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# THE CHARTERED INSTITUTE OF TAXATION OF NIGERIA

in collaboration with

IGBINEDION UNIVERSITY,  
OKADA, EDO STATE

# PROCEEDINGS OF THE 3RD ANNUAL INTERNATIONAL ACADEMIC CONFERENCE OF THE CHARTERED INSTITUTE OF TAXATION OF NIGERIA

**THEME:** TAXATION, SOCIAL CONTRACT AND ECONOMIC DEVELOPMENT

9TH - 11TH NOVEMBER, 2020

**EDITED BY:**

Prof. Godwin Emmanuel Oyedokun

Prof. Isa Kabiru Dandago

Mary-Fidelis Chidoziem Abiahu

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3RD ANNUAL INTERNATIONAL  
ACADEMIC CONFERENCE ON TAXATION

## PROCEEDINGS OF THE 3RD ANNUAL INTERNATIONAL ACADEMIC CONFERENCE OF THE CHARTERED INSTITUTE OF TAXATION OF NIGERIA

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## PROGRAMME OF EVENTS

### MONDAY, NOVEMBER 9, 2020: ARRIVAL DAY, REGISTRATION AND PhD COLLOQUIUM

- 12: noon - 3:00pm      Arrival/Registration  
Coordinators: Ndidi Attah  
Moshood Oluneye  
Emmanuel Ojo  
Dunmininu Akande
- 2.00 pm – 3.30pm      Courtesy visit by CITN Council to the Vice-Chancellor, Igbinedion University, Okada, Edo State.  
Courtesy visit to Esama of Benin Kingdom, Sir. (Dr.) Chief Gabriel Osawaru Igbinedion, CFR
- 4:00 pm – 7:30 pm      PhD Colloquium (**Session A**)  
Moderators:  
Chairman: Prof. Kabiru Isa Dandago  
Professor Suleiman A.S. Aruwa  
Professor Ralph Adeghe  
All other Professors in attendance  
Associate Professor Kareem Adedokun  
Dr. Kenny Adedapo Soyemi  
Dr. John I. Ugiagbe  
Secretaries - Conference Rapporteurs
- Session B**  
Moderators:  
Chairman: S.A.S. Aruwa  
Professor I.R. Akintoye  
Professor R.O. Salawu  
Professor Eugene Nwadiakor  
Professor John Obiora Anyaduba  
All other Professors in attendance  
Dr. Babatunde Lawal  
Secretaries - Conference Rapporteurs

## DAY 2

### TUESDAY, NOVEMBER 10, 2020: TECHNICAL SESSION, OPENING CEREMONY AND GENERAL SESSIONS

- 8:00am - 9:00am      Arrival / Registration
- 9:00am – 10am      Lead Paper Presentation I: Anatomy of Primary Data in Academic Research  
By Professor R.O. Salawu  
- Chairman of Session: Professor Rufus Ishola Akintoye  
Secretaries - Conference Rapporteurs





10:00am – 12:00noon OPENING CEREMONY – (Auditorium)

- Introduction of Dignitaries
- Opening Remarks by Chairman, Organising Committee: Prof. Kabiru Isa Dandago
- Welcome Address by Prof. Godwin Emmanuel Oyedokun, Chairman, Conference Committee
- Introduction of the President & Members of CITN Governing Council
- Welcome Address and Opening of the Conference by Dame Gladys Olajumoke Simplice, President, CITN
- Keynote Address by Professor Lawrence Ezemonye, Vice-Chancellor, Igbinedion University, Okada, Edo State

12 noon – 12:45pm

- Lead Paper Presentation II: Research Philosophy and Implications for Taxation Research by Professor Suleiman Akwu-Odo Saliyu Aruwa, Professor of Accounting, Nassarawa State University, Keffi
- Chairman of Session: Professor John Obiora Anyaduka
- Secretaries - Conference Rapporteurs
  
- Goodwill messages from Executive Chairman, Federal Inland Revenue Service, Edo State Internal Revenue Service.
- Vote of Thanks by Mr. Mary-Fidelis Abiahu, Director, Research & Professional Standards, CITN

12:45pm – 1:30pm

Group Photograph / Tea Break

General Session

1:30pm – 2:15pm

- Lead Paper Presentation III: by Professor Ralph Adeghe, Dean, College of Business & Management Studies, Igbinedion University, Okada, Edo State
- Chairman of Session: Professor Eugene Okoye Nwadiolor
- Secretaries - Conference Rapporteurs

2:15pm – 3:15pm

Lunch Break

3:15 pm – 4:30 pm

- Concurrent Session I (Room A to D)
- Associate Professor Olajide Samuel Dada
- Associate Professor Kareem Adedokun
- Associate Professor Michael Barine Nwidobie
- Dr. Kenny Adedapo Soyemi
- Dr. Sunday Mlanga
- Clement Ozele
- Secretaries - Conference Rapporteurs



### DAY 3

#### WEDNESDAY, NOVEMBER 11, 2020: WORKSHOP AND TECHNICAL SESSIONS

- 8:00am – 9:30am Registration/ Tea Break
- 8:30 am – 10:00 am -Technical Session II (Auditorium A): Structure Of Academic Publications:  
Issues for Consideration By Prof. Ishola Rufus Akintoye, CITN Professorial  
Chair in Taxation Occupier & Professor of Accounting, Babcock University,  
Ilishan-Remo  
-Chairman of Session: Professor Kabiru Isa Dandago  
Secretaries - Conference Rapporteurs
- 10:00 am – 11:00 am Special Session:
- 11:00 am – 1:00 pm Concurrent Session II (Room A-D)  
- Associate Professor Dada Olajide Samuel  
- Associate Professor Kareem Adedokun  
- Associate Professor Michael Barine Nwiodobie  
- Dr. Kenny Adedapo Soyemi  
- Dr. Sunday Mlanga  
- Clement Ozele  
Secretaries - Conference Rapporteurs
- 1:00 pm – 2:00pm Lunch Break (Networking)
- 2:00 pm – 3:30pm Closing ceremony, Award to the Best Papers & Distribution of Certificates  
3:30pm Departure



## THE 3RD ANNUAL INTERNATIONAL ACADEMIC CONFERENCE ORGANISING COMMITTEE

S/N	NAMES	DESIGNATION
1.	Prof. Godwin E. Oyedokun	Chairman, Conference Committee
2.	Prof. Kabiru Isa Dandago	Chairman, Organizing Committee
3.	Prof. Ishola Rufus Akintoye	Member
4.	Prof. Rafiu Oyeskola Salawu	Member
5.	Prof. Eugene Okoye Nwadiakor	Member
6.	Prof. S.A.S. Aruwa	Member
7.	Prof. J.O. Anyaduba	Member
8.	Dr. Sunday Mlanga	Member
9.	Dr. Barine Michael Nwidobie	Member
10.	Dr. Kenny Adedapo Soyemi	Member
11.	Dr. Samuel Olajide Dada	Member
12.	Dr. Akeem Babatunde Lawal	Member
13.	Dr. Oluwaseyi Emmanuel Badejo	Member
14.	Mr. Mary- Fidelis Chidoziem Abiahu	Secretary
15.	Mr. Ayodeji Adeyemi	Asst. Secretary

## ACADEMIC CONFERENCE WORKGROUP & LOCAL ORGANIZING COMMITTEE

1.	Dr. Kingsley Atu Omimi Ejoor	Chairman
2.	Prof. Ralph Adeghe	Member
3.	Dr. (Mrs) Josiah Mary	Member
4.	Dr. Sunny I. Agbo	Member
5.	Mrs Gina Oghogho Olufemi	Member
6.	Mr. Clement E. Ozele	Member

## CONFERENCE RAPORTEURS

1.	Dr. Lanre Olasunkanmi	Coordinator
2.	Dr Sunny I. Agbo	Member
3.	Ayodeji Adeyemi	Member
4.	Dunmininu Akande	Member
5.	Senami Sessi – Ogun	Member
6.	Emmanuel Ojo	Member
7.	Gina Olufemi	Member
8.	Clement E. Ozele	Member



## ADDRESS OF WELCOME BY THE CHAIRMAN, ANNUAL INTERNATIONAL ACADEMIC CONFERENCE COMMITTEE

### Protocol!!!

### Introduction

I am pleased to welcome you to the third edition of the CITN Annual International Academic Conference on Taxation in a serene academic environment of Igbinedion University with the Theme: TAXATION, SOCIAL CONTRACT AND ECONOMIC DEVELOPMENT with a lined up sub-themes.

We received over 100 Abstracts and those that scaled through the review process were accepted for presentation in this conference. This conference is sure an improvement on the 2nd edition and on behalf of the Institute, I wish to appreciate all the members of the Committee and staff of our great Institute and Igbinedion University that have worked tirelessly in ensuring that this edition is yet another success story.

### About CITN

The Chartered Institute of Taxation of Nigeria (CITN), established in 1982 and chartered by Act No. 76 of 1992, now CITN Act CAP C10 Volume 2 Laws of the Federation of Nigeria 2004, is the only regulatory body for Taxation profession in Nigeria. Its membership spreads across the country with over 23,000 membership base.

Since its inception, CITN has contributed immensely to various fiscal policies reforms aimed at achieving sustainable economic development in the country. CITN also promotes ways of ensuring an increase in national revenue from taxable income.

### Significance of the Conference

The conference provides a wide range of opportunities for participants, host community, the nation and world at large, to extend the frontiers of knowledge in taxation and related fields and create a nexus for policymakers in evolving better policies.

Distinguished participants, I will like to let you know that by attending this conference:

- i. you will benefit from various presentations on contemporary issues in Taxation, Fiscal Policy and related research findings;
- ii. your papers could be published in prominent Academic Journals including the prestigious Journal of Taxation and Economic Development;
- iii. your Abstract(s) will be published in the Book of Abstracts and read by scholars;
- iv. you will be able to share your experience with the entire Nigerian populace,
- v. there are prizes/awards for selected and outstanding papers at the Conference;
- vi. Participants who are members of CITN would be allocated 15 credit hours for attending this conference.

One more thing and on a lither mood, if by any chance you do not like or enjoy any aspect of this conference (at our instance), kindly write to me in my capacity for the refund of your conference. Meanwhile, terms and condition apply!!!

4th Academic Conference



Dear participants, I am using this opportunity to inform you that the preparation for the 4th CITN International Academic Conference will hold in August 2021. The details on the date and venue would be announced later. The collection of abstracts for the 4th International Academic Conference will commence immediately after this conference. We will be looking forward to receiving your papers and your presence at the 4th Annual Conference.

#### Conclusion

It is worth the effort to appreciate the Vice-Chancellor, Professor Lawrence Ezemonye and the Principal Staff of this revered University of Choice (our host and collaborator).

I thank Dame Olajumeke Simplice, the 14th President of CITN and the entire CITN Council for approving my committee's recommendations for this Academic Conference. My appreciation goes to the members of the Conference Organizing Committee ably led by Professor Kabiru Isa Dandago, the Local Organizing Committee as led by Associate Professor Atu O.O. Kingsley (FCTI), and indeed the CITN Staff as led by Mr Mary-Fidelis Abiahu, Director, Research and Professional Standards of CITN as delegated by the Registrar/ Chief Executive, Mr Adefisayo Awogbade, for their unfaltering contributions towards making this conference a reality.

It is, therefore, my singular honour and privilege to invite the Registrar and Chief Executive of the Chartered Institute of Nigeria, Mr Adefisayo Awogbade to please read the citation and invite the 14th President of our dear Institute to declare this 3rd CITN International Academic Conference on Taxation open.

I thank you all once again for coming and wish us all a fruitful deliberation.

Prof. Godwin Emmanuel Oyedokun, FCTI  
CITN Council Member  
Chairman, Education/Academic Conference



**WELCOME ADDRESS BY THE PRESIDENT OF THE CHARTERED INSTITUTE OF TAXATION OF NIGERIA, DAME GLADYS OLAJUMOKE SIMPLICE, FCTI, AT THE OPENING CEREMONY OF THE 3RD ANNUAL INTERNATIONAL ACADEMIC CONFERENCE ON TAXATION HELD AT IGBINEDION UNIVERSITY, OKADA, EDO STATE, NIGERIA ON MONDAY, 26TH OCTOBER, 2020**

**Protocols**

I am pleased to welcome distinguished participants to the 3rd Annual International Academic Conference being organized by the CITN in collaboration with Igbinedion University, Okada. Our partnership with this University in hosting this all-important conference attests to the respectability and place of Igbinedion University in the Nigerian Tertiary Education System. I commend the Vice-Chancellor, Professor Lawrence Ezemonye and his team for the enormous efforts put into making this conference a reality despite the challenges posed by the COVID-19 Pandemic in organizing events of this nature.

As we are well informed, the theme of this year's conference is Taxation, Social Contract and Economic Development. It is right to ask what gave rise to this thematic issue at this point. It is agreeable that no nation can achieve development in the absence of adequate revenue to fund its programmes and projects. However, sustainable and adequate revenue mobilization is a function of an effective tax system. In the same vein, there cannot be an effective tax system if the social contract is observed in breach by either party.

Sadly, this is the case with developing nations of the world, Nigeria inclusive.

On the citizen's part, the level of tax compliance is abysmally low such that revenues from taxation cannot fund development projects. From available data from the Joint Tax Board, just about 13% of our population are in the tax net. This is not encouraging for any nation that desires to achieve development in the foreseeable future. If we could ramp up the number of active taxpayers across all sectors, the recurring budget deficits and tendency to borrow to fund the budget will be adequately addressed.

On the governance side, there is a glaring trust deficit between the citizens and the government. They do not trust that the government would channel tax revenues for its intended purpose. The reason for this is not far-fetched. We have seen a consistent failure by successive governments in transparently accounting for revenues and executing programmes and projects that impact on the standard of living of the people. Therefore, both players in the social contract must play their part for our country to achieve economic development.

Distinguished participants, with this background, I expect that this conference will address possible remedies to challenges inherent in the tax system from the erudite scholars at this conference. Being an academic conference, we recognize the need for scholarly research on varying subjects relating to taxation and the economy. Therefore, we have structured robust sub-themes which would form the basis for the various papers to be presented by budding scholars from across the Nigerian Tertiary Education system.

Distinguished guests and participants, I must admit that our country is blessed with an enthusiastic number of researchers and professionals who are passionate, energetic and resourceful in their resolve to contribute to nation-building. It is evident in the number of papers sent in for this conference and attendance at previous conferences of the Institute. CITN will continue to provide support by way



of promoting discourse at conferences of this nature towards harnessing their potentials for national development. Importantly, at the end of this conference, we look forward to generating insightful and robust ideas that would be beneficial to government at all levels, particularly in tax administration, revenue generation and proposed fiscal policy initiatives.

### **Conclusion**

Distinguished guests, ladies and gentlemen, as I had alluded to in my opening comments, this conference was made possible by the “handshake” between CITN and Igbinedion University, Okada. The Founder, Chief Gabriel Osawaru Igbinedion, the Vice-Chancellor, Prof. Lawrence Ezemonye are worthy of mention for their great support. Members of the Organising Committee, the International Academic Tax Conference Committee, and the Local Organising Committee are well appreciated. I thank Prof. Godwin Oyedokun and Prof. Kabiru Isa Dandago for leading the wonderful team on this selfless endeavour. I also wish to extend my appreciation to the CITN Benin and District Society led by Barr. Festus Edogiawerie, Staff of the Secretariat and indeed all who have been part of the planning and execution of this conference, I thank you all.

At this juncture, I am honoured to invite the Vice-Chancellor Igbinedion University, Prof. Lawrence Ezemonye to deliver the keynote address.

Thank you for your attention and God bless you.

**Dame Gladys Olajumoke Simplice, FCTI**  
**14th President/Chairman of Council**  
**Monday, 26th October 2020**



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# **FIRM'S BEHAVIOURS AND DISCLOSURE OF ENVIRONMENTAL PRACTICES IN NIGERIA**

**AKINLADE, OLAYINKA ODUNAYO**

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## **Abstract**

The study investigated the relationship between firm behaviour and the extent of the environmental disclosures of Nigerian listed firms. The sample consists of 33 non-financial firms listed on the Nigerian Stock Exchange (NSE) at the end of 2019. Secondary data extracted from the annual reports of sampled firms were analysed through ordinary least square (OLS) regression. Results of the regression analysis indicate that firm size and industry membership are positively related to the extent of environmental disclosure, while profitability is negatively related. Neither leverage nor age has a statistically significant relationship with the extent of disclosure. The study concludes that firm size, industry membership and profitability are important firm characteristics that can have influence on the extent of environmental disclosure. It was recommended that Nigerian firms should make conscious efforts towards environmental disclosures. Environmental regulation and enforcement is weak in Nigeria and thus need to be strengthened.

Keywords: Environmental disclosure, firm characteristics, Nigerian listed firms.

## **1.0 Introduction**

The pathetic environmental effect of climate change and global warming, natural disasters and pollution on economic development have heightened the worries and concerns of governmental agencies, environmentalists and stakeholders about the protection and conservation of the natural environment globally. As a result of these growing agitations, companies have been facing intense pressure to operate in an environmentally responsible manner and to provide information about their environmental performance (Iwata & Okada, 2016). In order to respond to these demands, firms all over the globe have begun to seek ways of reducing their negative impacts on the environment and started voluntarily reporting their environmental performance and environmental information disclosure has become an important dimension of accounting information systems. (Ahmad & Mousa, 2017).

Dixon, Mousa, and Woodhead (2015) stated that the main reasons for the development of environmental disclosure are the increase of environmental regulations and pressure for clean air, clean water and general clean physical environment by various groups, the

increase of environmental risks and companies' desires to improve their images or gain financial benefits by using this kind of disclosure. These developments have also led to a substantial increase in the academic research in the area of environmental disclosure. However, it can be said that the literature has provided little empirical evidence on the environmental disclosure practices of the developing countries (Uwueze, 2017). Especially, in Nigeria, there are only a few studies with regards to the environmental disclosures of Nigerian companies. The findings of Kayode (2018). Adaeze (2018) indicated that there has been an increase in the volume of environmental disclosures of Nigerian companies over time. Previous studies on environmental disclosures and firm behaviour in Nigeria are sector-based and few firm's behaviours are covered. For example, Dibia and Onwuchekwa (2017) empirically analysed the determinants of environmental disclosures using oil and gas companies in Nigeria by examining the effect of four firm behaviour of size, profit, leverage, and audit firm type on environmental disclosures between 2008 and 2016. However this study goes further to cover more firms and years.

## **1.1 Background to the study**

The political upheaval and agitations in Nigeria cannot be wished away until there is a policy to incorporate environmental concerns into the nation's financial institution industry planning, management and decision making. Ngwakwe (2019) noted that the increasing external pressures from many stakeholders such as financial institutions, socially responsible investors, government, and community lobby groups. That is, members of host communities among others, now make companies to have more interest in environmental accountability issues. Nevertheless, firms behaviour and disclosures on environmental practices has not become norm and is still in its developing stage in third world countries like Nigeria in spite of the availability of a number of methodologies and practices (Donwa, 2011; Amaeshi, Adi, Ogbechie & Amao, 2016).

In general, the expectation is that firms that provide more information on firm's behaviour and disclosures on environmental practices would also experience or enjoy improved financial performance. It is also believed that financial performance of firms have to do with how they applied their resources to provide more environmental impact in terms of social, economical, political and technological . Several studies have been conducted by researchers at the international scene to investigate the link between firm behaviour and disclosures on environmental practices.

## **1.2 Statement of the problem**

A major issue to the accounting profession is to advance the environmental disclosure practices in Nigeria. It is no doubt that firms have been contributing through corporate social responsibility but this is a far cry to the impact of these firms on their environment. Iwata and Okada (2016) stated that the CSR is not a substitute for the impact these firms create on their environment and as a matter of paramount importance such activities must be disclosed and reported on the financial statement. The situation prevalent is worrisome because most firms do not report adequately or disclosed the impact of the firms on the environment which is against the spirit of professionalism, accountability and transparency expected by all stake holders and the general public on the imperatives and benefits of environmental accounting in our personal and business lives which include: promoting economic activity; facilitating savings and investments; and generating strategic competitive advantage.( Cho & Patten, 2017)

Damark-Ayadi (2018) observed that large number of people in Nigeria dwell are experiencing low standard of living, even though the country is blessed with abundant and tremendous natural resources which are being monopolized continuously by multinational companies and governments. Although, the use of natural resources is vital to economic development but it is not without environmental consequences such as environmental and atmospheric pollution, oil spillage, and desertification, destruction of ozone layers, global warming and climate change that is inimical to our existence. Nigeria as a developing country in the quest for economic advancement continues to exploit the natural resources hence there is correlation between the Nigeria's GDP and Natural resources consumption (Adaeze, 2018)

However, other contending issues that are still debated are the effects of some environmental accounting issues (which are largely unaccounted for) but have tremendous impact on the economic development of Nigeria. Hence, the questions raised by the researchers will be answered in this current research study.

## **1.3 Objective of the study**

The general objective of the study is to investigate the role of the firm's behaviour and disclosure on environmental practices in Nigeria. The specific objectives of the study are;

- i. To determine the relationship between firms size and environmental disclosure
- ii. To examine the relationship between profitability and environmental disclosures
- iii. To determine the relationship between industry behaviours and environmental disclosures

- iv. To analyse the relationship between firms age and extent of environmental disclosure

#### **1.4 Research Question**

The study attempt to answer the following questions

- i. To what extent is the relationship between firm size and environmental disclosure?
- ii. To what extent is the relationship between firm's profitability and environmental disclosure?
- iii. To what extent is the relationship between industry behaviour and environmental disclosures?
- iv. To what extent is the relationship between firm's age and extent of environmental disclosure?

#### **1.5 Hypotheses**

The following were formulated for the study

H<sub>01</sub> : There is no significant relationship between firm size and extent of environmental disclosure

H<sub>02</sub> : There is no significant relationship between firms profitability and extent of environmental disclosures

H<sub>03</sub> : There is no significant relationship between industry behaviour and extent of environmental disclosures

H<sub>04</sub> : There is no significant relationship between firms age and extent of environmental disclosure

#### **1.6 Scope and limitation of the study**

The annual reports of quoted companies are considered as the source of environmental disclosure, although companies can use a variety of communication channels for disclosing environmental information such as separate environmental, social responsibility or

sustainability reports and web-pages. Second, the sample of the study consists of 33 non-financial firms listed on the NSE and these firms are mostly large companies. In this sense, the results of the study may not be generalized for small firms.

## **2.0 Literature Review / Theoretical Framework**

### **2.1 Conceptual Review**

Environmental accounting is an alternative aspect of accounting. It generates reports for both internal use, providing environmental information to help make management decisions on controlling overhead, capital budgeting and pricing, and external use, disclosing environmental information of interest to the government, public and to the financial community (Eze, Nweze and Enekwe, 2016). This study takes into consideration both internal and external uses.

The environmental issue has become a global concern in the last decades being the spotlight in the different forum both at national and international levels. Environmental issues are rooted in economic and social policies, they occur at all levels from local to global, and solutions demands action by many players over a long period of time. The industrial revolution had brought economic improvement in almost all our spheres of lives, greater prosperity, improved health, better and easy way of doing things, indeed it is synonymous to economic development (Ironkwe and Success, 2017).

Yakhon and Dorweiler (2018) emphasized that the impact of business activity on the environment is found in several forms: air, water, underground pollution, drinking water, land and habitat for endangered and threatened species, oceans, atmosphere, land-masses etc. An array of pollutants, including toxic, hazardous and “warming” is accountable to business activities. They expressed that from this range of environmental impacts, multiple disciplines are needed for analysis of effects, and for integration into management decisions into management decisions and accounting reporting.

The environment regeneration is one of the important priorities to government institutions. Economic instruments such as taxes, tradeable permits or subsidy reform promise to achieve both environmental regeneration and economic objectives by raising the cost of environmentally harmful activities and at the same time lowering the cost of labour (European Commissions, 2013).

Mastrandea and Schneider (2018) highlighted that industrial revolution has brought economic improvement for most people in industrialized societies. Many enjoy greater prosperity and improved health. They opined that there have been costs, caused by factory



pollutant ion that harmed the natural environment. However, the application of machinery and science to agriculture has led to greater land use and therefore, extensive loss of habitats for animals and plants. These factors, in turn, have caused many species to become extinct or endangered.

Eze, Nweze and Enekwe (2016) posited that Nigeria being a developing nation, endowed with natural resources such as petroleum, natural gas, coal, limestone, vegetation etc. is not devoid of environmental degradation. The nation, in an attempt to tap these resources to enhance its economic development and well-being of the citizenry invariably finds her experiencing an array of pollutants including carbon dioxide, warming and other greenhouse emissions.

Akinbami and Adegbulugbe (2016) opined that the house of natural resources including energy is indispensable to economic development and not devoid of environmental consequences as traceable to the environmental degradation and the atmospheric pollution experienced in Nigeria. Beredugo and Mefor (2013) highlighted that Nigeria as a developing country must continue to advance economically and thus enquires increased exploitation of natural resources. They buttressed further that there exists a polarity between Nigeria's GDP and energy consumption, as they bear highly correlated. They emphasized that most of the natural resources consumed are nonrenewable and are under threat of depletion, and a persistence consumption of our most valued natural resources in present-day, would compromise the ability of future generations to meet their own needs. Oil exploration and government activities may have reduced the quality and usefulness of life through gas flaring, industrial pollution, oil spillage, deforestation and other related problems. However, huge amount of income is derived daily by the country from sales of crude oil and its by-products. Therefore, one would generally assume that this money should have significant impact at least on the development of oil and on the mineral producing communities. This should be so because it is on the record that the oil and gas industry remains the major income earner (about 90% of the total revenue) for the nation (NEEDS, 2004 and shell, 2000).

According to Ironkwe and Success (2017), environmental accounting issue since the early 1970s gradually taken the center stage in international discussion. The movement for environmental accounting and conservation of natural resources began in the advanced countries. In 1992, the United Nations Framework Convention on Climate Change was signed by most countries to consider steps to reduce global warming and palliate climate change. In 1997, a treaty known as the Kyoto Protocol was signed, setting binding targets for 37 industrialized countries and the European community to reduce their greenhouse gas (GHG) emissions. As a further step in the global concern for the environment, the UN

Conference on Environment and Development (UNCED), was held at Rio de Janeiro from 3 to 14 June, 1992. Popularly known as Earth Summit on Environment and Development, the Rio Conference was slated to coincide with the 20<sup>th</sup> anniversary of the Stockholm Conference (Cunningham and Saigo, 2017). The Rio declaration comprises of principles for guiding action on environment and development. Many address development concerns, stressing the right to and need for development and poverty alleviation.

Ogbeifun (2017) argued that decades of development have been lost apparently due to slow economic growth, inadequate development plan, and corrupt practices in high places. Again, their per capital income of about \$300 a year reveals that the country remains one of the poorest in the world. In spite of the country's natural endowmentssuch as vast mangrove forest, wet and fertile lands, serious threats from exploitation of timber, oil spills, gas flaring and the impacts of increasing costal urbanization appear to be posing serious challenges to Nigeria (NEEDS, 2004).

Obemene and Olaoye (2018) pointed out that the haste to develop did not incorporate pollution control and waste management into environmental management plan. Even the environmental laws regarding pollution and waste management seem to be inadequate where they exist remain to a large extent unenforceable. It is no wonder then, that Ogbeifun (2017) advocated that urgent steps to be taken, so that this present generation does not bequeath to her future generation, a downstream sector that is import dependent and dollar driven. Hence, the need for this study stretched out from the impact the environmental accounting has on Nigeria's economic development.

## **2.2 Theoretical Review**

### **2.2.1 Stakeholder theory**

The focus of stakeholder theory is articulated in two core questions (Freeman 1984). First, it asks, what is the purpose of the firm? Second, stakeholder theory asks, what responsibility does management have to stakeholders? Stakeholder theory challenged the conventional conception of the firm as a closed entity which operates solely in the interest of shareholders (Daood & Menghwar, 2017). According to stakeholder theory, firms have to take into account the needs and interest of the actors who either influence or are influenced by them (Freeman, 1984; Freeman, Harrison & Wicks, 2007). These actors include the environment and other corporate constituents. Thus manager is morally responsible for putting up strategy and operating corporate activities in ways that strike a balance between conflicting stakeholder demands as business sustainability depends on these stakeholders (Huang & Kung, 2016). Studies on environmental disclosure like this one are answers to questions of stakeholder theory bringing into perspective shared value

and stakeholder management efforts of the managers.

### **2.2.2 Signalling Theory**

Environmental disclosure conveys information about environmental activities of a firm and depicts the quality of such disclosure as adjudged by the readers and users. Signalling theory is fundamentally concerned with reducing information asymmetry between two parties (Spence, 2012). Quality is important to signalling theory. Ross (2017) as cited by Connelly, Trevis, Duane, Reutzel (2011) refers to quality as ‘the unobservable ability of the organization to earn positive cash flows in the future, which may be signalled by financial structure and/or managerial incentives’. Akerlof (1970) considers that the asymmetric distribution of information creates a barrier to the smooth exchange of assets at efficient prices with low transaction costs and trading frictions by introducing adverse selection; however information disclosure reduces the opportunity to obtain private information from investors.

## **2.3 Empirical Review**

### **2.3.1 Size of Firm**

The relationship between company size and the extent of environmental disclosure has been investigated by a number of studies. With a few exceptions, most of these studies have found a positive relationship between the company size and the amount of environmental disclosure. Patten (2017) argued that larger firms tend to disclose more information than smaller firms because of visibility concerns. Similarly, Cormier and Gordon (2011) state that, in the context of legitimacy theory, as a firm increases in size, it becomes more visible and therefore more accountable for environmental issues. Hence, larger firms are expected to provide more environmental information to present that their operations are legitimate and consistent with good corporate citizenship. Furthermore, it is suggested that gathering and disclosing this kind of information is a costly process and contrary to larger firms, small firms might not have sufficient funds for such costs (Pahuja, 2009). Based on these explanations, large companies are expected to disclose more environmental information than small ones.

### **2.3.2. Leverage of Firm**

Although leverage has been considered as an important company behaviour that can have an influence on the environmental disclosure, it is possible to say that there is no consensus in the literature on the relationship of this characteristic with the extent of disclosure. Leverage can affect the volume of environmental disclosure in two-fold manner

(Andrikopoulos & Kriklani, 2013). It is argued that as firm debt (leverage) increases, the investors' monitoring demand for information also increases in order to keep themselves informed about operating performance of the company, including environmental performance. Furthermore it is suggested that companies with higher leverage are more likely to increase the volume of corporate disclosure to reduce agency costs (Ho & Taylor, 2017). Because of these reasons, a positive relationship between leverage and environmental disclosure can be expected and this argument is supported by the results of the empirical studies such as Clarkson, Richardson and Vasvari (2014), Meng, Zeng, Tam, and Xu (2013), and Huang and Kung (2016).

On the other hand, Brammer and Pavelin (2008) argued that companies with relatively lower leverage may be able to have sufficient funds for financing environmental disclosures and to have the opportunity to focus organizational activities that are only indirectly affect the financial success of the company such as voluntary disclosure by the reason of facing less pressure from creditors. In a similar vein, Cormier and Gordon (2011) suggest that environmental information disclosure may increase proprietary costs for high leveraged firms and such costs could make credit negotiations more difficult and costly. Moreover, it is argued that highly leveraged firms have less environmental issues to report because such companies are more likely to comply with environmental regulations (Wu, Linxiao & Sulkowski, 2016).

By these reasons, a negative relationship between financial leverage and volume of environmental disclosure can also be expected. This negative relationship has also been documented by empirical studies such as Brammer and Pavelin (2008), Andrikopoulos and Kriklani (2013), Wu, Linxiao, and Sulkowski (2016), Ahmad, Hassan, and Mohammad (2013), Ho and Taylor (2017) and Eng and Mak (2013). Based on these contradictory conclusions from both theoretical and empirical studies, a positive, negative or no relationship between leverage and the extent of environmental disclosure can be expected.

### **2.3.3. Profitability of Firm**

As leverage, the results of previous empirical studies provide mixed results with regard to the relationship between profitability and the extent of environmental disclosure. Some studies found a positive relationship while other studies found a negative relationship. Moreover, some studies report that there is no relationship between profitability and the volume of disclosure (Da Silva Monteiro & Aibar-Guzmán, 2010) and Kathyayini, Tilt, & Lester, 2012). Despite these contradictory empirical results, a positive relation between profitability and the extent of environmental disclosure can be expected based on the argument that more profitable companies may have sufficient funds for compensating costs of environmental disclosures (Brammer & Pavelin, 2008). It is also argued that companies

with high profitability ratios may disclose more information in order to prevent negative attention that could stem from excess profitability and to increase their credibility among investors

#### **2.3.4 Industry Membership**

The relationship between industry membership and the extent of the environmental disclosure has been investigated by many theoretical and empirical studies due to the fact that each sector has some distinctive characteristics that may relate to risks to society, potential growth, employment, competition and government interference (Ahmad, Hassan, & Mohammad, 2013; Gao, Heravi, & Xiao, 2015). In this context, it is possible to say that the results of the previous empirical studies, with regard to the relationship between industry membership and the volume of environmental disclosure, usually indicate that companies operating in environmentally sensitive industries disclose more environmental information than companies operating in non- environmentally sensitive industries.

The literature provides some theoretical explanations for these empirical results. Pahuja (2009) argues that companies from environmentally sensitive industries disclose more environmental information than less polluting companies, because of their significant impacts on the environment. In line with this argument, it is also suggested that these firms have incentives for disclosure beyond their environmental performance, since they face greater pressure and scrutiny from powerful stakeholders (De Villiers & Van Staden, 2016; Cho & Patten, 2017). Based on these explanations, the following hypothesis is stated:.

#### **2.3.5 Age of Firm**

Finally, firm age has been considered as another important company behaviour that can influence the extent of environmental disclosure. It is suggested that age of the company can serve as an indicator of perceived stability of the firm (Liu & Anbumozhi, 2016) and represent some aspects of stakeholder power, strategic posture and financial performance (Roberts, 2012). It is also argued that as a company matures, its reputation and involvement in discretionary activities, such as environmental protection activities and disclosure of environmental information, can become entrenched and more valuable to company (Dibia & Onwuchekwa, 2017). In this sense, a positive relationship between age of the company and the extent of environmental disclosure can be expected.

Prior empirical research on the corporate environmental disclosure can be categorized into five groups. The first group studies measure the volume of corporate environmental disclosure with some comparisons on countries, sectors or media. The second group studies focus on the quality of information disclosed. The third group investigates the determinants

of the corporate environmental disclosure while fourth group explores the relationship between environmental disclosure and corporate environmental performance. Finally, the fifth group of studies analyses the market reactions to corporate environmental disclosure (Jose & Lee, 2017). This study fits into the second group. Based on the existing literature related to this topic, five firm characteristics are considered as the company attributes that may have a relationship with the extent of the companies' environmental disclosures: size, leverage, profitability, industry membership and age. Each of these characteristics is discussed in turn and hypotheses on their relation with the extent of environmental disclosure are proposed below. But first we will look at the theoretical basis for this work and we will review stakeholder theory.

### **3. Methodology**

#### **3.1. Research Design**

The study employed panel data for the study. The annual report of 33 non-financial firms listed on the Nigeria stock exchange (NSE) as at 31<sup>st</sup> Dec, 2019 was analysed for 10 years that is from 2010 –2019 period using ordinary least square (OLS) regression analysis.

#### **3.2. Sampling & Sampling Size**

The sample consists of 33 non-financial firms listed on the NSE main board covering ten financial periods from 2010 to 2019. The environmental disclosure data were retrieved from the annual reports of the companies by conducting content analysis. On the other hand, data for the firm characteristics (independent variables) were gathered from the web sites of Bloomberg and sampled companies.

### **3.3 Variables**

#### **3.2.1. Dependent Variable – The Extent of Environmental Disclosure**

Environmental disclosure can be defined as disclosures that related to a company's past, current and future environmental management decisions, activities and performance (Berthelot, Cormier, & Magnan, 2017). In this context, based on the review of previous studies analysing the extent of environmental disclosures, 8 main themes related to the environmental information are determined, namely, environmental policy, environmental protection activities, compliance with Environmental Management Standards and regulations, air emission information, energy, waste management, awards and other environmentally related information.

In order to measure the extent of environmental disclosure of Nigerian companies, the annual reports of sampled firms between 2000 and 2019 are analysed through content analysis. Abbott and Monsen (2018) defined content analysis as: ‘*A technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity*’. The annual reports are chosen as a basis for data collection on environmental disclosure due to the following reasons:

- i. The annual reports are compulsory as they are required by legislation and so they are produced regularly especially by all listed companies and by these reasons making comparisons relatively easy (Tilt, 2016).
- ii. The annual report also has a wide availability and is the most often used communication channel by the companies in order to communicate with all stakeholders in a systematic manner (Hughes et al., 2017).
- iii. Finally, the findings of the study by Tilt (2016) indicate that compared to all other disclosure formats, annual reports are considered as the most credible medium for environmental disclosures (Tilt, 2016).

Selection of a ‘unit of analysis’ represents another important issue in determining the extent of environmental disclosure through content analysis. In this respect, Holsti (2018) defined recording unit as ‘the specific segment of content that is characterized by placing it into a given category’. This study uses number of words as the unit of analysis in order to measure the extent of environmental disclosures of Nigerian sampled firms, since number of words as a recording unit has the advantage of being categorized more easily (Damak-Ayadi, 2018) and needs less subjective judgment of the researcher.

**Table 1: Summary of independent variable**

VARIABLES	Description	Hypothesis	Expected Sign
Size	Company size, measured as the natural logarithm of total assets for the fiscal years 2010 – 2019	H1	+
Leverage	Leverage ratio, measured as the ratio of the total debt to equity for the fiscal years 2010 – 2019	H2	+/-
Profitability	Return on assets, measured as the ratio of profit after tax to total assets for the fiscal years 2010 –	H3	+

2019

Industry Membership	Dummy variable which is equal to 1 if the company operates in an environmentally sensitive industry and 0 otherwise from 2010-2019	H4	+
Age	Company ages covering date of incorporation from 2010 to 2019	H5	+

**SOURCE: Authour, 2020**

### 3.2.2. Independent Variables – Firm behaviours

Table 1 presents the independent variables which are selected on the basis of previous literature analysing the relationship between firm characteristics and the extent of environmental disclosure. The data related to the size, leverage and profitability variables were retrieved from the web site of Bloomberg. On the other hand, as shown in Table 1, the industry membership is a dummy variable which takes 1 for companies belonging to environmentally sensitive industries and 0 for those belonging to non-sensitive industries.

## 4. Statistics and Discussion

### 4.1. Descriptive Statistics

Table 2: Descriptive Statistics

Panel A — Dependent and Independent Variables

<b>Panel A- Dependent and Independent Variables</b>								
<b>Variable</b>	<b>Obs.</b>	<b>Mean</b>	<b>Median</b>	<b>Std. dev.</b>	<b>Min.</b>	<b>Max.</b>	<b>Skew.</b>	<b>Kurt.</b>
EID	330	311.976	150.250	424.556	0.000	1927.000	2.052	7.091
SIZE	330	10.4685	10.4685	1.375	17.824	23.565	0.189	2.345
LEV	330	0.4185	1.0530.	3.916	-	9.641	-5.705	42.690
PROF	330	0.0245	0.064	0.190	26.948	0.433	-4.368	30.430
AGE	330	19.3065	41.500	16.239	-1.188	80.000	0.121	2.423
					10.000			

**SOURCE: Authour, 2020**

Table 2 reports the descriptive statistics. The mean, median, standard deviation,



minimum and maximum values and measures of skewness and kurtosis for the numerical variables are presented in Panel A.

The mean value of the dependent variable of the study, the extent of environmental disclosure (EID), is 311.976 with a minimum value of 0 and maximum of 1927. Based on these figures, it will not be wrong to say that there is a wide range in the volume of environmental disclosures of sampled companies in their annual reports. Regarding to the independent variables, Table 2 shows that the mean value of size which is measured by natural logarithm of total assets for five period covering 2008 - 2017, is 10.468 thus it can be easily said that the sample consists of relatively larger companies.

**Table 3: Pearson Correlation Matrix**

Variables	EID	SIZE	LEV	PROF	IND	AGE
EID	1					
SIZE	0.435*	1				
LEV	-0.032	-0.031	1			
PROF	-0.030	0.213**	0.136	1		
IND	0.232	-0.019	-0.149	0.242	1	
AGE	0.139	0.111	0.180	0.202	0.477*	1

\*Correlation is significant at the 0.01 level (2-tailed); \*\*correlation is significant at the 0.10 level

(2-tailed)

Variable	Coefficient	Std. Error	t-Stat.	p-value
Intercept	-6126.531	1449.315	-4.227	0.000
SIZE	305.001	68.833	4.431	0.000
LEV	14.554	25.007	0.582	0.5630
PROF	-960.728	516.133	-1.861	0.068
IND	633.727	257.392	2.462	0.017
AGE	-2.019	6.737	-0.300	0.766
R-Squared	0.289			
Adjusted R-Squared	0.225			
F-statistic	4.549			
p-value of F-Statistic	0.001			

SOURCE: Authour, 2020

## 4.2 Correlation Matrix

Table 3 presents the Pearson correlations matrix between the dependent and independent variables. The results of the Pearson correlation analysis indicate that the highest correlation coefficient between independent variables is 0.477 for age and industry membership. Farrar and Glauber (2017) suggest that correlation between independent variables should not be considered as harmful until the correlation coefficients reach 0.8 or 0.9 (Farrar & Glauber). In this sense, it is possible to say that there is no unacceptable level of multicollinearity between the independent variable

Similarly, in support of hypothesis 1, the regression results show a significant positive relationship between industry membership and the extent of environmental disclosure. This result is also in line with the previous research and suggests that companies operating in environmentally sensitive industries disclose more environmental information than companies operating in non- environmentally sensitive industries.

On the other hand, the coefficient on profitability is negative and statistically significant at 10% level, implying that an increase in profitability reduces the volume of environmental disclosure. In other words, companies with low profitability ratios tend to disclose more environmental information. Although this finding is contrary to initial predictions, it is in the same vein as the result of Andrikopoulos and Kriklani (2013). This result supports the arguments that profitable companies usually have less environmental problems to report (Wu et al., 2016) or those companies may be disclosing environmental information through alternative medium, such as a separate environmental or sustainability report (Kathyayini et al., 2017). In consequence, hypothesis 2 is accepted.

The results of the OLS regression analysis provide empirical evidence that there is a positive relationship between company size and the extent of the environmental disclosure for sampled Nigerian firms (hypothesis 1). Thus, in consistent with the previous studies, this finding supports the argument that larger firms disclose more environmental information than smaller firms for the purpose of increasing their legitimacy (Huang & Kung, 2016).

Similarly, the results provide supporting evidence for the hypothesis 2 that there is a significant positive relationship between industry membership and the extent of environmental disclosure. This is also consistent with the previous researches and suggests that companies from environmentally sensitive industries disclose more environmental information than those from non- environmentally sensitive industries. This finding provides empirical support for the argument that environmentally sensitive companies face greater pressure and scrutiny from powerful stakeholders because of their significant

impacts on the environment. (Cho and Patten, 2017).

On the other hand, contrary to the expectations, the results of the analysis reveal a negative relationship between profitability and the extent of the environmental disclosure for Nigerian firms. One possible explanation for this negative relationship could be that companies with high profitability may have better compliance with environmental regulations, thus these companies tend to have less environmental problems to report (Wu et al., 2016).

The results of the regression analysis do not provide statistical support for the remaining hypotheses, relating to variables leverage and age. The coefficient for leverage is positive but not statistically significant, which means that there is no statistically significant relationship between leverage and the extent of environmental disclosure. This result is consistent with the findings of Sutantoputra, Lindorff, and Johnson (2012), Clarkson, Overell, and Chapple (2016). This insignificant relation may stem from the slight attention of the creditors to the environmental performance of Nigerian firms (Liu & Anbumozhi, 2016). Similarly, the coefficient for age is positive but again not statistically significant. This finding is in the same vein as the results of Zeng, Xu, Yin, and Tam (2018).

It is considered that the study has contributed to the related literature because it has provided some insights from a developing country and represented an attempt to analyse the relationship between firm characteristics and the extent of environmental disclosures of Nigerian firms

Finally, the coefficients for the variables leverage and age are not statistically significant, suggesting that the debt to equity ratio and age of a company are unrelated to the extent of environmental disclosure so hypothesis 3 and 4 are also rejected.

## **5.0 Conclusion and Recommendation**

This study has empirically investigated the relationship between selected firm characteristics and the extent of environmental disclosures of companies operating in Nigeria, using a sample of 33 non-financial firms listed on the NSE main board for five years (2010 - 2019). The extent of environmental disclosure is measured by the total number of words related to the environmental issues in the annual reports of the companies derived from content analyses. Based on the previous literature, 5 firm characteristics are considered as the independent variables that may influence the extent of environmental disclosures of sampled companies, namely, size, leverage, profitability, industry membership and age.

The information content requirement by stakeholders helps in disclosing information about firm's behaviour and the report of environmental practices in Nigeria. The study concludes that firm size, industry membership and profitability are important firm characteristics that can have influence on the extent of environmental disclosure. According to the results, size and industry membership have a positive and statistically significant relation with the extent of the environmental disclosure, while profitability has a negative relationship.

.From the conclusion above, the following recommendation was made:

1. Nigerian firms should make conscious efforts towards environmental disclosures. Environmental policy should be put in place, while ensuring that their activities comply with Environmental Management Standards and regulations.
2. Firm's environmental protection activities should target air emission, energy, waste, and water.
3. Companies should be accountable and transparent by showing fines and penalties paid by company, environmental liabilities of the company, environmental provisions, and environmental costs capitalized on the notes to the accounts in their annual reports which is the performance indicators and non financial indicators of their behaviours
4. There should be a conscious policy on the part of all stakeholders to ensure and monitor adherence so as to encourage improve financial performance indicators influence on the firm's value
5. All activities of firms in the environment should be captured along with the financials and disclosed accordingly, thus making environmentally related information available for use of stakeholders.
6. Environmental regulations and enforcements should be strengthened in Nigeria. This can be achieved if firms should adopt uniform reporting and disclosure of environmental issues for the purpose of control and measurement of their behaviour.

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# **CITIZEN ENGAGEMENT AND TAX COMPLIANCE BEHAVIOR AMONG SMES IN NIGERIA**

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## **Abstract**

Tax revenue generation in developing countries generally and in Nigeria, particularly, constitute a huge challenge to stakeholders – government, academic researchers and practitioners. International donors and agencies have also been involved in tax revenue generation issues through technical assistance. Despite all these efforts, Nigeria's tax to GDP ratio remain critically below the internationally recommended benchmark. The problem has been a long standing one. Currently, there is a consensus that tax noncompliance constitutes a key hindrance to adequate tax revenue generation in Nigeria. While numerous factors have been found to influence tax compliance behavior in the country, the influence of citizen engagement is yet to receive adequate empirical attention. This study fills the gap by empirically investigating the relationship between citizen engagement and tax compliance behavior in Nigeria. A survey of taxpayers was conducted among SME owners in Abuja and the data was analyzed using the Partial Least Squares Structural Equation Modeling technique. Citizen engagement was found to highly influence and explained a significant portion of tax compliance behavior. The implications of this findings were discussed including the need to go beyond tax knowledge and awareness as currently practiced and to embrace citizen engagement.

**Keywords:** Tax compliance behavior, Citizen Engagement, Developing countries, self-employed taxpayers

## **1 Introduction**

The crisis of tax revenue generation in developing countries has received remarkable attention over the past 50 years. Nicholas Kaldor appears to have raised the red flag that has attracted a lot of global attention to the wide gap in tax revenue generation between developing and advanced countries (Kaldor, 1963). He stated that, as at 1963, advanced

countries were generating between 25 to 30 percent of their GDPs as tax revenue while developing countries struggled to eke out only 8 to 15 percent. Kaldor warned that developing countries' growth will remain stunted unless they are able to step up tax revenue generation. He recommended 15 percent as the minimum threshold that could enable meaningful development. In line with Kaldor (1963), the International Monetary Fund (IMF) has adopted 15 percent as the benchmark for tax revenue adequacy (IMF, 2011). The United Nations, on the other hand, recommended 20 percent benchmark to enable developing countries attain the 2015 Millennium Development Goals (MDGs).

Unfortunately, over sixty years after Kaldor's seminal exposition, tax revenue generation in developing countries remains a huge challenge (Burgess & Stern, 1993; Besley & Persson, 2014; Mascagni, Moore & McCluskey, 2014). The problem not only persists but appears to have worsened in many developing countries despite several years of donor-assisted tax policy and administration reforms. To underscore the current critical situation of tax revenue generation in developing countries, OECD (2014) 'Fragile States Report' classified about 51 developing countries as fragile – states prone to failure. The OECD study linked these countries' fragility to their inability to generate adequate tax revenue in the face of dwindling proceeds from primary commodities exports. The United Nations has shown considerable commitment to addressing internally generated revenue challenges among developing countries. As such, it has so far organized three global conferences to address the issue (Monterrey Conference, 2002; Doha Conference, 2008; and Addis Ababa, 2015).

There are numerous factors responsible for the low level of tax revenue generation in developing countries. These factors range from economic structure (Kaldor, 1963; Burgess & Stern, 1993; Besley & Persson, 2014); to administrative competence (Bird, 2015), and institutional factors (Mascagni, Moore & McCluskey, 2016). However, there is a growing consensus among scholars and multilateral organizations that tax non-compliance constitutes the biggest challenge (IMF, 2015). There is a current wave of research findings pointing at massive non-compliance with tax provisions among the wealthy in developing countries (IMF, 2013; Kangave Nakato, Waiswa & Zzimbe, 2016; McCluskey, 2016). For some instances, Kangave et al. (2016) conducted an investigation of 60 top lawyers (commercial firms) in Uganda to ascertain their compliance with tax provisions. They found that only 12 paid income tax in 2012 and only 13 paid in 2013. This translates to about 21 percent compliance and 79 percent non-compliance.

It is not surprising that data from Nigerian authorities are similar to the Ugandan findings. Nigeria's immediate past finance minister, Okonjo-Iweala, stated that 75 percent of registered firms in Nigeria boycott the tax system. Worse still, among the remaining 25 percent registered for tax purpose, 65 percent failed to file tax returns (Okonjo-Iweala, 2014). In Kenya, McCluskey (2016) asserted that only 100 high net worth persons are registered with the tax authority from an estimated population of 40,000. The author further

pointed out that 114,000 high net worth businessmen in South Africa are not registered with the tax revenue authority and this leads to revenue loss of about \$10.9 billion. Fjeldstad and Heggstad (2011) stated that, in Tanzania, only 400,000 taxpayers are registered out of the country's population of 45 million people. The authors added that an overwhelming majority of eligible taxpayers avoided their obligations leaving only 400,000 large taxpayers who contributed 80 percent of total tax revenue.

Outside Africa, developing countries in other regions are facing similar problems. As noted by Everest Philips (2010), more than 50 percent of the population pay tax in advanced countries in contrast to one percent in a developing country like Bangladesh. In Latin America, Sabaini and Jimenez (2012) stated that Guatemala has a tax evasion rate of 64 percent while the average for Latin America is 50 percent in their own perspective, Bird and Zolt (2005) observed that the taxpayers to total population ratio in advanced countries is between 28 to 78 percent while it is 0.14 to 12 percent in developing countries. IMF (2013) stated that the vast majority of wealthy self-employed businessmen in Greece are not captured in the tax system. moreover, an OECD investigation of tax effort across developing countries revealed that about 53 of the countries translating to 82 percent are below their tax revenue potential (OECD, 2013).

The massive tax non-compliance in developing countries is puzzling, to say the least. Though the advanced countries have their share of recalcitrant taxpayers, the situation in developing countries is overwhelming and is in no way comparable to what is obtainable in advanced countries. Researchers have linked numerous factors to tax compliance behavior. For instance, Kirchler (2007) stated that the American Inland Revenue Service has found over 60 factors that influence tax compliance in developing countries. Several factors have been investigated – public goods, audit probability, perceived corruption, tax knowledge, awareness, tax system complexity and others. This study investigated citizen engagement in order to ascertain its influence on tax compliance behavior. Though previous researchers mentioned citizen engagement as a crucial element in tackling the tax compliance problem in developing countries (Fjeldstad, 2014; Prichard, 2010), it is yet to be empirically investigated, thus constituting a vacuum in the literature.

The objectives of this study are three-fold. Firstly, it will fill a gap in the literature as it pertains to tax compliance behavior in developing countries by empirically investigating citizen engagement and its influence on tax compliance behavior. Secondly, it aims at setting a precedence enabling other researchers to adopt its measurement of citizen engagement and apply in their country-specific research across developing countries. Thirdly, it brings citizen engagement to the forefront of the ongoing discourse on tax compliance in developing countries pointing out its practical utility in influencing tax compliance behavior. The study proceeds as follows: section two presents an overview of the literature on citizen engagement. Section three discussed the methodology of the study, while section four presents the findings and discussion. Section five concludes the study.

## **2. Conceptual Frame work**

### **2.1 Citizen Engagement: An Overview of the Literature**

The foundation of governance is built on the fiscal social contract between citizens and those that wield governmental powers on their behalf (Ali, Fjeldstad & Sjursen, 2014). It is implied in the fiscal social contract that citizens, on whose behalf governmental affairs are conducted, should be carried along in the process. Beyond carrying citizens along, citizen engagement implies that citizens are able to influence government decision because ultimately, it affects their lives. As noted by Maier-Rabler and Huber (2011), citizens are increasingly demanding for 'open' governance. According to the authors, open encompasses involvement in agenda setting, decision making and policy implementation. In line with Maier-Rabler and Huber, McGee and Edwards (2016) assert that open data and open governance is an emerging field of governance which is related to the well-established subject of transparency and accountability.

In line with the above authors, Roberts (2004) asserted that citizen participation in decisions that affect their lives is an essential ingredient of democracy. The author stated that contemporary governance is shifting towards the role of the public. Public deliberation and participation by citizens are the key ingredients of democracy. It has a long history traced to the ancient Athenians town-hall meetings in Greece (Carpini, Cook & Jacobs, 2004). In an empirical study to investigate the impact of citizen engagement, Gaventa and Barrett (2012) found positive effect of citizen participation. They concluded that citizen engagement can empower citizens to hold governments accountable, build responsive states and create an inclusive and cohesive society.

The perennially poor quality of governance in developing countries manifest in citizen non-engagement. For instance, the World Bank-instituted annual survey of governance perceptions across countries of the world has consistently rated developing countries low in all aspects of governance including voice and accountability which is a good proxy for citizen engagement. In developing countries, the governing elites, rather than being accountable to the citizens, have turned around to utilize the states' security apparatus against the citizens in order to capture the states for their own interest (Moore, 2004). Predatory governance fosters a strained relationship between citizens and governments in Africa. Obasi and Lekorwe (2019) stated that countries in the region have a long history of dictatorships, authoritarian one-party democracies, oppressive monarchies and weak institutions. These deficiencies do not allow for effective citizen engagement in public affairs.

However, non-engagement of citizens could affect developmental efforts negatively. More so, it could lead to tax non-compliance thereby undermining the well-being of the state. As noted earlier, tax compliance literature, especially on developing countries, is yet to

provide guidance on investigating citizen engagement and its relationship with tax compliance behavior. This is not surprising as citizen engagement itself is an emerging field. It is currently receiving a lot of scholarly attention in the fields of Political Science and Public Administration. However, this study should influence tax compliance researchers to pay more attention to the phenomenon.

