asghar, A. J., Mohammad, A. H. G., Mirdamadi, S. A., & Nawaser, K. (2011). The effects of customer service and product quality on customer satisfaction and loyalty. *International Journal of Humanities and Social Sciences*, 1(7), 253-260.

- Babatunde, M. A., & Shuaibu, M. I. (2009). The demand for residential electricity in Nigeria: A bound testing approach. Retrieved on November 17, 2017 from <http://www.africametrics.org/documents>
- Barringer, B. R., & Harrison, J. S. (2000). Walking a tightrope: Creating value through interorganizational relationships. *Journal of Management*, 26(3), 367-403.
- Bassey, F. O. (2014). The effect of perceived price fairness on customer satisfaction and loyalty (Master's Dissertation, Eastern Mediterranean University, Gazimagusa, North Cyprus). Retrieved on July 31, 2018, from <http://www.irep.emu.edu.tr>
- *****Bello, S. L. (2013). Evaluating the methodology of setting electricity prices in Nigeria. *International Association for Energy Economics*, 31-32.
- Bharwana, T. K., Bashir, M., & Moshin, M. (2013). Impact of service quality on customer satisfaction: A study from service sector especially private colleges of Faisalabad, Punjab, Pakistan. *International Journal of Scientific and Research Publications*, 3(5), 1-7.
- Chang, M., Jang, H., & Kim, D. (2017). The relationship between the efficiency, service quality and customer satisfaction for state-owned commercial banks in China. *Sustainability*, 9, 1-15.
- Chen, J., Chen, C. N., & Chen, K. S. (2001). The integrated evaluation model for administration quality based on service time. *Managing Service Quality Journal*, 11(5), 342-349.
- Ekpo, A. H. (2009). The global economic crisis and the crisis in the Nigerian economy. Presidential address Delivered at the 50th Conference of the Nigerian Economic Society, Abuja, Nigeria.
- Enyonam, A. A. (2011). Effect of customer service on customer satisfaction: A case study of Fidelity Bank, Adum, Kumasi (Master's Dissertation, Institute of Distance Learning, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana). Retrieved on November 2, 2017 from <https://www.ir.knust.edu.gh/bitstream>.
- Enikanselu, S.A. (2008). Introduction to business. Lagos: Olas Ventures.
- Glasow, P. A. (2005). Fundamentals of survey research methodology. United States of America: Mitre Publishers.
- Hadi, S. (2004). Power system analysis. (5th ed.). New Delhi: Tata McGraw-Hill Company.
- Hanif, M., Hafeez, S., & Riaz, A. (2010). Factors affecting customer satisfaction. *International Research Journal of Finance and Economics*, 60, 44-52.
- Havaladar, K. K., Alexander, J., & Dash, M. (2012). Basic customer service and its impact on customer retention. Retrieved from <https://www.marketing-trends.congress.com>. Retrieved from October 31, 2017.
- Ibojo, B. O., Olawepo, G. T., & Akinruwa, T. E. (2013). Effect of customer satisfaction on organizational profitability, using an organization in the food and beverage industry. *International Journal of Management Sciences*, 1(5), 159-166.
- Ibojo, B. O. (2015). Impact of customer satisfaction on customer retention: A case study of a reputable bank in Oyo, Oyo State, Nigeria. *International Journal of Managerial Studies and Research*, 3(2), 42-53.
- IseOlorunkanmi, O. J. (2014). Issues and challenges in the privatized sector in Nigeria. *Journal of Sustainable Development Studies*, 6(1), 161-174.
- Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate

- objective function. *European Financial Management*, 7(3), 297-317.
- Kadiri, K. O., Alimi, M. O., & Alabi, A. O. (2015). Ways of achieving stable and uninterrupted power supply of electricity in Nigeria. *British Journal of Applied Science and Technology*, 10(5), 1-15.
- Khan, I. (2012). Impact of customers' satisfaction and customer retention on customer loyalty. *International Journal of Scientific and Technology Research*, 1(2), 106-110.
- Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunications Policy*, 28(2), 145-159.
- Kollmann, T. (2000). The price/acceptance function: Perspectives of a pricing policy in European telecommunication markets. *European Journal of Innovation Management*, 3(1), 7-15.
- Kotler, P. & Armstrong, G. (2001). Principles of marketing. (4th ed.). New Jersey: Pearson Education Inc.
- Lamb, C. W., Hair, J. F., & McDaniel, C. (2008). Marketing 9e. Canada: Thomas South Western Inc.
- Lonial, S. C. & Zaim, S. (2000). Investigating of product attributes and their effect on overall satisfaction. Retrieved from www.opf.slu.cz/wr/akce/turecko/pdf/Lonial.pdf. Retrieved Date: November 2, 2017.
- McIntyre, L. J. (1999). The practical skeptic: Core concepts in sociology. Mountain View, CA: Mayfield Publishing.
- Mahmud, A., Jusoff, K., & Hadijah, S. (2013). The effect of service quality and price on satisfaction and loyalty of customer of commercial flight service delivery. *World Applied Sciences Journal*, 23(3), 354-359.
- Michel, S., Bowen, D., & Johnston, R. (2009). Why service recovery fails. *Journal of Service Management*, 20(3), 253-273.
- Ngo, V. M. & Nguyen, H. H. (2016). The relationship between service quality, customer satisfaction, and customer loyalty: An investigation in Vietnamese retail banking sector. *Journal of Competitiveness*, 8(2), 103-116.
- Njoku, A. O. (2016). An examination of the challenges of power supply in Nigeria in post-privatization era, 2013-2016. *Asian Journal of Basic and Applied Sciences*, 3(1), 34- 44.
- Odunlami, S. A. & Sokefun, E. A. (2018). Electricity Service Delivery and Customer Satisfaction: Evidence from Electricity Consumers in Lagos State, Nigeria. *Crawford Journal of Business & Social Sciences (Cjbass)* 8(2) Pp 39-48
- Ogunnaike, O. O., Salau, O., Sholarin, A., & Taiye, T. B. (2014). Evaluation of customer service and retention: A comparative analysis of telecommunication service providers. *European Journal of Business and Social Sciences*, 3(8), 273-288.
- Ojo, O. (2010). The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria. *Broad Research in Accounting, Negotiation, and Distribution*, 1(1), 88-100.
- Oladejo, A. (2010). Customer satisfaction in business organizations: A case study of Prisma (A subsidiary of KPO). (Bachelor's Degree Project, Central Ostrobothnia University of Applied Sciences, Finland). Retrieved from <https://www.theseus.fi/bitstream/handle/>. Retrieved Date: October 30, 2017.
- Rubogora, F. (2017). Service quality and customer satisfaction in selected banks in Rwanda. *Journal of Business and Financial Affairs*, 6(1), 1-11.