## **2.2 Empirical Literature**

Poor tax compliance is a major challenge both in the developing and developed countries (Alabede & Zainal Afrin. 2011; Sebele-Mpofu, 2020), Different methodologies have been applied in tax compliance research. Some researchers, including the pioneering work of Allingham and Sandmo (1972) utilized economic modeling technique to predict tax compliance behavior. The upswing in socio-psychological factors brought about the need for other techniques. For instance, Alm, Jackson and McKee (1992) utilized the experimental method while Kirchler, Hoelzl, Leder and Manetti (2008) utilized taxpayer survey in their study. Alm (2012) advocated the experimental method as best suited for tax compliance research due to its sensitive, secretive and criminal nature. Earlier, Devos (2007) wrote in favor of the experimental method but pointed out overwhelming shortcomings that would limit the relevance of findings from experimental studies on tax compliance behavior. According to the author, experimental studies on tax compliance behavior often draw samples from students. It is doubtful whether students' behavior in a controlled experiment could reflect real life dynamics of actual taxpayers.

On the other hand, proponents of taxpayer surveys hinged their arguments on the need to monitor the perceptions of taxpayers as it determines their behavior. As noted by Schmolders (1960) quoted in Kirchler (2007), the manner citizens view their governments is fundamental in deciding their tax compliance behavior. The survey method has the strength of gathering information about taxpayer perceptions across a large population and permits the objective analyses of such data (Fjeldstad et al., 2012). The survey method also allows generalization unlike the experimental approach which is severely hampered by sample size. Fjeldstad et al. (2012) however noted that survey studies are limited by their cross-sectional nature which does not permit investigation of trends over time. Additionally, the authors mentioned the fact that survey responses could be unreliable. Given the pros and cons of different tax compliance research designs

## **3. Methodology**

The study utilized the survey approach. Citizen engagement which was investigated in this study, requires interactions between citizens and government in such a way that citizens are able to effectively participate in the affairs of governance. Capturing the extent of citizen engagement thus requires a survey of taxpayers' perceptions. It is doubtful whether other designs could ascertain the level of citizen engagement as much as the survey method.

Moreover, engagement is about citizen participation. The citizens, better than anyone else, are in a position to say whether they are engaged or otherwise.

### ***3.1 Population and Sampling***

Developing countries are not homogenous. They encompass a wide range of demographic and socioeconomic characteristics and spread around different countries. There is thus the need for caution when investigating a phenomenon that relates to these heterogeneous entities collectively called developing countries. However, the challenges of tax compliance appear to be common to most of the developing countries as reiterated over time by authorities (Kaldor, 1963; Burgess & Stern, 1993; Besley & Persson, 2014). In a study of this nature, it is not possible to conduct surveys across several developing countries. The study was limited to self-employed taxpayers in Nigeria. The choice of Nigeria is informed by the country's large population which makes it about a quarter of the population of sub-Saharan Africa. The country is the most populated (180.5 million, UNECA, 2015) among the countries declared as fragile by OECD citing inability to raise adequate tax revenue as a key reason (OECD, 2014). Based on this population, the country represents close to a quarter of sub-Saharan Africa's population of 800 million. This also makes it a good and fairly representative context in studying issues of developing countries. The country is also believed to have one of the lowest tax-to-GDP ratios in the world (Cobham, 2014) and an astonishing high rate of tax non-compliance (Okonjo-Iweala, 2014).

Narrowing the sample to self-employed businessmen is justified by the fact that this group represents a segment widely acknowledged for its penchant for tax non-compliance (Kirchler, 2007). Self-employed taxpayers (N=570) were randomly selected from the list of self-employed businessmen registered with the revenue agency in Nigeria's capital city, Abuja. Out of this sample, 360 were eventually utilized. The sample size of the study is guided by best practices in quantitative studies especially the Structural Equation Modeling (SEM) technique utilized for data analysis in the study. Quantitative studies using the SEM technique require a sample size of between 30 to a maximum of 500 (Sekaran & Bougie, 2013; Hair et al, 2010). The number chosen between this wide range would depend on dynamics of the particular study such as complexity of the model, overall population of the study, and even the researcher's capacity to survey a larger sample.

### ***3.2 Data Collection Procedure***

This study utilized self-administered questionnaires to elicit responses from self-employed businessmen. Copies of the questionnaires were attached to introductory letters detailing the purpose of the survey and guaranteeing anonymity of the respondents. It was also explicitly stated that respondents were under no obligation and could choose not to participate at any point in the process. The response rate was about 65 percent due to

proactive measures taken by the researcher. Research assistants were instructed to ‘drop and pick’, a strategy that requires waiting for few minutes while the respondents filled the questionnaire (Baruch & Holtom, 2008). To minimize missing data, research assistants were also instructed to peruse answered questionnaires and to draw respondents’ attention to any missing field before leaving with the questionnaire. This strategy takes a cue from online surveys where respondents are not allowed to submit if there is an outstanding or missing field and it was found to be effective.

#### *Data Collection Instrument*

The questionnaire was designed as a ten-point interval scale in which respondents tick between 1 (strongly disagree) to 10 (strongly agree). The statements were adapted from previous studies to measure citizen engagement and tax compliance behavior as shown in table 1.

Table 1

## Summary of measurement items

Construct	Measurement items	Source	Scale
Tax compliance behavior	<ul style="list-style-type: none"> <li>-Musa is justified if he doesn't file his tax returns at the stipulated date</li> <li>-Musa is justifies if he understates the income he reports for tax purpose</li> <li>-Musa is justified if he overstates his deductions</li> <li>-Musa is justified if he fails to pay the assessed amount at the due date</li> </ul>	McKerchar & Evans (2009), Lederman (2003)	Interval scale, 1= strongly disagree to 10= strongly agree
Perceived citizen engagement	<ul style="list-style-type: none"> <li>-I have access to information about government</li> <li>-Ordinary people are consulted in matters of governance</li> <li>-It is difficult to find out how government uses revenue from taxes and fees</li> <li>-Taxpayers are aware of how and why they are to contribute to tax revenue generation</li> <li>-tax authorities have periodic interactions with taxpayers on areas of mutual concerns</li> </ul>	Aiko & Logan (2014); Holmes (2011); Afrobarometer (2006, 2008)	Interval scale, 1= strongly disagree to 10= strongly agree



The measurement of citizen engagement sought to test taxpayers' perceptions on two aspects of citizen engagement – political engagement and fiscal engagement. The measurement of tax compliance behavior follows the traditional definition of tax compliance (Brown & Manzur, 2003; McKerchar & Evans, 2009). The statements for measuring tax compliance behavior were framed as a scenario such that they do not refer directly to the respondents. Tax compliance is a sensitive issue making it prone to non-response, untruthful response and bias. However, the scenario statements could make taxpayers state their own minds without feeling guilty (Ali, Fjeldstad and Sjursen (2014).

### ***3.3 Method of Data Analysis***

The next process after data collection was analysis. This process was conducted in three phases. Firstly, the raw data was screened and cleaned to make it suitable for the main analysis. The data screening procedure was aimed at discovering errors from the respondents or the research assistants in the process of data entry. This phase was done with the aid of SPSS software. Secondly, descriptive analysis of the respondents was carried out to determine the sample characteristics in terms of age, income level, education level and gender. The third phase of the analysis was the main analysis to determine the relationship between perceived citizen engagement and tax compliance behavior. The study utilized the SEM technique, specifically, the Partial Least Square (PLS) approach. According to Hair et al. (2010), the PLS approach is suitable when the objective of a study is to seek for explanation or predictive influence on a construct. In this study, the objective is to determine the extent to which citizen engagement influence tax compliance behavior, hence the PLS approach is suitable. Moreover, the PLS technique is able to assess the measurement model simultaneously with the relationship (path) model. Since this study also aims at providing a measurement of citizen engagement for the benefit of future researchers, the PLS technique becomes invaluable (Hair et al, 2010, 2017).

## **4 Results and Discussion**

This section presents the results of the analyses, discusses the results and implications in relation to previous studies. The results are presented in two phases in line with the PLS technique – the measurement and the path models (Hair et al, 2010, 2017).

*Measurement Model:* The measurement model result is meant to assess the extent to which the constructs under investigation were accurately measured. In other words, the reliability and validity of the constructs are assessed in the measurement model (Hair et al, 2017). Table 2 presents the results of the measurement model.

Table 2: Construct validity and reliability

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>	<b>Discriminant Validity</b>
<b>Perceived Citizen engagement</b>	0.804	0.810	0.865	0.562	Ok
<b>Tax compliance behavior</b>	0.867	0.868	0.909	0.715	Ok

Source: PLS algorithm output

The two criteria for assessing the propriety of the measurement model are the reliability and validity of the measurement (Hair et al, 2017). For reliability, two metrics were considered – the cronbach alpha and composite reliability. The recommended threshold for acceptable cronbach alpha is 0.7 (Henseler et al, 2009, Hair et al., 2017). Results of the measurement model as shown in table 2 indicate that the minimum threshold was clearly exceeded. This means the measurement items were reliable in measuring their underlying constructs. However, experts have faulted the cronbach alpha's ability to measure reliability and recommended composite reliability as a better measure (Hair et al., 2017). Good enough, composite reliability output is also built into the current version of Smart PLS software (Ringle, Wende & Becker, 2015). Table 2 also shows the composite reliability of the constructs and they surpassed the requisite minimum threshold of 0.7 according to Hair et al., (2017). This further strengthened the fact that the items used to measure the constructs are reliable.

The next measure is the validity of the constructs. In the SEM technique, convergent validity is used to measure construct validity. The statistic for determining convergent validity is the Average Variance Extracted (AVE) according to Henseler et al. (2009) and Hair et al., (2017). They stated that an AVE threshold of 0.5 and above is required to attain adequate convergent validity. Table 2 shows that the required level of convergent validity was attained by the constructs investigated in this study. In addition to convergent validity, discriminant validity was assessed and found to be satisfactory.

*The Path Model:* This aspect of the result assessed the relationship between the independent variable and the dependent variable (Hair et al., 2017). In this study, perceived citizen engagement is the independent or explanatory variable while tax compliance behavior is the dependent or outcome variable. Results of the PLS analysis revealed that the relationship between perceived citizen engagement and tax compliance behavior is highly significant, beta=0.686, P value = 0.000 and alpha = 0.05. The coefficient of

determination ( $R^2$ ) of 0.47 in figure 1 shows that perceived citizen engagement has a high explanatory effect on tax compliance behavior explaining about 47 percent variance. This result is considered large in Social Science research (Hair et al.,2017).

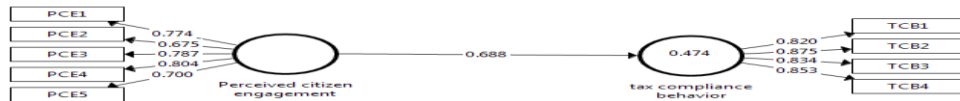


Figure 1: *PLS algorithm output*

*Discussion:* The significant positive relationship between perceived citizen engagement and tax compliance behavior as found in this study constitutes a good addition to the literature on tax compliance behavior, especially in developing countries. As mentioned earlier in the introduction section, citizen engagement is increasingly becoming a policy of choice in the realm of Public Administration and Political Science (Maier-Rabler & Huber, 2011; McGee & Edward, 2016). However, it has only received passive mention in the tax compliance field. This study's findings have positioned citizen engagement at the center of scholarly discourse on tax compliance. In doing so, this study also provided instruments for further investigation of citizen engagement.

Tax knowledge and tax awareness have hitherto received a lot of attention in tax compliance research. However, in the context of developing countries, the problem appears to be beyond tax knowledge and awareness. Tax knowledge refers to the technical knowhow required to discharge one's tax obligations effectively. According to Kirchler (2007), people's subjective knowledge of the tax system matters in influencing their compliance behavior. In line with Kirchler (2007), Hofmann, Hoelzyl and Kirchler (2008) stated that understanding of the tax laws lead to compliance. Moreover, Mckercher (2001) asserted that tax laws are complex in addition to high level of abstraction and technicalities.

Related to tax knowledge in influencing tax compliance behavior is tax awareness. Previous studies have dwelled on the need for awareness on tax matters in order to improve tax compliance. For instance, Kirchler et al. (2010) found the imperative of what they called "information campaign". Before Kirchler et al.'s study, OECD (2007) has emphasized the need for government to pass adequate information to taxpayers on issues of taxation. OECD contended that information is taxpayers' right in the context of the fiscal relationship between citizens and governments.

Despite the emphasis placed on tax knowledge and awareness by previous studies, this study argues that they are unidirectional. That means they flow in one direction from the

authorities to the taxpayers. In the increasing sophistication of 21<sup>st</sup> century governance, this is no longer adequate. Unlike the one way flow of information in tax knowledge and awareness, citizen engagement involves consultation, consensus building and participation by citizens and taxpayers. This process is bi-directional and flows both ways. Citizen engagement as investigated in this study is much wider in scope than tax knowledge and awareness. Even when citizens have the knowledge and aware of tax provisions, they will be reluctant to comply unless they feel a sense of belonging in the entire system.

## **5 Conclusion and Recommendation**

Developing countries have continued to underperform in tax revenue generation thus posing a grave danger to their governments' ability to provide essential social services. While numerous factors are responsible for the widespread tax non-compliance in these countries, this study investigated citizen engagement to determine its influence on tax compliance behavior among the self-employed taxpayers in Nigeria. While the positive and significant findings contribute to the literature on tax revenue generation in developing countries, there is need for some caution. Developing countries are numerous and cover extensive areas across continents. The findings from Nigeria may not strictly speak for other developing countries. There could be need for more country-specific studies to determine how well taxpayers perceive citizen engagement in individual countries. The methodology of this study was explicitly narrated in section three to enable such replications where necessary.

Despite the need for country-specific studies, there are ample justifications to conclude that citizen engagement suffers in most developing countries, thereby negatively affecting tax compliance in these countries. For instance, the periodic Africa-wide Afrobarometer surveys have consistently found citizens complaining of inadequate information from government and inability to participate in governance (Aiko & Logan, 2014; Little & Logan, 2008). Furthermore, the World Governance Indicators compiled annually by the World Bank investigates voice and accountability as one of the six dimensions of governance (Kaufmann, Aart & Mastruzzi, 2010). Expectedly, developing countries have persistently performed poorly in the ranking. Voice and accountability could serve as a good proxy of how well governments engage their citizens in affairs of governance. All these point to the fact that the findings of this study could well apply to developing countries generally. Apart from the contribution to literature, the findings of the study have implications for policy. A lot of effort is being invested in tax revenue generation in developing countries. These efforts are anchored by multilateral organizations such as the United Nations, World Bank, IMF, OECD, DFID and donor countries. These efforts have mostly resulted in tax administration reforms which usually involve improving technology, manpower training and changes in tax policies. However, these efforts are yet to yield

satisfactory results as admitted by IMF (2015). This is not surprising as citizens of developing countries remain unengaged in governance. Until citizens are adequately engaged, tax compliance may not improve to satisfactory levels in developing countries.

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# IMPACT OF TAX AUDIT AND INVESTIGATION ON REVENUE GENERATION IN EDO STATE

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## **Abstract**

Government suffers major revenue leakages due to non-remittance of taxes and evasion of tax. Several studies have conducted a research on how government revenue can be increased through effective tax audit and remittance. This study examined the impact of tax audit and investigation on revenue generation in Edo State Internal Revenue Service (EIRS). A well structured questionnaire was administered to staff of EIRS, Nigeria to obtain responses. Out of the 50 questionnaires that were administered, 45 were retrieved. The Ordered Logistic Regression technique was applied to test the hypotheses of the study. Findings revealed that Desk Audit and Back Duty Audit had significant impact on revenue generation in Edo State Internal Revenue Service while Field Audit had insignificant impact on revenue generation in Edo State Internal Revenue Service. The study recommended, among others, that tax audit be carried out frequently on tax payers to ensure compliance with tax laws and regulations.

**Word Count:** 151

**Keywords:** Tax Revenue, Desk Audit, Field Audit, Back Duty Audit, Edo State Internal Revenue Service.

## **Background of the Study**

According to Eze (2012), the existence of taxation in Nigeria is linked with the era of the colonial masters in the early 20th century. Its introduction became necessary as a result of the enormous tasks the government was facing. This agrees with the assertion by Jubril and Effiong (2018) that modern taxation in Nigeria has a chequered history and dates back to the pre-colonial period.

A country's development is highly depended on the amount of revenue generated by the government and its application for the provision of public infrastructure for the benefits of

her citizenry. One of the major nation's internally generated revenue is tax. Tax is a compulsory levy on the income of employees and companies driven by government through its agencies. According to Federal Ministry of Finance (FMF) (2017) in its National Tax Policy, 2017 stated tax is any compulsory payment to government imposed by law without direct benefit or return of value or a service whether it is called a tax or not. It has been regarded as one of the most reliable and principal source of revenue to the government used by the government to fund expenditures which enhance the standard living of her citizens. Such tax levies are made on salaries, business profit, dividend, interest, discount or royalties in order to obtain revenue. The State Governor of Edo State, Godwin Obaseki described taxation as vital to the economic and social development of the State during the Second Chartered Institute of Taxation of Nigeria (CITN) Zonal Tax Conference (South-South) held in Benin City in 2018 (Osagie, 2018).

Tax audit just like financial audit involves the gathering of information and processing it for determining the level of compliance of an organization with tax laws of the territory (Adediran, Alade & Oshode, 2013). It is the independent examination of accounts, tax returns, tax payments and other records of a taxpayer to confirm compliance with relevant tax laws, the accuracy and correctness of tax paid (Okonkwo, 2014). In expressing the importance of tax audit in a nation, Mebratu (2016) stated that tax audit is evident that a good tax structure plays a multiple role in the process of economic development of any nation.

According to Oyedokun (2016), investigation is an act of examining, searching and inquiring into a matter with adequate care and accuracy, usually undertaken to obtain additional information of a particular nature. Tax investigation is usually carried out on a taxpayer who is suspected of tax evasion. The aim of the tax investigation is to gather sufficient evidence on the tax evasion scheme and then prosecute the tax evaders in court to send a strong deterrent message to the public. Forensic investigation is usually associated with this when it involves giving evidence in the court of law.

As it is obtainable in our various countries and in Nigeria in particular, no tax payer is ready to reveal her books to tax officers for the purpose of examination. It is worthy of note that it is the duty of taxpayers to voluntarily declare their tax affairs in line with the relevant tax laws. Some companies misrepresent their financial position to reduce their tax liability to the government. It is based on this that Tax Audit and Investigation arises. That is why Onuoha and Dada (2016) stated that Tax Audit and Investigation attempts to fill all relevant gaps by making sure that individuals and organizations are assessed and taxed appropriately. It also ensures that government collects its complete and accurate revenue from all the taxpayers within its jurisdiction.

In Edo State, there are several options the government can use to finance its public expenditures while pursuing its fiscal policy. Some of these options include imposing of appropriate taxes on individuals or businesses, non-tax revenues like fees from services, loans, property and investment income, etc. The major source of internally generated revenue in Edo State is through taxation. Comrade Adams Aliyu Oshiomole led administration came up with the decision to reform the Revenue organs of Government which aimed at institutionalizing the tax/revenue administration as well as mainstreaming the administration's philosophy of a people participatory and result oriented Government in the process of internal revenue generation (Edo State Internal Revenue Service (EIRS), 2013). One key element of the reform policy was to set up a Tax Assessment Review Committee (TARC) to support the operations of the EIRS. The purpose for setting up this Committee is to ensure a transparent, fair and equitable treatment to all the parties involved in tax matters, notably, the taxpayers, the tax administrators and the State Government.

In February 2013, the State Government organized a Stakeholder Seminar on Tax Laws in collaboration with the State Judiciary with a view to enlightening and sensitizing the public on their rights and obligations. The purpose of the stakeholder education and sensitization was to sensitize members of the public on tax and tax-related matters and to give account of how taxes paid by the citizens of Edo State have been put to judicious use, thereby entrenching transparency and accountability, and a culture of quality service delivery. When he was signing the Edo State Revenue Administration Bill to law on 2<sup>nd</sup> January, 2013, Comrade Adams Aliu Oshiomole stated categorically that:

“The taxes you pay to government today are not for the comfort of the Governor. They are neither for the comfort of any Government official. The money you pay as taxes is for the Government to utilize to provide social amenities to the people.” (Edo State Internal Revenue Service, 2013).

According to Barreca and Ramachandran (as cited in Mebratu, 2016), tax audit and investigation can increase a nation's tax revenue in two ways either directly through assessment of additional taxes or indirectly by improving taxpayer's compliance with the tax laws and regulations. The implementation of the amendment to the Personal Income tax Act, 2011 granted majority of the taxpayers' huge tax reliefs thereby reducing significantly the revenue generated from PAYE scheme by about 48% out of 60% of revenue accruable to the State Government (EIRS, 2013). This made the Edo State Government to shift its focus from direct tax to indirect taxes. Examples of such indirect taxes include Consumption Tax, Land Use Tax, E-Lottery, Pools betting, Casino and Gaming tax, Entertainment Tax, etc. Despite efforts made by the Government to ensure taxpayers' full compliance to tax laws and regulations in the State, tax evasion cannot be totally eradicated. In fact, volumes of literature that have focused on this subject for ages

suggest that willful default in tax compliance remain a major issue in every human society (Modugu & Anyaduba, 2014; Mohd, Mohamad & Mohd, 2013) especially in Edo State. This therefore signifies that it is only through tax audit and investigation can the level of tax compliance be improved. The intent of this study therefore is to examine the impact of Tax Audit and Investigation on Revenue Generation in Edo State, Nigeria.

### **Statement of Research Problems**

The incidence of corruption within the taxes administration is very high. Government suffers major revenue leakages due to unjustified tax breaks given to tax payers by dishonest revenue officials. Corruption in revenue administration leads to harassment, inflated assessment and high litigation cost by government officials on honest taxpayers. The existence of corruption in revenue administration will continue to pose major challenges in enforcing the relevant tax laws. Tax audit and investigation will help to reduce such corrupt acts thereby countering tax evasion.

Revenue derived from taxes has been very low over the years. This confirmed the statement made by the Edo State government that only 160,000 persons and organisations out of about four million people that reside in the state pay tax to the state coffers every month (Aliu, 2017). The major reasons for this low compliance and remittance can be traced to fraudulent activities of tax officers, inadequate tax personnel, lack of understanding of the essence of tax by taxpayers, willful defaulting in tax responsibilities by taxpayers, etc. It is based on these challenges that tax audit and investigation were introduced. The study attempted to examine how tax audit and investigation impacts on revenue generation in Edo State. Furthermore, to the best of the researcher's knowledge, tax audit and investigation on revenue generated by Edo State has not been widely researched on. Given this gap of knowledge, there appears considerable potential area for further research. Therefore, the intent of this study is to examine the impact of tax audit and investigation on revenue generation in Edo State.

### **Objectives of the Study**

The main objective of this study was to examine the impact of tax audit and investigation on revenue generation in Edo State. The specific objectives include:

1. To determine the effect of desk audit on revenue generation in Edo State;
2. To examine the significant impact of field audit on revenue generation in Edo State;
- and
3. To ascertain the impact of back duty audit on revenue generation in Edo State.

### **Research Questions**

The following are the questions asked to guide this research study:

1. Does desk audit have any effect on revenue generation in Edo State?

2. How does field audit impact significantly on revenue generation in Edo State?
3. Does back duty have any impact on revenue generation in Edo State?

### **Research Hypothesis**

In order to guide the study, the following hypotheses were formulated:

H01: Desk audit does not have any effect on revenue generation in Edo State.

H02: Field Audit does not impact significantly on revenue generation in Edo State.

H03: Back Duty does not have any impact on revenue generation in Edo State.

## **LITERATURE REVIEW**

### **Conceptual Issues**

#### **Tax Revenue**

Revenue is an income collected by the authorities of the three-tier government (Federal, State and Local government) from individuals and businesses for the provision of public infrastructure and development of the economy. Ojo (2016) defined tax revenue as a levy imposed by the government on the income and profit of individuals and companies respectively. Tax revenue is a compulsory levy imposed by the government through its agencies on the income, consumption and capital of its subjects (Olaoye & Ekundayo, 2019). Income on which taxes and levies are applied are salaries, business and companies profits, interests, dividends, discounts, royalties, petroleum profits, capital gains, capital transfer, etc.

#### **Tax Audit and Investigation**

Literature affirmed that tax audit is always triggered by suspicion of fraud, evasion and related offences (Olaoye & Ekundayo, 2019). As posited by Adediran, Alade and Oshode (2013), the primary purpose of tax audit is to maintain the confidence in the integrity of the self-assessment system and also to improve voluntary compliance by detecting and bringing to book those who do not pay the correct tax amount.

Ojo (2016) defined tax audit and investigation as an inspection of taxpayers' business records so as to ensure that law and regulation were maintained in the amount of tax reported. Tax Audit and investigation drive taxpayers to comply with the outcome of tax audit and investigation, hence making them to become compliant with the provisions of tax laws. Tax Audit and Investigation deters tax evasion and invariably maximizes compliance with tax laws which in returns increases the internally generated revenue of the government. These revenues so generated are used by the government to carry out her duties which include the provision of basic infrastructure, healthcare, security, education which are very much necessary for economic development. According to Adediran, Alade and Oshode (2013), the major aim of tax audit and investigation is to compel taxpayers to abide by findings of the audit and investigation as well as to ensure that taxpayers conform

to the provisions of tax laws and regulations in future.

In Edo State, reforms on Internally Generated Revenue (IGR) have brought about increase in revenue to the State. Governor Godwin Obaseki of Edo State stated that only 160,000 persons and organisations out of about four million people that reside in the state pay tax to the state coffers every month (Aliu, 2017). He however declared that the implementation of the reforms his administration made on Internally Generated Revenue (IGR) yielded positive results as annual collection in local council areas has climbed from ₦30 million in November 2016 to ₦150 million in November 2017 (Proshare WebTV, December, 2017). He reiterated that all the revenues collected from tax would be used for the execution of capital projects across the state.

### **Types of Tax Audit**

Some researchers like Adediran, Alade and Oshode (2013) pointed out some types of tax audit which include Desk Audit, Field Audit, Back Duty Audit, Registration Audit, Single Issue Audit and others. For the purpose of this study, three types of Tax Audit was discussed which formed part of the study's objectives.

#### **Desk Office Audit**

As posited by Adediran et al (2013), Desk Office Audit is one in which the all the activities of the audit take place within the confines of the office of the tax officials where books and financial records of the taxpayers are examined. Here, the tax officials simply request for additional information from the tax payer to enable him ascertain whether or not the taxpayer paid the correct tax liability.

#### **Field Audit**

Field Audit is one conducted in the premises of the taxpayer. Field Audit is conducted when the tax officials are of the opinion that they cannot obtain sufficient information on the information provided by the taxpayers. Before this type of audit is carried out on the taxpayer, a letter from the relevant tax authorities must be written to the taxpayer informing them of their visit for audit and listing out all the documents that they may need for such audit. The depth of verification by the tax officials depends on the result of the desk audit carried out by them (Adediran et al, 2013). Onuoha and Dada (2016) posited that field audit enables the tax auditor to be more favourably disposed to more records and files of the tax payer being examined with the view of getting the accurate tax liability of the taxpayer.

#### **Back Duty Audit**

The back duty audit allows the tax official to examine the taxpayer's records to a limited period of six years before the year of the actual audit (ICAN, 2014). Researchers asserted that back duty audit can be instituted when it is observed that there is a reduction in the

profit disclosed in the filed returns, where there is a doubtful claim of capital allowances in respect of current or previous year, falsification of document submitted to tax office to reduce tax liability, etc (Adediran et al, 2013; Onuoha & Dada, 2016; Olaoye & Ekundayo, 2019).

### **Condition for a Good Tax Audit**

As highlighted by Adediran et al (2013) and Nwaiwu and Okoro (2018), the following conditions must be fulfilled for tax inspector to carry out a good audit exercise:

1. The tax auditor must be familiar with the environment in which he works. He must be properly schooled in the political, economical, social, cultural and religious environment of the taxpayer because such knowledge will greatly affect the decision he makes.
2. The tax inspector must be trained and experienced in his area of specialization, and should be motivated to carry out tax audit. He should not be carried away by corrupt practices that render the aim of the tax audit useless.
3. The tax audit should be carried out by those who are professionals and when new tax inspectors are sent to carry out the audit, they should be monitored by older ones to ensure that the right thing is done.
4. Specialization should be encouraged. The cases should be grouped. This will allow the tax audit staff to become specialist in specific field.
5. The manner in which the audit is being carried out should be changed. The use of computer should replace the manual process as this will go a long way in facilitating the job and helping to preserve information for a long time. This will improve the efficiency of the exercise (Ogundele, 1999).

### **Tax Investigation**

According to Enofe, Embele and Obazee (2019), an investigation is a systematic fact-finding and reporting process performed to consent or dispute the existence or non-existence of a material fact. Oyedokun (2016) defined Tax Investigation as a more detailed and painstaking examination of the taxpayer's records. It is usually triggered when it is suspected that fraud, evasion and related offences have been committed. Tax investigators possess more power and authority than tax auditors.

### **Tax Evasion**

Tax evasion, according to Owusu (2019), is defined as the illegal manipulation of person's or company's activities with the main goal or aim to reduce the total amount of tax to be paid.

Fakile and Agdebie (2011) stated that taxpayer either evade tax partially or fully. They opined that while partial evasion is the understatement of individual's or corporate

earnings, full evasion occurs when an individual or corporate body who is eligible to pay tax fails to register with relevant tax authorities. While tax avoidance is a careful tax planning exercise (taking advantage of loopholes in the tax system) to reduce taxpayer's tax liability, tax evasion can be seen as an outright fraud and can be termed a criminal offence. The major reason why tax payers evade tax is because they perceive that tax revenues collected by the government are not used for the benefit of the citizenry. There would be improved tax compliance if tax payers if government makes effective use of tax generated for the provision of public goods to her citizenry (Enofe, Embele & Obazee, 2019).

### **Empirical Reviews**

Adediran, Alade and Oshode (2013) examined the impact of tax audit and investigations on revenue generation in Nigeria. They collected their data through the primary sources from four hundred and ten respondents who were staff of the Federal Inland Revenue Service and Edo State Board of Internal Revenue. Having tested their formulated hypotheses with Pearson Correlation Coefficient using SPSS output data, they found out that tax audit and investigations have significant positive relationship with the revenue base of the government since it is occasioned with increase in revenue generated. They also found out that tax audit and investigation can stamp out the incidents of tax evasion in the country.

Onoja and Iwarere (2015) explored the effects of tax audit on revenue generation in Federal Inland Revenue Service (FIRS) in Abuja to determine the relationship between the tax audit and revenue generation in Federal Inland Revenue Service. The staff of the FIRS formed the population of the study on whom they administered their questionnaire. Taro Yamane sampling technique was used to determine the sample size. The data generated were analysed and the hypotheses tested using Analysis of Variance (ANOVA). They found that tax audit has a positive and significant relationship with the revenue generation in Federal Inland Revenue Service.

Olaoye and Ekundayo (2019) examined the effects of tax audit on tax compliance and remittance of tax revenue in Ekiti State. Tax audits specifics used were desk audit, field audit, back duty audit and registration audit to determine their effect on tax compliance and remittance of tax revenue in Ekiti State. They used a close-ended questionnaire to gather the needed data on which analysis was carried out through correlation matrix and multiple regressions. They discovered that desk audit, field audit, back duty audit and registration audit had a positive significant effect on tax compliance and remittance in Ekiti State with the p-values of 0.001, 0.000, 0.000 and 0.000 respectively. They also noted that field audit was the most significant predictor out of all the predictor variables.

Igbinigie (2018) empirically examined the problems and prospects of internally generated



revenue in Edo state. The population of the study consisted of all the 18 Local Government Councils staff. Using the purposive sampling method, a sample size of 200 respondents from 11 Local Government Councils for the period 1998 to 2015 was used. He analyzed the data and tested the research hypotheses with both parametric and nonparametric estimation methods. The result showed that the coefficient of fines, earnings and rates (1.5740, 0.667978, 0.665834) were positively related to IGR while the coefficients of rents and license (-1.670000, -443.5507) were negatively related to IGR in Edo State.

Olaoye, Ogunleye and Solanke (2018), examined the impact of the tax audit on tax productivity in Lagos state, Nigeria. They analyzed trends of tax audit and tax productivity, and the impact of Desk audit, Field audit and Back-duty audit on tax productivity in Lagos state. They made use of both primary and secondary data. Primary data were collected with the use of questionnaires administered to 350 randomly selected staffs of Lagos State Internal Revenue Services, while secondary data were sourced from Federal Inland Revenue Service and Lagos Internal Revenue Service audit division in Lagos state over the period of 2000 to 2015. These data were analyzed using unit root test, Fully Modified Least Square (FMOLS), co-integration regression and Logit regression analysis. They found that field tax audit, desk tax audit and back duty tax audit has a significant positive impact on tax productivity with reported estimate of 0.530454 ( $p < 0.0044 < 0.05$ ) for FIDAUD, 0.774450 ( $p < 0.0085 < 0.05$ ) for DEKAUD, 1.244317 ( $p < 0.0001 < 0.05$ ) for BAKAUD.

Amah and Nwaiwu (2018) examined the effect of tax audit practice on down south tax revenue generation in Nigeria. They adopted both primary and secondary source of data and the data collected were analysed using linear regression analysis and multiple regression analysis with the aid of Special Package for Social Sciences (SPSS) version 21.0 with 0.71%. The study revealed that the predictor variable of tax audit practice has positive effect on criteria variable of tax revenue in Nigeria.

Enofe, Embele and Obazee (2019) examined the impact of tax audit and investigation on tax evasion. A well-structured questionnaire administered to staff of revenue generating agencies in Bayelsa State, Nigeria. The Ordered Logistic Regression technique was applied on the data collated to test the hypotheses of the study. The result revealed that tax audit in the form of desk audit, field audit and back-duty audit exert a significant negative influence on tax evasion.

### **Theoretical Framework**

This study was hinged on the Theory of Reasoned Action (TRA) which was propounded by Fishbein and Ajzen in 1975 and 1980. It has been a leading theory in social psychology for the last few decades (Trafimow, 2015). In 1975, Fishbein and Ajzen conducted a review of studies done on attitudes and behavior and found little evidence supporting the relationship between the two. They proposed that although attitude should be related to

behavior, it is the intention to perform rather than the attitude toward a behavior that determines behavior. It suggests that if someone wants to do a behavior, it is very likely that the person will do it. This theory is useful for this study in that it explains which of the potential tax payers would tend to evade tax payment. Olaoye and Ogundipe (2018) stated that the major reasons why taxpayers evade tax could be due to the attitude of government, cultural norm and individual differences.

## METHODOLOGY

### Research Method

The data used for this study were generated from primary data. The primary data were generated through the use of 50 questionnaires administered to the staff of the Edo State Board of Internal Revenue, Edo State, Nigeria. Forty-Five questionnaires were properly filled and returned. The Ordered Logistic Regression technique was used to analyze the forty-five returned questionnaires. The questionnaire was structured and designed in five point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). It was designed in two parts. Part A was used to generate background information of the respondents while Part B was used to gather information on the variables of the study Tax Audit and Investigation (Desk Audit, Filed Audit and Back Duty Audit).

### Data Analysis Method

The study made use of various test to ensure the reliability of the data. The Pearson Correlation Matrix and the Cronbach's Alpha, Goodness-of-Fit and Pseudo R Squared carried out with the aid of Statistical Package for Social Sciences (SPSS) version 23. The ML- Ordered Logit (Quadratic hill climbing) with the aid of EvIEWS 9 was also applied in investigating Tax Audit and Investigation on revenue generation in Edo State.

### Model specification and Estimation

In the study, tax audit is the explanatory (predictor) variable operationalized as Desk Audit, Field Audit and Back Duty Audit, while the measures of tax revenue variable are Internally Generated Revenue.

$$\text{Internally Generated Revenue (IGR)} = f(\text{Tax Audit and Investigation}) \dots \dots \dots (1)$$

$$\text{IGR} = f(\text{Desk Audit, Field Audit, Back Duty Audit}) \dots \dots \dots (2)$$

$$\text{IGR} = a_0 + a_1\text{DEAUD} + a_2\text{FIAUD} + a_3\text{BDAUD} + \mu \dots \dots \dots (3)$$

The model is therefore modified as presented below:

$$\text{IGR} = \beta_0 + \beta_1\text{DA} + \beta_2\text{FA} + \beta_3\text{BDA} + \mu \dots \dots \dots (4)$$

Where:

IGR = Internally Generated Revenue

DA = Desk Audit

FA = Field Audit

BDA = Back-Duty Audit  
 $\beta_1, \beta_2, \beta_3, \beta_4$  = Coefficients  
 $\mu$  is error term.

## DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF FINDINGS

### Data Analysis

**Table 1: No of Questionnaires Retrieved**

Questionnaire Administered	Questionnaires Retrieved	Percentage
50	45	95%

Authors' computation (2020)

The table 1 above depicted the total number of questionnaires administered and retrieved for the research purpose. As indicated above, a total number of fifty questionnaires were distributed, and forty-five were successfully retrieved representing about 95%.

**Table 2: Demographics of Respondents**

Demographics		Frequency	Percentage (%)	Total (%)
Gender	Male	24	53.33	100
	Female	21	43.33	
Qualification	1 <sup>st</sup> Degree	41	91.11	100
	2nd Degree	3	6.67	
	3rd Degree	1	2.22	
	Chartered	7	100	
Professional	Accountants			
Years of Experience	1-5 Years	16	35.56	100
	6-10 Years	19	42.22	
	11-15 Years	5	11.11	
	16-20 Years	2	4.44	
	20 and Above	3	6.67	

Authors' computation (2020)

Table 2 above captured the descriptive statistics of the survey research to elicit information useful for the analysis. The respondents characterized 24 Male representing (53.33%) and 21 Female representing (43.33%); their qualifications ranging from 1st degree to 3rd degree (41, 3 and 1) with their respective percentages given as 91.11%, 6.67% and 2.22%; there were also 7 Professional Chartered Accountants; in addition, the years of experience of respondents ranges from 1-5 years, 6-10 years, 11-15 years, 16-20 years and 20 years above with their respective number put respectively at 16, 19, 5, 2 and 3 and percentages at 35.56%, 42.22%, 11.11%, 4.44% and 6.67%.

**Table 3: Reliability Test Statistic (Cronbach's Alpha)**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.765	.781	13

IBM SPSS 23

The Cronbach's Alpha showed the reliability of our model, .700 is usually considered acceptable. The value at .766 and .781 based on the standardized items showed that the model used is reliable.

**Table 4: Reliability Test for each variable**

Variables	No. of Items	Cronbach's Alpha
IGR	13	.798
DA	13	.726
FA	13	.739
BDA	13	.713

IBM SPSS 23

As shown in table 4 above, the Cronbach's Alpha test for each of the variables reliability to validate internal consistency. The results yielded a Cronbach's Alpha statistics coefficient of above .700, which is usually acceptable. Based on the above, we can conclude that our research instrument has a high level of internal consistency.

**Table 5: Pearson Correlation Matrix**

		Internally generated revenue	Desk Audit	Field Audit	Back Duty Audit
TE	Pearson Correlation	1	-.092	-.019	.093
	Sig. (2-tailed)		.546	.904	.543
	N	45	45	45	45
DA	Pearson Correlation	-.092	1	.209	.406**
	Sig. (2-tailed)	.546		.168	.006
	N	45	45	45	45
FA	Pearson Correlation	-.019	.209	1	.282
	Sig. (2-tailed)	.904	.168		.061
	N	45	45	45	45
BDA	Pearson Correlation	.093	.406**	.282	1
	Sig. (2-tailed)	.543	.006	.061	
	N	45	45	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

IBM SPSS 23

The study employed the Pearson Correlation Matrix to examine the relationship and association with the dependent variable and the independent variable in the study. From table 5 above, Desk Audit at (-.092) exhibited a weak negative correlation with IGR, Field Audit at (-.019) exhibited a weak negative correlation, while Back Duty Audit at (.093) exhibited a strong positive correlations. Therefore, we concluded the absence of multicollinearity in the model.

**Table 6: Goodness – of – fit**

	Chi-Square	Df	Sig.
Pearson	145.400	135	.255
Deviance	68.260	135	1.000

Link function: Logit.**IBM SPSS 23**

In the table 6 above, we would like to fail to reject the null hypotheses of the goodness of that our data is adequately fit, because we are looking for a significant value greater than .05, since the significant level for the both p-value stood at .255 and 1.000, the data is adequately fit to be used for our analysis.

**Table 7: Pseudo R Square**

Cox and Snell	.712
Nagelkerke	.752
McFadden	.423

Link function: Logit.**IBM SPSS 23**

The Pseudo R-squared ( $R^2$ ) which is the Nagelkerke tells us that our model was able the explain 75% of the variation in the model or the variance in the dependent variable, while the remaining 25% unexplained variations was ascribed to the error term.

**Table 8: Regression Result Internally Generated Revenue (IGR) as dependent variable**

Method: ML – Ordered Logit (Quadratic hill climbing)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
DA	-0.684714	0.354767	-1.930040	0.0536
FA	-0.153402	0.269707	-0.568771	0.5695
BDA	0.927495	0.439235	2.111614	0.0347
Limit Points				
LIMIT_2:C(4)	-0.314345	1.027853	-0.305827	0.7597
LIMIT_3:C(5)	0.703578	1.020165	0.689671	0.4904
LIMIT_4:C(6)	1.562463	1.038503	1.504535	0.1324
LIMIT_5:C(7)	2.244733	1.090258	2.058901	0.0395

Pseudo R-squared	0.754352	Akaike info criterion	3.090043
Schwarz criterion	3.371079	Log likelihood	-62.52596
Hannan-Quinn criter.	3.194810	Restr. log likelihood	-66.33016
LR statistic	7.608400	Avg. log likelihood	-1.389466
Prob(LR statistic)	0.054838		

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EvIEWS 9

### Interpretation of Results

The result from the ordered logistic regression analysis in table 8 above showed that Desk Audit (DA) had a negative but significant relationship with Internally Generated Revenue in Edo State with the z-Statistics, coefficient and probability value put at  $z(1, 45) = -1.930040$ ,  $\beta_2 = -0.684714$ ,  $p = 0.0536$ ; the result also revealed that Field Audit (FA) portrayed a negative and insignificant relationship with Internally Generated Revenue in Edo State with the z-Statistics, coefficient and probability value put at  $z(1, 45) = -0.568771$ ,  $\beta_3 = -0.153402$ ,  $p = 0.5695$ , while Back Duty Audit (BDA) had a positive and significant relationship with Internally Generated Revenue in Edo State with the z-Statistics, coefficient and probability value put at  $z(1, 45) = 2.111614$ ,  $\beta_1 = 0.927495$ ,  $p = 0.0347$ . The explanations led credence to the rejection of the first null hypothesis that Desk Audit does not have a significant impact on revenue generation in Edo State and the acceptance of the alternative hypothesis. We accepted the second null hypotheses that Field Audit does not efficiently impact on revenue generation in Edo State and in turn reject the alternative hypothesis. Lastly, we rejected the third null hypothesis that Back-Duty Audit (BDA) does not have any significant contribution on revenue generation in Edo State, and the acceptance of the alternative hypothesis.

The Pseudo R-squared put at 0.754 suggested that all the independent variables (DA, FA and BDA) jointly accounted for about 75% of the systematic variation in the dependent variable (IGR). This implied that the remaining 25% unexplained variation was ascribed to the error term. The LR – statistics put at 7.608400, and its respective probability value put at 0.054838, indicated that model was linearly fitted and reliable in making statement about the dependent variable.

### Discussion of Findings

In analyzing the impact of tax audit and investigation on revenue generation in Edo State, after carrying out the required test and method of analysis, one of the findings revealed that that Desk Audit (DA) had a negative but significant relationship with Internally Generated Revenue in Edo State. This led credence to the rejection of the null hypothesis and the acceptance of the alternative hypothesis that Desk Audit has a significant effect on internally generated revenue in Edo State. The finding related to the work of Enofe, Embele and Obazee (2019) who examined the impact of tax audit and investigation on tax evasion.

It therefore means that an increase in internally generated revenue in Edo State can be traced to the activities of Desk Audit if the financial records of tax payers are well examined and monitored without compromising the system.

Another finding revealed that Field Audit had no significant effect on Internally Generated Revenue in Edo State based on the 5% level of significance adopted for the research. Hence we accept the null hypothesis that stated that Field Audit does not efficiently impact on revenue generation in Edo State and in turn reject the alternative hypothesis. Field Audit is conducted when the tax officials are of the opinion that they cannot obtain sufficient information on the information provided by the taxpayers, the process is cumbersome and has bottlenecks. Since the result showed an insignificant relationship, it therefore means that the cost and bottlenecks involved in eliciting extra information, records and documents of a tax payer can be channeled to other productive use.

Another finding in the research work also shown Back Duty Audit (BDA) had a positive and significant relationship with Internally Generated Revenue in Edo State. Researchers asserted that back duty audit can be instituted when it is observed that there is a reduction in the profit disclosed in the filed returns, where there is a doubtful claim of capital allowances in respect of current or previous year, falsification of document submitted to tax office to reduce tax liability, etc (Adediran et al, 2013; Onuoha & Dada, 2016; Olaoye & Ekundayo, 2019). From the result, we rejected the null hypothesis and accepted the alternative hypothesis.

### **Summary, Conclusion and Recommendations**

A country's development is highly dependent on the amount of revenue generated by the government and its application for the provision of public infrastructure for the benefits of her citizenry. This is one of the reasons it's necessary to carry out a study on tax audit and investigation on revenue generation in Edo State. The study made use of internally generated revenue (IGR) in Edo state as the dependent variable while desk audit (DA), field audit (FA) and back duty audit (BDA) were the independent variables. The SPSS 23 was used in carrying out the reliability test, while the Eviews 9 was also applied in analyzing the data applying ML- Ordered Logit (Quadratic hill climbing) method in finding the relationship between the dependent and the independent variables. The findings showed that Desk Audit (DA) had a significant but negative relationship with internally generated revenue (IGR) in Edo State; Field Audit (FA) had no significant relationship with internally generated revenue (IGR) in Edo State; while Back Duty Audit (BDA) had a positive and significant relationship with internally generated revenue (IGR) in Edo State.

In conclusion, the impact of tax audit and investigation on revenue generation in Edo State is necessary looking at the pandemic (Covid 19) eat deeply into the world (Edo State is not

left out), the dwindling and fluctuation crude oil prices, the reduction and fall in Federal allocated revenue to States. This has made the State to look inwards at various means to generate revenue to finance its yearly budget and one of these avenues is the levying of various taxes. The study will be an eye opener to Edo State Government and users of accounting information on the best way to go on tax audit in Edo State and key variable to focus on, improve on and the ones to give less attention to.

In line with the above findings, the study recommends that:

1. Those under the umbrella of Desk of Office Audit should continue to be trained and retrained, since they are saddled with such responsibility as tax officials where books and financial records of the taxpayers are examined. This will enable professionalism and efficiency in their daily activities.
2. It's a known fact that Field Audit is conducted when the tax officials are of the opinion that they cannot obtain sufficient information on the information provided by the taxpayers. The process is cumbersome and has bottlenecks. Therefore, there should be a standard practice that will compel taxpayers to disclose and submit all the essential documents at the point of tax registration to avoid sourcing for such information latter. This can be done technologically, thereby making Field Audit easily accessible and significant to revenue generation in Edo State.
3. Lastly, the number and capacity of Back Duty Audit be increased in Edo State to enable her follow up and closely monitor and to avoid a reduction in the profit disclosed in the documents filed, doubtful claim of capital allowances in respect of current or previous year, to prevent falsification of document submitted to tax office to reduce tax liability.

### **Contribution to Knowledge**

This study majorly contributes to the existing literature by empirically examining the impact of tax audit and investigation on revenue generation specifically in Edo State, Nigeria.

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# GOVERNMENT BUDGET VARIABLES AND ECONOMIC GROWTH IN NIGERIA (1981-2019)

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## **Abstract**

*This study used Auto-Regressive Distributive Lag (ARDL) to examine government budget variables and economic growth in Nigeria for a period of 39 years, spanning from 1981 to 2019. While budget variables were disaggregated into oil revenue, non-oil revenue, capital expenditure and recurrent expenditure, economic growth was proxied with real GDP. Expo-facto research design was adopted and data was sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin (2019). Pair-wise correlation was used to ascertain the relationship and then Cointegration and Error Correction Mechanism for impact after confirming the data's stationarity using Unit Root. It was discovered that oil revenue and capital expenditure exerted a positive and significant impact on economic growth in Nigeria. Also, non-oil revenue and recurrent expenditure have a positive but insignificant impact on economic growth in Nigeria. Thus, we recommend that the government should focus on judicious public spending and the diversification of the economy.*

**Keywords: Capital Expenditure, Recurrent Expenditure, Oil Revenue, Non-Oil Revenue Economic Growth**

## **Introduction**

In the continent of Africa, Nigeria appeared to have the largest economy with a wide range of economic resources that are not limited to natural gas, iron ore, oil, limestone, coal, lead and zinc. However, Daud, Abubaker and Hussaina (2020) argued that a larger part of these resources is either untapped or unduly tapped, and this has grossly affected the finances of the nation, in terms of revenue generation and public expenditure. The under-exploitation and seemingly poor utilization of the nation's resources have not only affected the finances of the government, they have also contributed maximally to the series of disparities in fiscal policy formulation, implementation and economic growth.

World over, the singular aim of every government is to continuously improve the state of

economic activities. An improved economic growth is an indication of a positive and sustained increase in the aggregate of goods and services produced in an economy within a given period. Every country aspires to be great and competitive globally, and this has been the motivation of the Nigerian government to earnestly formulate and implement policies capable of improving the productiveness of the country. These deliberate and heroic acts stimulate the healthiness of the economy and equally improve the living standard of the populace. Adebayo, Mariam and Amos (2019) opined that for a government to be effective and efficient, it has to embrace the nitty-gritty of budget and budgeting.

Budget is a written document that clearly states the expected revenue and expenditure for a definite period. It is short-term planning instrument where the government intention of tackling issues that bother on the economic growth of the nation such as unemployment, inflation, interest rate, redistribution of income in the society, demand stimulation measures for local products and so on are revealed (Sani & Nwite, 2018). Budget covers the review of economic performance in the preceding year, total revenue and planned expenditure, total federation account revenue and other distribution to the three tiers of government and proposal of fiscal and monetary policy changes.

Budget is an essential economic tool for every government, given that it aids economic growth. The basic variables of government budgets, which are revenue and expenditure, are strategic and all-encompassing because it allows the government scarce resources to be harnessed and judiciously allocated to programmes and services of governmental operations. Nwala and Ogboji (2020) argued that the Nigerian economy is constantly faced with imbalances in budget formulation and implementation. Budget is expected to be a significant economic instrument; however, it is engulfed with a lot of illusions and as such might not contribute to the economic growth and development of the country (Nwala & Ogboji, 2020).

A look into the economic growth of Nigeria, in terms of real Gross Domestic Product (GDP), indicated that the government has been effective and efficient in its policy formulation and implementation; however, without a corresponding increase in the living standard of people. Just like other countries in Africa, Audu (2018) stressed that Nigeria is overwhelmed with mass poverty, unemployment, underemployment and illiteracy, and it is regarded as the 11th largest producer of petroleum in the world. It seemed that there was an increase in the economic growth without any increase in the economic development. A lot of monies are being role out every year with any significant development in the country. A lot of revenue is always budgeted for ministries and parastatals every year; however, it appeared that no expressive growth is witnessed and high unemployment and underemployment rate are challenging problems of the country. Chukwu and Udochukwu (2019) argued that despite the huge revenue from crude oil export, taxes and high public expenditure, Nigeria as a nation is not well-positioned in terms of human development due to poor access to basic social infrastructure, portable water, electricity, health, education,

high level of unemployment, high level of insecurity among others. Government of all levels allocated massive funds to various capital projects such as the construction of roads, building industries and other growth like and developmental ventures yet, get dilapidated. In the developed countries, planned revenue generation and expenditure are always carried out strictly to avoid any disparities with the aim of ensuring that the expected growth and development in the economic activities and the overall living standard of the people are achieved. Also, in Africa, countries like Rwanda, Ghana and South Africa have experienced remarkable economic growth on the account of budget implementation. On the contrary, the economic growth of Nigeria measured in terms of GDP is relatively low and sometimes negative. It is worrisome that despite the huge amount of Nigeria's budget, which has maintained an upward trend over the years, its influence has been uncertain evidenced by stunted/stagnant economic growth (Sani & Nwite, 2019).

Government budget variables, capital expenditure, recurrent expenditure and government revenue, have been interchangeably used in literature as fiscal policy, public finance and even budget implementation. Over the years, a lot of studies have been conducted to show the relationship between government budget variables and economic growth. However, the findings reported are different. This might be predicated on the divergence of the method of analysis and the peculiarities of where the studies are carried out in terms of political instability, economic activities and establishment of a data bank. While studies like Ilegbinosa (2015), Kakar (2015), Ebimobewei (2016), Abubakar (2016), Adefeso and Mobolaji (2018), Mohamed (2019), Sani and Nwite (2019), Sunday, Nwanne, Basil, Ugwu and Festus (2019) and Hillary (2020) revealed that productive government expenditure has positive effect on economic growth.

On the other hand, Rudolf and Jan (2015), Abdurrauf (2015), Bongumusa, Irrshad and Lorraine (2019) and Chai-Thing, Azali and Muzafar (2020) reported that government spending and revenue have a negative impact on economic growth. Also, Tasnia (2018) and Orji (2019) revealed that both government expenditure and tax revenue have no significant impact on real GDP growth. In the same vein, studies like Oke (2013), Adah and Akogu (2019) and Bongumusa, Irrshad and Lorraine (2019) reported a mixed effect of government budget variables on economic growth. The mixed findings created a vacuum for another study and this constitutes the motivation for this present study.

Another identified gap is the fact none of these studies, based on the materials at the disposal of the researchers, is recent enough to actually reveal the relationship between government budget variables and economic growth in Nigeria with the consideration of the recent changes in some macro-economic variables such as inflation rate, exchange rate, investment, fiscal balances, public debt and unemployment rate. For example, Kaker (2015) covered 1980-2009, Abubakar (2016) covered 1981-2015, Ebimobewei (2016)

covered 1991 to 2015, Adefeso and Mobolaji (2018) covered 1970-2017, Bongumusa, Irrshad and Lorraine (2019) covered 1960-2017, Sani and Nwite (2019) covered 2014-2018, Adah and Akogu (2019) covered 1999-2017 and Chai-Thing, Azali and Muzafar (2020) covered 1980-2017. These periods might not reflect the recent development in the country and findings reported might not be relied upon given the intermittent change of the government policies and the economic environment.

The identified gaps based on the mixed findings and period covered serve as motivations for the researchers to re-examine the government budget variables and economic growth in Nigeria for 39 years, spanning from 1981 to 2019. The contribution to knowledge is found on the eagerness of the researchers to affirm the earlier findings reported by scholars on the relationship between government budget variables and economic growth with the consideration of the recent changes in some macro-economic variables such as inflation rate, exchange rate, investment, fiscal balances, public debt and unemployment rate. The findings of this study might encourage the government to reassess budget variables so that it can have a direct effect on the economy. The remaining part of this paper is divided into four sections. Section 2 to 5 covered literature review, methodology, results and discussion of findings, and conclusion and recommendations.