- Saglick, E., Gulluce, A. C., Kaya, U., & Ozhan, C. K. (2014). Service quality and customer satisfaction relationship: A research in Erzurum Ataturk University Refectory. *American International Journal of Contemporary Research*, 4(1), 100-117.
- Sabir, R. I., Ghafoor, O., Hafeez, I., Akhtar, N., & Rehman, A. (2014). Factors affecting customer satisfaction in restaurants industry in Pakistan. *International Review of Management and Business Research*, 3(2), 869-876.
- Sambo, A. S., Garba, B., Zarma, I. H., & Gaji, M. (2010). Electricity generation and the present challenges in the Nigerian power sector. Retrieved on the October 29, 2017 from <https://www.researchgate.net/publication>
- Soderlund, M. & Rosengren, S. (2008). Revisiting the smiling service worker and customer satisfaction. *International Journal of Service Industry Management*, 19(5), 552-574.
- Sule, A. H. (2010). Major factors affecting electricity generation, transmission, and distribution in Nigeria. *International Journal of Engineering and Mathematical Intelligence*, 1(1 & 3), 159-164.
- Usman, A. (2013). Determinants of electricity consumers' satisfaction in selected electricity distribution zones in Nigeria: Implications for regulatory activities. *Journal of Asian Business Strategy*, 3(6), 103-124.
- Zubac, A., Hubbard, G., & Johnson, W. L. (2010). The resource-based view and value creation: A managerial perspective. *European Business Review*, 22(5), 518-538.

EFFECT OF WORKING CAPITAL MANAGEMENT ON THE PROFITABILITY OF LISTED INDUSTRIAL GOODS COMPANIES IN NIGERIA

¹Arumona Jonah. O. PhD, ²Oyewobi, Ifeoluwapo PhD, ³Idedekumoh Daniel O.

¹Department of Accounting, Bingham University, Karu, Nasarawa State,
E-mails: jonaharumona@yahoo.com, ifeoyewobi@gmail.com
Phone No: +2347034684686, 08038556550, 08063837102.

Abstract

There has been a debate as to whether Working Capital Management plays an integral role in the profitability of firms. Some has argued in favour of while others are of the opinion that it has no relationship with profitability. This research work attempts to investigate the effects of working capital management on the profitability of listed industrial goods companies in Nigeria. The research adopted the use of secondary data spanning a period of 11 years from 2010 to 2020. Descriptive statistics technique and Stata 14 were employed to analyze the secondary data collected from the financial statement of the 10 sampled companies. The researcher proxied Profitability by Return on Assets (ROA) which was regressed against the independent variable Working Capital Management proxied by Inventory Turnover Ratio (ITR) using the ordinary least square technique and Cash Conversion Ratio as control variable respectively. The study adopted the ex-post factor research design. Ten firms were sampled out of sixteen (16) industrial goods companies using convenient random sampling techniques, panel data analysis was used to analyze the research hypothesis to facilitate decision making based on the outcomes of the research findings. The result showed that inventory turnover ratio has a negative and significant relationship with return on asset. Based on the result of the hypothesis the researcher recommended that management of industrial good firms in Nigeria should maintain a very strict policy as regards working capital management for a better performance.

Keywords: *Working Capital, Return on Assets, Cash Conversion Ratio, Inventory Turnover Ratio.*

INTRODUCTION

On a global scale, firms all over the world want to achieve superior performance regardless of which industry they belong. The desired cutting-edge performance is not a product of wishful thinking neither is it rocket science but it is a function of strategic corporate planning censored by effective utilization of entity's resources guided by efficiency and economy in line with best global practices. The goal of every business is to maximize profit (financial performance) within the available resources in

order that the going concern concept of business is not threatened. Ani, Okwo and Ugwunta, (2008), postulated that the profit maximization objective for any firm depends on efficient management of cost and processes of production as well as increases in sales revenue resulting from firms' market domination.

A starting point is to identify variables that drive revenue and profitability while servicing liabilities to promote organization's welfare

and financial health or well-being. Hence placing things in perspective financially, corporate profitability is a function of the efficient management of working capital. Charitou, Elfani and Loise (2010) postulated that efficient utilization of a company's resources leads to increased profitability and dilutes the risk of volatility which subsequently promotes a firm's value by reducing the risk of default. A well-organized management of working capital is vital for a business existence. It is based on this evidence that Owolabi and Alu (2012) opined that the management of working capital has a pivotal role to play in the achievement of profitability and overall performance of business entities. It provides a means for measuring a business' liquidity or its response ability to short term obligations when they fall due (Emery & Stowe 2004).

Facts revealed that most methods managers use in practice in taking decisions regarding working capital are completely void of principles of finance. They are mostly based on the rules of the thumb or poorly constructed models (Emery & Stowe 2004). This situation has made many managers not to be able to manage working capital effectively; thereby not been able to determine the right mix of the various working capital components consequently leading to either over capitalization or under capitalization of the business and in some extreme cases liquidation of the business.

Empirical study carried out by Smith (1973) showed that a large number of businesses' failures are attributable to the inability of those businesses' financial managers to plan and control effectively the working capital of the firms concerned. This crude way and inefficient approach is still adopted today by both SMEs and even large corporations alike in Nigeria. Owolabi and Alu (2012) observed that a substantial number of managers disregard organizations' operating cycle thereby having longer receivables collection period and shorter payable payment period. This scenario creates

a huge liquidity problem forcing most firms to incur additional cost in the form of overdraft in a bid to financing the deficit created in cash inflow arising from longer receivable collection period. Besides, there is a scarcity of literature on aggregation working capital management as it relates to the industrial goods sector in Nigeria. All these compelled the researcher to embark on this research effort which is to examine the effect of working capital management on profitability of industrial goods sector in Nigeria.

Studies abound in this area but they have not only resulted in mixed findings and in consistence results but also focus on just a single firm in most cases. Among these are the works of: Musa and Adamu (2020), Thu-Tian and Thi-Doan (2019), Olaoye, and Adeboye, (2019), Sardar (2018). These studies though they examine the relationship between working capital and financial performance, to the best of the researcher's knowledge are not aggregative studies. Musa and Adamu (2020), focused on bottling companies in Nigeria, Thu-Tian and Thi-Doan (2019), focused on fishery business in Vietnam while Olaoye, and Adeboye, (2019) and Sardar (2018) focused on cement companies respectively. Apart from Sardar, (2018), who used return on equity all others used return on assets as proxies for financial performance which they measured against inventory turnover ratio, cash ratio, receivable ratio and payable ratio. It is against this background that this research effort seeks to carry out an aggregation examination of the effect of working capital management on the profitability of industrial sector goods firms in Nigeria to investigate the relationship between working capital management and profitability of industrial goods sector in Nigeria. The study will employ return on asset as proxy for profitability while inventory ratio will be measured as proxy for working capital. Cash conversion cycle will be used as the control variable for the study. To achieve the above-mentioned objective, the under listed hypothesis will be tested.

Ho: There is no significant relationship between inventory turnover management and return on assets of industrial goods sector in Nigeria.

LITERATURE REVIEW

Conceptual Framework.

Working Capital

As stated by Pandey (2005), working capital is defined as the amount of capital, which is readily available to an organization, that is, the difference between resources in cash or readily convertible into cash (current assets) and the organizational commitments for which cash will soon be required (current liabilities). Working capital therefore simply refers to the resources which a firm has at hand to pilot the affairs of the organization on a daily basis. It provides a means for measuring a business' liquidity or its response ability to short term obligations when they fall due (Emery & Stowe 2004).

Working capital, also known as net working capital, is the difference between a company's current assets, such as cash, accounts receivable (customers' unpaid bills), and inventories of raw materials and finished goods, and its current liabilities, such as accounts payable. Net working capital is a measure of a company's liquidity and refers to the difference between operating current assets and operating current liabilities. In many cases, these calculations are the same and are derived from company's cash plus accounts receivable plus inventories, less accounts payable, and less accrued expenses.

Working capital is a measure of a company's liquidity, operational efficiency, and short-term financial health. If a company has substantial positive working capital, then it should have the potential to invest and grow. If a company's current assets do not exceed its current liabilities, then it may have trouble growing or paying back creditors, or even go bankrupt. To

calculate working capital, compare a company's current assets to its current liabilities. Current assets listed on a company's balance sheet include cash, accounts receivable, inventory, and other assets that are expected to be liquidated or turned into cash in less than one year. Current liabilities include accounts payable, wages, and taxes payable and current portion of long-term debt. Current assets are available within 12 months. Current liabilities are due within 12 months. Working capital that is in line with or higher than the industry average for a company of comparable size is generally considered acceptable. Low working capital may indicate a risk of distress or default. Most major new projects, such as an expansion in production or into new markets, require an investment in working capital. That reduces cash flow. But cash will also fall if money is collected too slowly, or if sales volumes are decreasing—which will lead to a fall in accounts receivable. Companies that are using working capital inefficiently can boost cash flow by squeezing suppliers and customers. The concept of working capital has been broadly classified into gross working capital, net working capital, positive working capital, negative working capital and zero working capital.

Working Capital Management

Working capital management is one of the major decision areas of financial management that profit-oriented organizations have to deal with in order to achieve business growth (Pandey, 2005). Functionally, the decision on working capital management is based on several components of an entity's financial management that have a great deal to do with liquidity and compliance with the fundamental issues of effective and efficient operation of a firm that relate to sustainability. are safe if it should be a concern (Enei, 2006). Thus, the ongoing concern of any business unit without an effective and efficient working capital management is a major threat. Ben Caleb (2008) conceptualized working capital management as the management of an entity's

current assets and its current liabilities. Profitability has been viewed as a function of working capital management, largely because the profits an organization makes are directly related to effective and efficient management of working capital and the value of shareholders' money (Bain, 2008). It is based on the fact that no firm can survive in business without having sufficient liquidity to meet its obligations on time. A firm's inability to promptly respond to its obligations would mean a poor credit rating which could unintentionally lead to lack of goodwill and consequent liquidation (Bhavate, 2011). Consequently, a proactive business will seek to develop a sound financial management policy that is deliberately motivated to maintain a healthy working capital that effectively and efficiently meets its short-term maturing obligations without jeopardizing the profitability of the enterprise in the long run.

Profitability

Within corporate governance managing risk and increasing a firm's profitability is the main focus of managers and is a product of informed decision making. Faizan and Farooq (2016) conceptualized profitability as reflecting the results and outcomes of the business sector, which reflects the overall financial health of the sector over a specific period. It indicates how well an organization is deploying its resources to maximize optimum shareholders' wealth and profitability. Thus profitability is a deliberately in-depth analysis that aims to create a measure of certainty that allows for the risk appetite of the investment (Sharma and Kumar 2003). Its main objective is to provide a comprehensive and relevant information to all the stakeholders for taking informed decisions.

Profitability is a combination of an organization's financial health, its ability and willingness to meet its long-term financial obligations, and commitment to providing services in the near future (Adenzi, 2008). In the broadest sense, profitability refers to the degree to which financial objectives are being met or have been met. It is the process of

measuring the results of a firm's policies and operations in monetary terms. Profitability is broadly seen as the ability of a firm to meet its financial objectives. The two key indicators of profitability are investor return and accounting return. Investors' return is measured from the shareholders' point of view, whereas accounting return focuses on how the firm's earnings react to various managerial policies (Sharma and Kumar 2003).

Return on Asset

Keon, (2003) pointed out that return on assets is one of the most important profitability ratios and indicates the performance of the management with respect to the resources and assets of the firm, calculated by dividing net profit by total assets. Return on Assets, Almajri (2013) evaluates the profit making ability of firms according to the total investment in assets. Brealey and Meyers (2002) views return on assets as the product of net profit margin and total asset turnover. He argued that maximizing return on assets is a common corporate goal and that the attainment of return on assets was influenced by both profitability and efficiency, leading to the development of a system of planning and control for all operational decisions within a firm. . The long-term trajectory of return on assets is the best financial metric of a company's health and an indicator of how its decisions play out (Hagel, Brown, & Davison, 2010). So understanding this trajectory plays a major role for companies that take a long-term perspective that helps them build a winning strategy in their operations. This flows from the fact that the returns reflect the true and most reliable stance and outlook of the financial health of companies by covering the two key financial stability metrics which cover assets and profits (Yuli, 2018).

Inventory Turnover Ratio Management

Brown and Howard (1975) were of the view that raw materials are the largest element of cost in a product, with the resulting large stock (inventory) often required. Often insufficient

attention is paid to the level of carried inventory; Adoption of maximum and minimum inventory level, reorder level and reorder quantity can prove very useful in effecting reduction. According to David, Christine and Peter (2000), the inventory turnover ratio measures the average number of periods a firm's inventory remains in the warehouse prior to sale. The level of inventory held by a firm will largely depend on the increasing market demand which forces most businesses to maintain a large inventory so as to meet the production needs and to meet the requirement of the customers. Carrying finished goods inventory (Brown & Howard 1975). The Inventory Turnover Ratio is usually calculated as:
$$\text{ITRM} = \frac{\text{Cost of Sales}}{\text{Average Inventory}}$$

Cash Conversion Ratio

Sinha (2012) argued that the sales ratio measures the cash generated from the regular operations of a firm per unit of cash in sales. Cash flows can be ascertained from the cash flow statement and revenue from the income statement. An increase in this ratio may mean that the firm adopts effective policies to convert sales into cash, and may also refer to a higher quality of profits. Hasan, Halil, Arzoo and Salih (2010) concluded that accounts receivable, payable amounts and inventory levels significantly affect the liquidity position of a firm. The current and liquidity ratios have traditionally proven to be stable. Therefore the level of their suitability for liquidity analysis is highly subjective and therefore leaves much to be desired. It is against this background that Hager (1976) popularized the cash conversion cycle as a dynamic liquidity measure to measure efficient working capital management. Brigham and Houston (2011) clarified that the cash conversion cycle is the length of time when funds in working capital are exhausted or the length between the payment of working capital and the collection of cash from the sale of working capital. Briley, on behalf of Myers and Allen (2001), asserted that the longer the production process, the more cash the firm has

to keep in inventory. Conversely, the longer it takes customers to pay their bills, the higher the value of accounts receivables.