## **2. Literature Review**

### **2.1 Conceptual Review**

The quest for economic growth alongside the struggle to achieve structural revolution to meet the demands of the twenty-first-century stability has been the major challenge for developing economies like Nigeria. Notwithstanding, the accessibility and applicability of several models and theories of economic growth, in addition to fiscal and monetary policies in the arsenal of the authorities seems ineffective in mitigating external shocks and internal disruptions. This weakness gave rise to renewed debate about the government's role in the economy. But then, the role of government interventions on economic growth through budget instruments such as government expenditure and revenue remain a significant economic policy issue in the global space.

Government budget is described as a statement that revealed the expected government revenue and expenditure for a definite time. According to Riley (2012), the term budget is derived from an old French word *bougette* which means to purse. He further stated that it is a quantified financial plan for a forthcoming accounting period. Supporting this, Mukumba (2014) viewed budget as an organizational plan stated in monetary terms. In a similar way, Mupenzi (2015) stated that a budget is a quantitative expression of a plan for a defined period which may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. It expresses strategic plans of business units, organizations, activities or events in measurable terms.

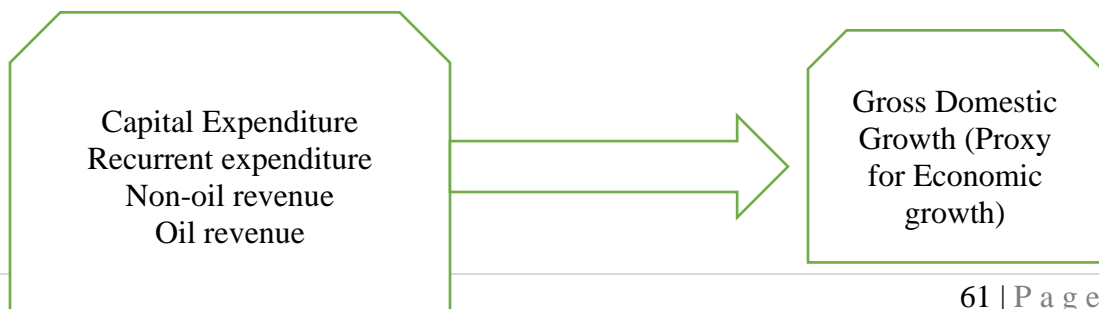
Government budget variables are basically government revenue and expenditure. Ali and Shah (2012) contend that revenue receipt includes routine and earned income. For these reasons, according to them, revenue does not include borrowing and recovery of loans from other parties, but it includes tax receipts, donations, grants, fees and fines and so on. Alade, Olaoye and Ojo (2019) described revenue as an income or funds generated to meet the expenditure. Revenue could, therefore, be defined as an income or funds generated to meet expenditures which is to be incurred by a constituted authority. Government revenue for the purpose of this study centers on oil and non-oil revenue generated by governments to finance their activities.

Oil revenue refers to the income earned from the sales of crude oil. Oil has been a major source of energy in Nigeria. Non-oil revenue refers to the total amount of revenue realized from the sale of non-oil products to both domestic consumers and foreign trading partners. Non-oil revenue is generated on commodities such as agricultural products, manufactured goods, tourist services or receipts, solid minerals, telecommunication services and so on. In other word, all the proceeds generated from all these commodities constitute non-oil revenue (Emelogu & Uche, 2010).

Government revenue and expenditure play a significant role in the economic growth of a nation. According to Hillary (2020), economic growth is a rise in the productive capacity of a country to produce goods and services compared from one period to another. It's a rise in an economy's real level of national income which can be caused by a growth in the quality and quantity of resources and developments in technology. In support of this, Audu (2018) described economic growth as the positive and sustained increase in aggregate goods and services produced in an economy within a given period. Abubakar (2016) opined that a country's economic growth is a long-term rise in capacity to supply progressively diverse economic goods to its population; this growing capacity is built on technological growth and development, the ideological and institutional adjustments that it demands. This implies that economic growth is tantamount to a sustained rise in national output, presence of advanced technology, attitudinal, ideological and institutional adjustments and provision of wide range of economic goods.

## 2.2 Conceptual Framework

The relationship between government budget variables and economic growth is depicted in figure 1:





## **Figure 1: Conceptual Frame Work**

**Source: Authors' Design**

### **2.2 Theoretical Review**

This study is theoretically underpinned by endogenous growth theory and the Keynesian theory. Advocates of endogenous growth theory contend that the efficiency and markets of today's industrialized nations when compared to the same countries in pre-industrialized eras provide proof that economic growth was formed and maintained from within the economy. This theory was pioneered by the work of Romer (1986), Barro (1990) among others, and it points out contrivances by which policy variables cannot only influence the level of output, but also steady-state growth rates. The original feature of the public-policy endogenous growth models of Barro (1990) and Barro and Sala-i-Martin (1992, 1995) is that fiscal policy can predict both the stage of the output path and the steady-state growth rate. This theory asserts that regulations by the government through internal means can actually spur growth and sustain it.

This theory supports the stimulation of the state and growth rate of per capita output within economic policies like tax strategies. The endogenous growth theory opines that the fostering of economic growth is essentially the result of endogenous influences and not exogenous influences (Romer, 1994). The growth and development of the economy in the long run is principally reliant on policy procedures which have severe consequences on competition, openness, innovation and change (Aregbeyen & Kolawale, 2015). This theory further debates that economic growth is spawned from within a system as a straight outcome of internal workings of the system. Explicitly, the theory denotes that the improvement of a nation's human capital will specifically lead to economic growth by virtue of the development and implementation of new forms of technology and competent means of production which are not interrupted by taxes.

Barro (1990) made one of the first attempts at endogenizing the association between growth and fiscal policies. He separated four classifications of public finances, which were productive vs. non-productive expenditures and distortionary vs. non-distortionary taxation. Productive expenditures positively influence the marginal output of private capital, which boost growth, while non-productive expenditures do not influence the marginal output of private capital (growth), but increase household utility directly. Distortionary taxation dwindles the incentives to invest in physical/human capital, which reduces growth, while non-distortionary taxation does not affect the above incentives (growth), due to the structure of the utility function assumed for the private agents.

Notably, taxation is distortionary if it influences the investment decision, and inevitably output/growth. This is very evident in the case of direct income and profit taxation.

Secondary or alternative taxes such as consumption taxes, are regarded as non-distortionary, though there is an exception when households confront the endogenous choice of leisure or labour (Nwankwo, Chris & Chiekezie, 2017). Endogenous growth models integrate networks through which fiscal policy can affect long-run growth. Emphatically, endogenous growth models uphold that a rise in productive spending financed by non-distortionary taxes will intensify growth, while the effect is abstruse if distortionary taxation is used. In the case of the latter, there is a growth-maximizing level of productive expenditure, which may or may not be Pareto efficient.

This theory asserts that fiscal policy can impact both the level and growth rate of per capita output. A sect of economists certifies that economic growth is the consequence of capital accumulation, while some other group upholds that technical progress is operative, and do not agree that economic growth is influenced by factors such as fiscal policy (Kazeem & Anthony, 2016). It is worthy to note that the major force behind endogenous growth is the elimination of the assumption of decreasing returns to capital. Endogenous growth is actually a long-term economic growth, which is at a rate predicted by forces that are internal to the economic system, specifically those forces managing opportunities and incentives to produce technological knowledge.

Critics argue that this theory is multifaceted, with a more complex pattern of intellectual evolution. Also, the theory has been challenged on empirical grounds, in the sense that it is impossible to validate with empirical evidence. It has also been accused of being based on assumptions that cannot be accurately measured. The relevance of this theory to the study is based on the fact that it explains the credibility of the factors that influence the economy from within the operations of a nation.

The Keynesian theory is deeply embedded on the conception of price inflexibility and the likelihood of an economy setting at a less than full employment level of income, output and employment. Propounded by Keynes (1936), this theory postulated that there is a strong connection between government expenditure and economic growth. It is specified that increase in government expenditure (on infrastructures) causes higher economic growth. However, neo-classical economists debate that government's fiscal policy is at variance with the growth of national output. This produced further controversy that government's fiscal policy (intervention tool) facilitates in preventing or correcting failure that might spring up from the ineptitudes of the market. Notably, the importance of fiscal policy as a mechanism of economic development was first envisaged by Keynes in his General Theory, wherein he displayed that the total national income of a country was an index of economic activity, and brought out the connection of economic activity of total spending.

The function of fiscal policy in the accomplishment of macroeconomic objectives has been comprehensively resolved with the Keynesian Theory of an activist macroeconomic policy. The Keynesian evaluation draws the conclusion that demand management policies

can and should be used to develop macroeconomic performance which would influence economic growth. An activist macroeconomic policy encompasses setting up fiscal and monetary policies in each time frame at the values which are considered essential to accomplish the government's objectives (Abdurrauf, 2015). A fundamental principle of Keynesian economics is that the private sector is innately unbalanced. It is subject to recurrent and quantitatively significant turbulences in the constituents of aggregate demand.

This theory has been criticized by both the monetarist and classical schools regarding the fact that the private sector is inherently stable. They agree that random disturbances occur in the private sector, but they disagree that these are either large or further amplified by quantifying adjustments (Abata, Kehinde & Bolarinwa, 2012). Also, critics say that a policy recommendation that confers to government a primary function in the operation of economic affairs is ultimately unworkable in a democratic society and so cannot constitute a viable policy option. This theory is relevant to the study as it depicts the factors influencing economic growth in a country.

### **2.3 Empirical Review**

Undoubtedly, a lot of studies have been carried out in this context in Nigeria and other parts of the world. For example, Abdurrauf (2015) examined the short and long run impact of fiscal policy on economic development in Nigeria between a period of 1981 and 2013 using annual time series data sourced from World Development Indicators (2014) and the Central Bank of Nigeria (2014). The study used government recurrent expenditure, government capital expenditure, government investment and tax revenue to indicate fiscal policy. Economic development was proxied by real per capita income. The model was estimated using Pair-wise Correlation to ascertain the relationship and then Cointegration and Error Correction Mechanism for impact after confirming the data's stationarity using Unit Root. The result revealed that government recurrent expenditure and government investment have significant positive impact on economic development in both the short and long run within the period under consideration. Capital expenditure appeared to have a short run positive impact but not in the long run. Tax revenue had an inverse significant impact in both short and long run. The speed of adjustment to equilibrium was found to be high. The results are all in line with theories and previous studies.

Ilegbinosa (2015) examined problems surrounding procedures of fiscal policy and their influence on economic growth in Nigeria from 1970-2009. The study adopted an Ordinary Least Squares (OLS) technique of multiple regression models using statistical time series data from 1970-2009. The estimated result revealed a positive relationship between the dependent variable (real gross domestic product) and the Independent variables (Government Expenditure and Taxes). This implies that the government expenditure is a

strong determinant of economic growth especially when properly directed towards the provision of adequate basic infrastructural facilities to stabilize investment activities. In the same vein, Falade and Folorunsho (2015) examined the relative effectiveness of fiscal and monetary policy instruments on economic growth in Nigeria in order to determine the appropriate mix of both policies. The study employed the error correction mechanism between 1970 and 2013. Real GDP was expressed as a function of money supply, exchange rate, interest rate (monetary policy instruments), government revenue, government expenditure (fiscal policy instruments) gross capital formation and inflation rate (control variables). The results showed that all the fiscal and monetary policy variables attained stationary. The results also showed a long-run relationship among fiscal and monetary variables and economic growth. The study maintained that the current level of exchange rate and its previous level, interest rate and current level of government expenditure and money supply are the suitable appropriate policy mix in promoting economic growth in Nigeria in short-run and long-run.

Using multiple regression analysis and Pearson Correlation analysis method, Haynes and Vidal (2015) investigated the contribution of fiscal policy to reduce economic inequality in the United States using data from 1976 to 2006. They find that the variety of fiscal policy tools such as cash assistance, unemployment insurance and corporate taxes have significantly lessened economic inequality among various economic groups. They also suggest future research to consider the fiscal policy of state and local governments. Kakar (2015) examine the impact of the fiscal variables on economic growth in Pakistan using time series data for the period 1980-2009. Cointegration and error correction techniques are used for this analysis and Granger causality test is used to determine the direction of causality. The results indicated that fiscal policy affects the long run economic development. Empirical results revealed that fiscal policy is very important for sustainable economic growth in Pakistan and results also indicated that fiscal policy measures are more of long-run phenomenon rather than short-run. In the short-run economic development can be stimulated by controlling interest rate and government expenditures at the cost of inflation.

Olaoye (2016) evaluated the effect of budget implementation on Nigeria's economic growth. Data on these variables were sourced from the Central Bank of Nigeria statistical bulletin from 1986 to 2014. The study adopted Ordinary Least Square (OLS), Co-integration and Error Correction Model (ECM) in analyzing respectively the short and long-run effect of budget implementation on Nigeria's economic growth. The findings from the study revealed that in the short run, PRE will have a positive relationship with GDP while PCE and PDS will have a negative relationship with GDP. In the long run, there was a complete turn of relationship as to what was obtained in the short run. In both the long run and short run, only PRE is statistically significant at 5% level of significance.

Also, Khosravi and Karimi (2017) examined the effects of fiscal and monetary policies on economic growth in Iran for the period 1960-2016 using the new bounds testing (ARDL) approach. The study revealed a cointegrating relationship between fiscal and monetary policy in Iran. Also, it was further revealed that inflation has a negative impact on economic growth while government expenditures have a significant positive impact on economic growth in Iran. In 2018, Audu evaluated the causal relationship between money supply, fiscal deficits and exports as a means of analyzing the impact of policy on the growth of the Nigerian economy between 1970 and 2010. The study adopted Co-integration Error Correction Mechanism (ECM), a two-band recursive least square to test for the stability of the Nigerian economy as well as determine the effect of money supply, fiscal deficits, and exports on the relative effectiveness of fiscal policies in the Nigerian economy. The study revealed that there is a significant causal relationship between gross domestic product (GDP) and the variables used in this research.

Sani and Nwite (2018) examined the implementation of budget and economic growth in Nigeria from 2014-2018. The objective is to investigate the impact of Public Capital Expenditure (PCE), Public Recurrent Expenditure (PRE) and Public Debt Expenditure (PDEX) on economic growth of Nigeria during the period under review. Using ex-post factor research design, data on PCE, PRE and PDEX (explanatory variables) and economic growth (dependent variable) proxied by Gross Domestic Product (GDP) were collected from Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) reports. The data were empirically analyzed using multiple regressions. The results revealed that PCE and PRE have significant impact on GDP except PDEX that do not show any impact.

Adah and Akogu (2019) investigated the effect of budget implementation on Nigeria's economic development. The Ordinary Least Square (OLS) model was used in the data analysis. In order to ascertain the data properties, unit root test was utilized and preliminary results showed that per capita GDP and Capital budget were stationary at first difference while Recurrent budget and implementation rate were stationary at level. Consequently, the ARDL model revealed that capital budget decreased GDP per capita significantly in the short run while in the long run, it increases per capita GDP but not significantly. Recurrent budget and budget implementation rate were positive in the short run but recurrent budget remained positive in the long run and significantly too while budget implementation rate turned negative and insignificant on the economy.

Adebayo, Miriam and Amos (2019) examined the effect of federal government budget on transport infrastructures and health sector on economic growth of Nigeria. The study used ex-post facto design and collected data through secondary source. The study covers Federal Government of Nigeria budgets for the period of 1999 to 2017. The study observed that government spending on transportation infrastructure does not significantly affect economic growth while spending on health has significant effect on economic growth.

Also, Orji (2019) assessed the effect of budget implementation on economic growth of Nigeria. Secondary data sourced from CBN statistical bulletin for the period of 1999 – 2018 was used. The study analyzed both the short and long run effect of budget implementation on economic growth. The result of the study shows that in the short run all the variables have no significant effect on economic growth, and in the long run the result shows they still have no significant effect on economic growth.

Oke (2013) examined the effect of budget implementation on the Nigerian economic growth and provides panacea to the problem of budget allocation and its implementation. To achieve this broad goal, the econometric model of ordinary least square (OLS) regression test was employed for analysis and time series data span from 1993 to 2010 was considered. The results revealed that budget implementation has a positive effect impact on Nigeria economic growth. The results further showed a positive relationship between GDP and public total expenditure (PEX), public recurrent expenditure (PRE), public capital expenditure, external debt (EXD), while public capital expenditure (PCE) shows a negative relationship to GDP.

Sunday, Nwanne, Basil, Ugwu and Festus (2019) examined the effect of fiscal policy on real sector growth in Nigeria. Focusing on government capital expenditure and its effect on the growth of the agricultural sector in Nigeria. The study adopted the ex-post facto research design and regression analysis as methodology using ARDL. Descriptive statistics and graphs were also used to complement the regression result. The result from the study revealed that there is a significant and positive effect of government capital expenditure on the growth of the agricultural sector in Nigeria. The implication of the study is that fiscal policy through government capital expenditure will increase the agricultural sector growth and thereby increases its contributions to the growth of the economy. Furthermore, Mohamed (2019) carried out a study titled, “Fiscal policy, income inequality and inclusive growth in developing countries.” The Bayesian model averaging (BMA) was adopted in the study to fit a classical linear regression model with uncertainty about the choice of explanatory variables. The study revealed that the fiscal consolidations have a statistically significant positive effect on a current GDP per capita growth.

Bongumusa, Irrshad and Lorraine (2019) examined empirically the impact of fiscal policy on economic growth in South Africa, using the annual time series data from 1960-2017. The study adopted Johansen VECM approach to examine the short-run and long-run relationship between fiscal policy variables and economic growth. The economic variables for empirical investigation include government expenditure, revenues, public debt, gross fixed capital formation, and economic growth. The result revealed that government revenues and gross fixed capital formation have a significant positive long-run impact on economic growth in South Africa. While government expenditure and public debt share a

negative long-run relationship with economic growth, the government expenditure has been growing at a higher pace than revenues.

Hillary (2020) carried out a study titled, “impact of Fiscal Policy on Economic Growth in Nigeria”. The study adopted error-correction technique to test the predictive ability of the endogenous growth model. The findings of the study were consistent with earlier empirical findings in other countries, which revealed that productive government expenditure has positive effect on economic growth. Also, Chai-Thing, Azali and Muzafar (2020) investigated the impacts of monetary and fiscal policies on economic growth in Malaysia, Singapore and Thailand from 1980 to 2017”. Autoregressive distributed lag (ARDL) approach was employed to determine the long-run relationship. Further, a range of econometric models, such as fully modified least squares method (FMOLS), canonical cointegration regression (CCR) and dynamic ordinary least squares method (DOLS), were applied to check the robustness. The study revealed that interest rate had a negative impact on economic growth in three selected countries. Also, government spending had a negative impact on economic growth in Malaysia and Singapore, but had a positive impact in Thailand. Monetary policy is more effective in Malaysia and Singapore, while fiscal policy is more effective in Thailand.

### **3.1 Methodology**

Ex post facto research design was adopted because of the study aimed at obtaining important information on the status of the specific phenomenon after some naturally occurring treatment without any manipulation of the situation. While government budget variables employed are capital expenditure, recurrent expenditure, oil revenue and non-oil revenue; economic growth was proxied by Gross Domestic Product (GDP). The model of the study was controlled by inflation. The study covered 39 years, spanning from 1981 to 2019 and data on both the explanatory variables and the explained variable were sourced from the CBN statistical bulletin of 2019. The choice of the years covered was predicated on interest of the researcher to improve on the years covered by the previous study and to equally cover the recent development in the nitty-gritty of the economic environment of the country. With a careful consideration of the tenets of endogenous growth theory, this study adapted the model used by Nwala and Ogboji (2020) to examine the effect of budget implementation on economic growth in Nigeria. The linear representation of the model is as specified in eq (1):

$$GDP_t = \alpha_0 + \alpha_1 CEX_t + \alpha_2 DEB_t + \alpha_3 REX_t + \varepsilon_t \dots \dots \dots 3.1$$

Where:

GDP: Gross Domestic Product

CEX: Capital Expenditure

DEB: Debt

REX; Recurrent Expenditure

$\alpha_0, \alpha_1 \dots \dots \alpha_3$  = the slop parameters

t = time series variable

$\varepsilon_t$  represent error term

The model was modified with the inclusion of oil revenue and non-oil-revenue. These variables were included because they form part of government budget variables that could affect economic growth. Also, inflation was included as the control variable and debt was excluded. The linear representation of the modified model is given thus:

$$GDP_t = \alpha_0 + \alpha_1 CEX_t + \alpha_2 REX_t + \alpha_3 NOR_t + \alpha_4 ORE_t + \alpha_5 INF_t + \varepsilon_t \dots \dots \dots 3.1$$

Where:

NOR: Non-oil Revenue

ORE: Oil Revenue

INF: Inflation

The research employed only quantitative method of data analysis. This was done in four folds: firstly, the descriptive analysis was performed using the mean, maximum, minimum, skewness, kurtosis and the probability of jarque-berra statistics. Secondly, the study examined the possibility of a relationship between variables through Pearson Correlation Matrix. This is followed by unit root analysis using the Augmented Dickey-Fuller (ADF), bounds co-integration test as proposed by Pesaran, Shin and Smith (2001) and Error Correction Model (ECM) estimation. For the evaluation technique, various criteria are employed which includes; the economic a-priori criteria, the statistical criteria [coefficient of multiple determination (R2), test of overall significance (F-test)] and the econometric criteria (Breusch – Godfrey test of serial correlation).



## 4. Results ad Discussion of Findings

### 4.1 Descriptive Statistics, Correlation Analysis and Regression Analysis

**Table 1: Descriptive Statistics**

	<b>RGDP</b>	<b>CEX</b>	<b>REX</b>	<b>NOR</b>	<b>ORE</b>	<b>INF</b>
Mean	34669.34	2430.350	1039.707	1433.398	473.9900	19.14718
Std. Dev.	20198.48	2723.421	1351.774	1856.968	528.3003	17.06314
Maximum	70546.05	8878.970	4725.600	6997.390	2289.000	72.84000
Minimum	13779.26	7.250000	2.980000	4.750000	4.100000	5.390000
Skewness	0.670305	0.776013	1.174475	1.282924	1.406542	1.783729
Kurtosis	1.872586	2.280238	3.124705	3.723099	5.032604	4.998158

**Source: Data Analysis, 2020.**

Table 1 shows the summary of all the variables under consideration in this study in their raw form. The mean values of RGDP, CEX, REX, NOR ORE and INF are #34669.34b, #2430.350b, #1039.707b, #1433.398b, #473.9900b and 19.14718 respectively. This shows the average values of the variables under consideration. The standard deviation values indicate the dispersion or spread in the data series. The higher the value, the higher the deviation of the series from its mean and the lower the value, the lower the deviation of the series from the mean. The variables with a higher degree of dispersion from the mean are CEX, REX, NOR and ORE. The minimum values of RGDP, CEX, REX, NOR ORE and INF are #13779.26b, #7.250000b, #2.980000b, #4.750000b, #4.100000b and 5.390000 respectively. Also, the maximum values for the period under consideration are #70546.05b, #8878.970b, #4725.600b, #6997.390b, #2289.000b and 72.8400 RGDP, CEX, REX, NOR ORE and INF respectively. The skewness statistic shows that all the variables are positively skewed. The Kurtosis statistic shows that all the variables have a thin-tailed distribution except VAT and CGT.

**Table 2 Correlation Matrix Analysis**

	<b>RGDP</b>	<b>CEX</b>	<b>REX</b>	<b>NOR</b>	<b>ORE</b>	<b>INF</b>
RGDP	1					
CEX	0.859636	1				
REX	0.963416	0.784678	1			
NOR	0.956193	0.781691	0.988280	1		
ORE	0.883619	0.778553	0.918287	0.937466	1	
INF	-0.346181	-0.381581	-0.322618	-0.317532	-0.349308	1

**Source: Data Analysis, 2020.**

Table 2 shows that RGDP has a positive relationship with CEX, REX, NOR and ORE with the correlation coefficient of 0.859636, 0.963416, 0.956193 and 0.883619 respectively. However, the relationship between RGDP and INF is negative to the tune of -0.346181. This explains that while RGDP moves in the same direction with CEX, REX, NOR and ORE, it moves in different directions with INF. Also, all the explanatory variables maintained a positive relationship except INF, indicating that they all move towards the same direction.

**Table 3: ADF Unit Root Test Results**

Variable	Level		First difference		Order of Integration
	Test statistic	p-value	Test statistic	p-value	
RGDP	0.052777	0.9575	-4.631834	0.0140*	I(1)
CEX	-1.274442	0.6314	-6.373953	0.0000***	I(1)
REX	-4.113970	0.0027**	-----	-----	I(0)
NOR	4.209963	1.0000	-5.037844	0.0003***	I(1)
ORE	4.014379	1.0000	-4.792577	0.0196*	I(1)
INF	-3.915670	0.0429*	-----	-----	I(0)

**Source: Data Analysis, 2020.** Note: \*, \*\* and \*\*\* indicate rejection of null hypothesis at 1%, 5% and 10% significance level respectively.

Table 3 shows that REX and INF are stationary at levels while the remaining variables which include RGDP, CEX, NOR and ORE are stationary at first difference. This implies that the simple linear regression estimate is not the appropriate estimation technique as the series are in different order of integration, thus, bounds co-integration test is performed. Since the series under review are in different order of integration as stated in table 4.3, bounds co-integration test as proposed by Pesaran, Shin and Smith (2001) is conducted in this section. In order to perform this test, Auto-Regressive distributed Lag (ARDL) model is estimated for the model and bounds co-integration test is performed thereafter. The Schwarz information criterion is used to determine the optimal lag length for each variable in the ARDL model. Table 4 presents the result of the bounds test.

**Table 4: Bounds Test Result**

F-statistic	Significance level	Critical value bounds	
		Lower bound	Upper bound
6.544253	1%	3.41	4.68
	5%	2.62	3.79
	10%	2.26	3.35

**Source: Data Analysis, 2020.**

Table 4 shows that the F-statistic is greater than the upper bound critical values at 10% significance level, thus indicating that the null hypothesis can be rejected. This indicates that there is cointegration (long-run relationship) among the variables in the model. Table 5 presents the long-run coefficients obtained from the ARDL model selected based on the Schwarz information criterion.

**Table 5: Long-run Estimation Results**

<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Test</i>	<i>Probability</i>
C	18888.74	1522.955	12.40269	0.0000
CEX	2.139346	0.437676	4.887972	0.0000
REX	0.575310	0.306061	1.445853	0.1900
NOR	3.577490	2.873379	1.245046	0.2219
ORE	6.863569	2.015901	2.709098	0.0368
INF	-10.92996	45.01518	-0.242806	0.8097

**Source: Data Analysis, 2020.** Note: \*, \*\*, and \*\*\* denote statistically significant at 1%, 5%, and 10% significance level respectively. *R-square*=0.859931, *Adjusted R-square*=0.853860, *F-statistics*=158.1151, *Prob(F-stat)*=0.0000

Table 5 reveals that CEX and ORE exerts a positive and significant effect on RGDP for the period covered by this study to the tune of 2.139346( $p=0.000<0.05$ ) for CEX and 6.863569( $p=0.0368<0.05$ ) for ORE. Consequently, REX and NOR have a positive but insignificant on RGDP to the tune of 0.575310( $p=0.1900>0.05$ ) for REX and 3.577490( $p=0.2219>0.05$ ). in the same vein, INF has a negative and insignificant effect on RGDP with the coefficient and probability values of -10.92996 and 0.8097 respectively. Also, the adjusted R-squared shows that about 85% variations in RGDP can be attributed to all the independent variables, while the remaining 15% variations are caused by other factors not included in this model. This shows a strong explanatory power of the model. This is further emphasized by the probability of the f-statistic given to be 0.0000 which shows that the regression result is statistically significant because this is less than 5%, the level of significance adopted for this study.

**Table 6: Short-run Estimation Results**

<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Test</i>	<i>Probability</i>
C	254.4488	181.1793	6.904934	0.0041
D(CEX(-1))	5.134652	2.176290	2.363805	0.0421
D(REX(-1))	0.091385	1.228786	0.074370	0.9413
D(REX(-2))	1.446031	1.220923	1.184375	0.2474
D(NOR(-2))	6.911958	1.972782	3.937474	0.0075
D(ORE(-1))	1.595363	1.431963	1.114109	0.2758
D(INF(-1))	16.59455	11.60456	1.430002	0.1651
ECT(-1)	-0.256768	0.002242	-2.785810	0.0094

**Source: Data Analysis, 2020.** *R-square=0.63985, Adjusted R-square=0.49578, F statistics=56.0051 Prob(F-stat)=0.000*

Based on the ARDL model, the short-run results show CEX has a positive effect on RGDP. REX has a positive but insignificant effect on RGDP in all periods. Also, NOR, ORE and INF have a positive effect on RGDP. However, the positive effect is only significant for NOR. The adjusted R-squared shows that about 54% variations in RGDP can be attributed to all the independent variables, while the remaining 15% are caused by other factors not included in this model. This shows a strong explanatory power of the model. This is further emphasized by the probability of the f-statistic given to be 0.0000 which shows that the regression result is statistically significant because this is less than 5%, the level of significance adopted for this study

#### 4.2 Residual Diagnostic Tests

**Table 7: Breusch-Godfrey serial correlation LM test**

<b>Lag</b>	<b>F-statistic</b>	<b>p-value</b>
1	0.51901	0.3310
2	0.51901	0.3761

**Source: Data Analysis, 2020**

The hypothesis of the test is that there is no serial correlation. The result of Breusch-Godfrey test shows that the hypothesis cannot be rejected at lag order 1 and 2, thus indicating that there is absence of first and second order serial correlation in the model.

**Table 8: Breusch-Godfrey Pagan Heteroskedasticity Test**

	<b>Test statistic</b>	<b>p-value</b>
<b>F-statistic</b>	0.77711	0.85541

**Source: Data Analysis, 2020**

The hypothesis for the test is that the residuals are not heteroskedastic. Table 4.7 shows that the hypothesis that the residuals are not heteroskedastic cannot be rejected, thus implying that the model is not biased due to heteroskedasticity.

**Table 9 Jarque-Bera Normality Test**

Test statistic	p-value
1.67001	0.55922

**Source: Data Analysis, 2020**

The residuals are expected to have a normal distribution. Table 4.8 shows that the hypothesis that the residuals are normally distributed cannot be rejected, thus indicate that the residuals in the model have a normal distribution.

#### **4.3 Discussion of Findings**

This study is an attempt to explain the relationship between government budget variables and economic growth in Nigeria for 39 years, spanning from 1981-2017. The long-run results are relied upon for the discussion of findings. It was discovered that capital expenditure exerted a positive and significant effect on economic growth in Nigeria to the tune of 2.139346( $p=0.000<0.05$ ), reflecting that a 1% increase in capital expenditure would engender a #2.13935 increase in real GDP of the nation. This discovery gave credence to one of the assumptions of endogenous growth theory that productive expenditures positively influence the marginal output of private capital, which boosts growth. A productive expenditure would stimulate investment which will, in turn, cause increase in the economic growth. The inference of this discovery is that government budget variables in terms of capital expenditure have the potency to improve the economic condition of Nigeria. This outcome corroborated the findings of Hillary (2020) and Sunday, Nwanne, Basil, Ugwu and Festus (2019), that government capital expenditure has a positive effect on economic growth. However, this discovery was not in agreement with the findings of Lorraine (2019) and Chai-Thing, Azali and Muzafar (2020). They reported a negative impact of capital expenditure on economic growth.

It was equally discovered that oil revenue exerted a positive and significant effect on economic growth for the period covered by this study to the tune of 6.863569( $p=0.0368<0.05$ ). This explains that the economy of Nigeria in terms of GDP would increase by #6.863569b with just a 1% increase in oil revenue. This is not surprising given that oil revenue is the major source of revenue through which the government fulfil its obligation and improve the living standards of the populace. The implication of this

discovery is that the indices of oil revenue in Nigeria should be improved with the intention of economic state of the country. In relation to other empirical studies, this finding was in support of the discovery of Bongumusa, Irrshad and Lorraine (2019), that government revenue significantly improves economic growth.

Another discovery made was that recurrent expenditure has a positive but insignificant effect on economic growth in Nigeria to the tune of 0.575310( $p=0.1900>0.05$ ). This shows that economic growth of Nigeria would increase by #0.57531b with just a 1% increase in recurrent expenditure. This outcome was in support of the Keynesian theory that there is a strong connection between government expenditure and economic growth. Its specified that increase in government expenditure (on infrastructures) causes higher economic growth. This explains that while recurrent expenditure helps in the stability of the economy, it does not contribute significantly to the growth of the economy. This outcome was in line with the findings reported by Falade and Folorunsho (2015), Abdurrauf (2015), Olaoye (2016) and Sani and Nwite (2018), that recurrent expenditure significantly impacts GDP.

The last discovery revealed that non-oil revenue has a positive but insignificant effect on economic growth to the tune of 3.577490( $p=0.2219<0.05$ ), indicating that that a 1% increase in tax revenue (non-oil revenue) would engender a #3.577490 increase in real GDP of the Nigeria. It is positive of the continued effort of the government to diversify the economy and improve tax revenue. However, it is insignificant the generation of non-oil revenue is inadequate and unstable. The inadequacy reflects the low productivity of the economy as a whole, while the unpredictability echoes the over-reliance on oil revenue. This discovery was not in tandem with the findings of Abdurrauf (2015), who reported that tax revenue had an inverse significant impact on economic growth.

## **5.1 Conclusion and Recommendations**

This study established the relationship between government budget variables and economic growth in Nigeria. Based on the variables of the study, it was established that capital expenditure and oil revenue could significantly stimulate increase in economic growth of Nigeria both in the short-run and long-run, as against recurrent expenditure and non-oil revenue. Thus, it was recommended that excessive recurrent expenditure should be discouraged and that government should invest more on capital projects that could induce foreign investors through which the economy of the state will be more booming. Government should work out modalities that will ensure offices and personnel are not duplicated and huge expenditure incurred on the assembly men are grossly reduced. Government should focus on judicious public spending and diversification of the economy

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# AUDITOR-CLIENT RELATIONSHIP AND AUDIT QUALITY: EVIDENCE FROM PUBLICLY QUOTED NIGERIA COMPANIES

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## ABSTRACT

*This study examined auditor-client relationship and audit quality of publicly quoted Nigerian companies. The ex-post facto research design was employed and data obtained from the annual reports and accounts of twenty (20) publicly quoted companies on the Nigerian Stock Exchange from 2013 to 2018. Using the Panel Least Square (PLS) regression technique, findings indicated among other things that there is a significant relationship between audit fee, audit firm size, audit tenure and audit quality. Therefore, it is recommended that firms in Nigeria should ensure that their auditors are adequately paid as this is likely to enhance audit quality. The study indicates that audit fee can result in higher levels of audit quality. Also higher audit fee should be sustained since high audit fee is associated with auditors' choice resulting to a higher audit quality and reporting.*

**Keywords:** Audit Fee, Audit Firm Size, Audit Tenure and Audit Quality

## INTRODUCTION

Prior to this dispensation, owners of business organizations take charge of the management of the activities of corporate organizations and as a result self-accountability was important. However, as corporate organizations continue to record growth, development and expansion, then it became necessary to separate ownership from management. This development gave rise to "principal-agent relationship (agency theory) where owners (principals) entrusted the duty of running the day-to-day affairs of the business in the hands of managers (agents) (Zayol, Kukeng & Lortule, 2017). Then corporate organizations owners left with no option to look for an agent (auditors) whose responsibility was to oversee the job done by the board of corporate organization, "who holds little or no interest in the businesses but assures owners of fair performance" (Zayol, Kukeng & Lortule, 2017). This lead to the introduction of auditing which is an "examination of accounting records done with the view of establishing whether the records are correctly and completely reflects in the transactions to which they relate" (Zayol, Kukeng & Lortule, 2017).

As opined by Imegi and Oladutire (2018) audit is about carrying out investigation to gain

proof concerning amount and revelations as contained in the annual report and account of corporate organization so as to estimate the accuracy of accounting records made available by corporate management. Auditors constitute a profession providing services to the people, particularly in auditing financial reports created by clients. The audit is especially intended to meet the needs of financial information users such as investors, creditors, prospective creditors and government institutions (Suseno, 2013). The quality of the audit services rendered by the auditor and the audit report issued are to a great extent affected by the independence of the auditor. Auditor independence is a cornerstone of the auditing profession, a crucial element in the statutory corporate reporting process and a key prerequisite for adding value to an audited financial statement (Enofe, Mbgame, Okunega & Ediae, 2013).

According to Ogiedu and Odia (2013) it is the responsibility of management of an organization to prepare financial reports for the consumption of their share/stakeholders. This financial reports show the financial health of an organization, and it is an avenue for communicating a company's financial dealings to the stakeholders and in most cases the only information accessible by them. Accordingly, investors and other stakeholders believe in these financial reports to determine their relationship with the organization. Similarly, Dabor and Dabor (2015) see financial reports as the most crucial components of an accounting transaction, because it's aimed at giving information to guide stakeholders' decisions, serves as a prospectus for potential investors and a barometer for ascertaining manager's performance. Aliyu and Ishaq (2015) opined that "audit report is the means of communicating information on the activities of the company to the users of accounting information; and the quality of audit is a function of the quality of accounting standards and the corresponding regulatory enforcement of the standards".

According to Imegi and Oladutire (2018) "audit quality therefore, is a basic ingredient in enhancing the credibility of financial statement to users of accounting information. Audit quality is a product of auditor's independence". Imegi and Oladutire (2018) declare that "when auditors become too familiar with their clients, it may affect the independence of the auditor and this in turn would have adverse effect on the audit quality". De Anglo (1981:186), "which defines audit quality as the market assessed joint probability that a given auditor will discover a breach in a client's accounting system and report the breach ". As indicated by Musa and Hassan (2014), audit quality plays an important role in maintaining an efficient market environment. Achieving quality financial reporting depends on the role that the external auditor plays in supporting the quality of financial reporting of quoted companies. Audit quality is amongst the most significant issues in audit practice today as organizations have enthusiasm for the quality of audited financial information (Musa and Hassan 2014).

In any case some corporate crimes have diminished client's trust in the auditors of public accounting firms. For example, financial crimes in Enron and World Com in USA in 2001 and 2002; Kimia Farma, Indo Farma, Agis and Bank of Century in Indonesia in 2001 and 2008. In the light of these financial crimes mentioned about, it is essential to improve audit quality, by examining the components that influence audit quality (Suyono, 2012). Prior studies (Listya & Sukrisno, 2014; Enofe, *et al* 2013; Shafie, *et al*, 2009) have employed diverse metrics for assessing audit quality. In this study, audit quality was measured using total accruals, while audit client-relationship by natural logarithm of audit fees, Big-4 and Non-Big 4 and audit tenure, the number of years auditor spent with clients. From the foregoing this study is carried out to examine auditor-client relationship and audit quality in Nigeria quoted companies.

### ***Statement of the Research Problem***

Previous research have shown disparities in the relationship between audit-client relationship and audit quality and the research previously done have failed to establish the relationship. Overtime, economic activities have made audit tenure and audit quality a major attention to timely debate. Previous research has shown a mixed relationship both positive and negative between audit tenure and audit quality. Example of the previous studies are, the studies of Abdul, Sutrisno and Rosidi (2014) who found that audit fee positively affect audit quality.

Kabiru and Abdullahi (2012) found that audit fee does not significantly improve the quality of audited financial statement. Ilaboya and Ohiokha (2014) found that there is a negative relationship between audit fee, audit firm size and audit quality in quoted companies. As a result of the mixed results associated with prior studies in both developed and developing countries, the aforementioned attributes were adopted with a view to finding out what the results would be if this study is carried out in Nigeria.

### ***Objectives of the Study***

The broad objective of this study is to examine auditor-client relationship and audit quality in Nigeria quoted companies. Other specific objective is to:

1. find out the relationship between audit fee and audit quality;
2. ascertain the relationship between audit firm size and audit quality; and
3. determine the extent to which auditor tenure influence audit quality.

### ***Research Hypotheses***

The following null hypotheses shall be tested in this study:

- H<sub>1</sub>: There is no significant relationship between audit fee and audit quality.  
H<sub>2</sub>: There is no significant relationship between audit firm size and audit quality.

H<sub>3</sub>: There is no significant relationship between audit tenure and audit quality.

## **LITERATURE REVIEW**

### ***Audit Quality***

DeAngelo (1981) defined audit quality “as the market-assessed joint probability that the auditor discovers an anomaly in the financial statements, and reveals it”. Audit quality according to Dandago and Rufai (2014) “is obtained by a process of identifying and administering the activities needed to achieve the quality objectives of audit work”. Dandago and Rufai (2014) further argue that “the skills, personal qualities of audit partners and staff, and the training given to audit personnel are important factors that determine auditor’s quality”.

### ***Audit Tenure and Audit Quality***

Audit tenure is described as “the number of years an auditor audits a client or the number of years a company employs the same auditor” (Qwaqzeh, Endut, Rashid, Johari, Hamid, & Rasit, 2018). Qwaqzeh, et al. (2018) buttress that “audit tenure has been dissected into large and short audit periods; long audit tenure might decrease the independence and professional care, on the other hand, shorter audit tenure reflects that the auditors have less knowledge about the client which may lead to low audit quality”.

Empirically, Mgbame, Eragbhe and Osazuwa (2012) carried out “an empirical study on the relationship between audit tenure and Audit quality”. “They utilized the Binary Logistic Model estimation technique in analyzing the perceived relationship between the tenure of an auditor and the quality of the audit. Other explanatory variables like the Returns on Asset (ROA), Board Independence, Director Ownership and Board Size were also considered in the study. Their findings revealed a negative relationship between auditor tenure and Audit quality; though the variable was not significant”.

A study conducted by Siregar, Amarullah, Wibowo and Anggraita (2012) in the Indonesian setting to examine “the effects of auditor rotation and audit tenure of the public accountant and the public accounting firm on audit quality”. Their results showed that “mandatory auditor rotation did not increase audit quality; and that shorter audit tenure did not also increase audit quality”.

Onwuchekwa, Erah and Izedonmi (2012) investigated “the relationship between mandatory audit rotation and audit quality using questionnaires distributed to investors, lecturers, consultants, accountants and auditors in Southern Nigeria. The study revealed that mandatory audit rotation had no significant relationship on Audit quality in Nigeria.

### ***Auditor Fee and Audit Quality***

Audit fee is the cost incurred by the company to pay a public accounting firm in order to audit the financial statements of the company (Rusmanto & Waworuntu, 2015). According to Elkana (2016), audit fees refer to the remuneration payable to an auditor for audit services rendered. According to Urhoghide and Izedonmi (2015) audit fee refers directly to payments made to the auditor that relates directly to the audit function.

### ***Audit Firm Size and Audit Quality***

According to Aronmwan, Ashafoke and Mgbame (2013), “the big4 audit firms have more reputation than their compatriots”. Audit firm reputation refers to the corporate image built over time by auditing firms (Aronmwan, Ashafoke & Mgbame, 2013). It may be as a result of the array of auditors the firm possesses, the brand name, the perceived audit quality resulting from little or no litigations, the fees charged etcetera. Mgbame, Eragbhe and Osazuwa (2012) opine that most companies in the face of scandals switch to high reputation firms (Big Four) because of their perceptions that high reputation firms produce quality reports since they face more loss of public image when compared with firms having little reputation status, hence it is expected that large firms would charge higher audit fees.

Dehkordi and Makarem (2011) investigated “the influence of audit firm size (Big auditors vs. non-Big auditors) and auditor type (governmental vs. private auditors) on audit quality. A sample of 224 firms was observed from the Tehran Stock Exchange (TSE) companies during the period 2002 to 2007. Discretionary accruals (DAC) were employed as representative of Audit quality. A modified, cross-sectional version of the Jones' model was applied to measure DAC. Their results showed that the size of non-governmental audit firms does not affect their audit quality, and changes within private audit firms do not lead to changes in the level of discretionary accruals”.

Bae and Lee (2013) “concluded that audit firm size is positively associated with Audit quality measured by discretionary accruals and modified opinions. Also audit firm size is positively associated with audit fees”. However, Imhoff (1988) “was against DeAngelo’s conclusion; he found that from analyst’s point of view, there is no difference in audit quality between top-eight audit firms and non-top-eight firms”.

## **METHODOLOGY**

### ***Research Design***

The study utilized both cross-sectional and longitudinal research design. The study covered a time period of six (6) years that is 2013 – 2018 (six financial years). The choice of this design is based on the nature of the study which is a cross sectional study and over a long period of time. With this design, the researcher will collect data that had occurred already and in which no further manipulation will be required to examine auditor-client

relationship and audit quality in the Nigeria quoted companies.

### ***Population, Sample Size and Sampling Technique***

The population of this study consists of the entire one hundred and seventy (170) companies quoted on the Nigerian Stock Exchange as at 31<sup>st</sup> December 2018 as evidenced in the Nigerian Stock Exchange Fact-Book (2018). A total of twenty (20) firms shall form the sample size of this study. The convenient sampling technique was used in selecting each of the companies. This is to ensure that all company quoted on the Nigeria Stock Exchange as at 31<sup>st</sup> December 2018 have an equal chance of been represented.

### ***Model Specification***

In line with the research hypotheses, the model for this study is specified below in its functional form.

$$audqua = f(audfe, audfsize, audten) \quad eq. 1$$

Equation 1 is expressed in its implicit form; however, equation 2 is re-estimated in its explicit form:

$$audqua_{it} = \beta_0 + \beta_1 audfe_{it} + \beta_2 audfsize_{it} + \beta_3 audten_{it} + u_t \quad eq. 2$$

**Where:**  $audqua_{it}$  = Audit quality for 'i' firm in period 't'  $audfe_{it}$  = Audit fee for 'i' firm in period 't'  $audfsize_{it}$  = Audit firm size for 'i' firm in period 't'  $audten_{it}$  = Audit tenure for 'i' firm in period 't'

**Table 1: Operationalization of Variables**

S/N	Variable	Variables Acronym	Measurement	Source
1.	Audit Quality	AUDQUA	This was taken as total accrual i.e. net income – cashflow from operating activities.	Listya & Sukrisno (2014)
2.	Audit Fee	ADFEE	Measured by the Natural Log of total fee paid to an auditor	Listya & Sukrisno (2014)
3.	Audit Firm Size	ADFSIZE	This was measured as 1 if the company audit firm is one of the big 4, 0 otherwise	Enofe, Mgbame, Aderin, & Ehi-Oshio, (2013)
4.	Audit Tenure	ADTEN	This is measured by assigning 1, if the number of years auditor spent with a sample company is greater than 3 years, otherwise, we assign 0.	Shafie, Hussin, Yusof & Hussain (2009)

**Source: Author's Compilation, 2020.**

### 3.4 Data Analysis Technique

In estimating the sourced data, the Ordinary Least Square Technique (OLS) was employed. The study also considered the use of descriptive statistics, correlation matrix to confirm the association between the selected variables.

## 4. DATA ANALYSIS AND INTERPRETATION

*Table 2: Descriptive Statistics*

	<b>AUDQUA</b>	<b>AUDTEN</b>	<b>AUDFEE</b>	<b>AUDFSIZE</b>
Mean	6.102636	0.758333	4.195981	0.458333
Median	6.060912	1.000000	4.178395	0.000000
Maximum	8.638388	1.000000	5.285152	1.000000
Minimum	4.343192	0.000000	3.477121	0.000000
Std. Dev.	0.784898	0.429888	0.416462	0.500350
Skewness	0.086461	-1.206902	0.385842	0.167248
Kurtosis	3.105905	2.456612	2.512581	1.027972
Jarque-Bera	0.205590	30.60860	4.165376	20.00391
Probability	0.902312	0.000000	0.124595	0.000045
Sum	732.3163	91.00000	503.5177	55.00000
Sum Sq. Dev.	73.31180	21.99167	20.63938	29.79167
Observations	120	120	120	120

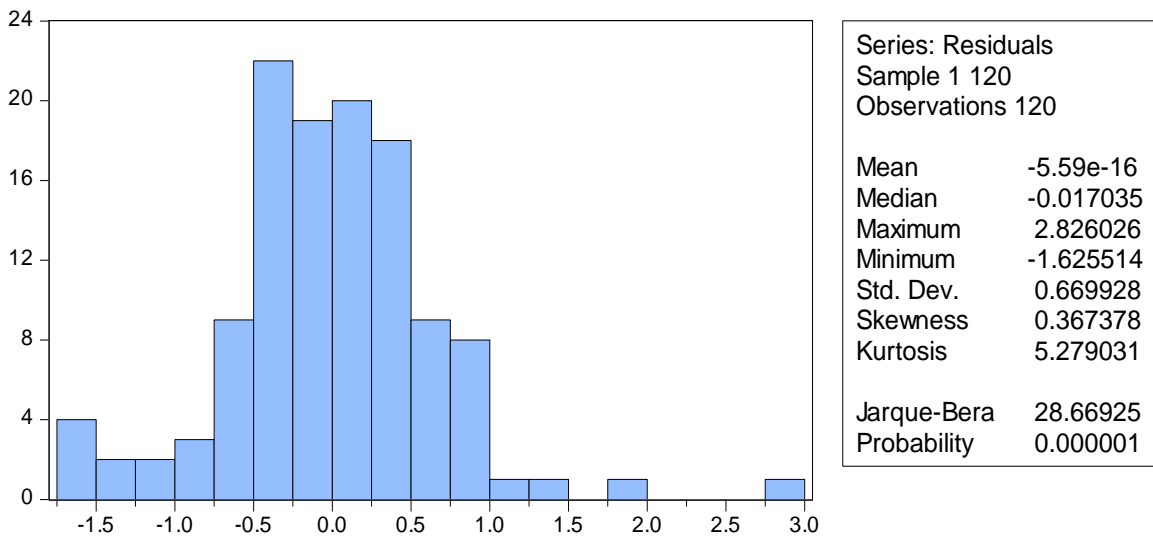
*Source: Eviews 9 (2020)*

The descriptive statistics in table 2 shows the characteristics of the variables from the twenty (20) selected companies that formed the overall sample of the study. As observed, the mean value of the dependent variable Audit Quality (AUDQUA) showed positive values ranging from 4.343192 to 8.638388 suggesting that the level of Audit Quality (AUDQUA) of the selected companies for the period under review skewed towards the positive. The mean values of all the other independent variables [Audit Fee (AUDFEE); Audit Firm Size (AUDFSIZE) and Audit Tenure (AUDTEN)] equally showed positive values with mean values of 0.758333, 4.195981 and 0.458333 respectively.

The standard deviations of each of the variables showed minimal dispersion ( $\pm$ ) from the mean values which are highly desirable. More so, the probability values of the Jarque Bera test for all factors are significantly lower than the 0.05 indicating that the series are uniformly distributed except variables of audit quality and audit fee that were not normally distributed. However, to ensure the reliability of the result, other tests were conducted; they are normality test, Variance Inflation Factors (multicollinearity), heteroscedasticity, serial correlation (auto correlation) tests as well as hausman test.



**Figure 1      Normality Test**



**Source: Researchers Computation, 2020**

The histogram normality and other descriptive statistics of the regression variables are revealed in the normality test above. The result showed a mean Jarque-Bera test of 28.66925 and associated probability value of 0.000001 which is significantly lower than the 5% level indicating that not all the series are evenly distributed. Thus, the issue of endogeneity arising from the heterogeneous nature of the data are likely evident.

**Table 3: Correlation Analysis**

Covariance Analysis: Ordinary

Date: 11/05/20 Time: 20:52

Sample: 1 120

Included observations: 120

Correlation

t-Statistic

Probability	AUDQUA	AUDTEN	AUDFEE	AUDFSIZE
AUDQUA	1.000000			
	-----			
	-----			
AUDTEN	0.255202	1.000000		
	2.867140	-----		
	0.0049	-----		
AUDFEE	0.473017	0.191498	1.000000	
	5.831978	2.119428	-----	

	0.0000	0.0362	-----	
AUDFSIZE	0.089250	0.089531	0.451788	1.000000
	0.973383	0.976481	5.501105	-----
	0.3324	0.3308	0.0000	-----

**Source: Eviews 9 (2020)**

Table 3 presents the correlation matrix of variables adopted in the study. The aim is to show how the variables are related among themselves and to also check for possible high correlations which could lead to multicollinearity problem. As observed from the result, an insignificant positive correlation exists between the dependent variable Audit Quality (AUDQUA) and the variables of Audit Tenure (AUDTEN) and Audit fee (AUDFE) at 0.25 and 0.47 respectively; while the variables of Audit Firm Size (AUDFSIZE) showed significant positive associations with the dependent variable Audit Quality (AUDQUA) at 0.08. However, the variables that have significant association with the dependent variable of Audit Quality (AUDQUA) passed the scale at 1% level of confidence. This suggests that all the independent variables move in the same direction with the dependent variable. It is also observable that the issue of high-correlation is not evident among the variables as none of the correlation coefficients is above 0.80.

### Diagnostic Tests

To ensure reliability and validity of the empirical results, some diagnostic tests were conducted. In order to test for the presence of multicollinearity in the model, the Variance Inflation Factor (VIF) was carried out, the Hereroskedasticity test was conducted using Breusch-pagan-Godfrey test.

#### Table 4: Variance Inflation Factors

Variance Inflation Factors

Date: 11/05/20 Time: 20:52

Sample: 1 120

Included observations: 120

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
AUDTEN	0.021733	4.295503	1.038080
AUDFEE	0.028862	133.7388	1.293850
AUDFSIZE	0.019418	2.319644	1.256474
C	0.460943	120.1386	NA

**Source: Eviews 9 (2020)**

The result of the variance inflation factor in Table 4 shows the absence of multicollinearity. The centered VIF values of the explanatory variables are far below the benchmark of 10. The explanatory variables of Audit Tenure (AUDTEN) reported a centered VIF of 1.038080; Audit fee (AUDFE) 1.293850 and Audit Firm Size (AUDFSIZE) 1.256474. All the variables of the model recorded a centered VIFs that are not substantially different from 1.00 and are not indicative of the problem of multicollinearity.

**Table 5: Heteroskedasticity Test: Breusch-Pagan-Godfrey**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.700973	Prob. F(3,116)	0.5533
Obs*R-squared	2.136698	Prob. Chi-Square(3)	0.5445
Scaled explained SS	4.271811	Prob. Chi-Square(3)	0.2336

*Source: Researcher's Compilation (2020)*

The test for Heteroskedasticity is presented in Table 5; it checks for the presence of non-constant variable leading to the breakdown of the BLUE properties in which the efficiency and consistency property may be lost. The decision rule is to conclude that there is no Heteroskedasticity if the F-statistic values are respectively greater than the critical values at 5% level. In the absence of this (i.e. if the critical values at 5% is greater than the F-statistic and observed R-square value), we conclude that there is Heteroskedasticity. As shown in Table 4.4, the p-value (55.0%) of the corresponding observed chi-square value is greater than 5%. Hence, we accept the null hypothesis of heteroskedastic error term which is desirable. The implication of this is that the regression results can be applied reliably.