Empirical Review

Moses and Adamu (2020) examined the impact of working capital management on the profitability of cited bottling companies in Nigeria for the period 2001 to 2014, covering a period of 13 years. The study covered all sixteen consumer goods sectors as of 2014. They assessed the impact of inventory turnover days, accounts receivable days, accounts payable days and cash conversion cycles on the profitability of seventeen consumer goods. Corrective research design was adopted and data were analyzed using the OLS multiple regression technique relying on 98 firm-year observations. The data analyzed was secondary data extracted from audited annual reports of sample companies. The findings showed that inventory turnover days have a positive and strong impact on the profitability of the companies under review at a significant 1%. On the other hand, accounts receivable days have a negative and significant impact on the profitability of bottling companies quoted at the 5% significance level. However, accounts payable days were found to have a positive but insignificant effect on the profitability of companies, while the cash conversion cycle had a positive and significant impact on the profitability of companies. It is said that an increase in the cash conversion cycle will lead to greater profits. The study therefore concluded that efficient management of working capital affects the performance of cited companies in Nigeria. Relying on the above study, it was recommended that managers should focus on working capital management and lay emphasis on an optimum working capital level in their respective companies, due to the positive impact of cash conversion circle and accounts payable which on profitability. Can attract more customers and subsequently lead to more profits. As can be seen the study is based on the consumer goods sector hence the related work but there is a demand to fill the gap

in the literature in the industrial goods sector. This is what informed this current study.

Thu-Trang and Doan (2019) analyzed secondary data collected from 20 listed fisheries enterprises in Vietnam using the Generalized Method of Moment (GMM) on the Impact of Working Capital Management and Profitability of Fisheries Enterprises in Vietnam carried out an empirical study. Stock Market, for a period of nine (9) years spanning 2010-2018. The study used return on assets as dependent variables, while accounts receivable, accounts payable, inventory period and cash conversion circle were the independent variables used for working capital components. An analysis of the relationship between predictive and predictive variables revealed that the returns on assets of fisheries enterprises were negatively correlated with the accounts receivable period (ARP), inventory period (INV), accounts payable period (APP) and cash conversion circle (CCC). was influenced by. Additionally, the study found significant effects of enterprise size (SIZE), leverage (LEV), economic growth (GDP) and inflation (INF) on enterprise profitability (ROA). The study therefore recommended that managers in the fisheries business in Vietnam should focus on efficient working capital management, especially in the role of supply chain finance to effectively improve profitability and sustainability. Since this study is geographically foreign to Nigeria, there is a need for a prototype of such study in Nigeria especially in the industrial goods sector. This difference is what the present study seeks to address empirically.

Olaoy, Clement and Adboy, (2019), conducted a comparative study of working capital management and performance of industrial and consumer goods firms in Nigeria, focusing on the average collection period and payback period on selected industrial goods and return on consumer's capital. Is. goods firm. A sample of twenty (20) firms was selected at random over ten (10) years during the period 2005–

2015. Static data analysis was used to analyze the data collected in the study. Empirical evidence shows that average collection period and average payment period had negligible positive effect on return on capital of industrial goods firms, while both average collection period and average payment had negligible negative effect on return on capital of consumer goods firms. The independent t-test results clearly demonstrated that there is a significant mean difference between the coefficients of the effect of working capital management on the performance of industrial goods firms and consumer goods firms when performance is measured in terms of return on capital employed. The study recommended that based on the finding that firms in both the sub-sectors should be strategic when managing working capital, setting higher average payout periods in a way that does not reduce their creditworthiness. Since this study is an inter-sectoral comparison, there is a need to independently examine the sensitivity of working capital management metrics to the sectoral performance of the industrial goods sector with respect to working capital management in order to examine the sensitivity of the return performance metrics to assets. can be done. Return on equity which is the goal of this research.

Sardar and Ibrahim (2018) examined the impact of working capital management on the profitability of industrial sector goods in Iraq. Sample sizes of five companies were considered for the study. The randomly selected tufted carpets for the study were Iraqi date processing, Iraqi carton manufacturing, Baghdad soft drinks and Iraqi and analyzed data collected covering a time period of nine (9) years in the period 2007 to 2016. was done. Secondary data were extracted from the annual reports of these companies, subjected to sensitivity analysis and significant ratios were calculated. The variables identified in working capital management were the current ratio and the quick ratio while the performance metric of return on equity was represented as an

independent variable or a predictive variable for profitability. The Simple Least Squares (OLS) model was adopted to examine the effect of working capital metrics (current ratio and quick ratio) on the profitability metric (ROE). The results indicated that ROE is positively related to the working capital variables that were tested. Based on this finding, the researcher recommended that management should plan an appropriate working capital mix that optimizes profitability without risking the business in the long run. A task of this nature should include other working capital management variables such as trade receivable period, trade payable period, cash conversion cycle and inventory turnover ratio, so this study is intended to examine the impact of working capital management on the performance of the industrial goods sector in Nigeria. was designed for. Taking cognizance of relevant working capital variables of inventory turnover in days, periods payable in days, cash receivable in days conversion cycle actual sales (cash management) and so on.

Uguru, Chukwu and Elom, (2018) explored the impact of working capital management on the profitability of brewery firms in Nigeria. They adopted a pre-post factor research design and employed the simple Least Squares (OLS) regression technique in the analysis of the secondary data collected. To measure the impact of working capital management in quantitative terms, the days accounts receivable are outstanding, the number of days the list is kept, and the cash conversion cycle were used as a proxy for working capital management, while on asset Return was used as a financial metric. profitability. The study used samples from Nigerian Breweries plc and Guinness Nigeria plc, covering a period of eight (8) years, from 2006 to 2014. Based on the results of the analyzed data, the study found that managing the number of days accounts receivable, the number of days inventory is held and the cash conversion cycle serve the profitability objective of brewery firms in Nigeria. are important factors. , The study therefore

recommended that brewery firms in Nigeria should reduce investments in current assets to avoid high inventory costs and excess cash holdings and account receivables. Although this work is recent in the literature of working capital management, work focused on consumer goods therefore a work on the industrial goods sector in Nigeria has become a clear call to which this study answers.