### Estimation Results

The fixed effect and random effect model estimation technique were to be adopted. However, in order to ascertain the one that is most appropriate. The Hausman's Test was applied; the result obtained is show below:

**Table 6: Hausman Test Result**

Correlated Random Effects - Hausman Test

Equation: Untitled

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	0.106702	3	0.9910

*Source: Researcher's Compilation (2020)*

**Null Hypothesis:** Random effect model is not desirable  
**Alternative Hypothesis:** Random effect model is desirable.  
Decision Rule: Accept null if product is greater than 5%.  
Accept alternative if product is less than 5%.

From the result of the Hausman Test, the chi-square statistics has a value of 0.10 and the corresponding p-value is greater than 5%. Hence, the null hypothesis was accepted. This implies that the random effect model is most appropriate for the study, (see appendix) in order to provide a comprehensive overview of the results.

### Table 7: Regression Results

Method: Panel EGLS (Period random effects)

Sample: 2013 2018

Periods included: 6

Cross-sections included: 20

Total panel (balanced) observations: 120

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDTEN	0.312905	0.150443	2.079897	0.0397
AUDFEE	0.963335	0.173372	5.556470	0.0000
AUDFSIZE	-0.246318	0.142205	-1.732135	0.0859
C	1.936109	0.692844	2.794438	0.0061
Effects Specification				
			S.D.	Rho
Period random			0.000000	0.0000
Idiosyncratic random			0.692444	1.0000
Weighted Statistics				
R-squared	0.271499	Mean dependent var		6.102636
Adjusted R-squared	0.252659	S.D. dependent var		0.784898
S.E. of regression	0.678536	Sum squared resid		53.40769
F-statistic	14.41039	Durbin-Watson stat		1.585732
Prob(F-statistic)	0.000000			
Unweighted Statistics				

R-squared	0.271499	Mean dependent var	6.102636
Sum squared resid	53.40769	Durbin-Watson stat	1.585732

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***Source: Researcher's Computation via Eviews 9 (2020)***

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As shown in the above table, the R-squared coefficient of determination stood at 0.27 which indicates that the model explains about 27% of the systematic variations in the dependent variable Audit Quality (AUDQUA). The Adjusted  $R^2$  which controls for the effect of inclusion of successive explanatory variables on the degrees of freedom was 25% meaning that about 75% of the systematic variations in Audit Quality (AUDQUA) were not explained by the model after adjusting for the degree of freedom. However, the proportion of the variation not captured by the model has been addressed by the error term. The F-statistics value and the associated p-value stood at 14.41039 and 0.000000 respectively indicating that the hypothesis of a joint statistical significance of the model cannot be rejected as 5% level of significance and the linearized specification of the model can be assumed as appropriate.

The evaluation of the slope coefficients of the independent variables revealed the existence of positive relationship between Audit Tenure (AUDTEN), Audit fee (AUDFE) and the dependent variable Audit Quality (AUDQUA) as depicted by the slope coefficient of 0.312905 and 0.963335 respectively. On the other hand, the other independent variable of Audit Firm Size (AUDFSIZE) has negative relationships of -0.246318 with the dependent variable Audit Quality (AUDQUA) as shown in the table. It is worthy to note that only the variables of all the independent variables [Audit Fee (AUDFE); Audit Firm Size (AUDFSIZE) and Audit Tenure (AUDTEN)] passed the significance test at 5% level based on the findings. Thus, a positive change in Audit Fee (AUDFE); Audit Firm Size (AUDFSIZE) and Audit Tenure (AUDTEN) will likely increase Audit Quality (AUDQUA) significantly by up to 0.03, 0.00 and 0.08 respectively. Lastly, the Durbin-Watson value of 1.58 suggests that there is no evidence of autocorrelation among the error term.

### **Test of Hypotheses**

The employed hypotheses are statistically tested below as shown in their null form. The study sets its decision rule for the acceptance of the hypothesis at 5% level of significance; hence, the null hypothesis would be rejected if the probability value is less than 5% (0.05). The following are the results of the tested hypothesis:

#### **Hypothesis One:**

H<sub>01</sub>: There is no significant relationship between audit tenure and audit quality in Nigeria.

The first hypothesis of the study seeks to justify if there is significant relationship between Audit Tenure (AUDTEN) and Audit Quality (AUDQUA). Utilizing the regression output in the previous table, and judging by the significance level of 0.0397 which is far greater than the 0.05 significance level as depicted in the regression Table 7, the study therefore accept the alternative hypothesis and reject the null. This can be concluded that there is a significant relationship between audit tenure and audit quality in Nigeria during the period of the study.

### **Hypothesis Two:**

H<sub>02</sub>: There is no significant relationship between audit fee and audit quality in Nigeria. In the second hypothesis, the study seeks to clarify whether or not there is a significant relationship exists between Audit fee (AUDFE) and Audit Quality (AUDQUA). Based on the regression result in table 4.6, Audit fee (AUDFE) was positively and significantly related to Audit Quality (AUDQUA). It had a p-value of 0.0000 which is far lower than the critical value of 0.05. Hence, the null hypothesis as stated is rejected. This means that there is a significant relationship between audit fee and audit quality in Nigeria.

### **Hypothesis Three**

H<sub>03</sub>: Relationship does not exist between audit firm size and audit quality in Nigeria. The third hypothesis of the study seeks to determine whether or not a significant relationship exists between Audit Firm Size (AUDFSIZE) and Audit Quality (AUDQUA). Based on the regression output in the previous table 7, and judging by the significance level of 0.0859 which is less than the 0.05 significance level as depicted in the regression. The study therefore accepts the null hypothesis and concludes that there is no significant relationship between audit firm size and audit quality in Nigeria among quoted Nigerian companies during the period of the study.

## **DISCUSSION OF FINDINGS**

The results of the Panel Least Square (PLS) results show that there is a significant relationship between audit tenure and audit quality in Nigeria, this finding is in conformity with Shafie, Hussin, Yusof and Hussain (2009) who find a positive and significant relationship between audit firm tenure and auditor reporting quality. On the contrary, Adeyemi, Okpala and Dabor (2012) did not find audit firm tenure to be a significant factor for enhancing audit quality in Nigeria. Also Mgbame, Eragbhe and Osazuwa (2012) note that an audit firm's tenure can result in a loss of auditor's independence. A long audit-client relationship could lead to an alignment of the auditors interest and that of its client which makes truly independent behaviour of the auditor a probability. We also observed that there is a significant relationship between audit fee and audit quality in Nigeria. This is in line with Yuniarti (2011) who find that audit fees significantly affect the quality of audits.

The finding also reveals that there is no significant relationship between audit firm size and audit quality in Nigeria. This result disagrees with Sawan and Alsaqqa (2013) who finds that Big Four firms are superior to their non-Big Four counterparts in all of the reputation issues presented to them, and that the size of the audit firm is positively associated with audit quality. Also Shafie, Hussin, Yusof and Hussain (2009) theorized that larger audit firms have superior audit quality since they invest more in audit technology and training. Thus, in term of audit competence, it could be argued that larger audit firm would be more accurately able to detect problems related to going-concern assumption than smaller audit firms.

## **CONCLUSION AND RECOMMENDATIONS**

The outcome of this study offers an important insight into auditor's independence and audit quality among Nigerian quoted companies. A sample of twenty (20) companies quoted on the Nigeria Stock Exchange were used for a period of six years (2013 – 2018) with audit quality captured as the dependent variable, while the independent variables include audit tenure, audit fee and audit firm size. The findings as we gathered through the analysis show that auditor independence (i.e. the amount paid for audit service) is a significant determinants of audit quality and audit tenure equally exhibit significant relationship with audit quality as we observe that a unit change in audit tenure and audit fee increases audit quality by 0.03% and 0.00 % respectively, while no significant relationship between audit firm size and audit quality.

### ***Policy Recommendations/Implication of Study***

1. The three years professional requirement for auditors in Nigeria should be backed up by law and enforced. Considering the positive effects audit tenure have on audit quality and in line with global trends, professional accounting bodies, Financial Reporting Council of Nigeria, and the National Assembly should issue a codified and authoritative framework, guideline or standard for auditors' tenure in Nigeria..
2. The study recommends that firms in Nigeria should ensure that their auditors are adequately paid as this is likely to enhance audit quality. The study indicates that audit fee can result in higher levels of audit quality. Also higher audit fee should be sustained since high audit fee is associated with auditors' choice resulting to a higher audit quality.

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# A REVIEW OF CORPORATE GOVERNANCE PRACTICES AND ETHICAL TAX BEHAVIOUR

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## **ABSTRACT:**

*The corporate collapses have led to increased scrutiny of deficiencies in the financial reporting process and corporate disclosure requirements of corporate organizations. The perceived credibility of corporate directors have been negatively affected due to the various manipulation of financial report and deliberate avoidance of tax. Corporate governance practices, standards and laws concerning financial disclosure to the compensation of corporate boards involved ethics which focuses on human behaviour in terms of morals, values and conscience that makes a system work. Ethics make corporate directors to do what is right because unethical practices are disastrous to the entity, community and the society at large. The study focuses on corporate governance and ethical tax behaviour of companies and adopted the content analysis with focused emphasis on primary and secondary sources of data. The study finds out that, companies have negative behaviour toward the payment of tax and as such sees it as a burden and therefore look for all unethical ways to avoid tax. The paper concluded that tax is a strong means of government generating fund for the huge responsibility ahead of them so corporate entities should practice good corporate governance policies which will make them adhere to high ethical value and in turn paying taxes will not be a burden but will be seen as obligation. Recommendations were: 1. government should review downwards the tax rate given to companies because providers of fund see tax as an enemy that shrinks their return on investment. 2. government should educate the tax payers on the benefit of tax. 3. Government should let the tax payer's fund be visible in project and finally, ethics should be seen as a culture and not a case of coercion.*

**Keywords:** corporate governance, ethics, behaviour, tax avoidance, government.

## **Introduction:**

The growing and worrisome trend in financial crimes, fraud and tax evasion these days call for the concern of every Nigerian. Corporate owners made huge resources from the immediate environment where they operate and want to deliberately avoid giving back to the environment in form of tax. When taxes are not paid, it has severe consequences on government because the primary role of every government is to provide basic amenities

for its citizens and undertaking this huge public expenditure and other social services will not be possible. To meet up with these responsibilities government requires substantial amount of funds which is expected to be generated through tax. The payment of tax is not new as there are evidences of tax payment right from the history of man like in colonial Nigeria there are evidence of an elaborate system of taxation and payment of tribute to traditional rulers. According to Anan (2018), in the North, evidence abound of the existence of the capitation tax on cattle belonging to the Nomads and community taxes in the south (Oyo, Egba, Bini and others), and also evidences of payment of tributes to Obas, Obi's and Igwe. These taxes ranges from five shillings to ten shillings per heads and it was paid by the people due to strong moral value for ethics wanting to do what is right not only in the open but also in the their closest. And from 1959 till date, Nigeria as a country has enacted a host of tax laws on every business firm whether public or private under the company income tax act (CITA) No. II LFN 2007 as amended at the rate of 30% and 2% education tax on the assessable profit respectively. Iyoha (2005), opine that government needs financial resources to act as a person and play a role that is expected by it to the public. Tax is one of the major sources from which government generates income to meet its huge responsibilities. Hanlon, et al (2010), defined tax as a compulsory levy by the government imposed on citizens of a country. According to Sullivan (2015), taxation forms a major source of government revenue in the country and when this source is blocked, the economy as a whole suffers and the resultant effect is that the government will take some instant measures to revive the economy. Some of these measures could be heavy taxation on surviving companies and staff retrenchment. Over the years the payment of tax has been an issue by companies because company directors are not truthful in the figure they declared as profit. Liberto (2019), opined that companies practice creative accounting and subject their financial statements to various forms of manipulated. This practice has led to collapsed of corporate organizations like Enron, Arthur Anderson, Worldcom and others in the late 2001 to date. This practice generated interest in corporate governance and a series of regulations and statutory provisions were enacted in 2002 through the famous Sarbanes – Oxley Act. Corporate governance is a young discipline that grown out of deep seated concern raised by spectacular and well publicized corporate failures The global corporate failure were caused by insider loans, compensation scandals, fudging financial statements, inefficient and unethical conduct of external auditors for companies and closed decision making process leading to corruption and waste, (Dube, 2008). Corporate governance process aims to allocate corporate resources in a manner that maximizes value for all stakeholders. Many people in developing countries lack adequate amenities like shelter, safe water, good road, good health care facilities, employment opportunities for the youth and care for the old to mention but a few. Government is aware of their responsibilities and they are willing to provide for the citizens to the best of their ability. They often faced challenges like insufficient fund to provide for those enormous

facilities or challenges in the administration of those facilities. The citizens continue to lament but no solution is forth coming. Government has huge projects to pursue on a yearly basis because the population is always on the increase so the expected facilities and if not properly planed there will be problems in the future. The major source of government revenue is tax and with the growing rate of adult citizen and companies that are eligible for tax is also on the increase. If taxes is rightly collected from these companies it will go a long way to remedy the problems of inadequate amenities currently experience by emerging economies. The paper looked at the corporate organizations and their attitude towards tax as a compulsory levy by the government and how ethics can help in the behavioral attitude of corporate owners to see tax payment as an obligation and not to look for opportunities to avoid or invade it.

### **Objective of the study:**

The research paper is carried out to achieve the following objectives:

1. Importance of corporate governance to the long run sustainability of the business.
2. Impact of ethical behaviour of corporate directors on tax.

### **THOERITICAL LITERATURE:**

According to Ozekmekci (2004), corporate governance is the system by which companies are directed and controlled and Boards of directors are responsible for good governance of their companies. Shareholders appoint the directors and the auditors to satisfy themselves that an appropriate governance structure is in place. Ridhar (2005) opined that corporate governance has been broken down into four simple words people, purpose, process and performance which is referred to as four “Ps” of corporate governance which is the guiding philosophies behind why governance exists and how it operates. Dibra (2016), defined corporate governance as the way by which corporation assures of getting a return on their investment. Mayer (1997), opined that it is a system to prevent rational self-interest agents from engaging in self-dealing. Kajola (2008), defined the term as a mechanism that is utilized to be able to direct and control firms and organization. Heitzman (2005), defined it as a control that provide controls that ensures financial statements present fairly the financial affairs of the company. CAMA 1990 attempts to imbibe corporate governance into companies through various means such as adequate disclosure of information in financial statement, auditing of account with regards the required accounting ownership requirements, disclosure of sundry issues and items, guaranteeing of minority shareholders right, among others, (Mirshekay et al (2009). According to Coyle (2003), corporate governance is the collection of mechanisms, processes and relations by which corporations are controlled and operated. It essentially involved balancing the interest of a company’s many stakeholders such as shareholders, senior management executive, customers, suppliers, finance, government and the community. According to Wisuphakorn and

Jihaporn (2015), corporate governance provides framework for attaining company's objectives. It encompasses practically every sphere of management from action plans and internal controls to performance measurement and corporate disclosure. Lenfhold (2012) said, it is a system of rules, practices and processes by which a firm is directed and controlled. So with all the definitions above, corporate governance can simply be put as a system by which companies are directed, managed and controlled.

### **Ethics and corporate governance**

Ethical lapses and dilemmas are one of the root causes of many problems that corporate management is facing today. Ethics is important for the survival of every business. Sullivan (2015) defined Ethics as a systematic attempt to understand moral and to propose and defend principles and theories regarding right and wrong behaviour. Cattel (1990), defined it as morals, moral principles, a philosophy and a code. Premranx et al (1993) says, ethical behaviour is good for shareholders' wealth as corporate managers own it as an ethical duty to keep making good returns in an ethical manner under responsibility to investors. Ethics is simply learning what is right and doing the right thing. Sanni (2003), explained the term as a process where moral values and principles are taught and put in practice by individuals, groups, societies that focuses on human behaviour. Code of ethics is important since they implicitly set limit and are intended to offer guidance in most difficult situations. Observance of sound ethical principles and codes will inspire, promote and ensure public and investor confidence in entities. Without a sound code of ethics and adherence to those ethics, investors may not be sure of the safety of their investments and also government will continue to have issues with tax compliance because ethics sets things right giving the corporate managers that insight to do what is right at all times.

### **Concept of tax:**

Tax is a compulsory levy by government to corporate entities. The corporate directors are aware it is a ritual that must be performed yearly from their profit then why do they look for avenues to either avoid or evade tax. Knowing the right thing and not doing it means unethical behaviour on the part of managers. Ethics becomes the hall mark for corporate directors to have a sound mind toward the payment of tax. According to Dyreng et al (2008), tax avoidance is the ability to pay a low amount of tax per dollar of reported pre-tax financial accounting income. Gary et al (2007) opined that it is the downward manipulation of taxable income through tax planning that may or may not be considered fraudulent tax evasion. Avoiding tax is avoiding a social obligation. Ogundajo et al (2016), opined that tax avoidance can make a company vulnerable to accusations of greed and selfishness, damaging its reputation and destroying the public's trust. Tax avoidance has been branded by some as an immoral and unethical conduct. Rather than hiding behind the business case for tax avoidance, companies need to be transparent about their tax planning.

As part of good governance companies will seek to minimize their tax liability through tax planning making the most of the tools and mechanism which the government make available to them specifically for this purpose, allowances, deductions, rebates, exemptions and so. Avoiding tax and bending the rules of the tax system is not illegal unlike tax evasion, it is operating within the letter but perhaps not the spirit of the law. It is unethical for multinational corporations to avoid paying tax, Loeb (2010). Avoiding tax is avoiding a social obligation because it makes the companies vulnerable to accusation of greed and selfishness damaging its reputation and destroying public trust. Paying your part of tax is a socially responsible thing for companies to do providing funds for public services such as health care, education and infrastructure. Tax avoidance is an immoral and unethical practice that undermines the very integrity of the tax system. The public expects the business to pay their fair share of tax but what constitutes a fair amount is subjective. It is expected that the burden of tax does not fall unfairly on taxpayers who play by the rules and pay their fair share but it gives no definition of what is to be regarded as fair. Compliance with all form of taxes makes it ethical for business owners because tax is a social responsibility a ritual that must be done,

### **Corporate governance and ethical tax behaviour**

Ball (2000), opined that corporate governance can reduce tax avoidance as public investors seem to be interested in ethical behaviours of corporations. Therefore good corporate governance which grants alignment of interests and transparency would prevent managers from engaging in strategic tax behaviours. According to Chan et. Al. (2006), tax behaviour are all those actions designed solely, to minimize corporate tax obligations whose legality may be identified as tax evasion, tax avoidance, tax licit savings of tax. Anything outside this becomes unethical behaviour which is stealing and rubbing the government of their entitlement. Bean et al (2007), opined that only corrupt executives would engage in corrupt practices of this kind. Good governance and corruption simply cannot co-exist simultaneously when one enters the system or management of government, the other departs, corruption and good governance here are also mutually exclusive. Muhammed (2009), opined that Corporate conduct and performance are known as corporate governance but tax liability is unethical behaviour and is not in the interest of shareholders and other stakeholders. Investors seem to be interested in ethical behaviour of corporations. According to Mervyn (2008), executive should act ethically not out of fear of being caught when doing wrong rather they should embrace ethical behaviour in business because of the freedom, self confirmation and success that brings ethics binds all members. Ethical standards are based on human principles of rights and wrong. Legal standards are based on governmental laws. Ethical issues represent the moral frameworks, the ethical framework and the value framework under which an enterprise takes decisions. In the long run, ethical issue had a positive impact on the company's performance. Ethics

just make good business sense and it brings values for the corporation both at the short run and at the long run survival of the industry.

### **Ethical conduct/behaviour of corporate directors**

Ethical behaviour of corporate directors starts from the preparation and presentation of financial statements. Liberto (2019), opined that taxes are imposed on the profit declared by companies of which these figures are manipulated figures making it difficult to get the right amount of tax paid. Character begins at home a popular adage applies to these directors to straighten their behaviour and conduct from inside so that it will reflect on the outside. Corporate director's role in maintaining a true and fair financial statement is an ethically sound behaviour. There is the need to install ethical sign post in financial statement or even financial reporting that would enhance public assurance and confidence. For shareholders to entrust their funds to a company and even trust the board, they must have a great deal of confidence in the company's financial reporting. Such financial reports should be product of professional competence and sound ethical compliance. Those behind the report should be ethically responsible in the first place. Only ethically responsible professionals can be ethically sensitive. There are various codes of ethics which executive directors are expected to cultivate, these are:

**Integrity:** the hall mark of the corporate governance all over the world is integrity. Iyoha (2005) defined the term as the aspects of one's behaviour rooted in his conviction which serves to deter him from taking advantage of his position of strength to gain at the expense of his organization, customer, client or subordinate. According to Murray et al (2006) says, in the absence of specific rules, standards or guidance, or in the face of conflicting opinions a member should test his decisions and deeds by asking this simple question "Am I doing what a person of integrity would do under this situation? Have I retained my integrity? So, integrity is measured in terms of what is right and just. Integrity requires all in the firm the CEO, Accountant who usually window dress the financial statement, and Auditor who in turn report on the manipulated financial statement to be true and fair free from all material misstatement to be honest, candid and forthright with a client's financial information. Corporate executives should restrict themselves from personal gains or advances by using confidential information to always take advantage and making the public to be at the receiving end as a result of failure to pay taxes to constituted authority.

**Objectivity:** Dibra (2019), opined that objectivity is a state of the quality of the mind which has regard for all considerations relevant to the task on hand before a final decision is taken or expressed. Objectivity involves the absence of personal feelings and opinions when corporate owners are required to make judgment or take a decision. Izedonmi (2012) defined objectivity as a mental attitude that is always characterized by the fulfillment of professional demands of others within and outside the organization.

**Due Care and Competence:** According to Owolabi (2002), Competence is the processes



of the professional acquiring techniques that will enable him develop and maintain the capability to perform competently within the professional environment. Competence is strictly based on individual education and experience. Professional competence requires the exercise of sound judgment in applying professional knowledge and skills in the performance of such service. The issues of due care and diligent is simply that the professional should carry out their professional work with skill, care, diligence, expedition with proper regards for the technical and professional standard expected of them as members. Those taking the lead in corporation are aware they are liable to tax and when not fulfilled it challenges their competence.

**Independence:** independence means exemption from external influence, control and support in conducting the audit work at all it stages. Independence is the hall mark of objective, integrity and believability of reports or works of the chief executive by the investor and general public.

**Professional Behaviour:**

This concept imposes all professionals to comply with relevant laws and regulations and avoid as much as possible actions and behaviours that are likely to bring discredit to his profession. He should act responsibly both in his private and public life. In marketing and promoting themselves they should do so responsibly, truthfully and honestly too. He should not initiate litigations that are likely to tarnish the image of the company.

### **Auditor role in corporate governance**

Izedonmi (2001), opined that auditing is a process of adding credibility to financial statements through an objective and expert evaluation of evidence as to whether those statements meet specified requirement and communication of the result to the financial statement users. The auditor is expected to bring many good to the organization like: threat to fraud, Assessing of business, Access to loan facilities, Performance measurement, Requirement for listed company, Detection and prevention of errors and fraud, Verification of books, Independent opinion, Moral check, etc. The point of emphasis here is that of moral check which auditors have abandoned due to corruption and aligned to practice unethical behaviour. Auditors have over the years help companies to window dress their financial statements by reducing the profit made in other to cut down their tax liability or increase profit in other to deceive the existing and prospective investors. When profit is cut down and tax liability is reduced the amount generated by the government will be reduced and the huge expenditure ahead will become abandon project due to insufficient fund. Corporate governance expects all stakeholders to come together and do the needful. Teju (2016), opined that abiding ethics in corporate management means doing the right thing that is paying the right amount and government meeting the demand of the citizens.

## **Law and Ethics**

According to Aiworo (2020), the issues in corporate governance are getting the board right, performance evaluation of director, true independence of directors, removal of independent directors, and accountability to stakeholders and executive compensation. Law can be defined as a custom or rule of conduct which a community or state, considers binding upon its members and which is enforced by compelling authority or legislation. It is also an enactment of a legislature or opposed to a constitution. Law is the system of courts a process of administering remedial justice. Law and ethics becomes related because in some cases they overlap that is, what is perceived as unethical is also illegal. In some situation they do no overlap. As what is perceived as unethical is legal and what is illegal is perceived as ethical. So one might say law and ethics is not the same. According to Iyoha (2005), law is inadequate to arrest unethical conduct because law is a crude instrument which is not suited for regulating all aspect of human activities especially those that cannot be reduced to precise rules, the law is a reactive instrument which often develops as a result of activities that are considered unethical and it is not sufficient just to obey the law because those we serve either in business or in public life expect ethical treatment from us. According to Iyoha (2005), laws are often regarded as nuisances to be overlooked or skirted when no one is paying attention. Ethics is simply knowing and doing the right thing as a culture and not to be forced like law.

## **EMPIRICAL STUDIES**

Rafiu, & Lanis (2018) investigated the corporate tax avoidance of listed firms in Nigeria and concluded that 18 out of the sample size of 19 listed firms avoid payment of corporate taxes due to unethical tax behaviour. Khurram, K., Ali, R.N., and Moazzam, I., (2011) investigated the effect of corporate governance on firm financial disclosure in the Tobacco Industry of Pakistan using data from 2004-2008 and applied the Multiple Regression statistical technique and concluded that there is a strong and positive impact of corporate governance on firm's financial disclosure that companies should stop the practice of creative accounting as it is an unethical behaviour of corporate managers.

Catherine and Dan (1994) examine the relationship among corporate governance structure and corporate bankruptcy using data from 1972 – 1982 and used the regression statistical technique and concluded that there is a significant relationship between corporate governance structure and corporate bankruptcy and recommended that corporate directors should have strong ethics for the performance of their jobs. Kojola (2008) examined the relationship between corporate governance mechanisms and firm performance measures and the results provide evidence of positive significant relationship between corporate structure and corporate behaviour.

Abubakar and Shehu (2011) examined the influence of corporate governance on earnings management of Nigeria Banks and the finding was that the board composition and

ownership structure impact on earnings while institutional shareholders is inversely related with manipulative accounting. Previous findings have showed that corporate directors was deliberately avoid or invade tax have always done so at the detriment of the organization. There is a significant relationship between the way the organization is run and the behaviour of the corporate directors towards tax payment.

Numerous benefits abounds if only businesses stick to the rules, guidelines and ethical standard while carrying out their practice. There are countless cases of high profit corporate failures due to account manipulation and accounting fraud. Examples are Parmalat (Italy), Enron (USA), Worldcom (USA), Satyam (India), Cadbury (Nigeria).

### **Benefits of ethical tax behaviour**

Ethical behaviour includes honesty, integrity, fairness and a variety of other positive traits. Those who have others interest in mind when they make decisions are displaying ethical behaviour. In the workplace there might be a standard for ethics set throughout the company. There are lots of benefits which includes the following: the payer feels happy and satisfied, the payer feels confident since he has no skeleton in his cupboard, the payer saves the organization against financial mal-practices and eventual collapse, it gives the public correct information on identity of the corporation and the managers and chief executive officer earns truth and respect from a wide perspective.

### **Unethical practices**

Today's workforce is composed of people who are more diverse than ever in Nationality, culture, religion, age, education and socio-economic status. These people enter the workforce with differing background, value, goals and perceptions of acceptable behaviours. Many of them have career expectations that will be difficult if not impossible to realize in today's society. This diverse multicultural population of workers is being asked to work together in a spirit of cooperation and respect for the good of the organization and the public they serve. According to Kirrane (1990), there is more pressure on people in the organization than there ever has been to do more with less and adjust quickly to changes. In response to that pressure people may cut corners and may engage in expedient but questionable behaviour. Corporate directors should adhere strictly to the prevailing tax law from the depth of their hearts as it should be seen as coercing them because ethical tax behaviour is to be seen as a matter of conscience as it borders on morals.

### **Cost of unethical behaviour:**

Cost of covering up evidence of unethical conduct, Loss of trust, Censored communication, Declining loyalty, Forfeiture of bring careers, Imprisonment, Loss of patronage, Image damage, Costly litigation.

**Tax burden:**

According to Leuthold (2002), it is the exertion a country puts into collecting its tax revenue, given the tax handles available to the country, to search for a tax burden which ensures the achievement of the greatest social welfare possible without using random estimation which is based on determining an inaccurate tax rate in advance.

**Core Concepts of Corporate Governance:**

The core concept of corporate governance are; Openness, Honesty, Transparency, Independence, Accountability, Responsibility, Fairness, Reputation, Sustainability, Ethics, Stakeholders interfacing, good board practices, control environment, board committee.

**Element of Good Corporate Governance:**

It is certain to state that the aspect of good corporate governance comprises of transparency or corporate structures and operations, the accountability of managers and the broads to shareholders, and corporate responsibility towards stakeholders. Corporate governance lay down the framework for creating long term confidence between companies and the external providers of capital. The various elements of corporate governance are as follows: Transparency: the board possesses independence in the functioning of boards by providing an effective leadership to the company and management to realize sustained prosperity for all stakeholders. It should provide independent judgment for achieving company's objectives. Accountability to stakeholder: with a view to serving the stakeholders and account to them at regular intervals for actions taken, through strong and sustained communication processes. Impartiality to all stakeholders and Social regulatory and environment concerns, Clear and explicit legislation and regulations are fundamentals to effective corporate governance, Good management environment that include setting up of clear objectives and suitable ethical framework establishing due processes, clear enunciation of responsibility and accountability, sound business planning's, establishing clear boundaries for acceptable behaviour, establishing performance evaluation measures explicitly approved norms of ethical practices and codes of conduct are communicated to all the stakeholders and should be clearly understood.

The objectives of the corporation must be clearly recognized in a long term corporate strategy including an annual business plan along with achievable and measurable performance targets and milestones, A well composed audit committee to work as liaison with management, internal and statutory auditors, reviewing the adequacy of internal control and compliance with significant policies and procedures, reporting to the board on the key issues, A clear Whistle Blower Policy where the employees may without fear report to the management about unprincipled behaviour, actual or suspected fraud, or violation of company's code of conduct. There should be some mechanism for adequate safeguard to personnel against victimization that serves as whistle blowers, Risk is an important

component of corporate functioning and governance, which should be clearly acknowledge, analyzed for taking appropriate corrective measures. In order to deal with such situation, board should formulate a mechanism for periodic reviews of internal and external risk.

### **Conclusion and recommendation:**

According to Ball et al (2000), Transparency is the hall mark of corporate governance. Good corporate governance means that management is doing the right thing at the right time. Paying of tax at the right time is the responsibility of the corporate directors. If corporate directors are up and doing in their behaviour it will definitely be evident in the tax payment. Previous studies showed that tax default has consequences on the companies that practice it. So there are a lot of benefits associated with having the right attitude to tax fulfillment and harmonizing success with sustainability. As a matter of importance the corporate governance and ethical tax behaviour is an important consideration for corporate managers around the world and directors are responsible for corporate governance. When there is a sound corporate governance policy the company will do well and out of the profit made the successful company service the immediate environment is serviced. An ailing corporate entity will definitely have nothing to give back to the host community. Government has a lot to contribute in making the business environment successful for corporate entities so in turn they deserve the collection of taxes from corporation. The paper hereby made the following recommendation, that ethics should be made a culture by all organization and not to be seen as a case of coercion. Government should review downwards the tax rate given to companies as providers to fund see tax as an enemy that shrinks their return on investment. The tax payers money is diverted by those in authority so government should let the tax fund be visible in project as the adage says “seen is believing” this will naturally motivate the payers to do more.

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# **BOARD HETEROGENEITY AND CORPORATE TAX AGGRESSIVENESS**

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## **ABSTRACT**

*Tax aggressiveness entails risky accounting option, which if not curtailed could lead to financial penalties and sanctions to the firm. The main purpose of this study is to examine the effect of board heterogeneity in the boardroom on corporate tax aggressiveness. The study covered a period of 2014 to 2019. Total book tax difference was used as the primary measure of corporate tax aggressiveness. Percentage of female directors to the total number of directors and ratio of females to the total number of members in the audit committee was used to proxy board heterogeneity. The study also controlled for profitability, firm size, leverage and board size in determining the effect of board heterogeneity on corporate tax aggressiveness. The study found a significant effect of percentage of females in audit committee on corporate tax aggressiveness. The study concluded that females' presence in the audit committees is very imperative in limiting the extent of corporate tax aggressiveness of listed manufacturing firms in Nigeria.*

**Key Words:** *Board heterogeneity, Board of directors, Corporate Tax aggressiveness*

## **1.0 Introduction**

Corporate governance is the mechanism which stipulates the distribution of rights and responsibilities among different participants in the corporation and spells out the rules and procedures for making decisions on corporate affairs (Garba & Abubakar, 2014). Corporate boards are expected to be central to strategic decision-making. Board heterogeneity entails composition of board and committee membership in relation to the number of female, young and non-banking members. There are many arguments for corporate board heterogeneity. Proponents of greater board heterogeneity argue that managers and firms benefit from directors bringing diverse social and occupational viewpoints to the boardroom.

In this study, we explore the potential financial costs and benefits that firms derive from a heterogeneous board of directors. We argue that the benefits of board heterogeneity arise from the varied perspectives and talents that a diverse group of directors brings to the

boardroom. More specifically, we argue that director heterogeneity brings a variety of backgrounds, experiences, and skills to the boardroom that strengthens the managerial advisory role. Board heterogeneity in addition, potentially increases mutual monitoring amongst board members; resulting in fewer directors free-riding and improving managerial monitoring. Firms however, can incur costs from heterogeneity because of greater communication and coordination problems that arise amongst a group of directors with dissimilar or disparate backgrounds. In particular, directors bringing varied perspectives to board deliberations can increase conflict amongst board members and protract decision-making processes.

Our central premise suggests that board heterogeneity affects the actions of directors and managers and ultimately corporate tax position. Based on 147 firm year observation, our results indicate that inclusion of female in the boardroom reduces tax aggressiveness. Controlling for several factors that influence tax aggressiveness across firms, proportion of female in the audit committee limits corporate tax aggressiveness across firms.

## **2.0 Literature Review and Hypothesis Development**

Board heterogeneity can arise from differences in many areas, such as director education, experience, profession, gender, ethnicity, and age. Beyond gender diversity however, little academic research or evidence indicates that director heterogeneity influences board efficacy, firm performance and tax aggressiveness.

We argue that the benefits of board heterogeneity play a role in protecting and promoting shareholders' interests in two important cases; operationally complex firms and firms with powerful managers. Firms experiencing increasing growth become increasingly more complex. The skill complementarities arising from a heterogeneous board yield greater monitoring benefits to shareholders and also provide stronger advisory committees to managers than less heterogeneous boards. If so, we expect to observe a positive relation between board heterogeneity and firm performance as corporate complexity increases. In less complex firms however, we expect that heterogeneity will provide fewer benefits and its costs will become increasingly more pronounced. Consequently, we posit weaker performance for firms with less complex operations as board heterogeneity increases.

Although powerful managers may seek to limit the input and oversight of a heterogeneous board, the counsel and monitoring of such a board potentially provides benefits to firm shareholders. We argue that as managers become increasingly more powerful, shareholders derive greater benefits from the monitoring and oversight of a heterogeneous board than from a homogeneous board. We thus, expect to observe a positive relation between board heterogeneity and firm performance as managerial power increases.

Khaoula and Ali (2012) examined the effect of demographic heterogeneity on corporate tax planning using a sample of 300 firms (S&P 500) for the period 1996 to 2009.

They argued that heterogeneity in terms of opinions, knowledge and experience does not lead to successful tax minimization strategies but demographic heterogeneity. The study sourced financial data from compustat database and corporate governance data was extracted from proxy statements. Controlling for firm size and board size and using panel data regression, the results showed that board heterogeneity does not have any significant effect on tax planning. Evidence provided showed that while board independence enhances tax practice, profitability is insignificantly associated with tax planning. It was concluded that better monitoring enhances corporate governance and governance in the form of board independence improve tax practice.

Richardson, Taylor and Lanis (2015) extended extant literature on corporate governance and corporate tax. They investigated the effect of female directors on corporate tax aggressiveness using Australia firms. The sample was made up of 205 firms consisting 1025 firm years from 2006 to 2010. Deviating from other studies, tax aggressiveness was measured as a dummy variable equal to one if the company is a party to a tax dispute and zero otherwise. The study adopted multivariate regression analysis in examining this relationship. The study controlled for board independence, average directors age, external directorship, CEO tenure, duality, big four audit, level of stockholding, executive compensation, firm size, leverage, capital intensity, research and development intensity, use of tax haven, market to book ratio and operating performance. Consistent with their expectation that female director improve ethical standards, communication and effective oversight functions, it was found that relative to there being more than one female board director; increase in female presence reduces tax aggressiveness. They provide robust result consistent with alternative measures of tax aggressiveness and testing for self selection bias using two-stage Heckman procedure.

Francis, Hassan, Wu and Yan (2014) investigated the effect of CFO board on corporate tax aggressiveness. The study borrowed from psychology and economics literature and linked the risk-aversion of female CFOs to firms' varying degrees of tax aggressiveness. They employed a methodology that allows isolation of the board effect on tax aggressiveness using a sample of 92 S&P 1,500 firms that change their CFOs from male to female in the 1988-2007 periods. Specifically, the study constructs a sample with male-to-female CFO transitions and then examine whether there is a significant decline in tax aggressiveness following the male-to-female CFO transitions. Focusing on firms that experience a male-to-female CFO transition, the study tried to compare those firms' degree of tax aggressiveness during the pre- and post-transition periods. Using the probability of tax sheltering, predicted unrecognized tax benefits, and discretionary permanent book-tax differences to measure tax aggressiveness, results showed that female CFOs are associated with less tax aggressiveness as compared to their male counterparts. Furthermore, supporting analysis based on propensity score matching, difference-in-difference tests, and tests with a female-to-male CFO transition sample corroborates initial findings that female

CFO's take less risky tax decisions. On the overall, they provided evidence which shows CFO board as an important determinant of tax aggressiveness. However, no evidence was found on whether female CFOs behave differently from their male counterparts in less risky tax aggressiveness activities.

Boussaidi and Hamed (2015) investigated the means through which corporate governance decreases tax aggressiveness activities. They examined the effect of board size, board heterogeneity, quality of external auditor, managerial ownership and ownership concentration on tax aggressiveness. Excluding banks for specific legal considerations, the study focused on a sample of 39 listed companies listed on the Tunisian stock exchange (TSE) over an investigation period spanning seven years, from 2006 to 2012. The study utilized multiple regression using effective tax rate as dependent variable. Controlling for firm size, debt, growth opportunities and profitability, the study found that board heterogeneity on the board has a significant positive effect on tax aggressiveness. This implies that higher female representation increases the effective tax rate (tax aggressive activities are low). That is, female directors in the boardroom negatively affect tax aggressiveness of Tunisian companies. However, the study failed to provide consistency of results across different measures of tax aggressiveness.

Boots (2015) investigated the effect of female representation in the top management on aggressive corporate tax aggressiveness. The sample consists of Standards and Poors 1500 firms within the period 2000 to 2011. Empirical analysis based on 20,068 firm-year observations showed a negative effect of female management representation on corporate tax aggressiveness for firms with one female representation. Contrary to prior studies, the inverse relationship is more negative for companies operating in the retail industry compared to other industries. However, no such relationship was found for firms with more than one female representation in top management. The findings suggest that although risk tolerant women self-select into top managerial positions, they are not equal to their male counterparts in terms of risk taking. The study failed to provide robustness of results across various measures of tax aggressiveness.

Yang and Kelton (2015) examined the associations between CFO board, board board heterogeneity and corporate tax evasion through 21 years of data spanning 1991-2011. It was argued that from prior studies, women and men make ethical decisions differently and on the overall, women are more ethical and less likely to take risks than men. Also, firms are to ensure that the number of women on the board gets to a critical mass of 30% to fully benefit a company. Consistent with prior studies on how much board heterogeneity in leadership roles influence corporate outcome, it was found that female CFOs were indeed less likely to evade taxes than their male counterparts, and they also confirmed that having a "critical mass" of women making up at least 30 percent of the board lets a company reap the benefits of board heterogeneity. In addition, the board of the CFO does not affect corporate tax evasion when all directors are male. In other words,

having at least one female on the board was necessary for the female CFO to affect tax practice. Furthermore, evidence provided showed female presence on the board increasing tax evasion where board of directors includes women but having a male CFO.

Under the premise of Stakeholders theory, Streefland (2016) investigated whether female board participation improves bottom line performance of companies through corporate tax aggressiveness. The study focused on a sample of U.S. publicly traded firms between 2009 and 2014. Uncertain tax benefit positions (UTB) and GAAP effective tax rates was utilized as primary measures of tax aggressiveness. Using Ordinary Least Squares regression (OLS) to examine the effect of board board heterogeneity on corporate tax aggressiveness, it was found that female executives are significantly associated with corporate tax aggressiveness. The study further tested the moderating impact of shareholder rights on the relationship between female directors on the board and corporate tax aggressiveness, the results showed significant impact of female directors on the board on uncertain tax benefit positions but insignificant impact on GAAP effective tax rates. Evidence provided showed the impact of female directorship on GAAP effective tax rates decline in the presence of strong shareholder rights in a company. However, the study did not provide robustness of results among various proxies of board board heterogeneity or corporate tax aggressiveness. Also, the sign of direction of UTB and the GAAP ETR in relation to corporate tax aggressiveness was conflicting.

Olayinka, Oyenika and Francis (2016) examined the relationship between board of directors' board heterogeneity and tax aggressiveness. They argued based on the risk aversion theory that different attitude of females to excessive risks can impact on corporate policies and decisions. Secondary Data was collected from annual reports and accounts sourced from the companies' websites and African financials website for the periods of 2012 to 2014. The study utilized cross sectional time-series research design. Interpreting the fixed effect regression model, the results showed a positive and non-significant association between female directors and tax aggressiveness after controlling for firm characteristics and governance mechanisms. Furthermore, interaction of board size with female directors significantly reduces the level of tax aggressiveness. However the study utilized only the proportion of women on the board in testing the board effect. Based on the aforementioned, this study hypothesizes as follows:

H0<sub>1</sub>: Board heterogeneity in the boardroom does not have significant effect on corporate tax.

H0<sub>2</sub>: Percentage of females in audit committee does significantly affect corporate tax aggressiveness.

### **3.0 Methodology**

The research design employed for this study is correlational research design. Correlation shows the statistical relationship between two or more variables. It allows for

testing of expected relationship between the variables and making predictions about their association. This study will measure two independent variables to one dependent variable as well as assessing the relationship between and among the variables under study. The sample includes manufacturing firms listed on Nigeria stock exchange as at 31st December 2019. Data was extracted from the annual reports of firms' downloaded for the period 2014 to 2019. The study utilized a total of 126 firm year observations

In analyzing the data for this study, panel regression technique (using balanced panel data) and was employed. Stata statistical package 13.0 was used to run the data so as to test the hypothesis of the study. This study therefore expresses corporate tax aggressiveness as a function of board heterogeneity as shown below:

$$CTA = F(PBH) \dots \dots \dots (i)$$

Substituting the proxy for corporate tax aggressiveness and board heterogeneity in equation (1), we have:

$$BTD = F(FEM, PFAD) \dots \dots \dots (ii)$$

In line with prior studies, we Include control variables (profitability firm size, leverage, and board size) we have:

$$BTD = F(PFEM, PFAD, PROF, FS, LEV, BS) \dots \dots \dots (iii)$$

Transforming eq (iii) above into a linear relation, we have:

$$BTD_{it} = F(PFEM, PFAD, PROF, FS, LEV, BS) \dots \dots \dots (iv)$$

$$BTD_{it} = \alpha + \beta_1 PFEM_{it} + \beta_2 PFAD_{it} + \beta_3 PROF_{it} + \beta_4 FS_{it} + \beta_5 LEV_{it} + \beta_6 BS_{it} + \varepsilon_{it} \dots \dots \dots (v)$$

The symbol  $\alpha$  represents the constant term, subscripts  $i$  and  $t$  represent companies and year, while  $\varepsilon$  is the disturbance error term of the model. We use book tax difference as a proxy for tax aggressiveness as high book tax difference indicates tax aggressiveness practice. We control for firm size (meant to capture and mitigate the effects of the variation in the investment levels of the firms in assets with tax incentives and because of the likely timing difference in the recognition of expenses), leverage (reduces the effective tax rates of highly geared companies because loan interest is tax deductible), profitability (profitable companies are expected to have high effective tax rate) and board size (has significant relationship with accounting outcomes).

**Table I: Definition of Variables**

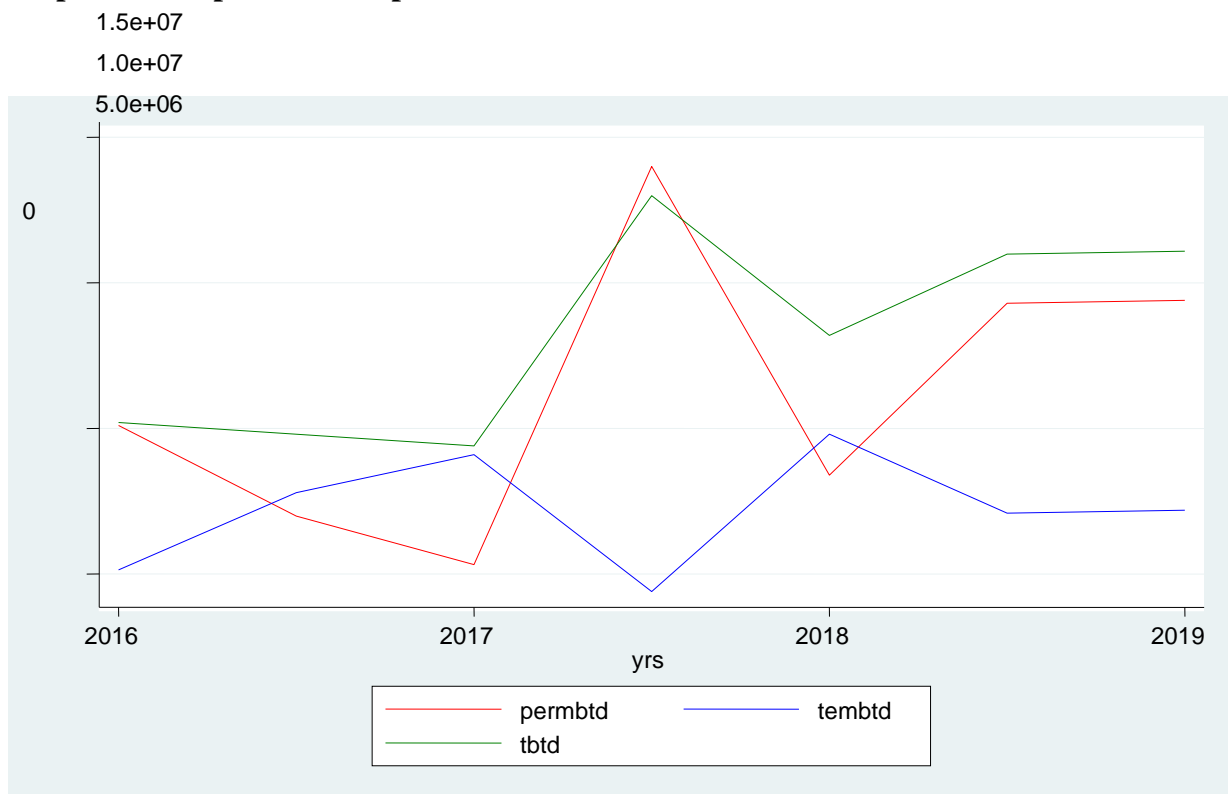
	Variables	Measurement	Source
BS	Board Size	Number of directors on the Board	
PROF	Profitability(ROA)	Profit before interest and tax divided by total assets	(Kubata, Lietz, & Watrin, 2013).
LEV	Leverage	Total liabilities to total assets	
FS	Firm Size	Log of total assets	(Katz, Khan & Schmidt, 2013)
PFAD	Percentage of Females in Audit Committee	Measured as the ratio of females to the total number of members in the audit committee	
PFEM	Percentage of Female Directors	Percentage of female directors to the total number of directors	
BTD	Tax Aggressiveness	{Pre-tax book income- (Current total tax expense/STR)}/Total Assets	Chyz, Gaertner, Kausar and Watson (2015)

**Source: Authors Review 2019**

#### **4.0 Results and Discussion**

This section entails the trend of BTD within the period of the study. A growing trend in BTD suggests there is increase in tax avoidance and vice versa. Graph 4.1 shows movement in tax avoidance during the period.

**Graph 1.0: Graphical Description of BTD**

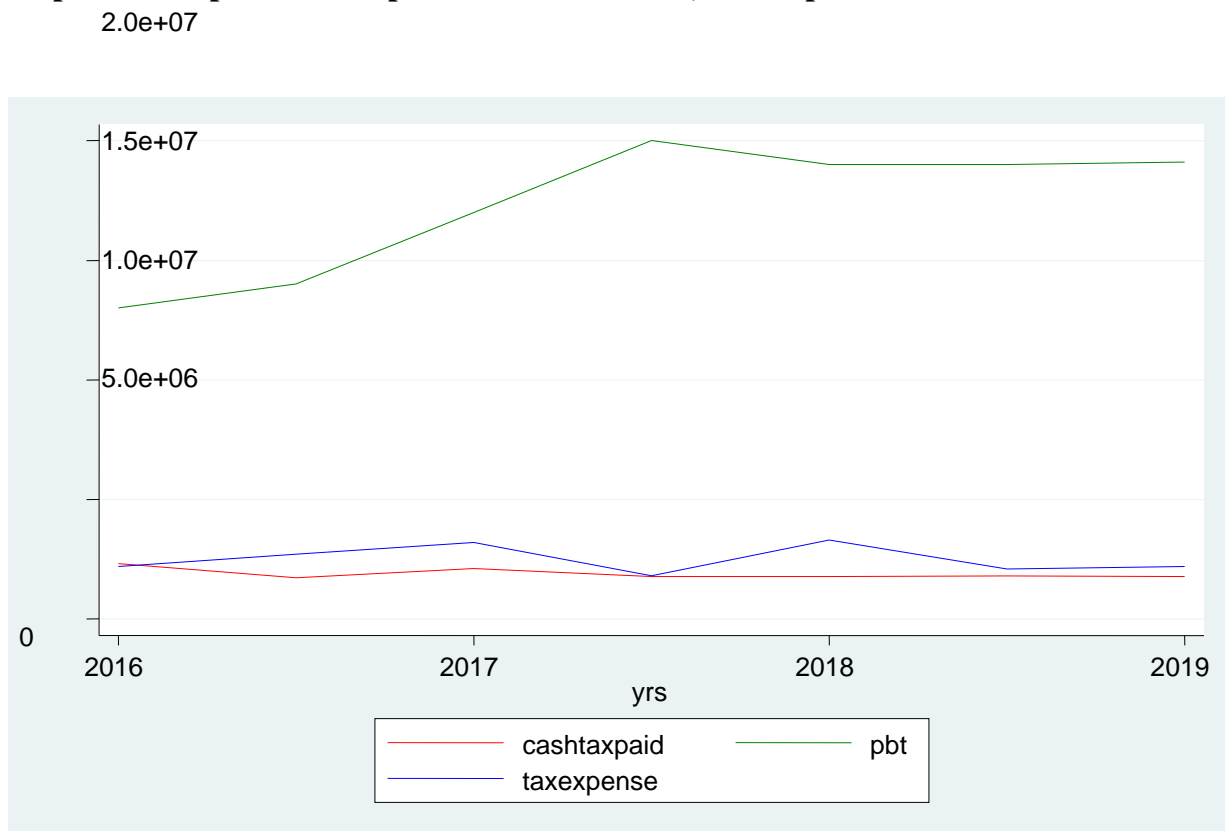


**Source: Stata Output 2020**

Graph 4.1 shows the pattern of total BTD, permanent BTD and temporary BTD overtime. PemBTD is the arrived at by deducting TemBTD from TBTD. It is worthy of note that the three BTDs fluctuate overtime which gives a good opportunity to investigate how corporate governance structures may account for this variation. In general, the trend is the same over the years, with the aggregate BTB for the TBTD, PermBTD and TemBTD being positive and the indication for TBTD above both of PemBTD and TemBTD except in 2016 where TempBTD is negative resulting in a higher PemBTD than TBTD. This positive trend suggests that book incomes are mostly higher than taxable incomes within the period of the study which is consistent with Frank, Lynch and Rego (2003). This also implies that listed manufacturing companies in Nigeria have parts of their profits untaxed.



**Graph 2.0: Graphical Description of Trend of PBT, Tax Expense and Cash Tax Paid**



**Source: Stata Output, 2020**

From the graph above, PBT is the pre-tax accounting income before tax after deduction of all GAAP related expenses. The tax expense is the average amount debited to the profit or loss for each year while cash taxes paid is the mean amount paid to the FIRS for each year. Although, there is much no much difference between the tax expense and taxes paid for each year, the tax expense is still higher than taxes finally paid. This suggests, there is a possibility of temporary differences to be offset in the future. The variance between pre-tax accounting income before tax in relation with tax expense and cash taxes paid is high. Large differences between pre-tax accounting income before tax and tax expenses suggest possibility of tax avoidance practice within the period. The amount of cash taxes paid as compared to pre-tax accounting income indicate possible ineffectiveness in revised assessment and back duty assessment over the period.

**Table II: Multivariate Analysis**

Dependent variables	Coefficients	Z.Values	Sig
Fem	-0.0240	-0.28	0.058
Pfad	-0.0682	-3.22	0.036
Prof	0.3357	5.31	0.000
Firm size	0.1815	7.15	0.000
Levarage	-0.2758	-5.52	0.000
Board size	-0.1179	-3.74	0.005
<b>R-sq</b>	<b>0.7250</b>		
<b>F.Stat</b>	<b>0.7345</b>		<b>0.000</b>

**Source: Stata output 2019**

### **Discussion of Result**

The results in table 2 show the regression result. The coefficient for percentage of female directors significant and negatively impacting on corporate tax aggressiveness. Therefore, we reject the first hypothesis which states that proportion of female directors does not have any significant effect on tax aggressiveness. This implies that percentage of female directors significantly affect tax aggressiveness practices.

Similarly, the coefficient for percentage of female in the audit committee is negative and significantly affects book tax difference. This suggest that female in the audit committee reduce tax aggressiveness. This is in line with female risk averse theory. That is, females are risk averse and will discourage risky accounting choices which can lead to sanctions and penalties. This study therefore rejects the second hypothesis which states that the percentage of female in the audit committee does not have significant effect on tax aggressiveness. The explanatory power of the model is 0.7250 showing the combined effect of the independent variables in explaining variation in tax aggressiveness. The Wald Chi2 is 73.45 which indicate model is fit at less than 1% level of significance.

### **Conclusion and Recommendation**

This study considers the effect of board heterogeneity on corporate tax aggressiveness. The study utilised 126 firm year observation and controlled for board size, firm size, profitability and leverage. It was found that heterogeneous boards reduce tax aggressiveness. Specifically, we found a significant negative effect of proportion of female in the boardroom and on the audit committee on corporate tax aggressiveness. This study concludes that both proportion of female in the boardroom and on the audit committee is a potential tool in reducing corporate tax aggressiveness. It was recommended that firms should encourage mandatory participation of female directors and shareholders in audit committees.

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# **TAX EVASION, AVOIDANCE AND SUSTAINABLE DEVELOPMENT: A LITERATURE REVIEW**

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## **ABSTRACT**

*This theoretical paper reviews tax evasion, avoidance and sustainable development in Nigeria. The importance of tax cannot be overemphasized. It was taxes that our colonial masters used for administration before the discovery of oil in 1958. The current loss of oil by Nigerian government resulting from the drop in oil revenue leads to the question, why are we not generating enough funds through tax to develop the nation? This study also intends to find out reasons tax revenue so far collected, not used for the sustainable development of the nation as it is done in some other nations? Based on the objectives of the study and reviewed literature, it is found that tax evasion and avoidance have significant impact on the sustainable development of the nation. It is therefore recommended among others that the nation should improve on the governance, use media platforms to enlighten citizens on the impact of tax evasion and avoidance on socio-economic development*

**Keywords:** Taxation, Tax evasion, Tax avoidance, Revenue generation, Sustainable Development.

## **1.1 Introduction**

Money is very essential for government in order to provide social obligations such as infrastructural facilities and social services (Fagbemi, Uadiale and Noah, 2010). According to Lymer and Oats (2010), taxation is meant to address certain challenges such as to raise revenue to finance government expenditure, for redistribution of income and

wealth to promote welfare of citizenry and to regulate economy for conducive business activities and sustainable development. To meet these obligations pose a serious concern to government therefore, citizens are expected to perform their civic duties through payment of their taxes. Tracing the historical background of revenue generation in the pre-colonial era of administration, there was an organized system of tax collection and distribution. The Emirs in the Northern part of the country, the chiefs in the southern part, the Obas in the West but in the Eastern part, it resulted in the Aba women riot of 1929. The British took advantage of the centralized system of administering tax especially in the northern and southern part of Nigeria to raise funds to administer Nigeria through indirect rule system of government (Fagbemi, et al. 2010). Ellawule (2018) states that success of any tax system depends on how it is managed, the extent of interpretation and implementation.

According to Institute of Chartered Accountants of Nigeria (ICAN, 2014) there is no generally accepted definition of taxation in any Nigerian tax law but can generally be defined as: “A compulsory contribution levied by a sovereign power, on the incomes, profits, goods, services or property of individuals and corporate persons, trust and settlements. Such taxes when collected are used for carrying out governmental functions, such as maintenance of law and order, provision of infrastructure, health and education of citizens, or as a fiscal tool for controlling economy”.

Considering the above definition, it then implies that taxes and tax systems are fundamental components of government revenue generation (Brautigam, 2008). He also noted, taxes underwrite the capacity of states to carry out their goals; they form one of the central arenas of the conduct of state-society relations, and they shape the balance between accumulation and redistribution that gives state, their social character. Thus, taxes build capacity to provide security, meet basic needs or foster economic development for sustainability and they build legitimacy and consent helping to create consensual, accountable and representative government. A key component of any tax system is the manner in which it is administered. Ellawule (2018) states that no tax is better than its administration, so tax administration is an important issue, and an essential objective of tax administration is to ensure the maximum possible compliance by taxpayers of all types with their taxation obligations. Unfortunately, in many countries including Nigeria tax administration is usually weak, and characterized by extensive evasion, avoidance, corruption and coercion. In many cases overall tax levels are low, and large sectors of the informal economy escape the tax net entirely (Brautigam, Fjelftand & Moore, 2008).

This will give us the opportunity to examine critically how the government has generated money aside from the money from oil revenue. Research from different researchers has different findings ranging from lack of tax authority’s inability to manage tax matters in Nigeria to lack of implementation of tax laws and total waste of the funds generated.

This study therefore, will strive to disentangle why despite the numerous tax strategies/methods at the disposal of government; she cannot generate enough funds for her development and in addition determine the effect of tax evasion and avoidance on sustainable development.

## **1.2 Statement of the Problem**

Taxation is one of the major source of revenue to the three tiers of government, not only in Nigeria but the world as a whole. The act of evading and avoiding tax by most registered organisations and individuals has however, affected the revenue base of government especially in providing essential services in the society. People naturally prefer to reduce their tax liabilities by deliberately overstating their expenses and make false entries in their books of account. Thus, their act however, causes tremendous reduction in the revenue accruable to the government which eventually shrinks revenue in the treasury of government (Aliyu, 2019).

Kiabel and Nwokah (2009) opined that although tax evasion are problems that face every tax system, the Nigerian situation seems a reality viewed against the extent of corrupt practices well pronounced in the Nigeria. In personal taxation practiced in Nigeria, the major problem lies in the collection of taxes especially from the self-employed citizens such as contractors, businessmen and professional practitioners such as lawyers, accountants, architects, doctors and traders in shops among others. Ayua (1999) observed that self-employed persons blatantly refuse to pay tax by reporting losses every year and many of them live a lifestyle not consistent with reported income, which is always not realistically low for the kind of businesses they are into. Civil servants and other salaried workers are the only class of people that actually pay tax in this Nigeria. However, even among the salaried workers, he observed that many have turned the statutory allowances and relief into a fertile ground for tax evasion. Similarly, despite the tax provision meant to plug loopholes through which taxable persons can minimize tax liability the self-employed persons employ all kinds of avoidance schemes to minimize or escape tax liability and makes you wonder whether there are still any tax officials working in that capacity. Such scenarios, no doubt, say a lot about tax administration system in Nigeria both in its design and in the disposition of some taxpayers towards taxation.

Over the years, revenue derived from taxes has been very low and no physical development actually took place, hence the impact on the poor is not being felt (Aguola, 2004). The generation of additional revenue is a key function of taxation as additional revenues to government enables the government to provide qualitative and quantitative services and utilities to its people (Aguola, 2004 in Muhammad, 2019).

According to Aliyu (2019), the inability of the revenue board to collect substantial amount of money from tax is as a result of evasion and avoidance of tax. This paper examines tax evasion, avoidance and sustainable development: A literature review and the

problems faced by the revenue board in collecting taxes and levies under its jurisdiction with a view to identifying possibilities of minimizing or even eradicating tax evasion and avoidance in the nation.

### **1.3 Objective of the Study**

The main objective of this study is to review tax evasion, avoidance and sustainable development in Nigeria.

Sub-objectives: the specific objectives of the study are:

- (i) To find out the effect of tax evasion and avoidance on total revenue generation in Nigeria
- (ii) To assess the effect of tax evasion and avoidance on the sustainable development in Nigeria
- (iii) To examine the impact of tax revenue on the sustainability in Nigeria

### **2.1 Literature Review**

The study reviews the literature of tax evasion, avoidance and sustainable development. Empirical review and the theoretical underpinning that supports the study are also considered in this section.

### **2.2 Conceptual Review**

*Tax Evasion:*

Tax evasion has remained one of the major problems of the Nigeria tax system, tax payer find tax evasion and avoidance delightful, but it is a threat to the government's revenue base. In order to mitigate this threat, government has amongst other actions enacted the Transfer Pricing Regulations in 2012 as part of its General Anti-Avoidance Rule (GAAR) strategy to strike down impermissible practices carried out in a manner which undermines the intention of the tax law. The much disliked Excess Dividend Tax (EDT) Provision of Section 19/21 CITA and deemed dividend distribution provision of Section 20 CITA are also examples of GAAR (Ayooluwatunwase, 2020).

According to Annette, Neils and Gabriel (2019) the wealthiest people are among the biggest tax evaders (journalistresource.org). Analysis from Norway, Sweden and Denmark exposed this.

Tax evasion is also rampant among the self-employed, according to the US government analysis. There is likelihood of self-employment rises as wealth increases. In instances where there is no third party reporting – like an employer submitting employee wage information to the federal government, the non-compliance rate is 63%. Misreporting is only at 1% when income amounts are subject to substantial information reporting and withholding (Annette et al, 2019). They opined that income of self-employed are less “visible” than income of someone who works for a company or non-profit, both of which would report wage information authority every year.

According to Aliyu (2019), the Red Cliff Commission defines tax evasion as a situation which denotes all those activities which are responsible for a person not paying the tax that are existing change on his income. He further said that according to ASPREY COMMITTEE, the phrase “tax evasion” described an act in contravention at the law whereby a person who derives a taxable income either pays no tax or pays less than then, he should otherwise be bound to pay. He sees tax evasion as failure to disclose in a return the true amount of income derived. The definition offered by the Canadian Department of National Revenue as stated by Aliyu (2019) sees tax evasion as the commission or omission of an act knowingly with intent at decisive, so that the reported income by the tax payer is less than the tax payable under the law, or a conspiracy to commit such an offence. This he said, may be accompanied by deliberate misrepresentation, concealment or withholding of material facts.

Blazkova and Dvoulety (2018), in the study, impact of tax evasion and avoidance in economy condemned the act; that it has a negative impact on the collection and sustainable development in economy of a nation.

Darnihamedani, Block, Hessels and Simonyan (2018) opined that tax payment diminishes income factor besides affecting the strategic decisions of entrepreneurs such as willingness to provide new ideas and new products, it can also affect the tax evasion of entrepreneurs ([www.tandofonline.com](http://www.tandofonline.com)).

According to Ellawule (2018) tax evasion is a situation whereby a taxpayer outrightly refuses to pay tax or tries illegally to minimize his tax liability. Tax evasion is fraud and deceit, by deliberately refusing to declare all sources of income when filing returns or understates income in tax returns (ICAN, 2014). Incomes are expected to be declared even if they are tax exempted. Gurama, Mansor and Pantamee (2015) states that tax evasion is either full or partial; it is full when a citizen who qualifies to pay tax refuses to get registered for the purpose of paying tax while it is said to be partial when a tax payer manipulates his income in other to reduce his tax burden.

Anyafu (1996) sees tax evasion as an attempt to escape tax (wholly or partly) by breaking the law. He said it is essentially, a criminal act since it is achieved principally by making false declaration such as underreporting income or overreporting relief and allowances. Slemrod and Bakija (2004) defined tax evasion as intentional illegal behaviour, (behaviour involving a direct violation of tax laws, in order to escape payment of taxes). Farayola (1987) sees tax evasion as a fraudulent, dishonest, intentional distortion or concealment of facts and figures with the intention of avoiding the payment of or reducing the amount of tax otherwise payable. He said tax evasion is accomplished by deliberate act of omission or commission which in them constitute criminal act under the tax laws. These act of omission or commission might include: failure to pay tax e.g. withholding tax, failure to submit returns; omission or misstatement of items from returns; claiming relief (in Personal Income Tax), for example, of children that do not exist; understating income;



documenting fictitious transactions; overstating expenses; failure to answer queries (Aguola, 1999).

From the definitions of tax evasion reviewed so far, this paper sees tax evasion as involving fraudulent, concealment and distortion of facts by a tax payer in order to minimize or prevent tax liabilities. It is an illegal act punishable by fine or imprisonment. It is made up of falsification of document, non disclosure of profit or income and non-rendition of returns.

#### *Tax Avoidance:*

The second in command at the Australian Taxation Office has told business not to exploit what he described as loopholes in government's COVID-19 relief programmes valued at approximately AUD 135 billion (around \$95 billion) (Australian Personal Taxpayer, 2020).

Impact of tax cannot be overemphasized yet some believe by paying tax is enriching selected few at the expense of all (Ellawule, 2018). To encourage tax defaulters to pay their taxes, federal government of Nigeria introduced Voluntary Assets and Income Declaration Scheme (VAIDS, 2017). ICAN (2014) states that tax avoidance is a situation whereby a taxpayer arranges his financial affairs in such a way that he pays least possible amount of tax without breaking any tax law.

According to Fakile and Uwuigbe (2013), tax avoidance can be defined as all illegitimate (but not necessarily illegal) behaviours aimed at reducing tax liability which do not violate the letter of the law, but clearly violate its spirit. They said that the scope of the concept varies from one country to another depending on government's policies, court decisions, tax authority's attitudes and public opinion. Adebisi and Gbegi (2013) opined that tax evasion and avoidance are one of the main problems of tax system in Nigeria and Africa and are described as "twin devils" which cause the difference between actual and potential revenue.

Anyafo (1996) sees tax avoidance as an attempt to escape the liability by circumventing the law, not by breaking it. It is seen as the act of winning games without actually cheating, thereby beating the internal revenue and the government to their own game. Aronondole and Oluwalaoyode (2006) defines tax avoidance as a legal ways by which a taxpayer reduces his tax liabilities.

Kiabel (2001) sees tax avoidance as arising in a situation where the taxpayer arranges his financial affairs in a way that would make him pay the least possible amount of tax without infringing the legal rules. He describes it as a term used to denote those various devices which have been adopted with the aim of saving tax and thus sheltering the taxpayer's income from greater liability which would have been otherwise incurred.

According to Ani (1983), the taxpayers knowing what the law says, decides not to be caught by it, arranges his business in such a manner as to escape tax liability partially or entirely. It is a lawful trick or manipulation to evade the payment of tax.

Considering the reviewed literatures on tax avoidance, this paper sees tax avoidance as involving the arrangement of affairs by a taxpayer in order to reduce tax liabilities it is a legal act and concerns with capitalizing on loopholes in the tax laws. It is made up of: claiming relief and allowances e.g. dependable relative allowance, life assurance allowance, equitable shareholding in research and development company relief. “No one really likes to pay tax yet they are inevitable for the provision of social welfare” (Nightingale, 2002).

A good tax system must be clear, fair and equitable, progressive, economical and administratively simple to implement”. An efficient tax may not necessarily be considered fair and the one that is considered equitable may not be efficient” (Lamb, Lymer, Freedman & James, 2004). A lot of people see tax as a burden but to some, they see it as their civic responsibility. So many of them avoid tax payment while a few of them are eager to pay, in order to avoid these practices by some organization, the Company Income Tax Act (CITA) contains general provisions on anti-avoidance rules. Companies are asked to comply with arm’s length principle when dealing with related parties (Deloitte, 2013).

### **2.3 Sustainable Development**

Perhaps one of the most succinct definitions of sustainable development is that from the World Commission on Environment and Development (WCED, 1987). It defines sustainable development as “development that meets the needs of the present without compromising the ability of future generation to meet their own needs”. This concept gained momentum in the 1980s following the activities of the United Nations and its agencies aimed at creating awareness and mobilizing stakeholders to discuss the deteriorating condition of the global environment (Sampson, 2013).

As far back as 1972, the United Nation held a conference on the Human Environment in Stockholm, Sweden, where it tried to address similar global challenges, but the setting up of the Brundtland Commission in 1984 and the publication of the epoch making report “Our Common Future” in 1987 marked the actual beginning of the growing relevance of sustainable development as a major global issue. The report also had a great influence on the works of the Earth Summit in Rio de Janeiro Brazil in 1992 and the third UN Conference on Environment and Development in Johannesburg, South Africa in 2002. While we are not trying to trace the history of sustainable development, but our take here is that sustainable development advocates focus mostly on how nations, corporate bodies, communities, individuals and other stakeholders could meet their developmental needs in ways that will not conflict with the needs of the future generations. For example, how do we ensure that a family’s need for firewood does not result in deforestation and damages to the soil and the larger environment? How do we ensure that the need for bio-fuel in one place does not result in food shortage? How do we ensure that developmental projects in one part of the area does not result in social, economic and environmental hazards?

(Sampson, 2013) . This comes the question, how can the needs of the people of Nigeria be met without jeopardizing those of future generations?

According to Sampson (2013), the concept of sustainable development stresses a balanced consideration of these social, economic and environmental issues in our everyday decision making processes. It encourages government, non-governmental institutions, corporate organisations, communities, families and individuals to take responsible decisions with the wellbeing of the whole environment in mind rather than just their own selfish ends. Nigeria is no doubt grappling with serious socio-environmental economic and institutional challenges that call for the deep reflections and warrant urgent actions at national, subnational and even institutional levels. Sustainable development has the potentials to tackle these problems headlong of concreted efforts are made to make its implementation a priority. But how can this happen when there is diversion of funds, tax evasion and avoidance, mismanagement of tax proceeds etc.

Sampson (2013) opined that no doubt, government policies and regulations backed by effective implementation would be needed if the set goals on sustainable development are to be achieved. She added that government also have the responsibility to ensure good governance, which is governance in compliance with the rule of law and best practices. Its service delivery to the public should be carried out in responsible manner that does not favour any one group at the expense of the next. She said, government also owe it to the private sector, interest groups, communities, families and all national and global stakeholders to play a pivotal role and provide a conducive environment for sustainable development to take firm roots and thrive. The question here is when there is misappropriation everywhere, tax evasion everywhere and tax avoidance how will the money be generated for such enabling environment? We should bear in mind that the sustainability of today's corporate organisations and states will depend on how seriously they adopt the principles of sustainable development and the sacrifices they are willing to make to preserve the future of the state and the overall economy. It is a trade-off that no state can shy away from going forward (Sampson, 2013).

Sustainable development is all about giving development a human face, taking the wellbeing of the people, the environment and future generations into consideration in all efforts at development and appealing to the conscience of governments and private institutions to do what is right (Sampson, 2013). This paper suggests that progress in sustainable development and achievements of the developmental goals in Nigeria and any other economy means the same thing – good meals on the table of millions who currently go to bed hungry; decent work opportunities for the unemployed; access to clean water; access to good healthcare facilities; roof over all heads; some breath of clean, unpolluted air, access to basic education; equal opportunity for all, irrespective of gender, race, religion, economic status and physical handicap.

## **2.4 Types of Tax Evasion and Avoidance**

According to Aliyu (2019) some areas are highlighted for tax evasion and avoidance: such areas as custom duties where taxpayers attempt to evade or avoid them. He said, typical importers try to evade or avoid customs duties by either under-invoicing or changing the product description to attract lower rates of duty; that a lot of goods are brought into the country through unauthorized routes. This is intended to evade the payment of customs duties.

Another area of tax evasion and avoidance is in Personal Income Tax (Aliyu, 2019). Employers may try to evade or avoid payment of employment taxes. Most often, this is done by intentionally failing to remit to the tax authorities the employment taxes from its employee. Some offices of the University of Benin in December 2019 were sealed up due to non-remittance of this group of taxes to Edo State government. Some organization will deduct taxes from the employee's salaries without remittance, as time goes, the employer will dissolve the company or claim bankruptcy, leaving the employment tax not paid (Aliyu, 2019). The third area manifests in Value Added Tax (VAT). Aliyu (2019) believes that one of the simplest ways to evade or avoid VAT in Nigeria is to inflate the claims to deduct VAT paid at earlier stage or outright fabrication of fake invoices for purchases never made.

## **2.5 Causes of Tax Evasion and Avoidance**

Tax evasion and avoidance is believed to be a phenomenon found everywhere in Nigeria and other parts of the world (Liman 2003 in Aliyu, 2019). Man is always pleased to receive but not willing to give. Therefore, tax payer will do everything they can to avoid their tax liabilities. The reasons are many but some important ones found in Nigeria are as follows:

### *Tax Rate:*

A lot of complains about tax rate as being high. Even though it is reduced to the barest, taxpayers will still complain of high tax rate.

### *Lack of Punishment for Evaders:*

Tax evasion is punishable by law but most of the evaders go free either because they are influential in the community or the uncle somewhere is ready to make calls. This situation does not only make tax evaders to continue in the act but it becomes a source of discouragement to other tax payers.

### *Greed and Selfishness:*

Even though many taxpayers in the state are poor, there are still some who are rich at international standard yet, they would not want to pay taxes, perhaps, so that they will continue to exercise their powers and controls over the poor in the society, they would not want a reduction in income rather an increase.

### *Loopholes in Tax Laws:*

Loopholes according to Aliyu (2019) also encourage tax avoidance where the taxpayer takes advantage of the loopholes in the tax laws to minimize their tax liabilities believing it is a lawful act.

*Lack of Qualified Personnel:*

Incompetent and inadequate personnel becomes impediment to having correct tax assessment and prompt collection of taxes. Taxpayers will be happy to see a tax officer who cannot raise an assessment correctly (Aliyu, 2019).

## **2.6 Impact of Tax Evasion and Avoidance**

It is clear that taxation is the most important of all the sources of revenue to the government and its sustainable development and economic growth. Government's annual expenditure estimates are based largely on the tax revenue especially where tax evasion and avoidance are not predominant. Where evasion and avoidance of taxes becomes the order of the day, relevant tax authorities find it difficult to meet their target collection resulting in less revenue to the state and the country at large. This has a serious impact on the state's sustainable development (Aliyu, 2019).

Two outstanding impacts of tax evasion and avoidance are identified here:

*Decrease in Revenue:*

The amount of money which would have been realized by the government of the state as revenue through tax power is drastically decreased. The loss as a result of tax evasion and avoidance cannot be accurately estimated which significantly affect the wellbeing of the government (Aliyu, 2019).

*Inadequate Supply of Basic Services:*

Due to tax evasion and avoidance, the state government is unable to execute its socio-economic programmes like the provision of social amenities such as electricity, security, building of schools, portable water supply, good healthcare, road construction and more, for the general wellbeing of the people.

## **2.7 Preventing Tax Evasion**

As stated in Aliyu (2019), both federal and state governments have commendably deployed several measure with the aim of curtailing or minimizing tax evasion. Most of these measures are contained in various legislations empowering the government Ministries, Departments and Agencies (MDAs) and any commercial bank where any company has an account or with respect to any kind of transaction or business to demand from such person a tax clearance certificate of three years immediately preceding the current year of assessment. Government also introduces tax payment within 30 days by corporate entities or the declaration of interim dividends which constitute a commendable anti-evasion endeavor. In some states, similar anti-evasion measures have been adopted (Aliyu, 2019).

Other tax laws are both punitive monetary measures as well as criminal sanctions with a view to solving this problem. Section 66 of the Company Income Tax Act (CITA) which conferred on the Federal Inland Revenue Services (FIRS) the power to seize and sell defaulting taxpayer's goods, chattels as well as their premises in extreme cases in order to recover the amount of tax owed by the taxpayers. Section 40 speaks about failure to deduct or remit tax. In this case the tax withheld will be paid and 10% of the amount owed or withheld. Section 41 speaks about obstruction, hindering, molesting or assaulting authorized person. It attracts a penalty of ₦200,000 or three years imprisonment or both. False declaration of tax, penalty is as in Section 41 above. Section 43 speaks about counterfeiting, document, falsification and alteration: penalty as in Section 41 (Aliyu, 2019).

## **2.8 Theoretical Framework**

### **The Theory of Social Influence**

The theory that underpins the study on Tax Evasion, Avoidance and Sustainable Development Nigeria is the theory of social influence as propounded by Cialdini is a psychological theory but will, however, be used as a framework for this research work. The theory of social influence as accessed from changing minds explains thus: in 1984, Cialdini (1984) in his book "published influence" where he discussed on topics like reciprocity, social proof, liking, authority and scarcity. Reciprocity is a belief that when you give you expect in return. According to Ellawule (2018), it is natural that when taxes are paid government should put the funds to judicious use. Consistency and commitment: this is an idea where government made promises to provide amenities, when this is done the taxpayers are inclined to pay their taxes. Social proof: this shows lack of policy implementation where people evade tax and are not punished, copy and the cycle continues. Liking: when the citizens see good governance they feel liked and are obliged to do their civic duties. Authority: when a citizen knows that by not paying his tax there is consequence for not paying, he has no option than to pay. Scarcity: if government knows without acting in order to generate money through tax today, then the inevitable will happen, that is lack of funds to run the nation.

## **2.9 Empirical Review**

Liu, Hu, Zhang and Carrick (2019) carried out a study on corruption, tax evasion and avoidance and entrepreneurship in emerging market. China macro level data entrepreneurship was used. It was discovered that invented "U" relationship exist between corruption/tax evasion and avoidance and entrepreneurship.

Annette, Neils and Gabriel (2019) analysed 685 records from Norway, Sweden and Denmark exposed following the panama papers and Swiss leaks investigations along with tax amnesty data from 1422 households in Norway and 6811 in Sweden. They found out

that wealthiest 0.01% of asset holders who own half the wealth in the sample evade 25% of their tax liability, compared with 5% across the entire sample. Some 35% of the top 0.5% richest households in the distribution engaged in tax evasion.

Blazkova (2018) conducted a study on entrepreneurship and corruption “Do Corruption Perceptions influence Regional Entrepreneurial Activities?” Regional panel data set including 14 Czech NUTS 111 regions utilize data from Transparency International and GEM. The estimated panel regression empirically support the hypothesis about negative impact of corruption, tax evasion and avoidance on both the regional business activities.

Darnihamedani, Block, Hessels and Simonyan (2018) in a study “taxes, start up cost, and innovative entrepreneurship” carried out an empirical examination. Fifty-three (53) countries micro data were used that resulted in the negative role of corporate tax rate on innovative entrepreneurship.

Jimenez and Alon (2018) carried out a study on corruption, political discretion and entrepreneurship. Ninety three (93) countries macro data with the entire density rate- from the World Bank. It was found that countries with higher levels of corruption, tax evasion and avoidance are highly associated with lower levels of firm creation.

Avnimelech, Zelekha and Sharabi (2018) examined the effect of corruption on entrepreneurship in developed versus non-developed countries. Seventy (70) less developed countries and thirty-four (34) OECD countries and entrepreneurial activities were collected from the professional network site linked in. The result had a negative effect of corruption on entrepreneurship, which is more significant in developed countries.

Mohammadi (2017) in his study “Institutions and Entrepreneurship: The Mediating Role of Corruption” examined ninety (90) countries macro data using GEM data. It was found that there is a negative role of tax evasion and avoidance as well as corruption on productive entrepreneurship.

Belitski, Chowolhury and Desai (2016) conducted a study on taxes, corruption on entry. Seven-two (72) countries were considered, macro data from World Bank were used, the result show a direct influence of corruption on entry as negative, the interaction influence of corruption and tax rate was positive, it was seen that corruption can offset the negative influence of high taxes on entry.

Dutta and Sobel (2016) in their study “Does corruption ever help entrepreneurship?” Micro data for one hundred and thirty (130) companies were considered using World Bank data. It was seen that tax evasion, avoidance and corruption never improve entrepreneurship and any country; it simply hurts less when business climate are not conducive to growth in the first place. This means tax evasion and avoidance may never be good any state or country.

Adebisi and Gbegi (2013) administered questionnaire on employees of Federal Inland Revenue Services in Abuja. Some of the elements in personal income tax like

contractors and professionals are left out of the study. ANOVA was used to analyse two hypotheses, the relationship tax avoidance, tax evasion and personal income tax administration in Nigeria and the relationship between tax rates, tax avoidance and tax evasion. The researcher's use of ANOVA to test the relationship brings to question whether the study is measuring 'effect' or 'relationship'. The study found out that good governance will discourage tax avoidance and tax evasion. It equally found out that tax avoidance and tax evasion is as a result of high tax rate.

From the study, ethics of tax evasion, Fagbemi et al, (2010) used a survey for their study. They focused on business tax payers and left out likely tax evaders like the contractors and professionals like the lawyers, doctors and accounting firms. The analysis of the study used both descriptive and inferential statistics. They found out that the level of tax evasion is significantly higher when government is corrupt.

Mookherjee (1997) investigates the effect of bonus tax systems on revenue generation. He opines that the possible gain in tax revenues following from the fact that the possible of the corrupt tax officers is strengthened, this way of justifying bonus systems should be rejected because it does not capture the long-term effects of an increase in corruption on tax revenues and government legitimacy. It is highly implausible that sustained development can grow from an institutional framework that fosters corruption and extra-legal tax enforcement. He therefore, justified that an increase in tax revenue is possible due to the bonus tax system.

### **3.1 Summary, Conclusion and Recommendations**

This section summarises the result of findings, conclusion and make recommendations on tax evasion, avoidance and sustainable development.

### **3.2 Summary**

From the study we can see that taxation is not just the only means of government revenue but can also be used to stimulate other sources of government revenue and develop other areas of the economy from which government can realize revenue for sustainable development. however, when there is leakages in tax collection through evasion and avoidance, no development can take place. In most countries where there is high rate of tax evasion and avoidance, it is usually associated with high rate of unemployment based on the fact that tax evasion and avoidance have negative and significant impact on growth of economy and sustainable development, lowers government revenue and leads to stagnation and low employment rate.

### **3.3 Conclusion**

In conclusion, we can see that government all over the world need revenue to run the affairs of their states. This fund is however not sufficient due to tax evasion and avoidance by some companies and individuals. This has afforded the researchers the opportunity to determine the effect of this tax on the sustainable development.



### 3.4 Recommendations

Based on the findings in this study, the following recommendations are made:

- (i) The government should use media platforms to enlighten citizens on the impact of tax evasion and avoidance on socio-economic development. Furthermore, tax rates should be reduced to enhance and boost revenue generation which will increase the tax net to capture many individuals and small businesses. Also, the insignificance of penalties and tax authority bearing should also be tackled.
- (ii) Changes in tax legislation should also be communicated to citizens on time through any available media platforms. Qualified personnel should be recruited and trained to enhance the efficiency and effectiveness of tax operations. Also, tax authorities should engage in practices that are capable of attracting public confidence in eradicating the evasion and avoidance of taxes.
- (iii) Staff should be motivated to increase their morale in ensuring the insulation of fraud and corruption from tax operations. For example, good salary package should be designed for tax officials to discontinue corrupt practices. In so doing, evasion and avoidance of taxes will be reduced to ensure socio-economic and sustainable development Nigeria.

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# EFFECT OF COMPANY INCOME AND VALUE ADDED TAXES ON NET INVESTMENT OF QUOTED HEALTH CARE FIRMS IN NIGERIA

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## **Abstract**

*This study assessed the effect of taxes on net investment of quoted health care firms in Nigeria from 2010 to 2019. The specific objectives of this study were to investigate the extent to which company income tax (CIT) and Value Added Tax (VAT) affect the net investment of quoted health care firms in Nigeria. The research adopted ex-post facto research design and a sample of seven (7) healthcare firms were purposively selected out of ten (10) quoted health care firms based on data availability. The secondary data used were collected from the published financial statements of sample firms. The panel data used in this study covered a period from 2010 to 2019. Panel least square regression analysis was used to analyze the data with the aid of E-Views 10.0. The regression result revealed a significant negative effect of company income tax and value added tax on net investment at 5% significant level respectively. The study therefore, recommends that Government should reduce the rate of company income and value added taxes in order to enhance the level of investment (domestic and foreign direct investment) and also reduced the cost of doing business which will invariably reduce poverty, unemployment rate and bolstering the investment activities of firms, thus encouraging consumption in Nigeria.*

**Keywords: Company Income Tax, Value Added Tax, Net Investment**

## **1. Introduction**

Globally, one of government main sources of revenue is tax. In the performance of their conventional duties such as provisions of public goods, maintenance of law and order, defense against external aggression, regulation of trade and business Government utilize money generated from tax in order to achieve social and economic stability. According to Okeke, Mbonu and Amahalu (2018) the resultant effect of tax entails the distribution of income and efficiency of resources used as well as inclusive effect on the level of capacity output, employment, prices and growth. In developing economies, effective functions have to be performed by the government towards the promotion of economic development due

to the paucity of private initiative and capital.

A major tool used in stimulating economic growth and development in an economy is fiscal policy. A crucial aspect of fiscal policy is taxation. Taxation as a crucial policy tool that can contribute towards the development of an economy via mobilization of resources, reduction in inequalities of income, betterment of social welfare, foreign exchange, regional development and inflation control. A thorough structured tax system is a vital channel for the achievement of the resources required in the provision of basic infrastructure. A proper tax system allows the government of a nation to obtain extra money in performance of its basic responsibilities.

Tax is an obligatory levy compulsorily imposed on a person or upon his property by the government to cater for security, social amenities and create conditions for the economic well-being of the society. In a similar vein, Okeke, Mbonu and Amahalu (2018) stated that tax are imposed to control the manufacturing of certain goods and services, safe-guarding of infant industries, inflation control and income inequalities reduction. Recently, the effect of taxation on the growth of economies has drawn the interest of international and national scholars alike. Significantly, the major types of taxes are direct and indirect taxes. Direct taxes are charged on individuals and factors of productions, companies' income tax (CIT), personal income tax (PIT), capital gain tax (CGT). While, indirect taxes are charged on goods and services, for instance Value Added Tax (VAT), import and export duties. Taking cognizance of the fact that a major avenue of governments' revenue is taxation, hence this study seeks to investigate the effect of taxes on net investment of quoted health care firms in Nigeria.

Numerous challenges are attributable with tax and its collection in Nigeria. Taxes can impede the level of investment in an economy in relation to taxes like corporate and personal income taxes, capital gain taxes; taxes can cause a surge of resources to other sectors that are facing poor productivity; high taxes on labour supply can distort the efficient use of human capital. High tax burden can impact negatively on investment. Thus, the corporate tax as currently applied is not a tax on pure profits or economic rents. It is of the assertion that tax reliefs and rebates will exert an influence on investment decisions, growth and the productivity of companies. However, several extant literatures on taxation and financial performance revealed mixed results that are inconclusive. For instance; Okoye, Amahalu and Obi (2019); Osho and Efuntade (2019); Wilson, Nwarogu and Nwabueze (2018) found a positive relationship between taxation and economic firm performance. On the contrary, Bauer, Kourouxous and Krenn (2018); Aloys, George and Thomas (2015); Ilaboya, Izevbekhai and Ohiocha (2016) documented a negative relationship between taxation and firm performance, while, Junaidu and Hauwa (2018);

Ra'ed, Mohammad, Idries and Ali (2015) reported a negative relationship between taxation and firm performance, thereby, creating a gap in knowledge which this study tends to fill. To the best of our knowledge most studies on taxation and performance concentrated on banks leaving other sectors, like the health care sector with limited research. Again, the predominant focus of prior studies is on performance, but this study focused on net investment as its dependent variable. Therefore, this study attempts to ascertain the effect of taxes on net investment of quoted health care firms in Nigeria.

The broad objective of this study is to determine the effect of company income and value added taxes on net investment of quoted health care firms in Nigeria. Specifically, the objectives of this study are to:

- i. Determine the effect of Company Income Tax on Net Investment of quoted Health Care firms in Nigeria
- ii. Evaluate the effect of Value Added Tax on Net Investment of quoted Health Care firms in Nigeria.

The researchers hypothesize that:

H<sub>01</sub>: Company Income Tax has no significant effect on Net Investment of quoted Health Care firms in Nigeria

H<sub>02</sub>: Value Added Tax has no significant effect on Net Investment of quoted Health Care firms in Nigeria

## **2. Conceptual Review**

### **2.1 Tax**

Taxes are involuntary levy imposed on individuals or corporations and enforced by a government entity, whether local, regional or national in a bid to finance the execution of the roles of government. A tax is a compulsory financial charge or some other type of levy imposed upon a taxpayer (an individual or legal entity) by a governmental organization in order to fund government spending and various public expenditures (Fritz, 2020). Both in developed and developing economies, taxes are applied to some form of money received by a taxpayer. The money range in various forms like income earned from salary, capital gains from investment appreciation, dividends received as additional income, payment made for goods and services. It is a fiscal weapon used by governments to fight social ills and bring stability to the economy (Eiye 2012).

### **2.2 Company Income Tax**

Company Income Tax (CIT) is a tax on the profits of registered companies in Nigeria. It also includes the tax on the profits of foreign companies carrying on business in Nigeria.

The tax is paid by limited liability companies inclusive of the public limited liability companies. Companies are liable to company income tax (CIT) at the rate of 30%. For small companies in the manufacturing industry and wholly export-oriented companies with a turnover not exceeding NGN 1 million, the CIT rate is reduced to 20% in the first five calendar years of operation.

CIT is governed by Companies Income Tax Act(CITA), Cap C21, LFN 2004 (as amended) (Federal Inland Services, 2020)

### **2.3 Value Added Tax (VAT)**

VAT is a tax on the supply of goods and services which is borne by the final consumer but collected at each stage of the production and distribution chain. The current VAT rate in Nigeria is 7.5% (raised from 5% on February 1, 2020). VAT is usually included in the invoice value of goods and services except items specifically stated as an exemption or zero rated. The VAT system in Nigeria is administered by the Federal Inland Revenue Service (FIRS). VAT is governed by Value Added Tax (amendment) Act, 2007.

### **2.4 Net Investment**

Net investment represents the figures that provide a sense of the expenditure on durable goods such as plants, equipment, and software that are in use in the company's operations (Aruna, Oshiole, Amahalu, 2020). Net investment is an expenditure which increases the availability of fixed capital goods or means of production and goods inventories. It is the total spending on newly produced physical capital (fixed investment) and on inventories (inventory investment) (Tejvan, 2020). Net investment is the total capital expenditure minus depreciation of assets. Net investment gives an indication of how much the effective productive capacity of a firm is increasing. Net investment shows how much working capital is actually increasing (Riley, 2020).

Net Investment = Capital Expenditure – Depreciation (corporatefinanceinstitute, 2020)

### **2.5 Company Income Tax and Net Investment**

Karagiorgos, Grigorios and Leontiadis (2020); Akinleye, Olaoye and Ogunmakin (2019) examined the effect of corporate income taxes on investments incentives. Karagiorgos, Grigorios and Leontiadis (2020) found that corporate income tax have a significant influence on short-term and long-term capital investment. Akinleye, Olaoye and Ogunmakin (2019) found that taxation affects investment activities. Corporate taxes reduce the return of equity holders and therefore tends to reduce risk taking. Karagiorgos, Grigorios and Leontiadis (2020) concluded that investment allowances and gross investment tax credit significantly relate with short-term investment. However, Chytis (2019) concluded that investment incentives have not been effective in stimulating



investments.

## **2.6 Value Added Tax and Net Investment**

Investments bolsters economic activity and long-term economic growth by increasing the manufacturing capacity of goods and services (Abiahu & Amahalu, 2017). Taxes can be used in promoting investment in certain economic zones initially not very popular to investors. This is applicable in a country where the government extends tax holidays, tax exemptions, remissions and other tax benefits to the investors in specified sectors of the economy or regions. Taxation exerts a regular channel of resources to carry out developmental activities. Meshari (2020) found a positive relationship between VAT and performance. Contrarily, Osemeke, Nzekwu and Okere (2020) found a negative relationship between VAT and performance.

## **2.7 Theoretical Framework**

### **2.7.1 Optimal Tax Theory**

This theory is the foundational work of Ramsey (1927) and Mirrles (1971). This theory is centered on eight general principles which are:- the optimal marginal tax rate schedules which depend on the distribution of ability; the optimal marginal tax schedule which could decline at high incomes; a flat tax, with a universal lump-sum transfer, could be close to optimal; the optimal extent of redistribution rises with wage inequality; taxes should depend on personal characteristics as well as income; only final goods ought to be taxed, and typically they ought to be taxed uniformly; capital income ought to be untaxed, at least in expectation; and in stochastic dynamic economies, optimal tax policy requires increased sophistication. The standard theory of optimal taxation posits that a tax system should be chosen to maximize a social welfare function subject to a set of constraints. The optimal taxation theory typically treats the social planner as a utilitarian, that is, the social welfare function is based on the utilities of individuals in the society. Hence, this study is anchored on the optimal tax theory.

## **2.8 Empirical Review**

Adegbite and Akande (2017) examined the impact of value added tax on private investment in Nigeria. Data were obtained from Central Bank of Nigeria (CBN) statistical Bulletin from 1994 to 2015. Pearson product moment correlation and multiple regressions were employed to analyze the relationship between the dependent variable (Private Investment) and independent variables (Value Added tax, interest rate, inflation rate and exchange rate). Findings showed that there was a positive significant relationship between Private Investment and the Value Added tax, interest rate, inflation rate and exchange rate with the adjusted  $R^2$  at 75%. Therefore, Value Added tax, interest rate, and exchange rate have strong and positive statistical impact on Private Investment in Nigeria. It was recommended

that government should increase the rate of value added tax in Nigeria so that the funds realized from value added tax will be expended on the provision of social and infrastructural facilities which ultimately will boost the economy by way of enhancing the level of investment (encourage investors) which invariably create employment opportunity in the country.

Osho and Efuntade (2019) examined the impact of taxation on investment, social and economic development in Nigeria. The objective of the study was to examine how tax revenue affects investment, social and economic development in Nigeria. The Study was predicated on the social political theory of taxation, expectancy theory, benefits-received theory and ability to pay theory. The secondary data were obtained from relevant literatures, Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics publications among other. Data were tested using the Ordinary Least Square Linear Regression model. From the Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics, information concerning Gross Domestic Product, Gross Fixed Capital Formation, Value Added Tax, Company Income Tax and Personal Income Tax in Nigeria were extracted. The findings showed that all the coefficients of the explanatory variables are all statistically significant to gross domestic product and Gross Fixed Capital Formation (GFCF) except company income tax. The study concluded that, tax revenues are tools of both capital formation and economic growth to enhance investment, social and economic development of the country. The study then recommended among others, that to ensure sustainable investment, social and economic development, generation of tax revenue must be sufficient, efficiently and judiciously utilized. In addition, the government should pay attention to encouraging her citizens to build trust in it by tax accountability, ensuring that the promises made to the citizens are delivered.

Uchime (2019) examined the effect of taxation on domestic investment in Nigeria; using time series data from 1995 to 2017. Data for the study was sourced from the Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics. The estimation technique adopted in the study was the Ordinary Least Square (OLS) Technique. The results of the estimates showed that: Taxation has long run relationship with Domestic investment in Nigeria, Personal income tax and Gross domestic product have non-significant negative effects on Domestic investment in the long run, while company income tax has a significant positive effect on Domestic Investment. Value added tax has a non significant positive relationship with Domestic investment in the long run. Based on findings of the study, the following recommendation was made; Government should use money derived from taxation in providing adequate infrastructures like good roads, water and electricity. This will lower the cost of doing business in Nigeria.

### 3. Methodology

#### 3.1 Research Design

The research design that was employed in this study is the *ex-post facto* research design. An *Ex-post Facto* research determines the cause-effect relationship among variables.

#### 3.2 Population of the Study

The population of this study consists of ten quoted (10) Health Care firms in Nigeria as at 31<sup>st</sup> December, 2019 which include: Afrik Pharmaceuticals plc., Eko Corp Co. Ltd., Evans Medical plc., GlaxoSmithKline Nigeria, Juli Pharmacy, May & Baker Nigeria plc., Neimeth International Pharmaceuticals plc., Nigeria-German Chemical plc., Pharma-Deko Company and Union Diagnostic & Clinical Services plc.

#### 3.3 Sample Size and Sampling Technique

This study utilised purposive sampling technique. The sample comprised of firms that consistently filed their annual reports and accounts with the Nigeria Stock Exchange for the period of interest (2010-2019). The seven (7) sample firms include: Eko Corp Co. Ltd., Evans Medical plc., GlaxoSmithKline Nigeria, May & Baker Nigeria plc., Neimeth International Pharmaceuticals plc., Nigeria-German Chemical plc., Pharma-Deko Company.

#### 3.4 Source of Data

This study primarily made use of secondary data. The data were sourced from publications of the Nigerian stock exchange (NSE) fact books and the annual report and accounts of the sampled health care firms.

#### 3.5 Operationalisation of Variables

Variables (code)	Operational Definitions
<b>Dependent Variable (Net Investment)</b>	
Net Investment (NTINV)	Capital Expenditures – Depreciation
<b>Independent Variable (Taxes )</b>	
<b>Proxies:</b>	
Company Income Tax (CIT)	30% of the taxable profit
Value Added Tax (VAT)	5% of invoice value of goods and services
<b>Control Variable</b>	
Leverage (LEV)	Total debt/Total equity
Net Asset Tangibility (NAT)	Total Assets – Intangible Assets – Total Liabilities

### 3.6 Model Specification

The specification of the econometric model adopted in this study, builds on theoretical propositions. The model used in this study is specified as follows;

$$NTINV = f(\text{Taxes})$$

Put in linear form, the above model becomes;

$$NTINV_{it} = \beta_0 + \beta_1 CIT_{it} + \beta_2 LEV_{it} + \beta_3 NAT_{it} + \mu_{it} \quad - \quad - \quad - \quad \text{Model 1}$$

$$NTINV_{it} = \beta_0 + \beta_1 VAT_{it} + \beta_2 LEV_{it} + \beta_3 NAT_{it} + \mu_{it} \quad - \quad - \quad - \quad \text{Model 2}$$

**Where:**

$\beta_0$  = constant term

$\beta_1$ ,  $\beta_2$  and  $\beta_3$  = co-efficient of the regression equation of firm  $i$  in period  $t$ .

$\mu_{it}$  = The error term which account for other possible factors that could influence  $Y_{it}$  that are not captured in the model.

$i$ : individual firms

$t$ : annual time periods

$NTINV_{it}$  = Net Investment of firm  $i$  in period  $t$

$CIT_{it}$  = Company Income Tax of firm  $i$  in period  $t$

$VAT_{it}$  = Value Added Tax of firm  $i$  in period  $t$

$LEV_{it}$  = Leverage of firm  $i$  in period  $t$

$NAT_{it}$  = Net Asset Tangibility of firm  $i$  in period  $t$

## 4. Data Presentation and Analysis

### 4.1 Table 1: Pearson Correlation Matrix

Pearson correlation matrix was used to determine the nature and direction of the dependent and independent variables of the study. Below is the Pearson Correlation Matrix Table.

	NTINV	CIT	VAT	LEV	NAT
NTINV	1.0000	-0.6877	0.0269	0.6818	-0.3318
CIT	-0.6877	1.0000	-0.1810	-0.6944	0.2348
VAT	0.0269	-0.1810	1.0000	-0.5174	0.6625
LEV	0.6818	-0.6944	-0.5174	1.0000	-0.6718
NAT	-0.3318	0.2348	0.6625	-0.6718	1.0000

Source: Researchers Computation, 2020.

Table 1 shows an indication of a negative correlation of -0.6877 and -0.3318 between CIT, NAT and NTINV. Moreso, a positive correlation exists between VAT, LEV and NTINV

at a coefficient factor of 0.0269 and 0.6818 respectively.

## 4.2 Test of Hypotheses

### Test of Hypothesis I

**H<sub>01</sub>:** Company Income Tax has no significant effect on Net Investment of quoted Health Care firms in Nigeria

**H<sub>1</sub>:** Company Income Tax has significant effect on Net Investment of quoted Health Care firms in Nigeria

### 4.3 Table 2: Panel Least Square Regression showing the effect of CIT on NTINV

Dependent Variable: NTINV

Method: Panel Least Squares

Date: 10/08/2020 Time: 14:45

Sample: 2010-2019

Periods included: 10

Cross-sections included: 7

Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.508487	0.057277	8.877717	0.0000
CIT	-0.209887	0.260992	-5.804189	0.0000
LEV	0.047612	0.011438	4.162762	0.0001
NAT	0.047872	0.016019	2.988525	0.0039
<hr/>				
R-squared	0.771316	Mean dependent var	0.65456	2
Adjusted squared	0.738194	S.D. dependent var	0.22677	0
S.E. of regression	0.197928	Akaike info criterion	0.34638	0
Sum squared resid	2.585588	Schwarz criterion	0.21789	4
Log likelihood	16.12328	Hannan-Quinn criter.	0.29534	4

F-statistic	48.91427	Durbin-Watson stat	5
Prob(F-statistic)	0.000000		

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Source: Researchers Computation, 2020

#### 4.4 Interpretation of Regression Result

From the result of Table 2, the F-statistics of 48.91427 with an associated P-value of 0.000000 indicates a significant linear relationship between CIT, LEV, NAT and NTINV. The prediction by the regression model shows that any positive or negative change that affects the independent variable (CIT) or control variables (LEV, NAT) could necessarily affect the level of NTINV. The adjusted R-squared reveals that 73.8% of the changes in NTINV is jointly explained by the influence of all the independent and control variables included in the model. The remaining 26.2% of variability in NTINV is caused by other factors not captured in this study. It also shows that relationship between CIT and NTINV is negative and significant which can be justified with the negative t- value of -5.804189 and p-value of 0.0000 with negative coefficient of -0.209887. This implies that an increase in CIT by 1% will lead to a decrease in NTINV by -0.209887 holding other variables constant. Moreover, the control variables; leverage and net asset tangibility are positive and significant which can be proved with the positive t-values of 4.162762; 2.988525 and p-values of 0.0001; 0.0039 with positive coefficients of 0.047612; 0.047872. This reveals that an increase in LEV and NAT by 1% will result to an increase in net investment by 0.047612 and 0.047872 respectively.

#### 4.5 Decision

The existence of an inverse relationship between company income tax and net investment as significantly evidenced by the p-value of 0.000000 which is less than 5% level of significance, further buttressed the fact that company income tax has a significant negative effect on net investment, hence,  $H_1$  was accepted, while  $H_0$  was rejected.

#### 4.6 Test of Hypothesis II

**H<sub>02</sub>:** Value added Tax has no significant effect on Net Investment of quoted Health Care firms in Nigeria

**H<sub>2</sub>:** Value added Tax has significant effect on Net Investment of quoted Health Care firms in Nigeria

#### 4.7 Table 3: Panel Least Square Regression showing the effect of VAT on NTINV

Dependent Variable: NTINV  
Method: Panel Least Squares  
Date: 10/08/2020 Time: 14:45  
Sample: 2010-2019  
Periods included: 10  
Cross-sections included: 7  
Total panel (balanced) observations: 70

Variable	Coefficient t	Std. Error	t-Statistic	Prob.
C	0.754723	0.036367	20.75268	0.0000
VAT	-0.736451	0.067800	-10.86217	0.0000
LEV	0.017134	0.007399	2.315834	0.0237
NAT	0.021638	0.009877	2.190794	0.0320
R-squared	0.736044	Mean dependent var	0.654562	
Adjusted squared	0.724046	R- S.D. dependent var	0.226770	
S.E. of regression	0.119125	Akaike info criterion	1.361837	
Sum squared resid	0.936595	Schwarz criterion	1.233352	
Log likelihood	51.66430	Hannan-Quinn criter.	1.310801	
F-statistic	61.34725	Durbin-Watson stat	2.165967	
Prob(F-statistic)	0.000000			

Source: Researchers Computation, 2020

#### 4.8 Interpretation of Regression Result

In table 3, NTINV is negatively related to VAT with coefficient of -0.736451 but positively related to LEV and NAT with coefficients of 0.017134 and 0.021638 respectively. However, it did appear that VAT has a significant effect on NTINV at p-value of 0.0000. In the same vein, LEV and NAT have significant effect on NTINV of the firms studied. The adjusted  $R^2$  was 0.724, this implies that 72.40% changes in NTINV of sampled firms was as a result of the effect of the explanatory variables while the balance of 27.6% was

due to other variables not captured in the model. The joint effect of the explanatory variables as contained in the F-statistics was significant with probability value of 0.000000 as the p-value is less than 0.05. This implies that the study accepted the alternative hypothesis that value added tax has significant negative effect on net investment of quoted health care firms in Nigeria. And  $H_{02}$  was rejected.

## **5. Findings, Conclusion and Recommendations**

### **5.1 Summary of Findings**

The findings of this study include:

- i. Company income tax has a significant negative effect on net investment of quoted health care firms in Nigeria at 5% level of significance.
- ii. Value added tax has significant negative effect on net investment of quoted health care firms in Nigeria at 5% level of significance.

### **5.2 Conclusion**

This study examined the effect of taxes on net investment of quoted health care firms in Nigeria. The study used panel data sourced from sampled firms annual reports covering the period 2010 to 2019. Data collected were analyzed using the panel least square technique. Findings indicated that both company income tax and Value added tax have negative effects on net investment at 5% level respectively.

### **5.3 Recommendations**

Based on the findings made in the course of this study, the following suggestions were recommended:

- i. Since company income tax impacted negatively on net investment of firms, Government should reduce the rate of company income tax in order to enhance the level of investment both domestic and foreign direct investment which will invariably reduce poverty and unemployment rate in Nigeria. The higher the tax rate, the lower will be the level of investment which will absolutely have adverse effect on economic growth in Nigeria.
- ii. Government should reduce the rate of value added tax in Nigeria as this will encourage businesses by reducing the cost of doing business, thereby, bolstering the investment activities of firms and also encourage consumption.



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# ENVIRONMENTAL TAXATION: ISSUES AND BENEFITS

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## **ABSTRACT**

*This study examined environmental taxation; issues and benefits with the objectives of identifying issues and revealing the benefits of taxation using a descriptive statistics where content analysis of literature of past journals, articles, conference papers and books were reviewed. The study found that adopting environmental taxation in Nigeria is advantageous as it enables revenue generation; curtailment of certain behaviour of organizations and environmental conservation while issues of determining effective tax rate for local polluters, inability of policy makers to acquire sufficient information, weak institutions and corruption, poor reforms, non-voluntary compliance etc as impeding environmental taxation in Nigeria. The study further emphasised that application of environmental taxes should be done with optimum precaution given it might affect businesses negatively due to multiplicity of taxes and negative competitive nature of Nigerian businesses. The paper concluded by recommending government to adopt environmental taxation, instituting stringent penalties against polluters of the environment and plugs loop holes in the Nigerian laws and caution in the implementation.*

**Keywords:** Pollution, Taxation, Accounting, Sustainability, Policy

## **Introduction**

Environment has been at the centre stage of world discussed over the past few decades. Human and economic survival of nations largely depends on the environment. Without it there will be no life. Therefore, it is important to take issues relating to environment very seriously. Over the years activities of man as a result of industrial and technological advancement has hampered the environment thereby affecting humans through causing

climate change, depletion of ozone layer, high emission of radioactive elements leading to different types of ailments not known to man in the past. The quest for solutions on making the environment sustainable and fit for living led to recent movements by environmentalist and nations in addressing how man should respond to dangers posed to the environment. In 1972 the United Nations Conference on Environment was held in Stockholm with major aim of addressing these concerns. Environmental sustainability and sustainable development are concepts which emphasis on meeting the economic and environmental needs of today without compromising meeting the same objectives in the future (WCED 1987). This has been on the news till today and series of debates have been going on the subject. Society has become so conscious and more concern of the impact organizations plays or need to play in ameliorating these environmental issues. The quest for solutions led to environmental accounting and environmental taxation. While environmental accounting covers both corporate level and national environmental performance activities and associated stakeholder interactions and includes the processing of both non-financial and financial information regarding environmental and ecological impacts (Islam 2018; Schaltegger 1997), environmental taxation on the other hand means to collect taxes from impersonal entities or individuals which are engaged in developing, defending or utilizing environmental resources, according to the degree of the exploitation, pollution or protection of the environmental resources (Oyedokun, Fowokan, Hassan & Akintoye 2018).

Environmental taxation could be a major tool but in applying it serious caution need to be taken. The National Tax Policy provided the scope under which to have fees, charges, fines as well as environmental taxes none of which is in existence today. When payments are not related to costs associated with particular participants, but more loosely related to a discrete group of participants/an industry, then it's a 'tax if it is otherwise then it is not a tax'. The question that could be asked is would placing pollution tax on fumes from millions of generators or aged vehicles on Nigerian roads with no proper or efficient/affordable mass transportation system be fair? (Amokaiye, 2020). He further stated that it will be counter-productive for the government to introduce new form of environmental taxes given that multiplicity of taxation is already levied on businesses thereby causing them to face a competitiveness issue. The better approach to adopt is for the government to review and plug areas of lacuna or gaps in the environmental laws and regulations (in addition introducing stringent financial sanctions and penalties and strengthening the capacity of relevant tax agencies in order to enhance enforcement. It is against this backdrop that this paper examined the issues and benefits of environmental taxation and accounting in Nigeria using descriptive or content analysis of past literature or journals.