Hassan, Helen and Wiley (2017) in their research on the impact of working capital management on the financial performance of firms in Put-Land Somalia, analyzed the return on assets (ROA) on the four independent variables of the cash conversion cycle (CCC). Linear regression was used.), Stock Turnover Ratio (STR), Receivables Turnover Ratio (RTR) and Payable Turnover Ratio (PTR). The study confirmed that CCC and STR have a positive effect on the return on assets of water companies in Garoway. Thus the study found that there is a significant positive association between CCC and STR on ROA while RTR and PTR are negative. The researcher recommended that there should be no major changes in the dues management policy as the payables turnover ratio does not affect the financial performance of water companies in put-land Somalia. Although this research appears to be a recent study, it suffers from geographic and regional gaps, which this work seeks to address in the Nigerian context.

Godfrey (2017) explored the impact of working capital management on the corporate profitability of construction firms in Nigeria using Dangote Cement Plc. The study covered a period of ten (10) years spanning from 2007-2017. Simple least squares regression method was employed to establish the relationship between the components of working capital management and corporate profitability (ROA). The research found that efficient working capital management has a positively significant impact on the return on assets and that efficient working capital management has a positively significant impact on a firm's net

profit margin. The study recommended that firms should improve their working capital policies to enhance corporate performance and that there should be periodic assessment of investment in working capital based on capital investment model to determine ahead of time the feasibility of such investments. Although this study is recent and focused on a single firm in the industrial sector, the sample size taken for the study was too small to make any generalizations. It is this gap that this research work seeks to address.

Raji, Adebayo and Folarin (2017) examined the effect of working capital on the performance of firms in Nigeria. The study focused on listed agricultural firms in Nigeria. Secondary data was drawn from the audited financial reports of agricultural firms and banks, respectively, for a period of thirteen (13) years spanning 2002 – 2014. The collected data were analyzed with the use of the panel method. The research findings showed that there is no significant relationship between working capital and the performance of firms as measured by the current ratio. The study therefore recommended that firms should focus on their ability to meet their short-term obligation to ensure the survival of the business in the long run. Since mono-variable regression was used in the study, this research will use multivariate regression analysis to study the relationship between working capital metrics in relation to profitability of the industrial goods sector in Nigeria.

Theoretical Framework

Agency Theory

The identity of agency theory is based on the legal paradigm of the relationship that exists between an agent and principal Shapiro (2005). The principle is sacred in accounting because of the entity concept of accounting which is based on the fact that ownership is distinct from management and control, especially in modern business. Therefore there is an imposed duty on the shareholders (principals) to appoint agents

(managers) whose responsibility is to provide for the assets of the shareholders committed in their hands to the shareholders through the financial reports prepared by the agent. Manage and report. Agency theory was championed by Jensen and Meckling in 1976. Agency theory describes the authority assigned to the owners (principals) to the manager (agents) to run the firm on their behalf in accordance with the owner's welfare with the owner's welfare (Jensen and Meckling, 1976).

Agency theory seeks to address potential conflicts of interest between owners and managers, as managers' interests can lead to opportunistic use of firm resources to satisfy their individual interests. Agent(s) may have more relevant information than shareholders, information asymmetry occurs, and this increases the likelihood that the agent(s) may behave in ways that put their own interests first because insider information is available to them. The pass rests on the shareholders. This research work examines the impact of working capital management on the profitability of industrial goods sector firms in Nigeria. The primary objective of a firm is to maximize the wealth of the shareholders (principal). It rests entirely on the shoulders of the managers (agents). Therefore, efficient working capital management by managers to enhance performance is fulfilling the agency's obligation, due to the managers to their respective owners or principals.

Stakeholders' Theory

This theory is a move away from Milton Friedman's shareholders' theory, where he propagated the idea that the only stakeholders organization should be worried about is the shareholders. The stakeholders' theory is accredited to Dr. Edward Freeman who perceived stakeholders as "those group without whose support the organization would cease to exist." In his view the corporate environment as an ecosystem of related groups, all of whom need to be considered and satisfied to keep the company healthy and successful in the long

term. Thus the theory was adopted to fill the observed gap created by omission found in the agency theory which identifies shareholders as the only interest group of a corporate entity. Within the framework of the stakeholders' theory the problem of agency has been widened to include multiple principals (Sand, Garba & Mikailu 2011). The stakeholders' theory attempts to address the questions of which group of stakeholders deserve the attention of management. The stakeholders' theory proposes that companies have a social responsibility that requires them to consider the interest of all parties affected by their actions. The original proponents of the stakeholders' theory suggested a restructuring of the theoretical perspectives that extends beyond the owner Manage-employee position and recognizes the numerous interest groups. Freeman, Wicks & Farmer (2004), suggested that: "if organizations want to be effective, they will pay attention to all and only those relationships that can affect or be affected by the achievement of the organization's purpose". Therefore, an audit report is not just a pilot document for shareholders only but a compass that all stakeholders can rely on in decision making.

This research work is anchored on the stakeholders' theory discussed above. The choice of the stakeholders theory becomes necessary owing to the fact that determining an

appropriate working capital mix will mean factoring in the interest of all stakeholders into the working capital management policy of the firm. Thus an effective and efficient working capital mix is one that reflects the interest of stakeholders. This is because any working capital management policy that neglect the interest of stakeholders will result in poor financial performance of industrial goods sector in the long run which consequently could lead to business failure.

METHODOLOGY

The research design employed in this study is the ex-post factor design because it is appropriate for the estimation of the relationship between the dependent variable and the independent variables. It is always convenient to be used as it provides quantitative measure for estimating the numeric coefficients of models owing to the linearity of the econometric relationship between the variables under study. The study used secondary data which were collected via annual financial reports and bulletins of Nigeria Stock Exchange of the various firms. Convenience sampling techniques was used to select ten (10) out of the sixteen (16) listed industrial good firms on the Nigeria stock exchange based on availability of data. Data collected were analyzed using both descriptive and Panel regression analysis with the aid of STATA 14 package

The model that will be used in testing the hypothesis of the study is hereby presented as follows:

$$ROA = \beta_0 + \beta_1 ITRM + \beta_2 CCC + \varepsilon \text{ ----- (i)}$$

Where ROA = Return on Assets

CCC = Cash Conversion Cycle

ITRM = Inventory Turnover Ratio Management

RESULT AND DISCUSSION OF FINDINGS

This section presents and analyses the results of the study. The results of descriptive statistics are reported in Table 1.

Table 1
Descriptive Results

Variables	Mean	SD	Min	Max	Skewness	Kurtosis	N
ROA	4.268	28.516	-179.917	53.959	-4.091	25.019	110
ITRM	4.650	3.461	1.617	32.258	5.104	38.817	110
CCC	-52.119	239.569	-1345.76	230.998	-3.214	16.770	110

Source: STATA 14 OUTPUTS

Table 1 above contains a descriptive description of the panel data for all variables included in the study. The panel has 110 observations for three (3) variables for ten selected industrial commodities in Nigeria. The researcher covers a period of 11 years (2010-2020). The dependent variable (return on assets) has an average value of 4.26%, the standard deviation that measures dispersion, indicating that the return on assets (ROA) of the industrial goods companies in the panel deviate from its mean by approximately 28.52%. The

minimum value for return on asset is -179.9% while the maximum is around 54%.