## **1.2. Statement of Research Problem**

The subject of environment had been on heated debate over the last decades. The quest for environmental sustainability has awaking consciousness on individuals, organizations and nations all over the world. Environmental taxation has been adopted by some countries like South Africa, Malaysia etc. The effectiveness and impact of the adoptions in reducing harmful environmental practices or modelling good eco-friendly behaviour has been diverse. While some believe that environmental taxation is not necessary as it has no positive impact on environmental conservation, that rather the government should enforce compliance with traditional environmental laws and regulations, others believe environmental taxation will encourage eco-friendly practices and model environmental behaviour of organizations as well as generating revenue for the government. Given this lacuna in global standards and diverse opinions this research is undertaken to examine the issues and benefits of environmental taxation.

## **1.3. The Study objectives**

The study objective is majorly to examine the issues and benefits of environmental taxation and accounting in Nigeria. While the specific objectives are:

1. Identify the issues that will arise from adopting environmental taxation in Nigeria.
2. Reveal the various benefits to be derived from environmental taxation in Nigeria.

# **LITERATURE REVIEW**

## **2.0. Introduction**

This section deals with the extant review of literature on environmental taxation with a view of analysing the content of journals and make appropriate recommendations for future studies.

## **2.1. Concepts of Environmental Taxation**

“Environmental taxation has a significant role to play in addressing environmental challenges. Taxes are more effective if they are designed properly and levied as close to the pollutant or activity causing the environmental damage as much as possible and also being set at appropriate rate. (OECD 2011). Stephen (2013) opined that Developing countries are faced with increasing environmental pressures across a range of directions. At the same time, the ability of the governments to effectively pursue policy goals is often constrained by a lack of resources, with tax revenues in many countries not measuring to that of developed economies. For some, these are distinct issues that should be considered separately. For others, they can and should be dealt with together. According to EC (2001) economic instruments for pollution control and natural resource management are an increasingly important part of environmental policy in the EU and OECD countries and

there are considerable interests in information about these topics. The instruments include deposit refunds systems and subsidies for environmental protection etc. Information about environmental taxes is significant for areas of environmental policy and fiscal policy as well as for analytical purposes and environmental or climate change decision making. A policy issue of interest in recent years is green or environmental tax system which involves increasing taxes on the use of the non-environmentally friendly products and reducing taxes on other tax bases in particular labour. The environmental effect of a tax emanates mainly from its impact on the relative prices of environmentally related products and activities in addition to the relevant price elasticities (OECD 2000). Therefore, environmental taxes put more emphasis on the potential effect of a given tax in relation to its effects on costs and prices of goods and services. It focuses on the tax bases that have a particular environmental relevance and to consider all taxes levied on these tax bases as environmental. It is a tax whose tax base is a physical unit (or a proxy of it) of something that has proven, specific negative impact on the environment (EC 2001).

### **Main Categories of Environmental Taxes**

EC (2001) for analytical purposes, divided the environmental taxes into four main categories:

Energy taxes (including CO<sub>2</sub>-taxes); Transport taxes; Pollution taxes; and Resource taxes (excluding taxes on oil and gas)

#### **Energy taxes**

These taxes on energy products normally used for transportation and for the purpose of stationary. The most important and relevant energy products for this transportation purpose are majorly petrol and diesel. Energy products for stationary use include fuel oils, natural gas, coal and electricity. The CO<sub>2</sub>-taxes are included under energy rather than under pollution taxes. There are several reasons for this. First of all, the inability to identify separately CO<sub>2</sub> taxes from other taxes. e.g via differentiation of mineral oil tax rates. In addition, the revenue from these taxes are always large as compared to those from pollution taxes aside that they introduced as substitutes thereby distorting international comparisons. If they are identifiable, CO<sub>2</sub>-taxes should be reported as a separate category next to energy taxes. SO<sub>2</sub>-taxes may be subject to the same problem as CO<sub>2</sub>-taxes.

#### **Transport taxes**

These are the form of taxes charged and paid by owners of motor vehicles due to the emissions caused by the vehicles to the environment. Other taxes on this category are flights (air planes) and other related transportation services. These taxes are charged when they conform to the definition.

## **Pollution taxes**

These are form of taxes on measured or estimated emission to air and water, they also include the management of noise and solid waste materials. An exception is the CO<sub>2</sub>-taxes, This form are included under energy taxes as discussed in the previous literatures.

## **Resource taxes**

Taxes on resources pose some particular problems. Opinion differs among practitioners, regulators as to whether extraction of resource constitute harm to the environment, though there is broad consensus that extraction can cause some environmental problems such as pollution, soil erosion, degradation and destruction of organic and inorganic substances within the earth surface and underneath.

## **1.3.Review of Related Literature**

### **Prior Studies on Environmental Taxation and Accounting**

Akinwande (2014) on Green House Gas emission in South Africa stated that for tax to be environmentally effective, the tax rate should equal the social marginal damages from producing an additional unit of emissions or, more or less equivalently the social marginal benefit from abating a unit of emissions. Thus the optimal tax rate would be where the marginal benefit of abatement equals the marginal cost of abatement. That climate change is a global problem meaning that damage costs have to be assessed globally. Therefore asking local polluters to pay the global damage costs seems unfair. Such can probably succeed if there were an international carbon tax.

From literature on environmental taxes, environmental taxes cannot guarantee environmental certainty. This is because at the time of setting the tax, policy makers do not have all the required information regarding technological progress and price sensitivities, so setting the tax at the required level to meet the emission targets becomes difficult. Secondly new entrants into the polluting industry can also upset the whole arrangement in that their activities could lead to increased emissions. To ensure that the environmental goal is not diluted by reason of new polluting sources, the tax level has to be adjusted.

As further opined by Akinwande (2014) using Nigeria as example that section 3 of the Associated Gas Reinjection Act outlaws gas flaring, but allows polluters to continue to flare on payment of a fine. The troubling question is, has the imposition of a fine (tax) ever being successful? Despite the fines imposed by the federal government of Nigeria on gas flaring there is a negligible rate of reduction in gas flaring in Nigeria thereby raises questions on whether environmental taxes significantly discourage pollution. Also raises questions on the effectiveness of the monitoring and reporting system put in place to ensure the reduction rates are proactively disclosed and verified. Setting the tax at the desired rate

is complicated; the proposed plan by Nigeria (NNPC) to set the flare penalty to the international market value of the gas flared is a big challenge given that the market value of gas varies across continents. Another key factor that weakened the flare penalty regime in Nigeria is weak enforcement and corruption. In fact weak enforcement, bribery and corruption have been the bane of the environmental tax law in Nigeria.

The observation made by the Nigerian Extractive Industries Transparency Initiative thus confirms the above statement. NEITI observed that the volumes of gas produced by oil and gas companies were never declared before flaring. The figures are calculated by the company and forwarded to Department of Petroleum Resources (DPR) after the gas must have been flared. This is as a result of serious control and monitoring weakness by DPR whose responsibility is to ensure JV companies provide with accurate and reliable information. DPR should rise to their responsibility of carrying out oversight function of ensuring the monitoring of the upstream sector of oil and gas industry in Nigeria. (Akinwande 2014).

Agbo and Udeh (2018) examined environmental taxation and accounting in Nigeria using a content analysis (literature review) stated environmental challenges are majorly emanated from industrialization, economic, scientific and technological advancement all over the world. That many scholars and organizations have come up with strategies to ameliorate the quality of their environment. Further tax systems in several countries are yet to sufficiently provide policy reforms that support levying taxes across the sources off emission of harmful substances and tax alignment with external damages and scaling back redundant energy taxes to address global warming, it finally recommended the introduction of environmental taxation on emission of harmful substances in Nigeria to curtail incessant environmental pollution and ensure future of green accounting.

Akinwande (2014) stated that carbon tax is one of the policy instrument canvassed for the reduction of greenhouse gases. That an economic instrument which levies taxes on the carbon content of goods and services, getting increasingly popular among policy makers all over the world.

Oyedokun et al (2018) stated that environmental problems in Nigeria are caused by industries while the public are mounting pressure on government to find solution by way of reducing environmental damage while reducing harm to economic growth. Using descriptive survey design revealed that environmental taxation is significantly coterminous with improved quality in Nigeria as it existence will ensure restoration and maintaining environmental quality in the country. That the both form have not reduced environmental problems. The study recommended government to ensure the structure and administration of environmental related taxes premised on sound accounting system, void of loopholes and provisions that can allow evasion and that proceeds from such taxation should be



channelled to the development of infrastructural facilities in Nigeria to ensuring an improved standard of living while organizations are also advised to keep and maintain environmental accounting records that depict relevant financial transactions of the company.

Garba and Gundawardana (2015) found that the industries are just making mere promises to the government in their effort to control pollution through regulatory mechanisms with compliance. That government should design and formulate a tax process that encompass environmental tax policies so that levy of tax be designed placing its burden over those responsible for causing particular environmental problem or problems and provide statutory incentives to reduce administrative cost to the government and compliance cost imposed on the tax payers.

Hu, Dong, Jiang and Zhu (2020) analysis the marginal abatement cost (MAC) of water pollution and air pollution in key industries in China and found that MAC of pollutants in various industries is quite different in different industries. They further stated that rate of environmental taxes in 2018 were low thereby not enough to force enterprises to reduce pollution. That without the governments mandatory environmental laws and regulations measures, many investors will not inject large sums of funds to execute technological innovations for green production, as such are highly capital intensive. The study recommended the need for government to increase the rate of environmental tax, gradually approach the cost of corporate pollutant treatment and force companies to implement technological transformation. The government should on the other hand do a good job of tax neutrality, increase the compensation for environment protection behaviours of companies and encourage them to adopt green development policies. Monitoring and Supervision should be enforced and tax violations should be checked strictly for avoidance of tax cuts against rules.

Andrei, Mieila, Popescu, Nica and Cristina (2016) found that environmental taxes provide increase in GDP and effective in preventing environmental degradation by reducing the level of pollution and as well harmful environmental supplies and practices.

Olatunji and Olaoye (2015) found out the environmental taxation is coterminous with improved environmental quality, that the cost effectiveness of Nigerian firms has not led to or improve standards of living as such taxation has no significant influence.

Uwuigbe, Uwuigbe and Iyoha (2015) revealed a significant positive relationship between environmental tax on nylon packages and floods reduction and concludes that implementing such tax will affect the use of nylon as the major system of packaging products in Nigeria.

Dike and Micah (2018) recommended for stakeholders to increasingly require companies

to manufacture goods efficiently and at competitive prices without harming the environment, to enhance sustainable development by reducing the environmental impact while increasing the value of the enterprise, satisfying human needs and contributing to the quality of life.

#### **1.4. Issues Arising from Environmental Taxation**

ISAR (1991) in Agbo and Udeh (2018) found the following issues as relating to environmental taxation and accounting:

The belief by heads of corporate organizations the environmental information was not necessary for a true and fair view of the financial performance and the impossibility of distinguishing environmental cost from other expenses;

The non-formulation of national accounting standard with specific provision for environmental information disclosure in the financial reports;

Disclosures were qualitative, descriptive and difficult to compare; and The reluctance of organizations to show or disclose voluntarily calls for the need for comprehensive national and international standard to guide environmental reporting.

Amokaiye (2020) stated that environmental tax would negatively impact on tax competitive rating in Nigeria.

He further argued that creating additional environmental taxes would be counter-productive given that multiplicity of taxes is still a concern issue in business competitiveness in Nigeria. That a better way should be to review and plug areas where gaps exist in environmental laws and regulations (including instituting stringent sanctions) and strengthening relevant enforcement agencies.

In addition he raises some concerns about environmental tax in Nigeria given the structure we are operating. The concern is majorly who would impose pollution taxes, Nigeria being operating a federal system of government. How will the revenue generated from this form of taxation be shared? Even if the issue of structure is resolved who will bear the burden of such tax upon Nigerians facing excessive taxation already? That the Nigerian state having increased cases of corruption in civil service and its poor legal system it will be more suitable to use the traditional instruments of environmental law instead imposition of environmental taxes that may be highly sensitive to corruption menace.

He also expressed concern that even the traditional instruments of environmental legislations are also to be enforced by the civil servants. Therefore, Nigeria should fix her corruption malaise before its shuts down governance and public institutions as well as the nation.

In support of assertion made by Amokaiye (2020), Iliya and Kenedy (2015) examined the challenges and barriers of introducing environmental taxation in Nigeria and found that industries were just deceiving the government by making mere promises to the government in their effort to control pollution through regulatory mechanisms and compliance. And recommend on the government to design environmental tax policies that will place the burden of tax on those responsible for causing a particular environmental problem and incentive to minimize administrative and compliance cost.

#### **2.4.1. Issues Extracted from the Review**

**The following issues were deduced from the literature:**

1. Determining the effective tax rate for local polluters giving that damage cost to environment is assessed globally.
2. Inability for policy makers to acquire sufficient information and the influence of new entrants thereby causing environmental uncertainty.
3. Weak institutions and corruption thereby impeding efficient/effective monitoring of compliance.
4. Poor reforms supporting levying of taxes across the sources off emission of harmful substances and tax alignment with external damages and scaling back redundant energy taxes to address global warming.
5. Non voluntary compliance with regulatory mechanism by different organizations.
6. The problem of multiplicity of taxes in Nigeria.
7. The issue of who to impose pollution taxes in Nigeria giving that we operate a federal system of government and how the revenue can be shared.
8. The issue of who bears the burden of environmental taxes.

#### **2.5. Benefits of Environmental Taxation**

Okafor and Igbinova (2017) investigated the perception of different professionals on the introduction and practicability of such taxes using cross sectional research design and found that environmental taxes will not affect the economy negatively and no significant difference on how environmental taxes are perceived on economic development in Nigeria and recommended immediate introduction of environmental tax in Nigeria as is beneficial in terms of areas of revenue and environmental conservation.

According to Organization for Economic Corporation and Development (OECD 2011) environmentally related tax account for approximately 5% of total tax revenues in the OECD countries. Beredugo and Mefor (2012) established that environmental accounting and taxation enhances the quality of decision making requiring the need for organizations to baseline standard of its greenhouse gas emissions, energy usage and other environmental indicators and set reduction targets.

Environmental taxation can play a significant role in assisting governments make well founded decision regarding climate change. (INTOSAI 2010)

Blidisel, Popa and Farcane (2011) on the significance of environmental taxation in accounting/finance practice and environmental accounting states the following disclosures to be made in the note to financial statement –that government incentives related to environment protection received by the organization. The accounting treatment selected for such should be disclosed. Furthermore, payment of such taxes reveals information of great significance in awareness of situation faced by business regarding environmental questions. More so, in some instances initiating payment of environmental taxes by organizations may be linked to the availability or existence of public service whose use could reduce the extent environmental destruction.

Baba (2015) on the advantages of implementing environmental accounting and taxation within the economy opined that:

Environmental accounting is for both internal and external users; Provision of useful information regarding decision making for value of investment, environmental cost etc; Identifies and analysing of environmental cost and identifies and manages the ratio between the environmental expenses and afferent; Analysis data about raw materials, energy and other information about the impact of the business on environment that will lead to decision making with implications for profitability and environmental protection; Manages the acquisition, including waste and sales of materials and consumption; Better management of energy and water costs; Provision of information regarding performance of an economic entity which leading a better relationship between the organization and the external environment; Enables management of purchasing materials that will minimize the costs; Environmental accounting is used in order to present the social and environmental responsibility as environmental costs (Carciani & Jianu 2007).

## **2.6.Theoretical Framework**

### **Benefit Principle**

The **benefit principle** as already known is concept in the theory of taxation from public finance literature. The benefit principle bases taxes to pay for public-goods expenditures on a politically-revealed willingness to pay for benefits received. That taxes should be paid based on the benefits enjoyed by the tax payer. The principle is related to the function of pricing in the allocation of private goods and services to competing users. (Neumark & McLure, 2013). It is used for assessing the efficacy and effectiveness of the tax system and to appraise fiscal policy framework of the government. This approach was developed by Knut in 1896 and Lindahl in 1919, They were two renown economists from

Stockholm School. Paul Samuelson later extended the approach. This has been applied to subjects like progressive taxation, property tax and corporate taxes.

### **Ability to Pay Principle**

Ability to pay is an economic principle that states that the payment of taxes by individuals should be based on the level of burden such tax will create in relation to the wealth accumulated by the individual or organization. The principle suggests the real amount of tax chargeable and paid by an individual or organization is not the only factor to be considered in taxation. That tax authorities on determining tax to be paid should also consider the ability of such individual or organization to pay.

This study is anchored on the above theories of taxation.

### **3.0. Methodology**

The method applied in this study is a descriptive statistics where an in-depth use of past journals, conference papers, articles, newspapers, books were reviewed and conclusions as well as recommendations drawn.

### **4.0. Summary of Findings, Conclusion and Recommendation**

#### **Summary of Findings**

Following the review of literature on the issues and benefits of Environmental Taxation the following issues were deduced:

1. Determining the effective tax rate for local polluters giving that damage cost to environment is assessed globally.
2. Inability for policy makers to acquire sufficient information and the influence of new entrants thereby causing environmental uncertainty.
3. Weak institutions and corruption thereby impeding efficient/effective monitoring of compliance.
4. Poor reforms supporting levying of taxes across the sources off emission of harmful substances and tax alignment with external damages and scaling back redundant energy taxes to address global warming.
5. Non voluntary compliance with regulatory mechanism by different organizations.
6. The problem of multiplicity of taxes in Nigeria.
7. The issue of who to impose pollution taxes in Nigeria giving that we operate a federal system of government and how the revenue can be shared.
8. The issue of who bears the burden of environmental taxes.

#### **Benefits:**

The following benefits were also deduced from the literature:

1. Revenue generation.
2. Environmental conservation
3. Enhancement of quality decision making
4. Enabling organizations to make sound decisions on climate change.
5. Curtailment of the behaviour of organizations.

## **Conclusion**

Environment has been at the centre stage of world discussed over the past few decades. Human and economic survival of nations largely depends on the environment. Without it there will be no life. Therefore, it is important to take issues relating to environment very seriously. Over the years activities of man as a result of industrial and technological advancement has hampered the environment thereby affecting humans through causing climate change, depletion of ozone layer, high emission of radioactive elements leading to different types of ailments not known to man in the past. The quest for solutions on making the environment sustainable and fit for living led to recent movements by environmentalist and nations in addressing how man should respond to dangers posed to the environment. In 1972 the United Nations Conference on Environment was held in Stockholm with major aim of addressing these concerns. This study was undertaken to examine environmental taxation; issues and benefits and thereby made below recommendations.

## **Recommendations:**

The study recommended for Nigerian government to adopt environmental taxation and making stringent penalties against polluters of the environment, institute institutional reforms to enable effective monitoring of the taxes, reduce multiple taxes and set effective tax rate. The study also recommended for proper caution while implementing environmental taxation given that Nigeria already faced with problem of multiple taxation and negative competitiveness rating of businesses.

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# EFFECT OF TAX ADMINISTRATION AND TAX PAYER EDUCATION ON TAX COMPLIANCE BEHAVIOUR

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## **ABSTRACT**

*In order to generate more revenue from income taxes, the Cross River State government had embarked on intensive tax campaign across the state. It is not clear whether this has led to more compliance on the part of tax payers. Therefore, the study examined the effect of tax administration, tax payer education on tax compliance in Calabar Metropolis. It was specifically aimed at determining whether tax administration and tax payer education (proxied by electronic tax payer education, print media tax payer education, and stakeholder sensitization program) affect tax compliance of registered small and medium enterprises (SMEs). The survey research design was adopted and a self-reported questionnaire served as the means of gathering data from 213 registered SMEs. The multiple regression analysis was performed with the aid of SPSS version 20. The findings indicated that electronic tax payer education had a significant relationship with tax compliance while the print media tax education had a significant but negative relationship on tax compliance behaviour of SMEs. Furthermore, tax administration and stake holder's sensitization programmes had a non-significant effect on tax compliance behavior of SMEs. This has policy implications for the management of Cross River Board of Internal Revenue Service in the bid to increase the fortunes of the state through income tax administration.*

**Keywords:** tax administration, tax payer education, SME tax compliance behaviour

## **1. Introduction**

Tax is a compulsory levy which a government imposes on its citizens to enable it to obtain the required revenue to finance its activities (Adesola, 1986). It is generally considered as a civic duty aimed at raising revenue to meet the expenditure needs of government. Tax is also about building accountable relations between government and citizens through efficient utilization of tax proceeds. To a citizen, tax is a compulsory cost which the tax payer seeks to minimize while the government on the other hand seeks to maximize tax revenue. Therefore, there is conflict between government's objective of maximizing revenue from taxes and those of the taxpayer who seeks to minimize his tax liabilities. In

order to maximize tax revenues, government often resorts to diverse methods of enforcing compliance either through forceful means or persuasion. Tax compliance can be described as the process of fulfilling the tax payer's civil obligation for tax payment and filing of tax returns including the provision of necessary documents and explanations required by the tax authority in a timely manner (Oyedele, 2009). Tax compliance may be voluntary or involuntary. However, the problem of non-compliance pervades tax authorities across the globe and it is also severe within the Nigerian tax system as understanding what prompts people towards voluntary compliance remains topical in literature.

Tax authorities have employed the forceful means of extracting taxes from citizens but with a largely underdeveloped economy, this strategy has not led to increased revenues for government. Hence the need to resort to persuasion to compel citizens to fulfil their civic responsibilities. Many previous empirical studies have delved into the subject of what and how voluntary tax compliance can improve. Therefore, some studies have examined predictors of tax compliance behaviour from the economic perspectives and psychological perspective (James, Alley, 2004). Despite the perspectives so far examined, the list of predictors of tax compliance behaviour is not exhaustive because human behaviour is evolving as circumstances within economies change. Irrespective of the many studies on how to increase voluntary tax compliance behaviour, low tax compliance remains a major concern for the policy makers in many developing countries including Nigeria. This is because non-compliance limits the capacity of governments to raise revenue for developmental and recurrent expenditure purposes (Togler, 2003).

In realization of the importance of persuading citizens to voluntarily fulfil their tax obligations, the Cross River State government recently embarked on a state wide tax awareness campaign. The objectives of the programme was to enlighten citizens on the various taxes due and the process of filling returns. Various means of educating the citizens were adopted including electronic, print, sensitization workshops and town hall meetings in the three senatorial districts of the state. Moreover, the state government needs to raise more revenue from alternate sources aside the federally allocated. One of the alternate sources is through taxes. Since the conclusion of the programme, it is unknown whether it has led to increase voluntary compliance or at least have tax payer's intention to file their returns increase? Therefore, this study sets out to examine the effect of tax administration and tax payer education on tax compliance behaviour. The study contributes to knowledge in two ways. Firstly, the study is beneficial to tax administrators who are constantly seeking effective ways of maximizing revenue for the government. Secondly, the study contributes to the growing literature on tax compliance especially in the appraisal of a government sponsored tax compliance programme. The rest of the paper includes the literature review, methods, results and discussion and the conclusion.

## **2. Literature Review and theoretical framework**

### **2.1. Tax compliance**

Tax compliance to a tax payer's willingness to voluntarily attend to all tax obligations in accordance with the relevant provisions of the tax laws. It includes filing tax returns and actual payment of taxes as at when due. In carrying out this civic duty, it is assumed the tax payer is fully knowledgeable about the whole process. Pangestu and Rusmana (2012) identified kinds of tax compliance namely: formal compliance and material compliance. Formal compliance describes the process where a tax payer complies with all the legal requirements and provision of the relevant Tax Act. Material compliance is condition in which a tax payer not only complies with the formal provisions a Tax Act but does so in accordance with the contents and spirit of the Tax Act itself. In all tax compliance requires honest reporting on the side of the tax payer. A more embracing definition by James and Alley (2004) describes tax compliance as the willingness of tax payers to act in accordance with the "spirit" and 'letter' of the relevant provisions of the tax laws.

Various factors in literature have been identified as antecedents of tax compliance. An earlier review of 43 studies on tax compliance by Jackson and Milliron,(1986) between the period 1974 to 1985 outlined fourteen variables associated with tax compliance behaviour to include: tax rates, detection rate, age sex, source of income, level of education, gender, ethics, complexity of tax law, tax authority contact, influence from peers, perceived fairness, probability of sanctions, and audit. Most of these studies were conducted in other context. In Nigeria, tax non-compliance remains a topic of concern as the country was identified as one with the lowest compliance levels in Africa (CITN, 2010). Also, subsequent studies reported an unsatisfactory tax yield especially from income taxes (Kiabel & Nwokah, 2009; Nzotta, 2017; Odusola, 2006). Within the Nigerian context several factors have been studied in relation to tax compliance. For example, tax payer's attitude, risk preference (Alabede, Ariffin, & Md Idris, 2011); tax knowledge, tax accountability by government, trust in government, ethics, and tax rate (Akintoye & Tashie, 2013). Others include probability of audit, tax knowledge, equity and fairness perception (Inasius, 2018). Although all these variables are associated with tax compliance have been studied, the issue of tax compliance remains topical as government is yet to achieve a fair proportion of tax to GDP ratio. Therefore, there is need to examine more factors that can enhance voluntary tax compliance.

### **2.2. Tax payer education and tax compliance behaviour**

Taxpayer education describes the methods adopted by tax authorities for educating the citizens on the whole process of taxation and why they should fulfil their tax obligations (Akinsola, 2011). According to Misra (2004), the main aim of tax payer education is to disseminate tax knowledge as regards tax laws, foster compliance, promote positive taxpayer's attitude towards taxation and consequently increase tax yield through voluntary

compliance. It includes providing awareness on tax matters, counseling and support to the taxpayers, through different media such as print media, electronic media (television, radio programs, websites) and through sensitization programmes like seminars and workshops on tax matters. From the foregoing, it is evident that tax payer education is mainly aimed at increasing tax knowledge with the motive that this could lead to better understanding on the part of tax payers and invariably generate the required response. Empirical studies have found positive effects of tax knowledge on tax compliance behaviour (Kirchler, Niemirowski, & Wearing, 2006; Loo, McKerchar, & Hansford, 2009). Also, evidence shows that deficiency in tax knowledge can led to unintentional non-compliance behaviour among tax payers (Loo, et al., 2009). Therefore, tax payer education can enable the transfer of the required information to potential tax payers to enable them make informed decisions about their behaviour towards tax matters. Only a few studies have documented a relationship between the methods of tax payer education and tax compliance behaviour. For example, Tetteh (2019) studied the impact of print media, electronic means, and stakeholder sensitization programmes on SMEs tax compliance behaviour in Ghana. The study reported positive and significant relationships between print media, electronic means, stakeholder sensitization programmes and SMEs tax compliance behaviour. Similar findings were reported by Gitaru (2017) in a Kenyan study. Also, Koumpias and Martinez-Vazquez (2019) found income tax filing increased in after exposure to adverts in newspaper that provided information on eligibility to tax but not for notification for filing deadlines and late filing penalties. However, advertisements on television using moral suasion increased tax filing. Therefore, we put forward the following hypotheses:

H<sub>1</sub>: Print media education significantly influences tax compliance behaviour

H<sub>2</sub>: Electronic tax payer education significantly influences tax compliance behaviour

H<sub>3</sub>: Stakeholder sensitization programmes significantly influences tax compliance behaviour.

## **2.2. Tax administration and tax compliance behaviour**

Tax administration is the most important part of a tax system. It encompasses all the processes involved in enforcing the various tax laws. One of the features of the role of tax administration would be the provision of an enabling atmosphere for citizens to discharge their civic responsibilities. A well-organized tax administration should be reflected through a higher level of tax compliance and less avenues for tax evasion. The strategy of the tax administration should be to create processes that gently compels tax payers towards voluntary compliance. This implies that effective leadership from tax authorities would normally lead to compliance from tax payers (Alm, Cherry, Jones, & McKee, 2010). Conversely, a tax system bedeviled with uncertainties and complexities produces less

compliance reporting and filing of returns (Alm et al., 2010). Wide spread tax non-compliance has been attributed to poor tax administration characterized by time consuming processes, corruption, inadequate information, unresponsiveness, unstable tax policies, and compliance hurdles (Akinboade, 2015).

Tax Administration should support voluntary compliance through efficient processes aimed at making the processes easy for tax payers. The extent of success of tax administration depends on the how tax payers perceive it. Thus, a negative perception may create non-compliance while a positive perception can generate higher levels of compliance on the part of tax payers. Therefore, the following hypothesis is put forward:

H4: tax administration significantly influences tax compliance behaviour

## **2.4. Theoretical framework**

The theoretical background of the research rest on James and Alley's (2004) approaches to tax compliance which is the economic approach and the behavioural approach. Specifically, the study relies on the behavioural approach which hinges on the willingness of the tax payer to act in accordance with the spirit and letter of the tax law. This implies that “individual taxpayers are not seen as selfish utility maximizers but also interact with tax authorities according to their differing attitudes, beliefs, norms, and roles such that the success of tax effort depends on cooperation” (Nkundabanyanga, Mvura, Nyamuyonjo, Opiso, & Nakabuye, 2017 p. 933). In essence the tax payer is viewed as ‘good’ who makes decisions based on how issues are perceived.

## **3. Methods**

The survey design was adopted for this study. The unit of analysis was individual tax payers (registered small and medium scale enterprises). The population of the study was made up of 266 registered small and medium scale enterprises (SMEs) in Calabar South Local Government Area and Calabar Municipality of Cross River State. For the purpose of the study, a sample of the population was studied. Using Krejcie and Morgan (1970) sample size determination table, for a population of 266, the sample size is approximately 160. However, in order to mitigate the problem of non-response, the whole population was served the questionnaire. The list of all registered SMEs in the two local government areas served as the sampling frame. Data were collected by means of a self-reported questionnaire distributed by hand to the registered office of the SMEs. Managers of the respective SMEs were assured of the confidentiality of their responses in order to secure their cooperation in the filing of the questionnaire. The multiple regression technique was employed to examine the relationships being studied and this was achieved through the use of SPSS version 20 software. The instrument for the survey was adapted from previous studies and modified for this study.

#### 4. Results and discussion

From the 266 questionnaires distributed, 213 were returned giving a response rate of 80%. The demographic characteristics of the respondents showed that 118 (55.4%) were male while 95 (44.6%) were female. In terms of age, 91 (42.7%) respondents were 30 years and below while 122 (57.3%) are 31 years and above. Also, 71 (33.3%) had the senior secondary school certificate while 142 (66.7%) had degrees. Furthermore, 154 (72.3%) respondents were of the management cadre and 59 (27.7%) were of the top management cadre.

The descriptive statistics of the variables as shown in Table 1 indicated that SSP had the highest mean (4.074) while TA had the lowest mean (3.198). The standard deviation of the variables ranged from .600 to 1.057 while variance ranged from .360 to 1.118. Furthermore, the values for skewness and kurtosis indicated that the data is normally distributed and within acceptable limit of  $\pm 2.58$  (Hair, Black, Babin, & Anderson, 2010).

Table 1

Descriptive Statistics of variables

Variables	Mean	Std. Dev.	Variance	Skewness	Kurtosis
TA	3.198	.764	.584	-1.23	-.146
PMT	3.350	1.057	1.118	-.450	-.795
ETE	3.438	.738	.546	-.009	-.197
SSP	4.074	.783	.614	-.018	-.135
TC	3.782	.600	.360	-.216	-.016

Furthermore, the correlation test was performed to establish the degree of association among the variables. All the variables displayed a moderate to low degree of association with only TA and TC showing a moderate degree of association of .661. All the correlations were significant at  $p < .01$ . The results are shown on Table 2.

Table 2

Correlations among variables

Variables	TA	PMT	ETE	SSP	TC
TA	1				
PMT	2.90*	1			
ETE	0.194**	0.375**	1		
SSP	0.290**	0.375*	0.140*	1	
TC	0.661*	0.259**	0.382**	0.245*	1

\*\* correlation is significant at the  $p < 0.05$ ,  $p < .01$

In addition, a test for multicollinearity was performed and the results showed there were

no issues as the variance inflation factor (VIF) and tolerance levels are well within acceptable thresholds of not greater than 10 and not less than .10 respectively (Hair et al., 2010). Table 3 shows the results.

Table 3

**Test of multicollinearity**

variables	VIF	Tolerance
SSP	1.287	.777
TA	1.275	.785
ETE	1.166	.858
PMT	1.162	.861

Multiple regression analysis was performed to determine the effects of SSP, TA, ETE, and PMT on TC. The analysis helped answer the research questions of the study. Therefore, Table 4, 5 and 6 show the results of the multiple regression performed.

Table 4

**Model summary**

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	Std. Error of the estimate
1	.354	.125	.108	.93931

v. Independent variables : SSP, TA, ETE, PMT

vi. Dépendent variable : TC

Table 5

**ANOVA showing the significance of the model**

Model	Sum of square	df	Mean square	F	Sign
Regression	25.754	4	6.438	7.297	0.000 <sup>b</sup>
Residual	179.990	204	882		
Total	205.744	208			

a. Independent variables : Stakeholder sensitization programme (SSP), Tax administration (TA), Electronic tax payer education (ETE), PMT

b. Dépendent variable : Tax Compliance

Table 6

**Coefficients showing the contribution of each predictor variable to tax compliance**

Model	Unstandardized co-efficient		Standardized co-efficient	t	Sign
	B	Std. Error	Beta		
(constant)	3.590	0.511		7.031	0.000
SSP	0.050	0.086	0.043	0.578	0.564
TA	-0.038	0.073	-0.039	-0.525	0.600
ETE	0.248	0.067	0.274	3.878	0.000
PMT	-0.179	0.058	-0.218	-3.084	0.002

a. Dependent variable: TC

b. Independent variables : SSP, TA, ETE, PMT

Table 4, 5 and 6 shows the results of the multiple regression performed. The results on Table 4 and 5 indicated that the predictors accounted for approximately 11% of the variance in TC ( $R^2 = .108$ ,  $F(4, 204) = 7.297$ ,  $p < .000$ ). Table 6 shows ETE contributed positively and significantly to the regression model while PM contributed negatively but significantly to the model. However, SSP and TA did not significantly contribute to the model.

The coefficient of Stakeholder sensitization programme (SSP) was positive ( $b = .043$ ) indicating that as SSP increases, tax compliance (TC) increases but the relationship was not significant. This implies that as stakeholder 's sensitization programmes are intensified, the response towards tax compliance increases but not enough to significantly translate to tangible compliance. The findings are inconsistent the results of previous studies that examined the relationship between SSP and TC (Tetteh, 2019). This result is unexpected as such programmes should lead to increase in tax compliance. It is likely that these SMEs are suspicious of the state government's tax campaigns and interpret it to mean more tax drive in the future.

As expected, the coefficient of electronic tax payer education (ETE) was positive ( $b = .274$ ) and significant indicating that both ETE and TC increase at the same pace. This implies that ETE predicts TC. This also shows that tax payers had a positive orientation towards ETE as a means of educating them and this has a significant influence on TC. The findings are in tanderm with those ofTetteh (2019) who also reported similar findings in their study in Ghana.

The coefficients for tax administration (TA) ( $b = -.039$ ) was negative and the relationship with TC was also not statistically significant. The findings show that TA produce a negative influence on TC. It also means that tax payers do not perceive the administration of taxes in the state as efficient to help generate interest in voluntary tax compliance. These results are at variance with Tetteh (2019) who found positive and significant relationship between TA and TC.



The relationship between print media education (PM) ( $b = -.218$ ) and TC was negative but statistically significant. These results did not support the findings of Tetteh (2019) who found PM and TA to be positively and significantly related to tax compliance. The findings imply that tax education through the print media negatively influences tax compliance. This finding is unexpected but it could be a pointer to the fact that some of the items printed may not be read by the recipients of such literature on tax.

## 5. Conclusion and implications

This study examined the direct link existing between TA and TC and between the proxies of tax payer education and TC. Evidence from this study suggest only ETE had a positive and significant influence on TC. This implies that SSP, TA, and PM have not encouraged SMEs to comply voluntarily with tax laws and pay their taxes. Practically, this has policy implications for the Cross River state government in assessing the effectiveness of the just concluded tax campaigns embarked on across the senatorial districts of the state. The outcome of TA, SSP and PM are unexpected and there is need for tax administrators to formulate and design programmes that enhance the confidence of tax payers, as aggressive tax campaigns may breed suspicion and turn out to be counter productive. Tax administrators should emphasize the best medium of tax payer education for increased voluntary tax compliance. Also, attention should be paid to tax administration with a view to giving tax payers a pleasant experience in the whole process.

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# **BIG FOUR AUDIT FIRMS AND MARKET PERFORMANCE OF SELECTED MANUFACTURING COMPANIES IN NIGERIA.**

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## **ABSTRACT**

*This study examined big four audit firms and market performance of listed manufacturing companies in Nigeria. The study utilized 67 quoted manufacturing companies in Nigeria from year 2014-2018. Data analysis was conducted using regression, Pearson correlation coefficient, mean and standard deviation. The findings from the hypothesis tested revealed that; Big four audit firms has significant positive impact on return on investment of quoted manufacturing companies in Nigeria, that Big four audit firms has negative impact on net profit after tax of quoted manufacturing companies in Nigeria and that Big four audit firms has significant positive impact earnings per share of manufacturing companies in Nigeria. Consequently, the study further recommends that in other to boost productivity companies should ensure that they engage the services of big four audit firms and leverage on the professional experience for a significant performance.*

**Keywords:** *Big Four Audit Firms, Earnings Per Share, Return on Investment, Net Profit After Tax.*

## **1. INTRODUCTION**

Financial report is one of the most useful information sources for investors, lenders and other creditors in making decisions (IASB 2010). Especially, the financial reports audited by the Big-4 audit firms (Deloitte, Ernst & Young, KPMG, and Price water house Coopers), that are guaranteed by the perennial reputation and commitment to the quality of audit services (Hope, 2013). The information from the financial report can reflect the financial health and the nature of a business. Using this information the investors can estimate, analyze and decide to invest effectively. In order to ensure the stock-market to operate in a fair, transparent, and effective way the financial report of each firm must be

open, explicit, full, true and timely. In which, timeliness is one of the qualitative characteristics that enhance the usefulness of information that is relevant and faithfully represented (IASB, FASB 2010, QC21).

The Big Four is the nickname used to refer collectively to the four largest professional services networks in the world, consisting of Deloitte, Ernst & Young, KPMG, and Price water house Coopers. The four networks are often grouped together for a number of reasons; they are each comparable in size relative to the rest of the market, both in terms of revenue and workforce; they are each considered equal in their ability to provide a wide scope of quality professional services to their clients; and, among those looking to start a career in professional services, particularly accounting, they are considered equally attractive networks to work in, because of the frequency with which these firms engage with Fortune 500 companies. According to Simons (1990) as cited by Zaleha and Rashidah (2011) financial performance is the process of measuring the results of an organization policies and operations in terms of monetary value. The concept of performance revolves around monitoring and strategy implementation. Generally, performance measurement plays a key role in the development of strategic plans and evaluating the achievement of organizational objectives and serves as a signalling and learning device. Performance can be seen from many variables, such as stock price performance, reported earnings, or market share of a firm. According to Sonnentag and Michael (2001) when conceptualizing performance, one has to differentiate between an action (that is behavioural) aspect and an outcome aspect of performance. Abdelsalam and Street (2007) opined that big-4 audit firms activities in companies have the tendency of directing the firms towards high productivity. The timeliness of financial report is also considered as one of the benefit of the Big-4 audit firms in most companies. It is clear that a timely financial report of a firm can attract attention of investors and creates goodwill of financial report users. Owusu-Ansah (2010) stated that firm that are audited by big-4 audit firms tends to get more patronage from customers. This is because most customer on knowing that the firm is audited by Big-4 audit firms they assume that the firm is free from any unethical practice.

Two important issues prompted the need for this study and the gap that it seeks to address. Firstly, big-4 audit firms has been debated by researchers because of its divergent views. Mawih and Zaroug (2015) in their research found out big/non-big auditor has significant effect on performance. Zaleha and Rashidah (2011) also added that big-4 audit firms have a role in the business environment with a market share of more 70% of total market share. Other studies such as Sawan and Al Saqqa (2013), Defound (2014) and Davidson and Neu (1993) concluded that the quality of auditors has effects on those firm audited. Quality attracts clients and investors and their activities leads to firm performance. In the studies of Weiner (2012) they found out that many companies that switch to one of the big four firms do it because of larger brand name. Studies not supporting big-4 audit firms on performance have opined that there is no relationship between big audit firms and

firm financial performance. They further stated that business can only perform well when its management team take tactical and prompt decision against day to day challenges. Velte and Stiglbauer (2012) study focused on audit market concentration of listed firms which is characterized by an oligopoly of “Big Four” audit firms. The study found out that EU-member states cannot clearly relate increase in financial performance but that big-4 audit firms end up increasing the expenses (audit fees and consultancy fees) of a firm thereby reducing financial performance (Net Profit After Tax and Return on investment). These different findings has raised an urgent need for a study to be carried out in other to bring to rest the unending controversial views. To gain more insight into this paper, the remainder of this paper has been organized as follows. Section 2 presents an in-depth review of related relevant literatures and hypotheses development. While section 3 focused on the research methodology adopted for the study; section 4 and 5 discusses the findings and conclusion of study.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

According to Ammar (2018), Big Four (Deloitte, Ernst & Young (EY), KPMG and PricewaterhouseCoopers (PwC)) are the four biggest professional services networks in the world, offering audit, assurance services, taxation, management consulting, advisory, actuarial, corporate finance and legal services. They handle the vast majority of audits for public companies as well as many private companies. The Big 4 largest accounting firms provide an extensive range of accounting and auditing services including external audit, taxation services, management and business consultancy, and risk assessment and control. The Big 4 are the titans of the accounting and consulting world (Shaique, 2014). Collectively, they generated over \$148 billion in revenue during 2018 (Business report, 2018). In addition to their size, these four firms are prestigious, and highly sought after for career opportunities. The Big 4 used to be known as Big 8 made up of (1) Arthur Andersen, (2) Arthur Young & Co., (3) Coopers & Lybrand, (4) Ernst &Whinney, (5) Deloitte, Haskins & Sells, (6) KPMG, (7) Touche Ross, and (8) Price Waterhouse. In 1989, two huge mergers reduced the Big 8 into the Big 6. Ernst &Whinney merged with Arthur Young to form Ernst & Young; and Deloitte, Haskins & Sells with Touche Ross to form Deloitte Touche. Then in 1998, Price Waterhouse merged with Coopers & Lybrand to form PricewaterhouseCoopers, famously known as PwC. It further reduced the group into the Big 5. In 2002, the five was cut by one due to the fall of Arthur Andersen after its involvement in the world-shocking Enron scandal. From then on, the four largest existing accounting firms have been known as the Big 4. Next to the Big 4 are: BDO Global, the 5th largest accounting firm with 80,000 employees in more than 150 countries and 2019 revenue of \$9.6 billion; and Grant Thornton International, placing in 6th with over 53,000 employees in 135 countries. Researcher such as Hanh (2016) have opined that because the big four audit firm engage the services of knowledgeable accountants there impact in firms

which they audit tends to be positive and will create value and build organizations towards high performance. Big four audit firms are firms who have created high auditing standard and quality over the years and are known for their sound matter in the discharge of accounting, auditing and consultancy duties. Organizations engages the services of the big four in order to create high value in financial reporting and when their recommendations are implemented it leads the organizations into a performing firm (Abdelsalam & Street, 2007).

The big four audit firm's activities has direct benefit to firm growth and performance. According to Vuran and Adiloğlu (2013) engaging the services of the big four audit firm tends to grandly audit quality thereby putting the company on a lime light to attract quality investors. When investor are attracted to an organization more capital are generated and invested into the business thereby result to high performance of such business. Just like other quality audit service, the big four audit firms have the capacity to engage in their services quality and qualified accountants who helps to identify weaknesses in the accounting systems of an organization and they also have the capacity to suggest improvements in areas of deficiency. In the views of Owusu-Ansah (2000), he stated that big audit firms are most likely not to engage in unethical practice in course of their audit engagement. This means that big audit firms are always on the part of strengthen organizations towards upholding ethical standard in business and taking the right decision. This is done through recommendations to management on specific issue. When management implement these recommendations most likely high performance becomes the result. The audit activities of big audit firms assures directors not involved in the accounting functions on a day-to-day basis that the business is running in accordance with the information they are receiving, and helps reduce the scope for fraud and poor accounting. An audit facilitates the provision of advice that can have real financial benefits for a business, including how the business is running, what margins can be expected and how these can be achieved. Advice from big audit firms can cover anything from the tightening of internal controls, to reducing the risk of fraud or tax planning all the s contributes towards firm performance. An audit will enhances the credibility and reliability of the figures being submitted to prospective purchasers. If an owner of business wishes to sell or discontinue a part of its business for the next 3 years, it may be beneficial to carry out regular audits in order to ascertain whether it is needful to sell such operation and ascertain the economic benefit of disposing the asset. Again big four audit firms contribute to the growth of business. Quality audit firm adds credibility to published information for employees, customers, suppliers, investors and tax authorities.

Drawing from the relationship between big 4 audit firms and financial performance these study is backed by two theories which are, agency theory and accounting conservatism theory. Agency theory has been widely used in literature to investigate the information asymmetry between principals (shareholders) and agent (management). In

agency theory the principals and agents act rationally and use contracting to maximize their wealth. Since principals do not have access to all available information at the time a decision is being made by an agent, they are unable to determine whether the agent's actions are in the best interest of the firm. Auditing is considered as a bonding cost paid by agents to a third party to satisfy the principals' demand for accountability. Like any other cost of running the business, the cost of auditing is borne by principals to protect their economic interests. Louise (2005), states that audits serve as a fundamental purpose in promoting confidence and reinforcing trust in financial information. Accounting conservatism theory on the other hand implies using strict standards when declaring profits (Iatridis, 2012). Through the activities of external auditors (Big4), the significance of the conservatism theory is harness. Hamdan (2011) found that accounting conservatism contributes to the improvement of quality of financial reporting through an external auditor for clean opinion.

Various related research have been carried out on the relationship between big four audit firms and financial performance. Akle (2011) conducted a study on the relationship between the timeliness of auditing and financial performance for companies listed on Egyptian stock exchange during the period from 1998 to 2007. Timeliness of auditing were measured using the companies audited by big 4 as having timling report and company audited by non-big 4 as not having timling report. Financial performance where measured using earnings per share, return on investment. The results showed that Egyptian publicly listed firms audited by big four have taken less timeliness to publish their annual financial report. The implication of this is that investors will be able to make prompt financial decisions based on the timelessness of auditing and publishing the statement. Investor decision affect financial performance as such firm financial performance has the possibility of increasing when auditing are promptly carried out. Alkhatib and Marji (2012) carried out a study on the effect of Big 4 audit report and quoted firm's growth. 5 years data was collected from a sample of 137 firms listed on the Jordanian Stock Exchange. The statistical tool for the analysis was SPSS while regression test was carried out to test the hypothesis. Firm growth was measured using net profit tax, type of audit firm, and company size. From the analysis it was found Big 4 audit report has a significant positive relationship with type of audit firm, and company size while it has it has a negative correlation with net profit after tax. Adeke (2019) conducted a study on market implications of audit quality in Nigeria. To achieve this, the study used eleven (11) manufacturing companies listed companies that had consistently published their audited annual financial reports from 2009 to 2018. Descriptive statistics, correlation analysis and OLS univariate and multiple regression technique were adopted to analyse data obtained, with the ex-post facto research design employed in the methodology. The following results were obtained from the test of hypotheses: Cash flows and accruals components of earnings are persistent in the Nigerian manufacturing market, with cash flows being more persistent than cash flows. Both cash

flows and accruals have significant impact on stock performance, with the persistence of both components being underestimated in the Industry. Auditor's independence, audit firm size and auditor's firm specialization have significant and positive impact on EPS and MPS result of the analyses revealed that auditors' independence and audit firm size have positive and significant effects on reported EPS figure and stock pricing. However, auditors' tenure is found to negatively and significantly affect MPS. The findings have direct implication on earnings management and market performance in the Nigerian Manufacturing Industry.

As a result of the identified gap in this study, the research will focus on big4 audit firms and market performance in quoted manufacturing companies in Nigeria.

## 2.1. Development of Hypotheses

As a result of the literature, the hypotheses to be tested in this study are stated below in their null forms:

- 1) Ho<sub>1</sub>: Big four audit firms does not have significant impact on return on investment of quoted manufacturing companies in Nigeria.
- 2) Ho<sub>2</sub>: Big four audit firms does not have significant impact on net profit after tax of quoted manufacturing companies in Nigeria.
- 3) Ho<sub>3</sub>: Big four audit firms does not exert significant impact earnings per share of quoted manufacturing companies in Nigeria.

## 3. METHODOLOGY

To achieve the objectives of this study, the annual report for the period 2014-2018 were analyzed. However, panel research design and convenient sampling technique were employed with a sample of 67 quoted manufacturing companies in Nigeria. In the testing of research hypothesis, the study adopted the use regression, pearson correlation coefficient, mean and standard deviation. The statistical tool used for the analysis is SPSS.

### 3.1 Model Specification

The model specified for the study followed the theoretical and empirical framework developed by Slavko (2015) cited by Adaze (2018). The general form of the model may be specified as:

$$FP=f(BIG4AF).....(3.1)$$

Consequently, we separate FP (firm performance) into return on investment, net profit and earnings per share. This study also incorporates control variables as size of the manufacturing companies.

$$BIG4AF=f(ROI).....(3.2)$$

$$BIG4AF=f(NPAT).....(3.3)$$

$$EPS=f(EPS).....(3.4)$$

Liner expression

$$BIG4AF_i = B_0 + B_1(ROI) + B_2(NPAT)_i + B_3(EPS)_i + \varepsilon$$



Where:

ROI = Return on Investment

NPAT = Net Profit After Tax

EPS = Earnings Per Share

BIG4AF = Big Four Audit Firm

$U_t$  = stochastic disturbance or error term

$\beta_0$  = the general intercept of the equation

$\beta_1 - \beta_3$  = the parameter estimate or coefficients of variables to be estimated

$i$  = the individual sampled firm

$t$  = time

The apriori expectations of the model are:

Model one:  $\beta_1, \beta_2, > 0$ ;

Model two:  $\beta_1, \beta_2, > 0$ ;

Model three:  $\beta_1, \beta_2, > 0$ ;

$\beta_1, \beta_2$ , are the parameters or coefficients of each of the above models. They describe the directions and strengths of the relationship between big four audit firm and financial performance of sampled firms.  $\beta_1, \beta_2$ , which are the parameter estimate of the model are expected to be greater than zero ( $\beta_1 > 0$ ). This means that big four audit firm of sampled firms are expected to be positively related to each of the dimensions of market performance (return on investment, net profit after tax and earnings per share).

**Table 1: Operationalization and Measurement of Variables**

S/N	Variable	Donation	Variable	Measurement	A priori Expectation
1	Earnings per share	EPS	Dependent variable	Measured by Net Profit after preference share dividend divided by ordinary share	+ positive
2	Return on Investment	ROI	Dependent variable	Current Value of Investment less Cost of investment divided by Cost of investment	- positive
3	Net Profit After Tax	NPAT	Dependent variable	Measured by the company's Net profit before tax	+ positive
4	Big 4 Audit Firm	BIG4AF	Independent Variable	1, If a BIG 4 is the audit firm, and otherwise 0 (Big 4 Audit Companies: PricewaterhouseCoopers, Deloitte Touche Tohmatsu, Ernst & Young, KPMG)	

**Source:** Researcher Compilation, (2020).

#### 4. DISCUSSION OF FINDINGS

The table below (table 1) presents the descriptive statistics of all the variables used in the study.

**Table 2: Descriptive Statistics**

		<b>BIG4AF</b>	<b>ROI</b>	<b>NPAT</b>	<b>EPS</b>
N	Valid	67	67	67	67
	Missing	0	0	0	0
Mean		71.26	0.0727	29.0899	0.1313
Std. Deviation		19.16363	0.06413	1.42851	0.14429
Minimum		1	-0.22	27	-1.07
Maximum		1	0.25	34.12	0.33

**Source: Researcher's Computation, (2020).**

The results from table 1 indicate that the minimum and maximum values of the big four audit firm (BIG4AF) are the same which is 1, with the mean value of 71.26 and standard deviation of 19.16363. This indicates that the BIG4AF of the sampled quoted manufacturing companies deviate from both sides of the mean by more than 100%.

Table 2 shows that the return on investment (ROI) of quoted manufacturing companies in Nigeria has a mean of 0.0727 with standard deviation of 0.06413, signifying that the financial performance in terms of return on investment is 7.27% on average and the performance deviate from both sides of the mean value by 6.413%. The minimum and maximum values of financial performance in terms of ROI during the period are -22% and 25% respectively.

Table 2 also shows that net profit after tax (NPAT) of quoted manufacturing companies in Nigeria has a mean of 29.0899 with standard deviation of 1.42851, signifying that the financial performance in terms of net profit after tax is above 100% on average and the performance deviate from both sides of the mean value by 142%. The minimum and maximum values of financial performance in terms of net profit after tax during the period are more than 100%.

Table 2 shows that earnings per share (EPS) of quoted manufacturing companies in Nigeria has a mean of 0.1313 with standard deviation of 0.0727, signifying that the financial performance in terms of earnings per share is 13.13% on average and the performance deviate from both sides of the mean value by 7.27%. The minimum and maximum values of financial performance in terms of EPS during the period are -107% and 33% respectively.

**Table 3: Correlations Result**

		<b>BIG4AF</b>	<b>ROI</b>	<b>NPAT</b>	<b>EPS</b>
BIG4AF	Pearson Correlation	1	-0.023	-.231*	.320**
	Sig. (2-tailed)		0.817	0.021	0.001
	N	67	67	67	67
ROI	Pearson Correlation	-0.023	1	.795	-0.124
	Sig. (2-tailed)	0.817		0	0.219
	N	67	67	67	67
NPAT	Pearson Correlation	-.231*	.795**	1	-.355**
	Sig. (2-tailed)	0.021	0	0	0
	N	67	67	67	67
EPS	Pearson Correlation	.320**	-0.124	-.355**	1
	Sig. (2-tailed)	0.001	0.219	0	
	N	67	67	67	67

**Source: Researcher's Computation, (2020).**

Table 3 presents the Pearson correlation coefficient results for the variables. It is observed that return on investment(ROI) appears to be negatively correlated with big four audit firms (BIG4AF) as depicted by the correlation coefficient (-0.023).It implies that the use of big four audit firms has a negative relationship with either increase or decrease of return on investment.

Net profit after tax (NPAT) also exhibits a negative association with net big four audit firms (BIG4AF) as depicted by a negative correlation result (-.231). It implies that big four audit firms has a negative relationship with net profit after tax.

Another result shows that earnings per share (EPS) exhibits positive correlation (.320) with big four audit firms. This means that as a firm continuously employ the services of big four audit firms their earnings per share will be determined by the activities of the big four audit firms.

The correlation coefficient results show that some of the variables are significant at 1% (\*) and 5% (\*\*).

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Adjusted R Square
1	.589a	.346	.312	15.89964

a. Predictor: BIG4AF

**ANOVA<sup>a</sup>**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12594.174	5	2518.835	9.964	.000a
	Residual	23763.066	94	252.799		
	<b>Total</b>	<b>36357.240</b>	<b>99</b>			

a. Predictor: BIG4AF

b. Dependent Variables: ROI, NPAT, EPS

**Coefficient<sup>b</sup>**

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	ROI	74.037	24.798	.557	3.560	.001
	NPAT	-220.05	53.736	-.736	-4.095	.000
	EPS	-10.595	4.213	.948	3.019	.003

Independent variable

**Source: Researcher's Computation, (2020).**

Tables 4 present regression results to test hypothesis H1 to H3 in this study with dependent variables of ROI, NPAT and EPS and independent variable of audit firms (BIG4).

The regression results showed that significant value of BIG4AF lower than 0.05, so this variable have statistical meaning with financial performance (ROI, NPAT, EPS) at the level of 5% and 10%.

#### 4.4 Hypothesis Testing and Discussion of Findings

Ho<sub>1</sub>: Big four audit firms does not have significant impact on return on investment of quoted manufacturing companies in Nigeria.

From the regression result

**Decision:** + Sig. (ROI) = 0.001. From Table 4.3, big four audit firms positively affect the return on investment (ROI) 5% and 10% significant level with a t-value of 3.560. It means that if listed manufacturing firm is audited by Big 4 audit firm, their activities will affect positively the return on investment of quoted manufacturing firms. Thus, the null

hypothesis which states that big four audit firms does not have significant impact on return on investment of quoted manufacturing companies in Nigeria is rejected while the alternate is accepted.

Ho<sub>2</sub>: Big four audit firms does not have significant impact on net profit after tax of quoted manufacturing companies in Nigeria.

**Decision:** + Sig. (NPAT) = 0.000, from table 4.3, big four audit firms negatively impact on the net profit after tax (NPAT) 5% and 10% significant level with a t-value of -4.095. It means that if listed manufacturing firm are audited by big 4 audit firm, big 4 audit firm activities will not have a positive relationship with the net profit after tax of the firm.. Thus, the null hypothesis which states that big four audit firms does not have significant impact on return on net profit after tax of quoted manufacturing companies in Nigeria is accepted while the alternate is rejected.

Ho<sub>3</sub>: Big four audit firms does not exert significant impact earnings per share of quoted manufacturing companies in Nigeria.

**Decision:** + Sig. (EPS) = 0.003, big four audit firms positively affect the return on investment (ROI) 5% and 10% significant level with a t-value of 3.019. It means that if listed manufacturing firm is audited by Big 4 audit firm, their activities will affect positively the earnings per share of quoted manufacturing firms. Thus, the null hypothesis which states that big four audit firms does not have significant impact on earnings per share of quoted manufacturing companies in Nigeria is rejected while the alternate is accepted.

The regression analysis results shows that the big four audit firms has significant impact on firm financial performance measured by return on investment and earnings per share while it also has negative impact on financial performance measured by net profit after tax.

Big four audit firms have significant positive impact on return on investment and earnings per share of quoted manufacturing companies in Nigeria. This result is in line with the study of Ahmad, Mohamed and Nelson (2016). They found a positive relationship between audit firms (measured by big four) with return on investment.

Big four audit firms have negative impact on net profit after tax of quoted manufacturing companies in Nigeria. The result of this study is different from the study of Nguyen and Nguyen (2016) who found a positive but not significant relationship between big four audit firm and financial performance. Al-Ajmi (2008) found a negative relationship between audit firm activities and performance of commercial banks. His findings is in line with this findings of this study. Owusu-Ansah (2000) found that big-4 audit firms have not relationship with performance. He further stated that business can only perform well when its management team take tactical and prompt decision against day to day challenges. Velte and Stiglbauer (2012) study focused on audit market concentration

of listed firms which is characterized by an oligopoly of “Big Four” audit firms. The study found out that EU-member states cannot clearly relate big four activities to increase in financial performance but that big-4 audit firms end up increasing the expenses (audit fees and consultancy fees) of a firm thereby reducing financial performance (Net Profit After Tax and Return on investment).

We can see from the first and third findings that professional experience and ability of Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers impacts of firm growth. According to Abdelsalam and Street (2007) Big-4 audit firms (Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers) activities in firm have the tendency directing the firms towards high productivity. Owusu-Ansah (2010) stated that firm that are audited by big-4 audit firms tends to get more patronage from customers there by increasing the turnover of the firm and boosting productivity.

## **5. CONCLUSION AND RECOMMENDATIONS**

This study basically examined the effects of big4 audit firms on financial performance in listed manufacturing companies in Nigeria. The study came up with the following findings that are of salient importance to scholars investigating issues relating to big4 audit firms and financial performance in the Nigerian context. The findings from are: big four audit firms has significant positive impact on return on investment of quoted manufacturing companies in Nigeria, that Big four audit firms has negative impact on net profit after tax of quoted manufacturing companies in Nigeria and big four audit firms has significant positive impact earnings per share of quoted manufacturing companies in Nigeria. From the findings the study therefore conclude that big for audit firms has positive significant impact on financial performance of quoted manufacturing company in Nigeria in terms of returns on investment and earnings per share and also has a negative relationship on the financial performance of quoted manufacturing company in Nigeria in terms of net profit after tax. Following the findings, the study further recommends that, the management of firms should work very hard to optimized the capital structure of their quoted firms in order to increase the return on investment, the management of quoted manufacturing firms should increase their commitments into capital structure in order to improve earnings from their business transaction, manufacturing firms should reduce firm size and operating expenses so as to increase the return on assets of their firms.

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# INFORMAL TAXATION AND ECONOMIC DEVELOPMENT IN NIGERIA

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## Abstract

*The absence of government developmental projects in rural areas has caused economic underdevelopment for the people, which is against the tenants of social contract theory. This has hampered economic growth as well as the infrastructural development of rural areas. As a result, rural communities have resort to self-governance in a bid to confront the challenges faced by community members because of low government attention to rural development. Informal taxation is seen as the most effective way of self-governance and raising funds to confront the economic development challenges faced by the rural communities. This study examines informal taxation and economic growth in Nigeria with focus on rural communities. The study adopts a survey research design. 200 Questionnaire are administered randomly online Using a 5 Likert's scale. 48 questionnaires are duly filled and returned which formed the sample size used for analysis. The study employs the use of inferential statistics (Averages) and percentages for analysis of responses and data collated from the returned questionnaire. The study found that informal taxation upholds social justice and tax benefit maximization as funds mobilized through informal taxation mechanism contributes to infrastructural development in Nigeria except for health care delivery. On the other hand, the level of accountability in informal taxation process is poor due to poor awareness of the process and lack of accountability mechanisms put in place by community members. Thus, it is recommended that government should collaborate with community members to improve the informal taxation mechanisms. This can be done through assisting the community members with public auditors who can assess the process to ensure accountability. Government should partner communities who engage in informal taxation by assisting these communities financially in order to finance the identified projects. This will encourage timely project completion and bring about rapid economic development within rural communities in Nigeria especially in the area of health care delivery.*

**Keywords:** Informal taxation, social contract theory, tax benefit theory and economic development.

## INTRODUCTION

Government over the world play the role of finance and provision of public amenities but in most developing nations especially Nigeria, the formal tax systems and government have

failed in this responsibility. As a result, local communities have resorted to informal taxation to finance social amenities provision for economic development. Informal taxation allows communities to overcome the problem with the formal taxation system that would otherwise lead to under provision of these amenities. Rural settlements in Nigeria are faced with the problem of low infrastructural development which as a result hampers economic activities and development in such areas. This statement is supported by Olken and Singhal (2009) who asserted that “in many of developing countries, informal tax systems appear to form a very important component of community development as a result of low or no presence of government funded projects within the area. This issue has created an atmosphere of distrust between the tax payers within the rural areas and the government for lack of economic development within the area despite formal taxation imposed on the people by government; as such ways of eliminating such distrust must be explored. Notwithstanding, communities and social groups have developed means of informal taxation in order to generate revenue for economic developmental projects like; water projects, community schools, rural electrification, road projects, bridges e.t.c (Olken & Singhal, 2009). Thus, the need to look beyond formal taxation into informal taxation for the benefit of immediate tax payers is within a community is eminent.

Beyond the economic benefits, a more political dimension to the New Fiscal Sociology concentrates on the importance of freeing informal actors from what Stiglitz (1982) Bice and Hoyt (2000); refers to as ‘the devil’s deal’ of lax tax enforcement and unaccountable governance. Taxation is viewed as a means of empowering informal actors through tax bargaining with the state, leading to gains in service provision and public accountability. As Bardhan (2002), explain, broadening the tax base and developing a culture of compliance through informal taxation can achieve more than simply increasing revenues for government; as informal taxation can be a way of re-engaging citizens with the state for economic development. In many of developing countries, informal tax systems appear to form a very important component of community development (Olken & Singhal, 2011). In Indonesia, for example, the concepts of *gotong royong* (mutual assistance) and *swadaya* (self-help) have become deeply institutionalized within local communities: residents are expected to make labor and monetary payments toward development projects. According to Miguel and Gugerty, (2005), Kenyan’ *harambee* (pull together) projects accounted for 11.4% of national development expenditure between 1967 and 1973, and *harambee*-financed spending on particular sectors, such as education, matched or exceeded government expenditure. In Nigeria specifically the South Eastern region, informal taxation generally is referred to as *Utu isi*’ while, informal taxation particularly for developmental purpose is referred to as *Utu mmepe*’. In Benue state Nigeria, informal taxation is referred to as “*Kpadegh*” This shows the existence of informal taxation in Nigeria.

According to Umezina (2016) the south eastern region of Nigeria is the country home of the Igbo which comprises of five states; Abia, Anambra, Ebony, Enugu and Imo. “The Igbo are competitive, enterprising and they love community spirit. They engage in trade and work globally and usually go back to their region to erect magnificent edifices, develop their immediate community in order to flaunt their new found economic status” (Umezina, 2016 p111). With these attributes, the region has been able to practice informal taxation over time geared towards economic welfare and development of the region. Schools, Hospitals, Roads, Bridges, Markets, and Worship centers have been developed by this informal tax system in the South Eastern region which translates to economic development. Where formal tax system and the government has failed to meet the primary objective of taxation; which is for resource allocation and benefit accrued, the informal tax system has proved to be more effective. Against this backdrop this study seeks to examine informal taxation and economic development in Nigeria.

## **THEORETICAL LITERATURE**

Why rely on informal taxation while there is the existence of formal taxation? This is a resounding question that if answered elucidates the minds of experts on the core basis and need for informal taxation. To provide answer for such contradiction; is as well a way of pointing out the existing gap in formal taxation that invariably projects the importance of the practice of informal taxation. In Nigeria, specifically in rural areas, formal tax payers have often times felt the government has failed in being accountable for the social contract of governance, therefore the benefit preposition of taxation has not been enjoyed by the tax payers. This is the major reason tax payers have resorted to informal taxation.

According to Abdullahi (2012) “social contract theory is a political theory that stresses an understanding between the ruled and their rulers, characterizing the right and obligations of everyone accordingly”. As cited in Gurama and Mansor (2015), the theory of social contract is traced to Thomas Hobbes and Jean-Jacques Rousseau. Propounded around the seventeenth century, the social contract theory refers to a political preposition where the masses propose to support political powers on grounds of individuals toward oneself interest ranging from monetary to social benefits. This is connected to the benefit theory of taxation as propounded by Lindahl (1919). Lindahl (1919) assumes that citizens tend to pay more taxes when they feel they have sufficient benefits from the activities of the state.

Taxation as a form of political participation is a social contract between the government and the governed by means of funding the government and expecting commensurate service for such funds provided to the government by tax payers. It is however argued by authors like Gurama and Mansor (2015); Kundt (2017); Nimenibo, Aminadokiari, Eyo and Friday (2018) that the services which are provided by the government out of the tax revenue

generated is not in commensurate with the taxes paid, tax payers have no option than to resort to informal taxation as a result of failure on the part of government to fulfill the social contract, since tax benefit is not achieved. Informal taxation seeks to bridge the theoretical (Social & Benefit theories) gap which the formal tax has created as a result of government failure to provide economic developmental strides with the tax paid by citizens. Due to this gap, tax payers explore informal taxation as a means to fill the theoretical gap; taxes paid are controlled by community base tax administrators and funds generated from such tax system is immediately used for provision of basic social service. The social contract and tax benefit theories are relevant for this study as both theories are used to explore the concept of formal taxation, why tax payers rely on informal taxation and the impact of informal taxation on economic development in Nigeria.

### **Concept of Informal Taxation**

As earlier mentioned, many countries even have specific vocabulary to describe these systems, such as *gotong royong* in Indonesia, *harambee* in Kenya (Olken & Singhal, 2011), and *Utu mmepe* and *Kpandegh* in Nigeria. These local taxation mechanisms where tax is collected by a community based constituted authority and such tax revenue is used for the benefit of the immediate community by financing of local public amenities is what we refer to as informal taxation. Informal taxation is facilitated by the perceived benefits these community members feel will be accrued to them if they pay their taxes. Informal taxation is a system of local public infrastructure finance coordinated by community officials and enforced socially rather than through the formal legal tax system. Again, the informal tax administrators are bonded by a social contract with the immediate community members to ensure that taxes collected on their behalf is judiciously used. In informal taxation, tax rates are levied at a flat rate or according to income status in the community which is determined by the community members through unions.

There are several prepositions and ontologisms about the study of informal taxation but the pertinent ontologies are that of the social contract and benefit expectancy theory that drives the effectiveness of informal taxation. First, payments do not appear to be chosen by households individually but a fix rate by a constituted community council (Bice & Hoyt, 2000). Then, expected payments and revenue from such tax system are coordinated by community leaders or a project committee for project delivery. According to Barkan and Holmquist (1989), in some cases indigenes and community members are asked to provide services in the form of labor in order to facilitate the execution of such projects. Other cases and option of payment or service provision is prescribed as a means of tax payment by the tax committee. These projects range from infrastructures to services. Another aspect of informal taxation is the enforcement mechanisms. In cases of tax defaulters, a range of punishments are imposed on such tax defaulters by the tax committee, in most cases tax

defaulters are denied the benefits of the project by denying the defaulters access to the projects. Barkan, McNulty and Ayeni (1991) documented that punishment for defaulting range from public announcement of defaulters' name to sanctions, fines and abrupt denial of access to such public amenities. This sanctions and enforcement mechanisms have proved to be an effective way of informal tax administration in most communities (Ezeibe, 2011).

### **Informal Tax Mechanisms**

The model for formal and informal taxation has diverse constraint parameters, arising from differences in their tax mechanisms (Brett, 2007). In the informal system, enforcement happens through social sanctions rather than through courts. This means that the informal tax system can use information that is observable but not legally verifiable, so informal taxation mechanisms effectively have better information than the formal tax system (Ferris, 1984). But, by foregoing formal legal proceedings, the informal system uses less severe punishments i.e., social sanctions instead of jail time which limits the progressivity of the informal taxation system (Olken & Singahl, 2009).

A major form of informal tax mechanism is the town union; which are committees formed and owned by the members of the community. These committees usually derive its name from the name of village or town that formed it (Umezina, 2016). These committees in collaboration with local chiefs are responsible for tax levy determination, allocation and collection. According to Umezina (2016), the community unions are presently referred to as Community Based Organization (CBO) in Nigeria, while enforcement groups include age grades and cooperative societies. This informal taxation mobilization mechanism involves informal associations, networks and extended families being mobilized for the development of the rural communities. This explains the doctrine of social corporation for effective tax and development as posit by Miguel and Gugerty (2005). Miguel and Gugerty (2005) argued that the process of empowering local based tax administrative mechanism for informal taxation will offer community members a more powerful opportunity to get involved on a more equal tax basis for community development.

Informal taxation may appear sub-optimal but authors like Meagher (2016), argued that it can in fact arise as the solution to a constrained optimal tax problem as presented by Mirrlees (1971). Obara and Nagih (2017), mentioned that communities in developing countries opt to finance public amenities in order to achieve social welfare because the formal tax system of government have failed to provide for them the social benefits of tax. Although for lack of legal enforcement mechanisms, communities' face an enforcement constraint as a result, punishments for non-compliance may be limited (Alderman, 2002). Another constraint to informal taxation mechanism is the aspect of information constraints.

In places where community members are not willing to pay taxes levied on them, they resort to hiding information about their income by telling the enforcement team they have little or no money to pay. Since the tax committee is limited in the aspect of information reach, they have little to do when it comes to ascertaining the viability of such assertion by those community members who are reluctant to pay taxes and are unwilling to disclose their actual financial status.

### **Informal Taxation and Economic Development**

Proponent of economic development concepts like Sharipov (2016), assert that economic development majorly is about improving the livelihood of people through provision of basic social amenities. According to the 1991 census, more than 70% of Nigeria's population dwells in rural areas this is also the case with South Eastern Nigeria. Although there exists formal taxation in the rural areas and in urban areas but the benefits of tax payment are minimal in the rural areas as they experience poor standard of living in these areas as a result of lack of social amenities. The level of economic development; roads, hospitals, schools etc in the rural areas is poor compared to the urban areas (Townsend, 1995; Wilson, 2010; Ezeibe, 2011). Defining economic development in terms of informal taxation entails a broad based organization and mobilization of the rural population and resources to improve the capacity of rural standard of living through provision of critical infrastructures for economic and social welfare of the community members. Similarly, Ezeibe (2011), opined that the World Bank looked at rural development as a strategy designed to improve the economic and social life of the people in the rural areas. Economic development involves extending benefits of development to the rural areas. This is achievable through effective mobilization of resources for such development. Umezina (2016), mentioned that an effective way of mobilizing funds for economic development in rural areas is through community-based donations and tax.

Informal taxation and economic development have received a handful of scholarly attention over the world as most researchers focus on the aspect of formal taxation. This aspect of informal taxation neglected has proved to be an effective tool for economic development especially in rural areas where there is evidence of failed social contract from government as expected by the locals (Olken & Singhal, 2009). Many authors have also supported this assumption. Umezina (2009) in his study "Health care and economic growth in South East Nigeria using a descriptive research design, mentioned that, there will be a meaningful economic improvement if ever there is a combined proactive engagement in healthcare delivery by the state governments and the citizens. This he meant indigenes and community members contribution is necessary to enhance economic development in the area of health care sector.

Nimenibo et al., (2018), empirically examine the tax revenue and economic growth in Nigeria. They carried out their analysis using the method of Multiple Regression Analysis. Their study concluded that government should ensure that tax revenue is used judiciously to make expenditures on Education, Housing, Transportation, Agriculture, Health, Power, Road construction, National defense, among others that will help the various sectors of the economy to grow and function well enough so that the growth and development of the country shall be enhanced. This prove that government have failed in carrying out social contracts as expected by the people, therefore the need to seek alternative financing measures for economic development is eminent thus communities' resort to informal taxation.

Akeju (2018) identified the viability of trade unions and associations in informal sector as agents for state tax collection and their labour absorptive capacity using a field survey of 600 artisans selected from three states (Ekiti, Ondo and Oyo) in the South West region of Nigeria. His study revealed that although the informal sector is marginalized with a weak voice in centralized policy making, it has allowed a large proportion of the population to escape extreme poverty through its economic activities. Using logit regression, the result indicated that associational members in informal sectors are strong and showcase a positively significant relationship towards ensuring tax compliance among tax payers. The findings of Akeju (2018) proves that community engagement and the use of community-based agents is an effective way for executing informal taxation.

Nzeibe (2010) examined how the interplay of state and market affects town unions' involvement in rural development in Nigeria. Nzeibe (2010) appropriated the basic propositions emanating from both elite and Marxian political economy theories. The conscious blend of these theories was based on the analytical strength of the theories for understanding effects of the interplay of state and market on the development activities of an organization or a group such as a town union. His study established that constantly, the dynamic interaction and parallel interdependence between money and votes; state and market or politics and economy, determines town unions' involvement in rural development in South East Nigeria.

Olken and Singhal (2009) finalized the arguments with their assertion that "Informal payments are a frequently overlooked source of local public finance in developing countries". They used micro-data from ten countries to establish stylized facts on the magnitude, form, and distributional implications of informal taxation. They mentioned particularly that informal taxation is widespread, particularly in rural areas, with substantial in-kind labor payments for low income earners while, high income earners pay more in monetary terms.

The various prepositions by previous authors has shown that informal taxation proves to

be a means of funding for rural and local economic development. Although neglected, this study intends to explore informal taxation and economic development with focus on Nigeria in order to bring to the knowledge of the general public the viability of tax system which been left untapped but proves to be effective in rural economic development.

## **METHOD**

The study adopts a survey research design. 200 questionnaire are issued to the general public; specifically, those who interact with their local communities and have knowledge about the practice and existence of informal taxation activities in their respective communities. 48 returned questionnaires formed the sample size used for the study. The study employs the use of descriptive statistics (Averages) and percentages for analysis of responses and data collated from the returned questionnaire. The questionnaire collected is administered using a 5 structured Likert's scale of agreement; Strongly agree (5), Agree (4), Neutral (1), Disagree (3) and strongly disagree (2).

*Decision rule: The average of 3 is considered the benchmark that forms the accepted opinion (Decision).  $< 3$  is disagree while,  $\geq 3$  is agree.*



## RESULTS AND ANALYSIS

Descriptive Statistics of Responses						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Tax payers comply and corporate with tax administrators in the community	48	1.00	5.00	2.6250	.18505	1.28204
Taxes are regularly paid to government tax administrators as at when due	48	1.00	5.00	3.0625	.14709	1.01910
Community members mobilize funds for community based projects	48	1.00	5.00	3.7083	.19287	1.33621
There is strict monitoring, supervision, and accountability of funds mobilized by community members	48	1.00	5.00	2.9375	.19159	1.32739
The informal (community) tax mechanism has an impact on health care development	48	1.00	5.00	2.9792	.16971	1.17581
The informal (Community) Tax mechanism has an impact on infrastructural development	48	1.00	5.00	3.5208	.15468	1.07168
Valid N (listwise)	48					

**Source: Author's Computation 2020**

The table above represents the descriptive statistics for the responses gotten. N represents the number of responses gotten which is 48. Questionnaire were sent out on social media platforms, research groups and the general community in order to maintain the Covid\_19 social distancing guideline set in place by the Nigerian Center for Disease Control. Only 48 responses were gotten, this forms the basis for the population and sample size of the study.

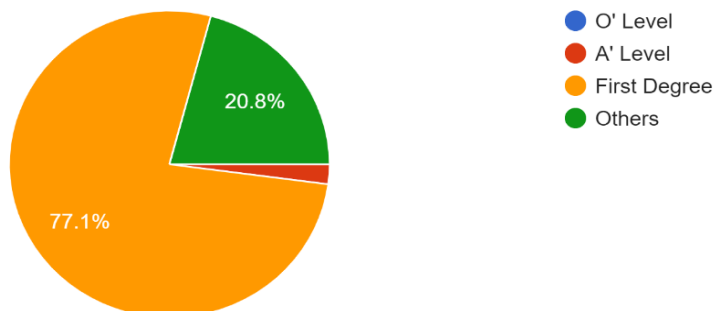
The minimum value of 1.00 recorded represents the least response which is a situation where a respondent is neutral. Also, the maximum value of 5.00 represents the highest

response which is a situation where a respondent strongly agrees to the opinion (Question) of the researcher. The mean statistic of the responses above represents the average response of the 48 respondent which forms the decision rule explained in the method section of the study.

## Validity of Response

### Qualification

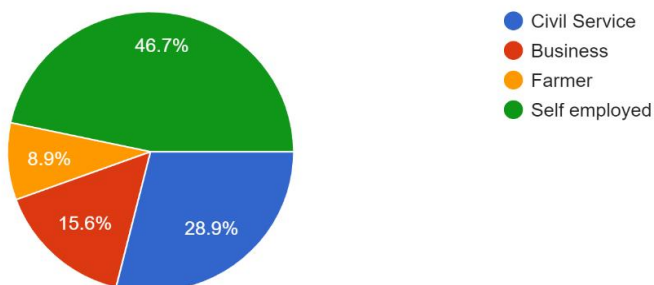
48 responses



The validity of respondent opinion is carried out using the above question on the generic qualifications of the respondent. 2.1% of the respondent have A level qualification which places them within the category of people with little knowledge about informal taxation as explained by the researcher. 77.1% and 20.8% of the respondent have first degree and other qualifications, which means 97.9% of the respondent are highly qualified and have the required standard education that enhances their understanding of informal taxation and economic development of Nigeria as explained by the researcher.

### Employment

45 responses

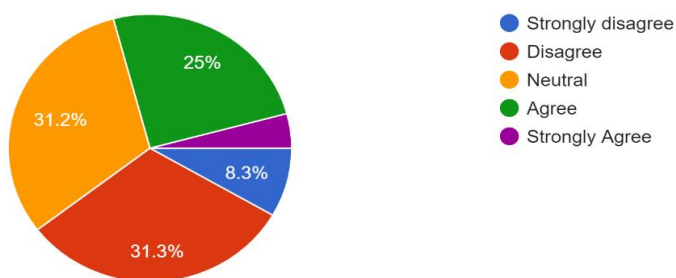


The respondent employment validates the fact that they are tax liable and have firsthand experience on informal tax mechanisms in their respective communities. 8.9% of the

respondent are farmers who are often domicile in the rural communities. 15,6% of the respondent are into business as result interact with their respective rural communities. 28.9% of the respondent are civil servant; these are the class of community members who are often regarded as those who understand government policy and should lead the implementation process within their respective communities. The large (46.7%) part of respondent fall under the self employed category; this category of respondent contribute to informal taxation process by engaging actively in the tax collection and implementation process.

## Analysis of Response

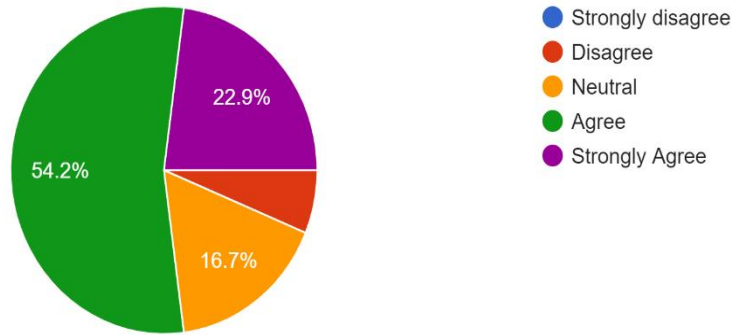
Tax payers comply and corporate with tax administrators in the community  
48 responses



Out of 48 responses, 31.2% were neutral, 8.3% strongly disagree, 31.3% disagree, 25% agree while, 4.2% strongly agree that tax payers comply and corporate with informal tax administrators in the community. On an average (2.6250), the respondent disagreed that community members do not comply and corporate with informal tax administrators.

## Community members mobilize funds for community based projects

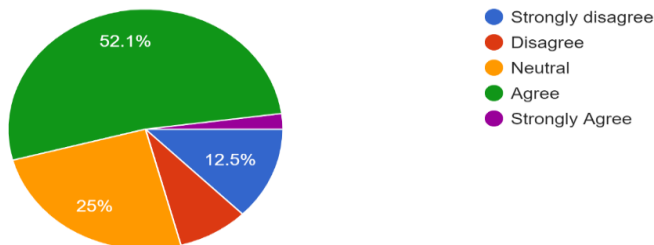
48 responses



Out of 48 respondent, 16.7% are neutral, 6.2% disagree, 54.2% agree and 22.9% strongly agree that community members mobilize funds for community base projects. The response average of 3.7083 means the respondent agree that community members engage in informal taxation as a way of mobilizing funds for community base projects.

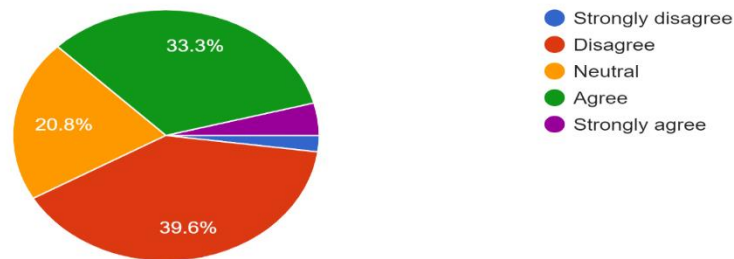
## There is strict monitoring, supervision, and accountability of funds mobilized by community members

48 responses



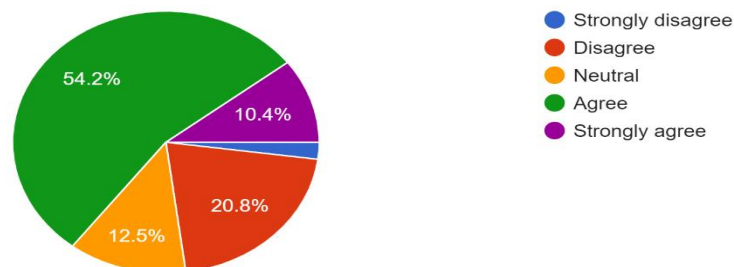
In regards to accountability of informal taxation, 25% of the respondent are neutral, 12.5% strongly disagree while, 52.1 agree that there is strict monitoring, supervision, and accountability of funds mobilized by community members. On an avearge (2.9375) the respondent disagree that there is no strict monitoring, supervision, and accountability of funds mobilized by community members.

The informal (community) tax mechanism has an impact on health care development  
48 responses



On the impact of informal taxation on health care development in Nigeria, 20.8% of the respondent are neutral, 39.6% disagree while, 33.3% agree that the informal tax mechanism has an impact on health care development. The average response of 2.9792 means the respondent disagree that informal taxation has no impact on health care development in the community.

The informal (Community) Tax mechanism has an impact on infrastructural development  
48 responses



12.5% of the respondent are neutral, 2.1% strongly disagree, 20.8% disagree, 54.2% agree while, 10.4% strongly agree that the informal tax mechanism has an impact on infrastructural development. The average response of 3.5208 means that the respondent agree that informal taxation has an impact on infrastructural development in Nigeria.

## Discussion of Result

The issue of informal taxation is not practically seamless, this is seen it's theorization and practicability.

There are limited empirical works to support the study of informal taxation and economic

development. This assertion is supported by Olken and Singhal (2009) who argued that informal taxation is frequently overlooked source of local public finance in developing countries. Nzeibe (2010) in a bid to develop theories that best explains the study of informal taxation came up with a blend of both the elite and Marxian political economy theories. These theories propagated by Nzeibe (2010) are political in nature. These theories propagate an understanding between the ruled and their rulers, which is more about the right and obligations of both government and her citizens but this theories do not best explain how informal taxation can be used as a means to end the disparity of low dividend of democracy experienced by rural community dwellers which necessitates informal taxation for economic development. Our study has explored both the social contract and the tax benefit theories which with the responses gotten from the community members have proved to be a bridge in the gap created by the formal tax system by proving that informal taxation has contributed to economic development in the rural areas in Nigeria.

Also, on the part of informal taxation practice, the core issue for concern is with the informal tax mechanism; this pertains the low level of accountability and stewardship by those who act on behave of community members as fund mobilizers in the process of informal taxation, noted in the study findings. On health care development, the capacity of funds mobilized through informal taxation is not enough to foster health care development. On the other hand, much of the funds mobilized through informal taxation is used for community infrastructural development like; roads, market, and water projects. This shows that informal taxation has contributed majorly to economic development of rural communities in Nigeria. Thus, informal tax payers feel more socially responsible in tax payment because they are certain of tax benefit maximization.

## **Conclusion**

In consonance with the study finding, it is concluded that, informal taxation upholds social justice and tax benefit maximization as funds mobilized through informal taxation mechanism contributes to infrastructural development in Nigeria except for health care delivery. On the other hand, the level of accountability in informal taxation process is poor due to poor awareness of the process and lack of accountability mechanisms put in place by community members.

## **Practical Implication of the Findings**

If adequate attention is not given to the accountability process of informal taxation, there is bound to be misappropriation of funds and issues of fraud committed by those involved in the informal taxation process. This will diminish the social justice system, as well as demoralize community members from further participating in informal taxation process

which will reduce the amount of community tax revenue and subsequently affect the development of projects in the community as a result of poor funding without commensurate tax benefit.

## **Recommendations**

The study recommends that;

- i. Scholars, institutions, and the government should engage in the study of informal taxation such that more awareness will be made about informal taxation processes and the accountability of informal taxation process improved.
- ii. Government should collaborate with community members to improve the informal taxation mechanisms. This can be done through assisting the community members with public auditors who can assess the process to ensure accountability.
- iii. Government should partner communities who engage in informal taxation by assisting these communities financially in order to finance the identified projects. This will encourage timely project completion and bring about rapid economic development within rural communities in Nigeria especially in the area of health care delivery.

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## Appendix I

### Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
There is government tax office in your community	48	1.00	5.00	3.7292	.15397	1.06670
Tax administrators have access to tax payers in the community	48	1.00	5.00	3.3125	.18149	1.25742
Tax payers comply and corporate with tax administrators in the community	48	1.00	5.00	2.6250	.18505	1.28204
Taxes are regularly paid to government tax administrators as at when due	48	1.00	5.00	3.0625	.14709	1.01910
There is presence of government health care centers in the community	48	1.00	5.00	3.5000	.14887	1.03142

There is high patronage of government health care centers by community members	48	1.00	5.00	3.2708	.18291	1.26726
There are alternative community based health care centers in the community	48	1.00	5.00	3.6250	.15072	1.04423
The community based health care centers are highly patronized	48	1.00	5.00	3.1667	.19825	1.37351
Roads constructed by the government that lead to the community are accessible	48	1.00	5.00	2.8333	.13752	.95279
There are other available alternative community based roads that lead to the community	48	1.00	5.00	3.1875	.18750	1.29904
The alternative community based road are accessible	48	1.00	4.00	2.5833	.15708	1.08830
The market in the community is funded by the government	48	1.00	4.00	2.7083	.11516	.79783
There is a water plant/project within the community	48	1.00	5.00	3.0417	.12618	.87418
The community based water plant/project is funded by community members	48	1.00	5.00	3.3333	.17699	1.22619
Community members mobilize funds for community based projects	48	1.00	5.00	3.7083	.19287	1.33621

There is strict monitoring, supervision, and accountability of funds mobilized by community members	48	1.00	5.00	2.9375	.19159	1.32739
Only residing community members constitute the fund raising committee	48	1.00	5.00	3.1042	.17675	1.22456
All community members are taxed by the fund raising committee	48	1.00	5.00	3.1042	.17924	1.24182
Each community member makes an equal amount of donation	48	1.00	5.00	2.8333	.15567	1.07848
Donations are shared in accordance with social status by the committee members	48	1.00	5.00	3.0208	.18946	1.31262
The fund raised by the committee is used for health care development	48	1.00	5.00	2.5417	.17854	1.23699
The fund raised by the committee is used for construction of roads	48	1.00	4.00	2.8125	.16486	1.14216
The Fund raised by the community is used for market construction/renovations	48	1.00	5.00	3.2708	.15682	1.08647
The Fund raised by the community is used for water plant/projects	48	1.00	5.00	3.1042	.17422	1.20706
The informal (community) tax mechanism has an impact on health care development	48	1.00	5.00	2.9792	.16971	1.17581

The informal (Community) Tax mechanism has an impact on infrastructural development	48	1.00	5.00	3.5208	.15468	1.07168
Valid N (listwise)	48					

# INSTITUTIONAL OWNERSHIP, GENDER BOARD DIVERSIFICATION AND CORPORATE TAX AGGRESSIVENESS OF LISTED CONGLOMERATES COMPANIES IN NIGERIA

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## **Abstract**

*This study investigated the effect of institutional ownership, gender board diversification on tax aggressiveness of quoted conglomerate companies in Nigeria. The population of the study consisted of the six (6) conglomerate companies listed on the Nigerian Stock Exchange as at 31st December 2019. The study employed the use of explanatory research design and secondary data contained in the annual reports and accounts of listed conglomerate companies for a period of ten (10) years (2010 to 2019) was used for the study. The result of the pooled Ordinary Least Square (OLS) multiple regression analysis revealed a negative significant effect of institutional ownership and gender board diversification on tax aggressiveness of listed conglomerate companies in Nigeria. Based on the findings, the study recommended that the regulatory bodies such as Security and Exchange of Nigeria should set standards for the inclusion of reasonable number of women on the board monitoring committees, because gender diversity in the board decreases tax aggressiveness.*

**Keywords:** Corporate tax, Conglomerate, gender diversity, Institutional ownership and tax aggressiveness

## Introduction

In the last two decades, regulators and policymakers have observed a dramatic increase in the variation between accounting income reported to the shareholders and taxable income reported to the government. Also, scholars (Noor, Fadzillah & Mastuki, 2010) have equally noticed that the increase in the variations between accounting income and taxable income are due to company tax aggressiveness. This change in company attitude has created holes in the government's pockets owing to the underreporting of company income. Moreover, the increased in corporate tax aggressiveness has led to a call for studying various characteristics of tax aggressiveness including the role of institutional shareholding and board gender diversity in the inclination of companies to elude taxes (Shackelford & Shevlin 2001; Kim, & Zhang, 2011; Koester, Shevlin & Wangerin, 2016; Mohd, Pong Rayenda & Akmal, 2019).

Shareholders, especially institutional ownership, play a central role in corporate governance structure. This collection of stockholders has considerable impact in these companies with respect to ownership of a significant portion of the companies' share and can also influence company's accounting practices and financial reportage. Institutional ownership are also important decision makers and they have high ownership in companies and this acts as an effective exogenous monitoring mechanism (Zhong, Chourou & Ni 2017). Therefore, the existence of such important shareholders can change company managers' behaviors and protect investments through their monitoring sources (Zhong, *et al*, 2017). Furthermore, institutional investors have less motivation to engage in tax aggressiveness (Iftekhar, Incheol & Qiang, 2016; Agustina, Tri, Agustinus & Wijaya, 2017).

The composition of the board is of important significance in measuring a board's aptitude in achieving its objectives. Therefore, the significance of a diverse board cannot be exaggerated as diversity results in injection of essential skills, diverse experiences and viewpoints on wide range of issues (Society for Corporate Governance in Nigeria, 2014). Moreover, women representation on the boards is one of the sources of diversity in corporate boards. This is because female board members provide the firm with divergent abilities, which might have certain values on corporate performance. However, the issue of board gender diversity has been a widely discussed issue in the last twenty years. The main reason is that women are statistically underrepresented in the policymaking and specifically as board members in corporate world. Even though Watson and McNaughton (2007); Farissha and Anuar (2018) found that women are more conservative, risk-averse preference and are more likely to comply with tax policies and directive compared to men. Based on the latter, Aliani, Hamid and Zarai (2011); Mohammadreza and Mahdi (2018) also established that the presence of women on corporate boards reduces corporate tax

aggressiveness.

Studies have been carried out on the bond between institutional ownership, board gender diversity and tax aggressiveness of companies particularly in developed countries with paradoxical results (Ibrahim Hairul& Siti 2013; Mozaffar, Suraj & Liang, 2017; Mohammadreza & Mahdi, 2018; Agustina, Tri, Agustinus & Wijaya, 2018). A common singularity in the studies is that institutional ownership and board gender diversity are not linked in one study. This signifies that the influence of either of the two variables in association to the effect on tax aggressiveness of a firm is unnoticed. Considering the role of institutional investors and gender diversity play to monitor and discipline managers and thereby reducing agency problems. However, limited studies (Oyeleke, Erin&Emeni, 2016; Onyali, & Okafor 2018) exist on the relationship between institutional ownership, board gender diversity and tax aggressiveness in the context of conglomerates companies in Nigeria for the period of 2010 to 2019. To achieve the objective of this study, a number of hypotheses were proposed and are tested using data from Nigeria conglomerate setting:

**Ho1:** Institutional ownership has no significant effect on tax aggressiveness on listed conglomerates companies in Nigeria.

**Ho2:** Board gender diversity has no significant effect on tax aggressiveness on listed conglomerates companies in Nigeria.

## **Literature Review**

### **Tax aggressiveness**

Several definitions of tax aggressiveness have been proposed by scholars. Hanlon and Heitzman (2010) defined tax aggressiveness as tax cuts for naira from pretax incomes. In other word, is a situation in which a manager has the choice to either report a profit raise only for financial accounting determinations or for both tax and financial accounting purposes and he chooses to report it only for financial accounting purposes. Palsternak and Rico (2008) claimed that occasionally taxpayers have the ability to manipulate legal terms. The chance arises when one legal term overlaps with another or there is a partial synonymy, and the activity is covered by the two terms at once, then the taxpayers have the legality to use the term that reduces their tax burden. However, it is difficult to find evidence of such an activity (Hanlon & Heitzman 2010). Furthermore, Desai and Dharmapala (2006) defined tax aggressiveness as a firm's effort to minimize their tax payments to the government. The challenge for the study is that there are no universally accepted definitions for tax aggressiveness. The terms include the undesirable tax planning activities from the viewpoint of the government (Knuutinen 2013).

### **Institutional Ownership**

Institutional ownership refers to the percentage of equity owned by the financial

institutions, corporate institutions, mutual funds, foreign financial institutions, foreign mutual funds and other institutions. Demiralp, Ranjan, Frederik and Venkat (2011) defined institutional ownership as shares held by registered institutions such as insurance firms, investment companies, pension funds, banks, and money managers. According to the literature there are several explanations why institutional stockholders monitor performance of company managers. First, as considerable investors, institutional stockholders are more likely to be active information collectors and financial moderators (Hadani, Goranova & Khan 2011). Related to minority shareholders, institutional investors prefer to apply right accounting practices to monitor how managers protect their interests (Shleifer & Vishny, 1997), therefore decreasing agency costs that maybe incurred (Hadani, Goranova & Khan, 2011). Secondly, institutional ownership can efficiently mitigate managers' opportunistic behaviors through external auditors (Rad, Salehi & Pour 2016). Third, potential institutional investors seek information about the good corporate governance firms and ignore entrenched management firms (Ruiz-Mallorqui & Santana-Martin, 2009). Lastly, institutional investors have more resources and ability to decline opportunistic earnings management, because they depend on experts to undertake securities evaluation scrutiny and corporate monitoring (Zhong, Chourou & Ni, 2017). Some studies support this opinion. They maintain that institutional stockholders reassure companies to improve disclosure and monitoring techniques as well as firm performance (Nagata & Nguyen, 2017).

### **Board Gender Diversity**

Studies on women on company boards have gained a lot of substance due to their monitoring role in governance system. For example, the United State Security and Exchange Commission authorized all registered companies to encourage diversity in the selection of board members (Upadhyaya & Puthenpyrackal, 2013). Similarly, Norway enforced gender quota on board of directors of quoted corporations (Rondoy, Oxelheim & Thomson, 2006). Apart from the female quotas, there is another medium in which the watchdogs have made efforts to raise the number of women directors. This includes conform to corporate governance principle (Thams, Bendell, & Terjesen, 2018), where firms are obligatory to disclose the organization of gender-diversity objectives and their progress, while providing reasons for non-compliance (Marquardt & Weidman, 2016). Equally, Sweden threatened to impose female quotas legislation if the firms do not increase the female directors' percentage voluntarily (Adams & Ferreira, 2009). Moreover, women are likely to show higher moral behavior than men (Arun, Almahrog, & Aribi, 2015; PuchetaMartínez, Bel-Oms, & Olcina-Sempere, 2018) "because of the more communal values into which women are socialized" (Sun et al., 2011). Consequently, women, in contrast to men, are more likely to be ethically sensitive and therefore display a more caring and empathetic nature (Bampton & Maclagan, 2009; Eweje & Brunton, 2010; Stedham,



Yamamura, & Beekun, 2007). This proposes women directors may be unlikely to tolerate policies depicting opportunistic stance (Ameen, Guffey& McMillan, 1996; Srinidhi, Gul, &Tsui, 2011; Zalata et al., 2018), which corroborates with the argument that women have different values at work and thereby affect decisions in organizations (Chusmir, Koberg, & Mills, 1989; Crow, Fok, Hartman, & Payne, 1991). As a result, women directors are not likely to be involved in practices that involve complicity with the manager to manipulate financial reports for personal advantage, as the empathetic nature of females may mean considering the interests of stockholders over self-centric interests, ultimately resulting in objective monitoring of financial information.

### **Institutional ownership and Tax aggressiveness**

Prior researches have documented inconsistent results concerning the effect of institutional ownership on tax aggressiveness. Iftekhar, Incheol and Qiang, (2016) studied the interaction between institutional ownership and tax aggressiveness using global Compustat index for the period of 2015. The fixed effect regression shows that institutional investor has negative significant influence on tax aggressiveness. Using data from Russell investment in America, Mozaffar, Suraj and Liang (2017) examined the influence of tax institutional shareholding on tax aggressiveness for the period 1979–2013. Regression approach was employed has technique of data analysis. The outcome shows that institutional ownership positively and significantly influenced tax aggressiveness.

Agustina, Tri, Agustinus and Wijaya (2018) examined the effect of corporate governance mechanisms on tax aggressiveness for the period of 2012 to 2016. Using data from listed Indonesian manufacturing companies and with the help of regression technique, the study found that institutional ownership negatively and significantly affects tax aggressiveness. Resti, Arie and Popi (2020) studied the relationship between institutional ownership and tax aggressiveness on Indonesian companies listed on the Indonesian Stock Exchange from 2016 to 2018. With the aid of regression, the study established negative significant relationship between institutional ownership and tax aggressiveness.

### **Board Gender Diversity and Tax aggressiveness**

The analysis of previous studies covered the relationship between board gender diversity and tax aggressiveness with mixed evidence. For instance, Oyeleke, Erin and Emeni (2016) studied the association between the board gender diversity and tax aggressiveness of banks listed on the Nigerian Stock Exchange (NSE) for the periods of 2012 to 2014. With the aid of panel regression, the result evidences a negative significant relationship amidst female directors and tax aggressiveness. Bill, Iftekhar and Qiang, (2016) studied the influence of board gender on corporate tax aggressiveness on listed Finland companies for the period of 2015. Panel data regression was adopted. The result indicates that female board members have negative significant influence on tax aggressiveness. Mohammadreza

and Mahdi (2018) examined the relationship between board gender and tax aggressiveness in the context of listed companies on the Tehran Stock Exchange for the duration of 2011 to 2015. Multivariate regression technique was used for data analysis. The result evidence that board gender negatively and significantly influences tax aggressiveness. In another study, Prasetyo (2019) examined the relationship among board gender diversity and tax aggressiveness of listed Indonesia companies for the period of 2012 to 2017. The effect of the regression displays that gender diversity does not have any influence on tax aggressiveness.

### **Theoretical Framework**

This study is positioned within an agency and resource dependency theoretic framework.

#### **Agency theory**

Jensen and Meckling (1976) picture the agency theory as the link relating the managers and the owners. The theory proposes that, where management is conflicted, they are most probable to make decisions that maximize their selfish interests and not those of the owners. In this case, a monitoring structure is put in place as a control instrument for the owners (Mironov, 2004). Proponents of this theory assume that companies consist of two contributors, the managers and owners, these two are self-centered and normally unwilling to sacrifice their interests for the interests of the others (Desai & Dharmapala, 2006). The agency theory is a relevant theory in this study because the institutional ownership and board gender diversity are company's monitoring mechanisms in reducing agency problems. However, with the divorce of owners from managers, tax aggressiveness activities could offer a platform for managers' opportunistic actions, therefore pursuing self-interests at the disadvantage of the owners. Furthermore, institutional ownership can affect tax aggressiveness through the effective monitoring technique. However, the higher the share of institutional investors in a company the effective management oversight will be. Thus, decreases managerial self-interest behavior to engage in tax aggressiveness practice. Moreover, institutional ownership may perhaps alleviate the agency conflicts between the conflicting parties in the principal-agent contract.

#### **Resource Dependency Theory**

The resource dependency theory basis is the fundamental hypothesis that companies supervise their environment by bringing on board resources needed to survive (Pfeffer & Salancik 1978). This theory provided a theoretical basis that the board gender diversity is a resource to the company (Hillman & Dalziel, 2003). Competent female directors bring in social capital resources and advice to management on strategic actions (Poppo & Zenger, 2002). Elmaghri, Elamer, & Zhang 2019 opine that women directors display experience and expertise which contribute to the board effectiveness in monitoring management, hence decrease tax aggressiveness practices.

## Methodology

The study adopted explanatory research design. The population comprised of all conglomerate companies listed on the Nigerian Stock Exchange as at 31 Dec 2019. There were six (6) listed conglomerate companies on the Nigeria stock exchange as at 31st December, 2019. These include Chellarams PLC, John Holt PLC, A.G Leventis (Nigeria) PLC, SCOA Nigeria PLC, Transnational Corporation of Nigeria PLC and UAC of Nigeria PLC. Census sampling method was employed to study all the companies. The choice of all the companies is informed by the need of the researcher to cover all the elements of the population such that possible generalization can easily be made. The source of data for this study is secondary and was collected from the issued annual reports of the sampled companies. The data collected was analyzed using multiple regression technique.

## Model Specification

$$TA_{it} = \beta_0 + \beta_1 IOWN_{it} + \beta_2 BGD_{it} + \beta_3 LEV_{it} + \beta_4 FS_{it} + \mu_{it}$$

Where:

TA= Tax aggressiveness

IOWN= Institutional ownership

BGD= Board Gender Diversity

LEV=leverage

FZ= Firm size

$\beta_1 - \beta_4$  = Regression coefficient

$\mu$  = Residual or error term

$i = 1 \dots N$  (cross sectional unit)  $t = 1 \dots T$  (time series unit)

## Variables Measurement

Variable Measurement	Proxies / definition
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### Dependent Variable

Tax Aggressiveness	Total tax expenses dividend by earnings before tax
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### Independent Variable

Institutional ownership	Share of institutional investors to total ordinary shares,
Board Gender Diversity	measured in terms of percentages of women in the board of the company

### Control Variable

Leverage	Measured as total debts to total assets
Firm Size	Measured by the natural logarithm of firm total Assets

## Data Analysis and Discussion of Findings

### Descriptive Statistic

Table 1 signifies the variable descriptive statistics of the data used in this study.

Table 1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ETR	60	.2415122	.1415664	.0057807	.5782568
IOWN	60	.253	.1132464	.04	.49
BGD	60	.1098454	.1010361	0	.2857143
LEV	60	.5912495	.1689418	.33456	.896332
FS	60	5.983678	1.238105	3.824646	8.370269

Source: STATA 15 output, 2020

Table 1 show that our measure of tax aggressiveness (ETR), effective tax rate has a mean value of 0.2415122 with standard deviation of 0.1415664, this signifies that the average effective tax rate is 24.2% which is below the threshold of legitimate company income tax rate of 30%. The effect is a signal that the companies under investigation are tax aggressive for the period of the study. The minimum and the maximum as shown by the tables are 0.0057807 (6%) and 0.5782568 (58%) respectively. Furthermore, Institutional ownership (IOWN) has a mean value of 0.253 and a standard deviation of 0.1132464. This shows that institutional ownerships deviate upward from it mean which can be interpreted as a good influence of institutional ownership in the survival of a firm and consequently on tax aggressiveness. Whereas the minimum and maximum values of IOWN are 0.04 and 0.49 respectively. From the table 1, we can also see that the percentage of women on the boards range from a minimum of 0.0000 to a maximum of 0.2857143 and a mean of 0.1098454. This indicates that the women depiction on the board of the sampled companies is very poor. This is because the average representation is only 11%. The minimum of 0 proves that some companies did not include women in their team of Board of Directors during this period of study; and for those that included women, the maximum representation is only 29%. The mean and standard deviation of the control variables leverage (LEV) and firm size are 0.5912495 (59%) 5.983678 (5.98%) and 0.1689418, (17%) 1.238105 (1.24) respectively. With the minimum and maximum value of 0.33456 (33%) 8.370269 (8.70%) 3.824646 (3.83%) respectively.

### Correlation matrix

The correlation matrix is used to establish the degree of association between independent variables and dependent variable.

Table 2: Correlation matrix

Variable	ETR	IOWN	BGD	LEV	FS
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ETR	1.0000				
IOWN	-0.1894	1.0000			
BGD	-0.0568	-0.1894	1.0000		
LEV	-0.0827	-0.0339	-0.0006	1.0000	
FS	0.0448	0.2501	-0.1903	0.0490	1.0000

Source: STATA 15 output, 2020

The results in table 2 show the Pearson correlation coefficients of the variables of institutional ownership, board gender diversity and the control variables leverage and firm size and tax aggressiveness (measured by effective tax rate ) of the listed conglomerate companies in Nigeria. The table presents a significant negative association between tax aggressiveness (ETR) and institutional ownership, board gender diversity and the control variable leverage from the correlation coefficient of -0.1894, -0.0568,-0.0827, while firm size shows a positive relationship with tax aggressiveness from the coefficient of 0.0448.

### Result of Robustness Tests

Robustness tests are conducted to test the validity of the statistical inference of a regression model. The robustness tests conducted for this study include multicollinearity test, heteroscedasticity test., Hausman test and Breusch and Pagan Lagrangian Multiplier Test.

#### Table :3 Heteroscedasticity Test

Chi2(1)	0.06	Prob >Chi2	0.8101
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#### Table :4 Multicollinearity Test

Variable	VIF	1/VIF
IOWN	1.31	0.766
BGD	1.27	0.789
LEV	1.01	0.994
FZ	1.18	0.844

#### Table 5 Hausman test and Breusch and Pagan Lagrangian Multiplier Test.

Hausman Test	$\text{Chi2}(2) = (b-B)'[(V_b - V_B)^{-1}](b-B)$		
	= 1.42		
	Prob>chi2 =		0.8402
Pagan Lagrangian Multiplier Test	chibar2(01) =		
	0.01		
	Prob > chibar2 =		0.1307

The results from table 3 show an absence of Heteroskedasticity in the model as indicated by the Breuch Pagan/Cook-Weisberg test for heteroskedasticity Chi2 of 0.06 with p-value of 0.8101. The table also indicates the absence of the perfect multicollinearity among the explanatory variables, as shown by the mean VIF of 1.19. The Breusch and Pagan Lagrangian Multiplier Test for Random Effects indicates the absence of significant statistical variance in the panel, from the Chi2 of 0.01 with p-value of 0.1307, implying that pooled OLS regression model is suitable with respect to the model of the study.

**Table 6: Regression result**

	Coef.	Std. Err.	T	Probability
IOWN	-.0261065	.0094303	-2.77	0.008
BGD	-.0229469	.0050424	-4.55	0.000
LEV	-.0790548	.1095972	-0.72	0.474
FZ	.2836337	.1219137	2.33	0.024
R-squared	=			
0.4436				
F(4, 55)	=			
10.96				0.0000

Source: STATA 15 output, 2020

The analysis of the table above began with the interpretation of the combined effect of both the explanatory variables and the explained variable. The R2 which is the multiple coefficient of determination gives percentage or proportion of total variation in the dependent variable measured by effective tax rate of listed conglomerate firms in Nigeria which is explained by the independent variables and control variables jointly. Hence, the result of R2 signifies that 0.4436 (44%) of total change in tax aggressiveness of listed conglomerate firms in Nigeria is caused by institutional ownership, board gender diversity leverage and firm size of listed conglomerate companies in Nigeria. The table also shows that the model is fitted as evident by the F-Statistic of 10.96 which is significant at 1% level of significance (as indicated by the P-value of 0.0000).

The results from table7 show that institutional ownership (IOWN) has a statistically significant negative effect on the tax aggressiveness of the listed conglomerates companies in Nigeria, as evidenced from the coefficient of -.0261065 which is significant at 5% confidence level (p-value of 0.008). This implies that, as institutional investors' increases, tax aggressiveness decreases. The result provides justification for the rejection of the null hypothesis, which states that institutional ownership has no significant effect on tax aggressiveness of listed conglomerates companies in Nigeria. The finding is in line with those of Iftekhar, Incheol and Qiang, (2016); Agustina, Tri, Agustinus and Wijaya (2018); Resti, Arie and Popi (2020) But the finding contradicts those of Mozaffar, Suraj and Liang (2017) who did find evidence of a significant positive relation between institutional ownership and tax aggressiveness.