Also for the independent variable, the average value of inventory turnover ratio is around 5 while the standard deviation is 3, indicating that there is no major difference in the number of days of inventory turnover between industrial goods companies in Nigeria. Furthermore, this was supported by a minimum ratio value of 2 and a maximum ratio value of 32 for inventory turnover as shown in the table above.

The result of the normality test (Shapiro-Swilk) is shown in Table 2.

Table 2
Normality Test

Variables	W	V	Z	P-Values	N
NPTM	0.6045	35.366	7.951	0.0000	110
STDA	0.5764	37.873	8.104	0.0000	110
FSIZE	0.6967	27.122	7.359	0.0000	110

Source: STATA 14 OUTPUTS

The Shapiro-Wilk (W) test was conducted to check the normality of the data. Table 2 discovered that data for the variables of the models are not normally distributed because the

P-values of all the variables are significant at the level of 1% (p-values of 0.0000). Hence, Spearman's rank correlation will be adopted.

Table 3: Correlation Matrix

	ROA	ITRM	CCC
ROA	1.0000		
ITRM	-0.2203	1.0000	
CCC	0.3259	-0.5421	1.0000

Source: STATA 14 OUTPUTS

The above table shows the correlation between the dependent variable (performance) proxies by return on assets, independent variable (inventory turnover) and the control variable (cash conversion cycle). The table shows that the independent variable is negatively (-0.2203) associated with return on assets of industrial goods companies in Nigeria.

Hypotheses Testing

Decision rule: Accept null hypothesis if the *p*-value of the data is less than 0.05 and reject the null hypothesis when the *p*-value is greater than 0.05

The hypotheses formulated for the study are tested and analyzed from the results in table 4.

Table 4

Variable	Aprori Sign	Random Effects	Fixed Effects
C		35.5936*** (5.2696) {0.000}	35.7661*** (2.4828) {0.000}
ITRM	+	-6.7998*** (0.4555) {0.000}	-6.8397*** (0.4674) (0.0000)
CCC	+	0.0057 (-0.0075) {0.443}	-0.0060 (0.0078) {0.445}
<i>Model Parameters</i>			
Wald Chi2		226.64	-
Prob. Chi2		0.0000	-
F-statistic		-	108.55
Prob(F-stat)		-	0.0000
R square		0.5973	
Adjusted R ²		0.5897	
F statistics		79.34	
Prob.		0.0000	
Hausman		0.9245	

Source: STATA 14 OUTPUTS

*** Sig @1%, ** Sig @5%, * sig @10%) standard error () p-value { }

Table 4 shows the regression results of the Random effects (RE) and fixed effects (FE) models. To determine which model is better, this researcher carried out the Hausman test for choosing the FE model versus the RE model. Meanwhile, the Hausman *p*-value is 0.9245 which indicates that the FE method may give bias and inconsistent estimators when compared to RE model and hence the RE is the preferred model. Hence the RE estimation results forms the basis for the analysis of the results for the study. As shown in the result at under model parameters both the probability for value for Wald test and F test was significant at

1%, this shows that the model is of a good fit and suggests that the hypothesis of a significant linear relationship between the dependent and independent variable cannot be rejected. It is also indicative of the joint statistical significance of the model.

As shown in the results, the R² for the model is 0.5973 which implies that the model explains about 60% of the systematic variations in the dependent variable with a degree of freedom adjusted the R² of 59%. The F-stat is 79.34 (*p*-value = 0.0000) is significant at 5% and suggests that the hypothesis of a significant

linear relationship between the dependent and independent variables cannot be rejected. It is

also indicative of the joint statistical significance of the model.

Table 5: Standard Error corrected for Fixed Effect Model

Variables	Model		
	Coefficients	P-Value	standard error
ITRM	-6.799	0.000	8.892
CCC	-0.005	0.293	0.005
CONS	35.559	0.000	5.123

Sources: STATA 14 OUTPUTS

The Robust Standard Error for random effect was employed to correct for potential serial correlation in the estimation and hence the estimation results are free from serial correlation. The above table shows the result after correction of serial correlation in the model.

The analysis of coefficients reveals that inventory turnover have a negative (-6.7998) and highly significant ($p=0.000$) at 1% and 5% level of significance. Based on the decision

rule stated above the p-value is less than 0.05 therefore, the null hypothesis is rejected inventory turnover has no significant effect on return on assets of listed industrial goods firms in Nigeria and accept the alternative hypothesis that, inventory turnover has significant effect on return on assets of listed industrial goods firms in Nigeria Although the control variable does not have any significant, CCC (0.293)..

Table 6: Panel Regression Diagnostics (Post estimation test)

<i>Multicollonniarity: VIF Vif</i>	1.08
<i>Cross sectional independence: Pesaran's test</i>	0.2704
<i>Serial Correlation: Wooldridge test</i>	
<i>F stat</i>	10.727
<i>Prob.</i>	0.0096
<i>Heteroskedasticity Test: Breush-Pagan</i>	
<i>Chi2</i>	28.68
<i>Prob. Chi-Square</i>	0.000

Source: STATA 14 OUTPUTS

The panel regression diagnostics is presented in the table above. Variance inflation factor was employed to test for multicollinearity; the result shows that there is no multicollinearity because the value (1.08) is less than 10. Also, Wooldridge test was used to test for serial correlation, the value for p was not significant (0.0096) this confirm that there is presence of serial correlation in which it has been corrected with robust standard error. Finally, the Breush-Pagan test was employed for heteroskedasticity; the probability value of chi (0.0000) confirms that there was heteroskedasticity in which the robust standard

error model has been used to correct this. Also the cross sectional dependence result (0.2704) showed that the residual is free from cross sectional dependence

DISCUSSION OF FINDINGS

From the above result, it was discovered that inventory turnover has a negative and significant relationship on return on asset; this means that improper management of inventory turnover ratio can reduce the return on asset of industrial goods companies and this call for proper inventory management. It also means that if the time taking in converting finished

goods to sales is longer than necessary, it can affect what is expected to generate in relation to the assets used in production of such product, also on the part of inventory to finished goods. Therefore, company's management should make sure there is proper monitoring of inventory turnover. This result aligns with the work of Thu-Triang and Doan (2019) who examine the effect of working capital management and profitability of fishery enterprises in Vietnam. Inventory turnover was found to have a negative but significant relationship with return on assets. On the other hand the result of this work is in contrast to the work of (Hassan, Hellen & Willy 2017), who examined the effect of working capital management on firms' performance in Portland Somalia. Inventory turnover was found to have a positive but insignificant relationship with profitability of firms.

CONCLUSION AND RECOMMENDATIONS

In Conclusions we established that inventory turnover ratio management has a negative and significant effect on return on asset. This means that working capital has a significant effect on performance of industrial goods companies in Nigeria. The study concludes that the ratio of inventory turnover should be appropriately managed to avoid an adverse performance. This means that if the inventory turnover is not well managed, it will reduce the income and this income may not be commensurate with the value of asset utilization and it can lead to adverse performance.

Recommendations

The following recommendations were proffered from the findings of this study:

- i. The management of listed industrial goods firms in Nigeria should take the issues on working capital management with great concern, with particular attention on inventory turnover as a very serious matter that needs proper attention to increase their performance.
- ii. The management of listed industrial goods firms in Nigeria should work diligently in having a good policy on working capital management.

REFERENCES

- Adeniji, A.A., 2008. *Management Accounting*. 4th Ed., El-Toda Venture Limited, Lagos, Nigeria.
- Almazari. A. A. (2013). The Relationship between Working Capital Management and Profitability: Evidence from Saudi Cement Companies. *British Journal of Economics Management & Trade*, 4(1), 146-157
- Ani, Wilson and Uchenna (2012). Effect of Working Capital Management on Profitability: Evidence from the top Five Beer Brewery Firms in the World. *Asian Economic and financial Review* 2(8),966-982
- Bealey, R. A. & Myers, S. (2002). *Principles of Corporate Finance*, Seventh Edition, New York, Macgraw-Hill
- Ben-Caleb, E. (2009). Working Capital Management and Profitability of Listed Companies in Nigeria: *Nigeria Research Journal of Accountancy*; 1(1), 44-57
- Bhavet (2011) Management of liquidity- A case study of Tisco Ltd. *International Journal of Research in IT & Management* 149(1), 2231-4334.
- Brigham, E.F., Gapenski, & L.C., Ehrhardt, M.C. (1999). *Financial Management: Theory and Practice*. (19th Ed.). Japan: The Dryden Press, 791-896.
- Brown L. J. & Howard L., (1975). *Principles and Practice of Management Accountancy*. Macdonald and Evans Ltd 8 John Street, London.
- Charitou, M.S., Elfani M., & Lois, P. (2010). The effect of Working Capital Management on Firms Profitability: Empirical Evidence from an Emerging Market; *Journal of Business and Economic Research* 8(12), 2010

- David, A., Christine, G. & Peter, H. (2018). Essential Accounting for Cambridge IGCSE (Third Edition); Oxford University Press.
- Emery, D. R., Finnerty, J. D., & Stowe J. D. (2004). Corporate Financial Management (2nd ed.) New Jersey: Pearson Education Inc.
- Enyi, P.E. (2006) Applying Relative Solvency to Working Capital Management: The Break Even Approach. In Gopala K.M.G.(2006) (ed). Toward Better Working Capital Management. Punjagutta, the Icfai University press
- Farrukh Ijaz and Faizan Navqvi (2016). Financial Performance of firms: Evidence from Pakistan Cement Industry. *Journal of Teaching and Education*. 5(1), 81-94
- Godfrey O. (2017). Effect of Working Capital Management on Corporate Profitability of Manufacturing Firms in Nigeria: Dangote Cement Plc: *International Journal of Current Research* (6), 53318-53323.
- Hassan, Hellen & Willy (2017): Effect of Working Capital Management on firms' Performance: The Case of Putland Somalia: *British Journal of Economics Management & Trade*, 4(1), 158-174
- Hagel, J., Brown, J.S. & Davison, L. (2010). The Best Way to Measure Company Performance. *Harvard Business Review* 4(6), 56 – 60
- Jesen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3(4), 305-360.
- Keown, A.J., 2003. Foundations of Finance: The Logic and Practice of Financial Management. 4th Ed., Pearson Education, New Jersey, USA.
- Musa I. & Adamu Y. (2018). Effects of Working Capital Management on Profitability of Quoted Bottling Companies in Nigeria; *International Journal of economics, Commerce and Management*, 4(8), 402- 417.
- Oladipupo A. O. & Okafor, C.A. (2013). Relative Contribution of Working Capital Management to Corporate Profitability and Dividend Payout Ratio. Evidence from Nigeria. *International Journal of Business and Finance Research*, 3(2) 11-20.
- Owolabi, S. A. & Alu C. N. (2017). Effective Working Capital Management and Profitability: A Study of Selected Quoted Manufacturing Companies in Nigeria; *Economics and Finance Review* 2(6), 55-67.
- Olaoye, C.O. & Adeboboye, R. (2019). Working Capital Management and Performance of industrial and Consumer Goods Firms in Nigeria: A Comparative Analysis; *Information Management and Business Review* 11(3), 35-45.
- Pandey, I. M. (1992). Venture Capital and Entrepreneurial Development: The Indian Experience, *Indian Institute of Management Ahmadabad, Research and Publication Department*.
- Raji S., Adebayo I. & Folarin O. (2017). Impact of Working Capital on Firms' Performance in Nigeria; *Oshogbo Journal of Management*, 2(3), 47-64
- Sardar Shaker Ibrahim (2018). Impact of Working Capital Management on Profitability on Industrial Sector in Iraq; *Finance and Banking Studies* 7(1), 2018: 27-32
- Shapiro, S.. (2005), Agency Theory, *Annual Review of Sociology*, 3(1), 263-284.
- Sinha (2012). Effects of Working Capital Management on Profitability of Sri Lanka Small and Medium Sized Enterprises: *Australian Journal of Business and Management Research* 1(11) 31- 40.
- Sharma, A.K. and Kumar, S. (2011). The Effect of Working Capital Management on Firm's Profitability: Empirical

- Evidence from India, *Global Business Review*, 12, (1), 159 – 173.
- Smith V. Keith (1973). State of the Art of Working Capital Management. *Financial Management* 2(3), 50 – 56.
- Uguru L.C. Chukwu, U. C. & Elom, J. O. (2018). Effect of Working Capital Management on the Profitability of Brewery Firms in Nigeria; *OISR Journal of Economics and Finance* (9)2, 09-20.
- Yuli A. (2018). The Effect of Working Capital Management on Profitability in Manufacturing Company Listed Indonesia Stock Exchange: *The Accounting Journal of Binaniaga* 3(1), 1 – 14

Appendix A

Fiscal Year	Companies	ITRM	CCC	ROA
2010	Berger Paints Nig	2.8205	33.5	16.9822
2011	Berger Paints Nig	2.791	62.4667	8.5164
2012	Berger Paints Nig	2.8569	32.7213	6.606
2013	Berger Paints Nig	3.2016	27.7984	7.1069
2014	Berger Paints Nig	3.3136	82.5768	4.088
2015	Berger Paints Nig	3.5769	34.794	8.4786
2016	Berger Paints Nig	2.6185	26.5871	5.4606
2017	Berger Paints Nig	3.1642	24.2311	5.7122
2018	Berger Paints Nig	3.1265	17.6045	7.067
2019	Berger Paints Nig	2.365	35.0729	8.857
2020	Berger Paints Nig	2.23	20.622	7.25
2010	Beta Glass Company	3.4956	139.2594	9.105
2011	Beta Glass Company	3.2094	131.7697	9.8474
2012	Beta Glass Company	3.7038	186.6064	5.9162
2013	Beta Glass Company	3.293	165.7475	5.4013
2014	Beta Glass Company	5.3069	142.7081	8.8762
2015	Beta Glass Company	3.5195	156.3403	7.3281
2016	Beta Glass Company	3.5969	171.3013	11.4494
2017	Beta Glass Company	3.3707	230.9986	10.7693
2018	Beta Glass Company	3.1957	88.2708	10.9654
2019	Beta Glass Company	3.3005	127.4361	10.7146
2020	Beta Glass Company	3.012	100.542	10.432
2010	Chemical & Allied Product	7.2159	-41.6431	37.2466
2011	Chemical & Allied Product	5.1979	5.5643	34.1813
2012	Chemical & Allied Product	2.699	18.3353	38.7911
2013	Chemical & Allied Product	5.2621	14.8017	46.6817
2014	Chemical & Allied Product	5.8416	31.5507	53.9594
2015	Chemical & Allied Product	5.1074	20.3033	51.0239
2016	Chemical & Allied Product	3.7494	8.3676	32.6151
2017	Chemical & Allied Product	3.2541	11.0236	29.891
2018	Chemical & Allied Product	4.5634	-52.9487	32.1544
2019	Chemical & Allied Product	4.226	-45.6761	25.7669
2020	Chemical & Allied Product	4.016	-30.324	24.564
2010	Cutix	3.0443	108.8421	13.014
2011	Cutix	2.9377	110.7522	9.0146
2012	Cutix	3.5256	113.3134	8.3914
2013	Cutix	4.905	67.7872	14.1007
2014	Cutix	3.6229	154.3547	11.8714
2015	Cutix	2.7912	181.1228	7.5786
2016	Cutix	4.3088	117.8008	10.0729
2017	Cutix	2.4204	139.8256	11.0524
2018	Cutix	2.6835	122.3832	15.5238
2019	Cutix	2.3988	154.873	16.673

2020	Cutix	2.045	130.456	15.342
2010	Dangote Cement	5.7125	-96.295	26.5162
2011	Dangote Cement	6.8087	-84.2674	23.0616
2012	Dangote Cement	3.6426	-42.2698	22.5532
2013	Dangote Cement	5.1511	-128.845	23.8612
2014	Dangote Cement	3.3513	-134.024	16.1976
2015	Dangote Cement	3.7992	-126.138	16.3215
2016	Dangote Cement	3.906	-194.133	12.2143
2017	Dangote Cement	3.7137	-169.338	12.2606
2018	Dangote Cement	3.5824	-100.04	23.0353
2019	Dangote Cement	3.3098	-150.949	11.5153
2020	Dangote Cement	3.2156	-130.345	11.235
2010	Greif Nig	3.8191	109.5172	6.4633
2011	Greif Nig	5.6113	118.4312	6.166
2012	Greif Nig	4.6403	153.5493	5.0974
2013	Greif Nig	4.0739	9.401	4.4879
2014	Greif Nig	5.6435	44.6254	6.5449
2015	Greif Nig	5.8264	-23.8273	3.4405
2016	Greif Nig	6.5608	-6.3768	3.7517
2017	Greif Nig	6.3137	-0.1499	6.2827
2018	Greif Nig	10.1651	-60.6263	-55.1969
2019	Greif Nig	32.2586	-102.373	-179.9173
2020	Greif Nig	15.231	-90.653	-150.236
2010	Lafarge Cement Wapco Nig	3.2749	20.5214	4.12
2011	Lafarge Cement Wapco Nig	4.1861	-123.178	5.6649
2012	Lafarge Cement Wapco Nig	4.2963	-70.665	9.682
2013	Lafarge Cement Wapco Nig	5.1097	-69.1891	17.5484
2014	Lafarge Cement Wapco Nig	5.6615	-40.9008	11.3315
2015	Lafarge Cement Wapco Nig	5.5924	-54.5307	5.9597
2016	Lafarge Cement Wapco Nig	4.0209	-71.8597	3.363
2017	Lafarge Cement Wapco Nig	4.2631	-49.7909	-5.9892
2018	Lafarge Cement Wapco Nig	5.0628	-25.9887	-1.6277
2019	Lafarge Cement Wapco Nig	4.841	-72.5978	3.1213
2020	Lafarge Cement Wapco Nig	4.941	-70.567	3.423
2010	Meyer Plc	1.7169	-557.189	-8.7031
2011	Meyer Plc	2.4112	-121.159	-1.9823
2012	Meyer Plc	2.784	-50.8971	-1.0439
2013	Meyer Plc	4.8452	-74.7029	1.7913
2014	Meyer Plc	3.7677	-113.995	-1.4852
2015	Meyer Plc	3.4733	-86.6897	2.2703
2016	Meyer Plc	4.2328	-112.336	-9.9385
2017	Meyer Plc	6.6683	-194.689	-13.9664
2018	Meyer Plc	4.461	-300.431	17.1434
2019	Meyer Plc	6.5822	-1340.79	-0.3629
2020	Meyer Plc	5.961	-1345.76	1.897
2010	Portland Paint Nig	1.6231	-51.6843	8.4715
2011	Portland Paint Nig	1.8377	92.7344	6.8627

2012	Portland Paint Nig	2.058	42.1053	-9.5708
2013	Portland Paint Nig	2.1265	89.4511	4.927
2014	Portland Paint Nig	1.9726	72.8312	6.5264
2015	Portland Paint Nig	2.0621	1.4893	-12.267
2016	Portland Paint Nig	1.6173	45.5232	0.49
2017	Portland Paint Nig	1.7994	154.8165	2.86
2018	Portland Paint Nig	2.4091	108.4741	9.1804
2019	Portland Paint Nig	2.5342	109.484	8.678
2020	Portland Paint Nig	2.243	108.437	7.564
2010	Premier Paints	13.1929	-231.113	-70.3448
2011	Premier Paints	7.7697	-276.789	-22.3254
2012	Premier Paints	9.9728	-245.542	-10.3606
2013	Premier Paints	7.887	-297.617	-8.3908
2014	Premier Paints	5.4872	-117.554	2.7998
2015	Premier Paints	7.4344	-239.658	-8.6428
2016	Premier Paints	7.696	-232.755	-12.0939
2017	Premier Paints	6.9244	-355.547	-18.9743
2018	Premier Paints	6.8576	-473.823	-26.3705
2019	Premier Paints	7.3933	-637.22	-6.9372
2020	Premier Paints	7.325	-646.45	-6.843



ISSN 2795-3483



kabodlimited.08029670000