The regression results further revealed that board gender diversity has negative and significant effect on tax aggressiveness of listed conglomerate firms in Nigeria. The beta coefficient of  $-.0229469$  indicates that tax aggressiveness will reduce by 2% with an increase of at least one-woman director. The finding serves as a base for the rejection of the null hypothesis, which states that board gender diversity has no significant effect on tax aggressiveness of listed conglomerates companies in Nigeria. Interestingly, this finding is similar to the findings of Oyeleke, Erin and Emeni (2016); Bill, Iftekhar and Qiang, (2016); Mohammadreza and Mahdi (2018). The result is contrary those of Onyali and Okafor, (2018).

The results in respect of leverage reveal that, the beta coefficient  $-.0790548$  and the probability of  $0.474$  which is insignificant at 5% level of significance. This signifies that, leverage has negative insignificant relationship with the tax aggressiveness of listed conglomerate companies in Nigeria. On the other hand, firm size shows positive significant effect on tax aggressiveness of listed conglomerates companies in Nigeria as evidence from the beta coefficient is  $.2836337$  and which is statistically significant at 5% ( $0.024$ ). This signifies that, larger firms engage in tax aggressiveness practice.

### **Conclusion and Recommendations**

This study examined the effect of institutional ownership and board gender diversity on tax aggressiveness of listed conglomerate companies in Nigeria. The study reveals that institutional ownership and board gender diversity has a negative significant effect on tax aggressiveness of listed conglomerates companies in Nigeria.

The study specifically concludes that companies with institutional investors are less tax aggressive. The study further concludes that more women involvement in the affairs of the board decreases the rate of tax aggressiveness.

Based on the findings, the study recommended that the supervisory body should place greater consideration on such exogenous monitoring mechanism to decrease tax avoidance practices. The study also suggested that the regulatory bodies such as Security and Exchange of Nigeria should set standards for the inclusion of reasonable number of women on the board monitoring committees, because gender diversity in the board decreases tax aggressiveness.

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# LONG TERM FISCAL SUSTAINABILITY AND SOVEREIGN EXTERNAL DEBT IN NIGERIA: AN EMPIRICAL INVESTIGATION

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## ABSTRACT

*The Nigeria's external debt stock has suddenly rose from \$3.54 billion in 2006 (after the debt cancellation deal of 2005) to \$25.27 billion as at 2018, approaching \$35.9 billion pre-cancellation stock of 2004. The consequence is increasing Debt Servicing Ratio that has quickly grew from 9.16% in 2007 to 64.06% in 2017, though, it declined tepidly to 51.64% in 2018. This study examines the long run fiscal sustainability and sovereign debt in Nigeria. Using time series data for the period 1970–2018, the study adopts Zivot-Andrews and Bai-Perron tests to examine the time series properties of the variables in the presence of structural breaks. The study further employs Dynamic Ordinary Least Square (DOLS) to estimate fiscal solvency equation to determine the long-term public debt sustainability amidst primary fiscal balance in Nigeria. The Zivot-Andrews and Bai-Perron tests indicate the presence of unit roots in public debt to GDP and primary fiscal balance, implying that expansion in sovereign debt is not sustainable in the long-run. The DOLS estimate reveals that a percentage point increase in government public debt is associated with 6 percent increase in fiscal deficit in the long run. This finding clearly stressed the looming danger of a prolonged fiscal irresponsibility from unsustainable public debt accumulation.*

**Keywords:** Dynamic OLS, Fiscal deficit, Sovereign external debt, fiscal sustainability, primary surplus.

## 1. Introduction

The need to continuously evaluate the fiscal health and exposure of a nation's public debt profile is critical to its economic growth, stability, and development (Ajayi, 1991; Obadan, 2010 & African Development Bank, 2020). The persistent and unsustainable rise in sovereign debt in Nigeria has revived curiosity on the consequences of mounting debt on growth and development trajectory. Escalating and uncontrolled sovereign debt can be detrimental and counterproductive, particularly, to developing economies, thereby exposing them to exchange rate vagaries, erratic foreign capital flows, crowding out of private investment, heightened susceptibility to domestic and external shocks and constraining fiscal space (Zampolli, 2011; Ogunyemi, 2011; Donatus & Mordecai, 2016). The pertinent questions therefore are: when does accretion of sovereign debt becomes excessive and unsustainable? What is the long-term implication of mounting sovereign external debt on fiscal stance?

In 2004, Nigeria was overwhelmed by unprecedented and unsustainable external debt stock of \$35.9billion, out of which 86 percent was indebted to Paris Club. Consequently, Nigeria intensified effort for debt relief, and was granted in 2005 (Obadan, 2010, Okonjo-Iweala, 2012). By 2006, total external debt stock was reduced to a manageable level of \$3.5billion, and the Paris Club debt was set to zero. Surprisingly, the country resumed external debt borrowing in 2008. Now, with heavy dose of non-concessional borrowing from commercial creditors. This gradually led to significant structural shift in external debt composition. By 2018, a new picture has emerged. Though, Paris Club debt was permanently flattened, about 56 percent of total public debt is currently owed to non-concessional commercial creditors. Statistics shows \$5.78billion was paid as total external debt service in 2018. Between 2007 and 2018, the country paid \$6.18billion and \$49.31 billion for public external debt and domestic debt services respectively. Public debt service-to-revenue was at a staggering level of 64% and 51.6% in 2017 and 2018, respectively, three times more than the recommended threshold (World Bank, 2020; Musa, 2020).

The conventional debt assessment tools indicate that most of the indices are within acceptable thresholds based on World Bank-IMF DSF and comparative averages. For instance, in 2018, Nigeria's debt-to GDP ratio was 19.04 percent while Africa median climbed to over 56 percent; fiscal deficit-to-GDP for Nigeria was 2.84 percent compared to 5.9 percent average for Africa countries (African Development Bank, 2020). The analysis of the World Bank IMF Debt Sustainability Framework (DSF) shows that out of five benchmarks, Nigeria has violated only one indicator (DMO, 2017, IMF, 2019). On this basis, Okonjo-Iweala (2012) remarked that the World Bank -IMF DSF are covertly simplistic because it underestimates the magnitude and severity of the potential debt crises of the developing countries. Despite effort to correct this defect, the deficiency in the framework for underreporting a looming crisis persists.

Notwithstanding this attractive outlook of public debt indicators using World-IMF framework, one is troubled looking at the macroeconomic implication of some complementary facts and indicator. First, the total external debt has risen above the alarming level of 2004 before debt relief. Second, the external debt servicing costs is now more than two-thirds of retained government revenue. Third, the rising profile of non-concessionary financing is a course for concern.

There is a vast body of literature that explore the implication of debt stock on economic growth (see Onah,1994; Cecchetti, Mohanty, & Zampolli; 2011, & Ogunyemi, 2011). These studies focus on the impact of public debt on economic growth. Other strands of studies examine the effect of either domestic debt or external debt on growth (see Donatus & Mordecai, 2016; Ozurumba & Kanu , 2016). A few studies that address the issue of fiscal sustainability employ threshold framework or cointegration in developing countries (Amankwah, Ofori-Abebrese, & Kamasa, 2018), and fewer studies explored Nigeria case

(Ajayi, 1991; Chete, 2005; Musa (2020)). None of these studies examine the long-term implication of sovereign debt sustainability using Nigeria data. Nevertheless, the broad objective of fiscal sustainability is not to attain a specific level of deficit or financial thresholds, per se, but a fiscal position that is sustainable considering policy goals and resource availability using empirical data. This study is an attempt to fill this vacuum.

This paper address two fundamental questions. First, it explores whether Nigeria's debt is approaching or has reached the unsustainable level using World Bank-IMF Debt Sustainability Framework. Second, it provides empirical evidence on the fiscal sustainability of Nigeria's sovereign debt using Fiscal Policy Response Function. The descriptive result indicate that Nigeria violated one (out of five) and the most critical of the World Bank-IMF DSF indices, public debt service to government revenue. This placed Nigeria as moderate risk country. In addition, the stationarity test revealed that Nigeria's external debt is not sustainable as indicated by primary fiscal balance and debt-to GDP ratio having unit roots. This result is supported by DOLS parameter estimates which indicate that a a percentage point increase in external debt-to-GDP lead to increase in fiscal deficit by 6 to 8 percentage points in the long-run.

The rest of this paper is structured as follows. Section 2 present the literature review. Section 3 discusses the data, model specifications and estimation techniques. Section 4 presents the empirical result and discussion of findings. Section 5 concludes the paper.

## **2. Literature Review**

### **2.1 Conceptual issues**

*Sovereign debt* comprises domestic and external debt. External debt is the fraction of the total debt that the government and its entities owe to lenders of foreign bodies. Total external debt can be classified into private nonguaranteed external debt and public and publicly guaranteed external debt. Figure 1 gives pictorial classification based on World Bank's World Development Indicators (2020).

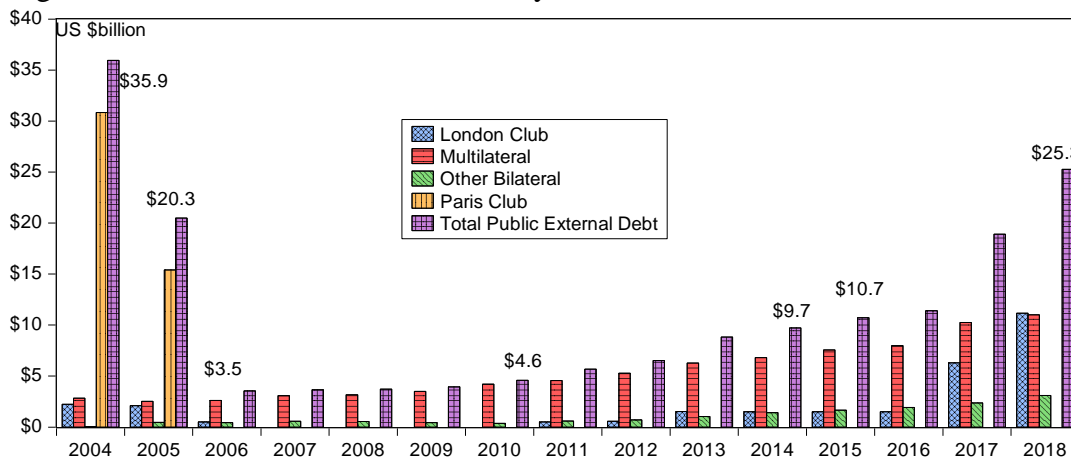
*Fiscal sustainability* is the ability of government to finance its budget without generating explosive increase in public debt over time. Odetayo and Adeyemi (2017) explained that fiscal stance is sustainable when the stock of outstanding public debt is offset by expected future primary surpluses. Thus, fiscal policy is sustainable when debt-GDP ratio is stationary with the tendency that short-term deviation will fizzle out in the long term.

A pragmatic approach in assessing fiscal stance and sovereign debt sustainability is to evaluate the solvency and liquidity ratios and compare outcome with World Bank - IMF benchmarks. The most recent guide provided jointly by World Bank-IMF's (2019) recommends five thresholds: two solvency and two liquidity measures, in addition to fiscal condition that the PV of total public debt in percent of GDP should not be more than 55 percent. The solvency measures comprise the PV of External Debt-to-GDP ratio of 40 percent; and the PV of External Debt-to-Exports ratio of 180 percent. The liquidity

thresholds stipulate that the External Debt Service-to-export ratio of 15 percent and the External Debt Service-to-revenue ratio 18 percent. These benchmarks are for countries in medium debt carrying capacity category that Nigeria has been classified (DMO, 2017, IMF, 2019).

It is based on these assessments that countries are grouped into four categories: (1) Low risk: when the debt burden indicators are within the acceptable thresholds for both baseline and stress tests scenarios. (2) Moderate risk: when debt burdens are within the acceptable threshold but failed stress test as a result of macroeconomic shocks such as abrupt fall in oil prices. (3) High risk: when some of the debt burden indicators are flouted under the baseline scenarios but still maintain regular loan repayment. (4) Debt distress: when country began to default in servicing or repaying its debt, evidenced by arrears, plea for cancellation, restructuring or outright repudiation (IMF, 2019).

Figure 1: Public external debt structure by creditors



Sources: author's computation from DMO's data

Furthermore, the composition of Nigeria's public external debt has evolved to be highly non-concessional over the years. Before debt relief deal of 2005, about \$30.85 billion representing 86 percent of the total external debt were owed to Paris Club as of December 2004. The Paris club debt was zeroized by the end of 2006: about 60 percent (\$18billion) was cancelled and the Nigeria paid \$12.4 billion to the Club in the form of arrears and debt buy-back. However, by 2008, Nigeria began external borrowing without recourse to this ordeal.

A careful comparison of the compositions of the debt stocks between 2004 (pre-debt forgiveness period) and 2018 shows a huge structural shift towards non-concessional credits. The sharp decline in borrowing from multilateral institutions and official Paris Club creditors was replaced with rapid increase in long-term finance from international capital

market(bondholder and commercial creditor) and non-Paris club government such as China and India(ADB,2020). The major concern is that the evolving composition have raised the debt risk profile and debt servicing obligation which also exacerbate the debt vulnerability of the country (Calderon & Zeufack, 2020).

## **2.2 Literature review**

There is a budding body of literature that focuses on the sustainability of debt and attempt to identify the levels of debt at which default arises, see Bohn (1998), Bohn 2005), Cordella et. al. (2005) and Kraay and Nehru (2004). Cordella et. al. (2005) examine how debt-growth relationship varies with indebtedness levels and country characteristics in a panel of developing countries. They found that existing quality of institution and government policy matter in assessing the impact of debt on growth and determining point of distress. Their study asserts that country with good policies and institutions experience debt overhang when debt rises above 15-30 percent of GDP, but the marginal effect of debt on growth becomes irrelevant above 70-80 percent. They further observed that countries with poor policies and institutions, experience lower threshold of overhang and irrelevance.

Bohn (2005) examined the presence of unit roots in the United States debt-GDP and deficit ratio and concluded that the absence of unit roots is a sufficient evidence of fiscal sustainability or solvency. The author added that a robust positive response of primary surpluses to variations in initial debt further support his result. Using a different approach, Kraay & Nehru (2004) empirically investigate the determinants of debt distress using probit regression for low and midde-income countries between 1970-2001. For the purpose of their study, debt distress is defined as period in which countries resort to exceptional finance in any of three forms: (i) significant arrears on external debt, (ii) Paris Club rescheduling, and (iii) nonconcessional IMF lending. They found that three factors explain the incidence of debt distress: the debt burden, the quality of policies and institutions, and shocks.

Antelo and Peon (2014) investigate the implication of various fiscal consolidation on macroeconomic performance among GIPSI countries under varying macroeconomic indicators and scenarios. The target macroeconomic indicators include inflation, economic growth, fiscal and monetary policies indices. Their study revealed that correcting fiscal imbalances and reducing public debt is the only panacea to avoid long-term fiscal austerity in these countries.

Cecchetti, Mohanty, & Zampolli (2011) used 18 OECD countries' data from 1980 to 2010 to examine when does debt go from good to bad? The concluded that at moderate level, debt improves growth and welfare, but high debt is detrimental to growth. Their study suggests that 85 percent (of GDP) threshold for government debt beyond which debt retards growth and 90 percent of GDP threshold for corporate debt. Adamu & Rasiah (2016) explored the dynamic effects of external debt on economic growth in Nigeria using a time series data that

span 1970 to 2013. The authors construct external debt sustainability index using principal component analysis to capture the effects of external debt indicators on economic growth. They employed ARDL bound test to examine long-run cointegration relationship between the variables. The study conclude that external debt has negative impact on growth in the long run. Surprisingly, the authors found that external debt sustainability index shows a positive effect of on growth in the long and short run.

Ferrarini (2008) argued that the World Bank -IMF debt sustainability framework (DSF) was designed to guide resources allocation and has failed to account for the particularity of economic vulnerability of low-income countries. The authors support an alternative approach that recognizes sources of vulnerability, recompense for exogenous shocks and trend factors. Okonjo-Iweala(2012) stressed this view that the World Bank -IMF DSF is unnecessarily simplistic because it diminishes the severity of the potential debt crises of the developing countries.

Sabiu (2018) examined the condition for fiscal sustainability in Nigeria using data frame between 1961 to 2016. The author found weak fiscal sustainability and cautioned that government need to synchronize tax and expenditure with the realistic public debt stock. Adeosun and Adedokun (2019) investigate the existence of equilibrium condition necessary and sufficient for achieving debt sustainability in Nigeria. The authors found negative response between government primary balances and changes in public debt in the long run in Nigeria and adduced that government fiscal behaviour does not corroborate the intertemporal budget constraints, which emanate from inability of fiscal authority to generate enough surpluses in response to public debt growth. Hence, the sufficient condition for sustainable fiscal debt in Nigeria is not attainable given the current public debt growth path.

### 2.3 Analytical Frameworks

Chalk and Hemming (2000) provide a detailed framework of assessing fiscal sustainability. The starting point requires that government satisfy both static and intertemporal budget constraint, given a closed economy. Given the static budget constraint as:

$$DS_{t+1} = R_t DS_t + FB_t \quad (1)$$

Where  $DS_t$  is government debt stock at the beginning of period  $t$ ,  $R_t = 1 + r$  is the discount factor applied between period  $t$  and  $t+1$ ,  $FB_t$  is the primary fiscal balance (revenue minus expenditure excluding interest payment). The intertemporal budget constraint is obtained by solving equation (1) forward.

This connotes that the present value of future primary surpluses must exceed the present value of future fiscal deficits by such a magnitude that will cover the difference between initial debt stock and the present value of the terminal debt stock. The assumption is that government cannot continue to borrow enough at all time to rollover its debt *ad infinitum*, while some individual holds government debt instrument in perpetuity. This is tantamount to Ponzi game, in which no rational individual will be interested to partake, at least, at all

time. Therefore, a no-Ponzi game condition is plausibly identical with sustainability, with the imposition of restriction that  $\lim_{T \rightarrow \infty} R(t, t+T)^{-1} DS_{t+T+1} \leq 0$ . Consequently, sustainable fiscal policy requires that the present value of budget constraint (PVBC) holds:

$$DS_t = -\sum_{j=0}^{\infty} R(t, t+1)^{-1} FB_{1+j}. \quad (2)$$

The fiscal sustainability simply requires the matching of excess of future primary surplus over primary deficits in present value terms. The transversality condition requires that growth rate of debt should be less than interest rate. If not, debt can grow faster than the economy.

### **Fiscal Sustainability and External Debt Liability**

The analysis so far is simplified because of the exclusion of external liability component. In an open economy, the equation for net foreign liabilities is given by:

$$e_t FL_{t+1} = R^* e_t FL_t - TB_t \quad (3)$$

Where  $e_t$  is the inverse of the real exchange rate,  $FL_t$  is the foreign liability, and  $R^* = 1 + r_t^*$  is the global interest factor. A positive trade balance improves net external indebtedness, and a higher interest rate deteriorates the country's indebtedness position. Similarly, solving equation (4) forward yield the country's intertemporal external constraints.

The same way that government cannot rollover its fiscal debt in perpetuity, a country cannot continue to service its external debt with new borrowing from abroad forever. Again, the possibility of this happening is tantamount to a Ponzi game.

$$FL_t = \sum_{j=0}^{\infty} R^*(t, t+1)^{-1} TB_{1+j} \quad (4)$$

Equation 4 stipulate that net foreign liability (or external debt) is sustainable to the extent that the future trade surplus (export minus import), in present value terms, is large enough to offset the net foreign liabilities. What is the empirical testability of this proposition? The cointegration properties of exports, import and interest payment can be evaluated. For instance, Castillo (2016) apply this technique in Brazil.

## **3. Methodology**

This study employs both descriptive and inferential analyses. The World Bank IMF Debt Sustainability Assessment framework embodies the descriptive analysis while inferential analysis utilizes econometrics approach for data estimation of the Fiscal Policy Response Function and growth model. This study employs time series data for the period 1970 -2018. All data are obtained from World Bank's World Development Indicators, Debt Management Office, and Central Bank of Nigeria.

### **3.1 Model Specification and Variables Descriptions**

The empirical model tests fiscal sustainability using Fiscal Policy Reaction Function (FPRF) propounded by Hamilton and Flavin (1986) and popularized by Bohn (1998, 2005) and further expounded by Chalk & Hemming (2000). The novel of this study is the



application Dynamic Ordinary Least Square to Nigeria data, to test debt sustainability hypothesis.

The purpose of this model is to detect cointegrating relationship between primary fiscal balance (*Primfiscal*) and sovereign debt stock (*sovdebt<sub>t</sub>*). The FPRF is specified as follows:

$$Primfiscal_t = \gamma Primfiscal_{t-1} + \alpha Sovdebt_t + \beta X_t + \epsilon_t, \quad (5)$$

Equation (5) is the primary fiscal policy function model. Where *Primfiscal<sub>t</sub>* is the dependent variable, the primary fiscal balance; *Sovdebt<sub>t</sub>* is the sovereign debt stock, *Primfiscal<sub>t-1</sub>* is the lagged dependent variable, to account for the persistence in the primary fiscal balance. and *X<sub>t</sub>* is a vector of exogenous variables that determines the primary fiscal balance, and  $\epsilon_t$  is the stochastic term.

The cointegrating relationship among these variables is a sufficient condition for Intertemporal Budget Constraint, and an indication of no-Ponzi game, which symbolize debt sustainability (Bohn, 2005). Therefore, the most important parameter in testing for fiscal sustainability is  $\alpha$ , it measures the reaction of government (in terms of fiscal policies) to an increase in the sovereign debt ratio. For fiscal solvency condition to hold, the coefficient should be positive and significant.

Zeng (2014) provides the vector *X<sub>t</sub>* explanatory variables that have been shown to be consistently relevant in the primary fiscal balance equation. These explanatory variables include real GDP Growth, public debt stock as a share of GDP, private savings share of GDP, inflation, government revenue as share of GDP. As a departure from Zeng's study, trade balance share of GDP, and degree of openness and external shock has been added to the regressors. *External Shocks (EShocks)* is computed as growth rate of international oil price (oil volatility) multiplied by the degree of openness. External shocks may emanate from unfavourable terms of trade, volume of exports, interest rate vagaries, international commodity prices and production disruptions (McCarthy, Neary, Zanalda, 1994; Woo, 2003).

### 3.2 Estimation technique

#### *Unit Root Tests with Structural Breaks*

To avoid spurious estimate, I examine the stationarity properties of the series using Zivot-Andrews (1992) unit root test and Bai & Perron(2003) for structural break. The Zivot-Andrews test is superior to other previous unit root test because it accounts for structural changes or breaks in the series. The null hypothesis of this test is that  $H_0: \theta = 0$ , while the alternate is that  $H: \theta < 0$ , Under this method, three models are estimated for the unit root test: a model with a break in intercept; a model with break in trend and a model break in intercept and trend (Zivot & Andrews, 1992).

The approach is to first examine if at least one break exists, and whether the series is stationary at level or first difference. The Zivot-Andrew test can only detect a one-off

discontinuity in the series. This is augmented with Bai & Perron (2003) for cases of multiple non-smooth shift which indicate serial structural break or instability (Perron, 2018).

### ***Cointegration Test***

Stock and Watson (1993) Dynamic OLS is used to test for long-run cointegration of the variables. This approach corrects for simultaneity bias and is asymptotically robust in small samples. The risk of simultaneity bias and small-sample bias among the exogenous variable is resolved by the inclusion of lagged and lead values of the change in the regressors.

$$PFB_t = B'X_t + \sum_{j=-1}^{j=1} \alpha_j \Delta SDS_{t-1} + \sum_{j=-1}^{j=1} \lambda_j \Delta X_{t-1} + \epsilon_t.$$

PFB and SDS are primary fiscal balance and sovereign debt stock, while  $X_t$  are vectors of regressors. This estimator is obtained by augmenting the static cointegrating regression with leads and lags of the first differences of the 1(1) regressors.

## **4. Result and Discussion**

### **4.1 Descriptive Analysis**

**Table 4.1:** Descriptive statistics

Variables	Mean	Median	Stand. dev.	Range	Minimum	Maximum
Fiscal balance	-2.0	-2.0	2.9	18.6	-8.8	9.8
External debt	24.3	9.9	25.0	93.9	2.5	96.4
public external debt	24.8	6.4	28.1	102.4	1.1	103.5
Trade openness	33.3	34.5	12.2	44.1	9.1	53.3
Savings	8.7	8.3	3.5	19.9	3.3	23.2
Inflation	18.4	12.9	15.8	69.4	3.5	72.8
Government revenue	15.0	13.4	6.7	26.2	5.5	31.7
Government spending	10.9	8.9	6.0	24.7	5.1	29.8
Broad money	16.1	13.4	5.6	19.6	9.1	28.6
FDI	1.7	1.6	1.2	6.9	-1.2	5.8
GDP per capita†	272.1	269.2	60.5	186.3	199.0	385.3
Trade balance	5.0	5.4	6.2	28.8	-5.7	23.1
Real GDP growth	4.0	4.6	6.4	38.1	-13.1	25.0

Variables are expressed in percentages of GDP at market prices unless otherwise stated. †The figure is in thousands of naira.

Table 4.1 shows the descriptive statistics used in the empirical estimation of the Fiscal Policy Response function and the welfare model in Table 4.3 and 4.4 respectively. The highest fiscal balance to GDP was 9.8 and the lowest is -8.8, with a mean and median value of -2. The lowest external debt/GDP was 1.1 and the highest was 103.5, given a wide range of 102.4 percent.

Table 4.2 presents the decades averages of selected external debt burden indicators analogous to World Bank-IMF DSA frameworks. As shown in the Table 4.1, in 1970s the debt burden indicators were within the acceptable thresholds. Suddenly, all the indicators were disregarded in 1980s and 1990. These periods coincide with huge windfall from oil. The country became deluded and began spending spree, which lead to serious debt problem. Normalcy however returned in 2000s following Paris club debt relief of 2005 except public debt service-to-revenue that was marginally violated. In 2010s, though the country still perceived to maintain acceptable thresholds, the public debt service-to-revenue further deteriorate from 19.83 percent to 28.4 percent. This ratio has worsened to 51.64 percent in 2018. The implies that Nigeria uses more than half of its generated revenue to service public debt.

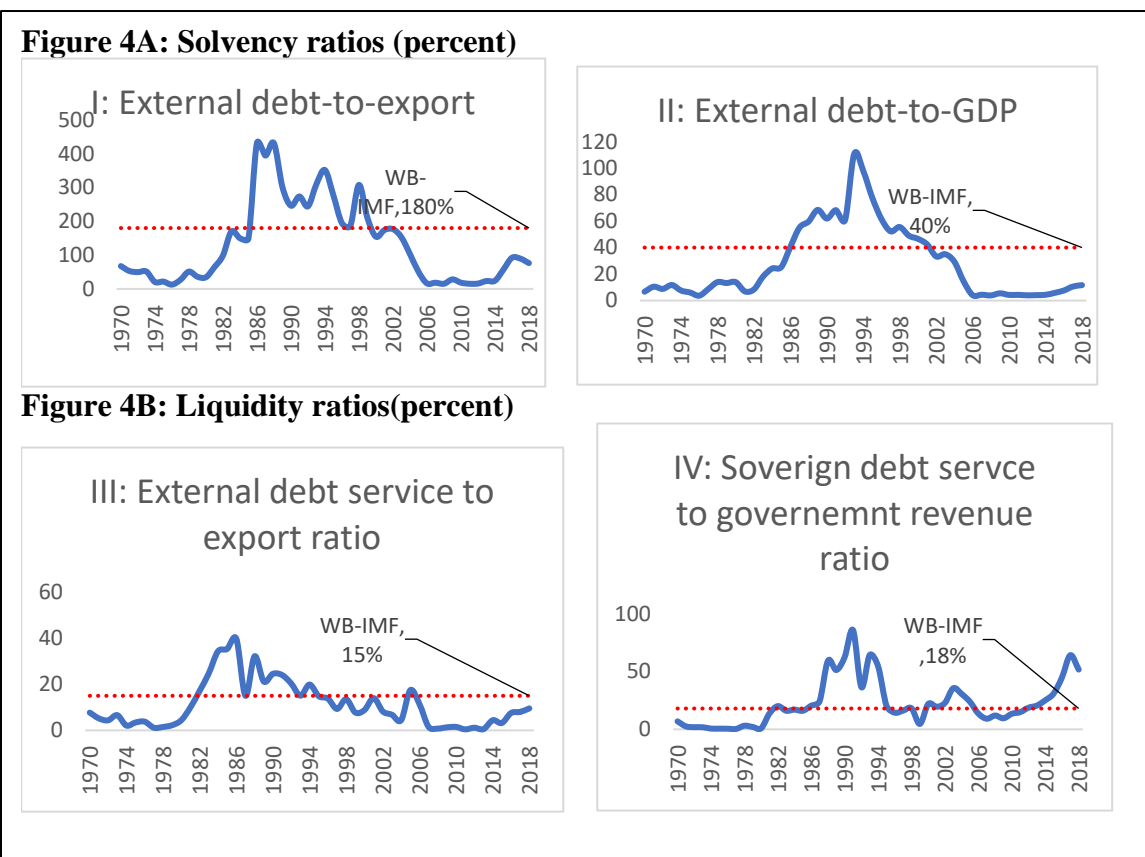
**Table 4.2 Selected Debt sustainability indicators for decades average (1970- 2018) & 2004 vs 2018**

Indicators (percent)	WB- IMF limits	1970s	1980s	1990s	2000s	2010s	2004	2018
External debt-to-GDP	40	9.09	32.06	69.5	21.91	6.29	29.24	11.64
External debt-to-export	180	38.99	222.25	260.04	89.03	41.18	103.28	76.22
External Debt service as percent of export	15	3.81	23.41	16.3	7.48	3.64	4.43	9.53
Public Debt service as percent of revenue	18	2.24	23.91	37.72	19.83	28.4	30.51	51.64
Total public debt as percent of GDP	55	17.64	54.4	100.55	27.74	14.04	34.49	19.99

Based on World Bank- IMF DSA framework, this placed Nigeria as high risk. Some of the debt burden indicators are flouted under the baseline scenarios even though the country maintains regular loan repayment. A cursory review of the 2004 and 2018 position revealed that the country is heading towards pre debt forgiveness period.

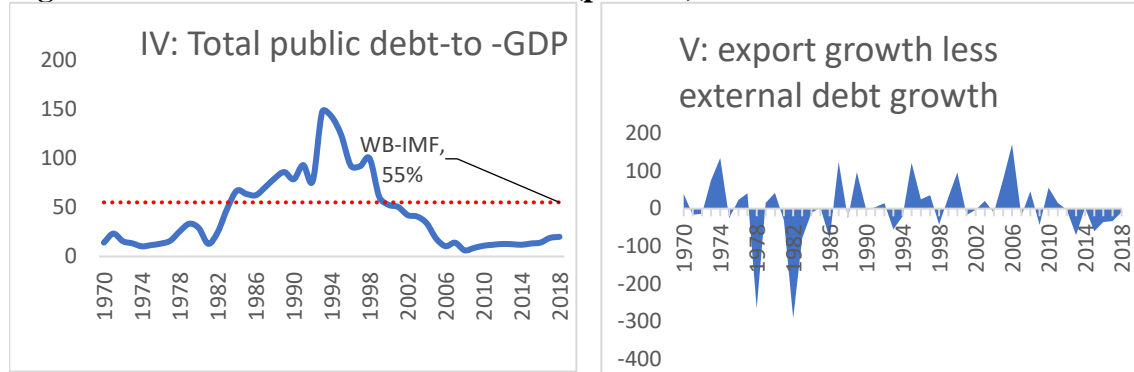
Figure 4 presents graphical illustration of the debt burden indicators and demarcation of critical levels based on World Bank -IMF Debt Sustainability Framework thresholds. Panel 4B, the liquidity ratios, the public debt service-to- government revenue shows that the threshold violated while the external-debt-service to export is fast approaching the benchmarks. The unsustainable debt indicators in figure 4C reveals similar trend. The country's debt profile is increasingly unsustainable looking at the difference between export growth and external debt growth. The external debt exceeded export beginning from 2012 till date while total public debt to GDP is also rising.

**Figure 4: Debt sustainability assessment based on World Bank-IMF DSA framework (1970-2018)**



Sources: Author's computation.

**Figure 4C: Unsustainable debt indicators(percent)**



## 4.2 Inferential Analysis

The inferential statistics is based on the model specification and estimation techniques outlined in the previous section. To estimate this models, it is required to examine the time-series properties of the data. Table 4.3 provides the results of Zivot-Andrews and Bai-Perron unit root test with structural breaks. The Zivot-Andrews test indicate that total external debt to GDP ratio and public external debt to GDP have unit roots.

This implies that Nigeria's external debt is not sustainable in Bohn's sense. This is contrary to Bohn's (1998) and Bohn (2005) findings that suggest that the U.S. fiscal policy is sustainable in spite of prolonged periods of primary deficits. However, the result of this study corroborates the evidence of Beqiraj, Fedeli & Forte (2018) that found fiscal unsustainability of 21 OECD countries debt using the same technique and Panel Vector Autoregressive model. The Bai-Perron test expectedly identified year 2005 and 1986 break points for debt-to GDP ratio. This information is incorporated in the estimation of Fiscal Policy Response Function equation with structural break (see Table 4.4).

**Table 4.3: Unit Root Test and Structural break test**

Variables	Zivot-Andrews single break		Bai-Perron multiple breaks test	
	t-statistics	break dates	F-statistics	break dates
Primary fiscal balance	-8.36*	1995	3.407†	Nil
External debt	-8.95*	1986	119.76 <sup>↑↑</sup>	2005, 1986
Public external debt	-7.5*	1986	119.76 <sup>↑↑</sup>	2005, 1986
Trade openness‡	-8.55*	1989	34.97 <sup>↑↑</sup>	1989, 1981
Savings‡	-9.26*	2007	53.87 <sup>↑</sup>	2007
Inflation	-6.04*	1996	42.61 <sup>↑↑</sup>	1997, 1988
Govt. revenue‡	-7.92*	1985	6.70†	Nil
Govet. spending	-7.51*	1981	53.19 <sup>↑</sup>	1981
Broad money	-6.29*	1981	10.13†	2007, 1981
FDI	-5.56**	1989	10.13 <sup>↑↑</sup>	1989, 1998
log Per capita income‡	-6.89*	1984	76.86 <sup>↑</sup>	2007, 1982
Trade balance	-6.31*	2011	13.74 <sup>↑</sup>	1987
Real GDP Growth‡	-6.36*	1985	5.48†	Nil

Note: ZA test level of significance are indicated with asteriks: \* 1 percent, \*\* 5 percent, \*\*\* 10 percent.

BA test indicate number of identified breaks as follows: † no break, <sup>↑</sup> one break, <sup>↑↑</sup> two breaks. ‡ indicates variables that are integrated at order one, I(1). All the variables are expressed in percentages except otherwise stated.

The baseline regression in Table 4.4 shows that one percentage point increase in government external debt is associated with 8 percent contraction in primary fiscal balance (i.e. increase in fiscal deficit) in the long-run, the coefficients is statistically significant at 1% level. When structural break is accounted for, in the second equation, the coefficient of public external debt, unexpectedly remains the same, but the total external debt became statistically insignificant. The coefficient of public external debt in DOLS model is -0.06, and statistically significant at 1 percent level. This suggest that one percentage increase in public debt is associated with 6 percent increase in fiscal deficit in the long run, coefficient of public external debt is -0.06. negative and statistically significant, a one percentage change in public external debt is associated with 6 percent increase fiscal deficit.

**Table 4.4: Estimates of Fiscal Response Policy Function: Fiscal sustainability**

Dependent variable is primary fiscal balance (percent of GDP)

Variables	Baseline OLS		OLS with struct. break		Dynamic OLS	
	<i>Coeff.</i>	<i>t-stat.</i>	<i>Coeff.</i>	<i>t-stat.</i>	<i>Coeff.</i>	<i>t-stat.</i>
C	25.36	1.37	2.66	0.06	62.96	3.04
prim. fisc. Bal(-1)	0.05	0.41	0.09	0.78		
External debt	0.04	0.67	0.09	0.76	-0.03*	2.82
Soverign debt	-0.08*	-4.77	-0.08*	-3.37	-0.06*	-4.93
per capita income	-1.81	-1.20	0.01	0.00	-4.98*	-3.05
trade balance	0.12**	1.81	0.15*	2.54		
savings	-0.32*	-2.72	-0.24**	-1.96	-0.09**	-2.14
gov spending	-0.14*	-3.88	-0.18*	-2.61		
real gdp growth	0.18*	3.04	0.18*	3.20		
Inflation	0.03**	1.78	0.04	1.45		
external shocks	-0.50**	-2.48	-0.48*	-3.56	-0.40**	-1.84
Debt Relief2005			-2.49	-1.20		
Relief05*pubext debt			0.18	0.71		
Observations	49		49		47	
Adj. R-squared	0.62		0.64		0.65	

Note: The t-statistics are white heteroskedasticity-consistent. The levels of significance are indicated by asteriks: \* 1 percent, \*\* 5 percent, \*\*\* 10 percent. Variables are expressed in percentages unless otherwise stated.

Overall, the empirical estimation yields two main conclusions. First, government or public external debt is not sustainable given the current fiscal trajectory. Second, public external debt has damaging effect on the economy and welfare. However, the impact of total external debt on welfare is indeterminate. These results are in harmony with the two model specifications and the descriptive statistics.

## 5. Conclusions and recommendation

This paper examined whether Nigeria's external debt stock is sustainable given the country's fiscal trajectory. In the descriptive analysis, I utilize the World Bank-IMF recommended debt burden threshold to determine debt sustainability. The econometric analysis employs Dynamic OLS to estimate the Fiscal Response Function and welfare models. I then estimate the impact of external debts on welfare under various scenarios for the period 1970-2018. To check for the robustness of model, the results compared favourably under baselines and presence of structural breaks scenarios.

The descriptive analysis indicates that Nigeria has a high-risk external debt profile, whereby over half of government revenue is spent on debt servicing on annual basis. The analysis indicates a dramatic shift in structural conflagration of public external debt toward non-concessionary debt, which has increased debt servicing liability. The empirical result clearly reveals two policy implications. First, government or public external debt is not sustainable given the current fiscal trajectory. Thus, government should leverage more on non-concessional loan to reduce debt servicing burden and potential debt overhang.

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# **TAX AVOIDANCE AND FINANCIAL PERFORMANCE OF LISTED OIL MARKETING COMPANIES IN NIGERIA**

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## **Abstract**

*This study examined the effect of earnings management on the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. The study employed correlation research design in a sample of nine (9) companies for a period of eight years (2012-2019). Secondary data from the financial statement of the sample companies was used. General Least Squares (GLS) regression technique of data analysis was used in the analysis, after controlling for firm size. The study reveals that tax avoidance has negative insignificant effect on financial performance of listed oil marketing companies in Nigeria. The study further reveals that earnings management positively and significantly moderates the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. In line with the findings, the study recommends that government policy should be directed towards strengthening these factors in order to stir up company financial performance.*

**Keywords:** *Earnings management, financial performance, Moderating effect, Tax avoidance.*

## **1. Introduction**

Tax is the most important source of income to the government of every developed and developing economy. It is presumed to be the means of support of any government, because taxes provide revenue to fund activities, like health facilities, education, roads, electricity, security and employment. Notwithstanding the noticeable benefits of taxes, corporate tax avoidance is considered a major drawback that threatens the economy of Nigeria and other nations of human race.

However, corporate tax avoidance is a tax planning strategy that can be used by

management to pay a low amount of tax per naira of reported pre-tax accounting income (Higgins, Omer & Phillips. 2015) The notion of tax avoidance can be determined as any effort by businesses to minimize the amount of tax that must be paid to the government (Abdullah, Furqan, Parwati & Asmanurhidayani 2019). Resultant upon these conducts, several billions of naira accruable from tax is lost to tax avoiders every year, therefore denying government extra revenue that could be used to complete projects, social amenities and infrastructural expansion. The issues of tax avoidance have been a problematic that called the attention of governments, practitioners and academics to find the factors that determine corporate tax avoidance. For this reason, tax avoidance has attracted the interest of researchers (Vieira, 2013; Kraft, 2014, Bambang, Yudha & Abim, 2017; Intan, Siti & Anita, 2018; Junaidu, & Saidu, 2018 Ferchichi & Dabboussi, 2019).

Nevertheless, infirms that engage in tax avoidance there is a connection between the owners as the principal with the manager as agent. Bestowing to Minnick and Noga (2010), owners always expect high profitability and increase the firm performance, so the owners want the tax paid to be minimized, whereas the manager as the tax planner also has an aim to the wealth owned by the company. Moreover, Jensen and Meckling (1976) and Desai and Dharmapala (2006); Chen, Noor & Mazni (2018) settles that tax avoidance does not improve financial performance of a company because tax avoidance activities is one among the mechanisms that offer room for self-interest managers to divert rent from owners to themselves to satisfy their individual self-interest. Besides, the agency costs related to tax avoidance activities, (additional compliance costs, and non-tax costs) might overshadow the tax benefits, therefore, reduces firm performance.

However, the effects of tax avoidance on financial performance is still an open question in Nigeria context due to debatable results from previous study (Nwaobia, Kwarbai, & Ogundajo, 2016; Zhang, Cheong & Cheokb, 2016). On this basis, some studies suggested that the contradictions may point to the likelihood that some important variable of earnings management was ignored. Based on this suggestion, the present study introduces earnings management as a moderating variable in the model. Earnings management refers to a strategy of producing accounting earnings, which is achieved through managerial discretion over accounting choices. (Phillips, Pincus & Rego, 2003). That is signifies that earnings management is a manager's effort to increase or decrease earnings, including income smoothing in agreement with the wishes of managers. Earnings management practices can also opportunistic or economically efficient (Fields, Lys & Vincent 2001, Scott 2003).

However, considering the importance of earnings management to managers, this can influence tax avoidance practices. This is because of the flexibility in accounting treatment, managers have an incentive to reduce the accounting earnings for financial reporting objectives and to lower reported earnings for tax reporting purposes. Badertscher, Phillips and Rego (2013) discovered that the firms carry out earnings

management to avoid taxes. Besides, when companies faced bad business performance; they have strong tax avoidance motivation in order to survive. Therefore, financial performance holds a greater influence on tax avoidance motivation. Through this avenue, tax avoidance may likely influence financial performance through earnings management interaction of listed oil marketing companies in Nigeria. The importance of oil marketing companies to the Nigerian economy as evidenced in the large volume of trade in shares on the floor of the Nigerian Stock Exchange, implies that these companies deserved to be studied in isolation for better understanding of the direct and indirect effect of tax avoidance and financial performance. Building on the explanation above, this proposed study aims to fill the literature gap by examining the relationship between tax avoidance and financial performance with earnings management as the moderator for the above mentioned relationships.

The remainder of the study is as follows. The second section provides the study theoretical framework and relevant literature on tax avoidance and financial performance and literature on the moderating effect of earnings management on tax avoidance and financial performance and develops our research hypothesis. Section presents the research methodology. Result and discussion were discussed in section four. The final section of this study closes with our conclusion and recommendation.

## **2. Literature Review**

### **Tax Avoidance and Financial Performance**

Corporate tax avoidance is a significant plan for a company. Is one way to circumvent taxes legitimately that does not go against tax systems (Suandy, 2008). Tax avoidance is not a criminal activity but looks like something negative since the company is trying to reduce the amount of tax payable in order to increase financial performance. Profitability is an important indicator of corporate financial performance. Regularly changing of company financial performance displays that the company has a risk in giving dividends to stockholders, so as to increase the confidence of the market manager will attempt to sustain profitability in order to remain reliable and stable (Tsuroyya & Astika, 2017). Financial performance is measured using Return on Assets (ROA). ROA is a performance indicator that is used to indicate the company's ability to manage a profit based on assets that are used. The more efficient company in the use and management of assets, the greater the chance it will be gaining corporate profits, so the ROA has pushed the incentive for managers in performing actions to create profit. As for one of this motivation is the motivation of the existence of the bonus that will be given to managers, therefore the manager will try everything possible to adjust its performance for the sake of getting an additional bonus.

However, studies on tax avoidance and financial performance have produced inconsistent results. Mosota (2014) studied the relationship between tax avoidance and firm

performance of companies listed at the Nairobi Securities Exchange (NSE) for the period of 2013 using regression technique of data analysis. The results show that tax avoidance positively impacts on the financial performance of the companies. Nwaobia, Kwarbai and Ogundajo, (2016) studied the effect of tax planning on firm value of listed consumer goods firms in Nigeria for the period of 2010 to 2014. Data were drawn from the financial reports of the sampled firms and analyzed using regression technique of data analysis. Findings shows that tax planning has positive significant effect on firm performance.

Zhang, Cheong and Rajah (2016) studied the impact of corporate tax avoidance on firms' financial performance for the period 2004-2012. Structural equation modeling (SEM) was used as technique of data analysis. The study finds significant positive indirect relationships between tax avoidance and market performance. Chen Yee, Sharoja and Mazni, (2018) studied the connection between tax avoidance and firm performance of Malaysian Public Listed Companies (PLCs) for the period of 2014. The study uses cross-sectional and regression was used as a method of data analysis. The outcome shows that tax avoidance negatively and significantly affects firm performance through Tobin Q.

Junaidu and Saidu (2018) studied the effect of company income tax on the financial performance of listed consumer goods companies in Nigeria from 2006-2016. Data for the study was collected from the annual reports and accounts of the companies and regression analysis was used as a technique for data analysis. The study finds that there is an insignificant negative relationship between corporate tax and financial performance using return on assets as a measure.

Using data from the annual reports and financial statements of firms listed on the Ghana Stock Exchange (GSE), Naiping, Nancy, Augustine and Mandella (2019) examined the relationship between tax avoidance and financial performance for the period of 2009 to 2018. Ordinary Least Square regression was employed has technique of analysis. Findings show a negative relationship between tax avoidance and financial performance. Based on the mixed result in the prior studies, hypothesis one proposed from this study is:

**H<sub>01</sub>:** Tax avoidance has no significant effect on financial performance of listed oil marketing companies in Nigeria

### **Tax Avoidance and Financial Performance Moderated by Earnings Management**

Earnings management refers to the technique of managers of the company to undertake some executive actions on company's performance variables, which are reflected in the company financial reports. The practice of earnings management in the firms aims at giving the impression of smooth yearly earnings by showing high profit for the current accounting period at the expense of future earnings or to lower the current earnings in order to report high earnings in the future (Ronen & Yaari, 2008). Previous research has closely related earning management with tax avoidance (Desai & Dharmapala, 2005; Ahmad & Amrie, 2018). Particularly, it has been argued that tax avoidance has corresponding techniques

with earnings management, such that management who are tasked to avoid taxes can concurrently use those avoidance techniques to manipulate earnings to derive some private benefit (Desai & Dharmapala, 2009; 2007; 2005). Moreover, tax avoidance is the transfer of value from the government to investors (Desai & Dharmapala, 2005). It is attributed to be value valuable to investors. On the other hand, earnings management can be observed as a transfer of value from investors to manager. This is because diverted funds could have been used for profitable investments or paid out as dividends (Amiram et al., 2013). The magnitude of earnings management problematic and its influence on financial performance is highly caused by lack of financial reporting transparency among the firms. This due to the fact that most organizations use accrual accounting methods which is the components of earnings, that are not reflected in the current cash flows and which the firm managers have discretion in reporting it (Chiraz & Anis 2013). Besides that, the level of profit has also been argued to have an influence on the manipulation of accounting accruals because managers may manage earnings to increase their bonus rewards. Moreover, low profitability ratio is usually related to higher earnings management because managers will not like to present a financial statement that show their poor performances, therefore, the need to manipulate financial statement to avoid reporting poor managerial efficiency. On the other hand, sustained poor performance can limit opportunistic management of earnings (De Angelo, 1994).

Earnings management has intervening variable can either increases or reduces corporate tax avoidance. Shiwei and Siyu (2012) studied the relationship between earnings management and tax avoidance of listed Chinese companies. This study use the data of Chinese A share non-financial listed companies from annual reports during 2004-2006. Using regression analysis, the study reveals that earnings management positively and significantly influences tax avoidance. Sally, Yorke and Cletus (2016) studied the consequences of earnings management and corporate tax avoidance on firm performance. Using a sample of non-financial firms listed on the Ghana Stock Exchange over a period of ten years (2003– 2012). Panel regression technique was used to analysed the data and findings shows that earnings management and tax avoidance negatively and insignificantly affect firm performance.

Sasiska, Didik and Luk (2018) studied the moderating effect of earnings management on the relation with corporate characteristics on tax avoidance. Using selected 49 manufacturing companies listed on the Indonesia Stock Exchange for the period of 2012-2016. The result of the panel data regression shows that earnings management moderates the effects of the profitability and tax avoidance. Ahmad and Amrie (2018) studied the effects of tax avoidance, Accrual Earning Management, Real Earning Management, and Capital Intensity to Equity Costs on manufacturing company listed on the Indonesia Stock Exchange for the period of 2017. This investigation was a quantitative research with secondary data. The study used multiple regression as technique of analysis. The study fails

to establish any relationship between tax avoidance and earnings management. Lawe (2019) examined the indirect effect of earnings management on Profitability and tax avoidance on Manufacturing Companies Listed on Indonesia Stock Exchange for the period 2013 – 2017. The sample used as many as 45 manufacturing companies listed on the Indonesia stock exchange. Multiple regression was used as technique of data analysis. The result indicates that earning management does not mediate the relationship between profitability and tax avoidance.

### **Agency Theory**

The theory that triggers the moderating effect of earnings management on the relationship between tax avoidance and financial performance is the agency theory. Agency theory proposed by Jensen and Meckling (1976), points out an agency connection between the owners and managers. In this association, the managements act as agents for the owners, who are considered to be the principals. Managers are employed and are granted the appropriate authority for productive goals (Chen & Chu, 2015). Managers as agents owe a responsibility to owners, to maximize profit and value for owners as best as they can (Christensen & Murphy, 2004; Campbell, 2017). That is, a responsibility to employ their best efforts to earning a return on the investments of the owners and make best use of their wealth. Nevertheless, the separation of ownership and control brings into question the managers' incentives to take actions in the best interest of owners. Specifically, given that managers are interested by self-interest, are rational actors, they may have individual goals that compete with those of owners (Mohd, 2005; Sally, Yorke & Cletus, 2016). Therefore, there is good reason to consider that the manager will not always act in the best interests of the principal (Jensen & Meckling, 1994).

Agency theory is an applicable theory in this study because of the fact that managers are in charge for taking tax decisions, disagreement of interest can lead them into taking such decisions that reflect their personal benefits. This is possible because tax avoidance practices required managing of earnings to ensure tax advantages (Desai & Dharmapala, 2009; Egbunike & Abiahu, 2017) whereas managers engaging in tax avoidance practices are solely motivated by their motivations to reduce the firm's tax liability. In view of this, tax avoidance has direct effect on increasing financial performance. Thus, companies with high performance will tend to commit tax avoidance practices to reduce their tax liabilities (Kraft, 2014). Moreover, one of the techniques used to smooth accounting earnings is to conduct earnings management. Which indirectly influence tax avoidance practice and firm financial performance.

### **3 Methodology**

The study adopts correlational research which forms part of causal research design. The population of the study consists of the ten (10) oil marketing companies in the Nigerian



stock exchange as at 31 December, 2019 which is not delisted as at 31 December, 2019.

**Table 3.1: List of Corporations**

<b>S/No</b>	<b>Name of Company</b>
<b>1</b>	Forte Oil Plc
<b>2</b>	MRS Oil Nigeria Plc
<b>3</b>	Total Nigeria Plc
<b>4</b>	Mobil Oil Nigeria Plc
<b>5</b>	Conoil Plc
<b>6</b>	Afroil Plc
<b>7</b>	Oando Plc
<b>8</b>	Eterna Oil & Gas Plc
<b>9</b>	Japaul Oil & Maritime Services Plc 2
<b>10</b>	Beco Petroleum Products Plc

Source: Authors Compilation from NSE Factbook

The number of firms was reduced to a working population of nine (9). Afroil Plc was excluded from the study population because it was delisted in 2014. Therefore, the entire working population of nine (9) oil marketing companies was used as the study sample considering the fact that the data required for the study is readily available from the published financial reports of the companies, and the NSE factbook for the relevant years. The data collected for this study is obtained absolutely from the secondary source. The data used for this study is extracted from the financial statements of the sampled oil marketing companies in Nigeria for the period of 2012 to 2019.

General least square (GLS) multiple regression analyses are employed to analyze the panel data based on random effect model using STATA 15. The random effect is arrived at from the result of Durbin-Wu- Hausman test which made it possible to make a choice between the fixed effects model and random effects model.

### **Model Specification**

The following model was estimated:

$$ROA_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 ETR * EM_{it} + \beta_3 FS_{it} + \epsilon_{it}$$

Where;

ROA = Return on Asset

ETR= Effective Tax Rate

ETR\*EM= effective tax rate interacted with earnings management

FS= Firm size

$\beta_1 - \beta_3$  = coefficients of the study model

Where i denotes firm and t is for time and

$\epsilon$  is error term

Table 2: Study Variables and their Measurement

Variable Acronym	Variable Name	Measurement
Dependent variable		
ROA	Return on Asset	Net income divided by total asset
Independent variable		
ETR	Effective tax rate	Tax expenses divided by pre-tax income (Salaudeen and Ejeh, 2018)
Moderator variable		
EM	Earnings management	Performance Matched Discretionary Accruals by Kothari (2005)
EM* ETR	Interaction between Earnings management and effective tax rate	Earnings management multiple by effective tax rate
Control Variable		
FS	Firm size	Natural Log of Total assets (Salaudeen & Ejeh, 2018)

#### 4. Results and Discussions

The sample descriptive was first presented in Table 1 where the mean, standard deviation, minimum, and maximum of the data for the variables used in the study were described.

**Table 1 Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	72	0.3408805	0.198774	0.001486	0.76986
ETR	72	0.3087244	0.0920759	0.1089986	0.5491446
EM*ETR	72	0.0175962	0.0342511	-0.0950753	0.154328
FS	72	7.15645	0.9618533	4.00199	8.126416

Source: Computed from the Annual Report and Account using Stata 15 Output

The table one reveals that the sampled listed oil marketing companies in the study have an average performance of 0.3408805 in terms of Return on asset (ROA) with the standard deviation of 0.198774. The mean value of 0.3408805 suggests that on average, the studied companies realize about 34% from utilization of their assets. This is with a standard deviation of about 19.8 implying low rate of variability of the returns realized on assets (ROA) by the firms. The minimum and maximum values of ROA are .001486 (1%) and 0.76986 (77%) respectively.

Table .1 also shows the mean of effective tax rate (ETR) of the sample oil marketing

companies during the period of the study is 0.3087244 with standard deviation of 0.0920759. This implies that the average effective tax rate of the sampled companies is 30% with the lower standard deviation of 9%. Which agreeing to the statutory tax rate for listed companies (30%), point to the uniformity between companies' tax level and tax policies. The minimum and maximum values of ETR are 0.1089986 (11% and 0.5491446 (55%) respectively. The moderating variable free earnings management (EM) has a mean of 0.0175962 with a standard deviation of 0.0342511. This implies that when earnings management interacted with tax planning it reduces the ETR to 2%. The dispersion of a standard deviation from the mean indicates the extent of variability of ETR of the oil marketing companies in Nigeria. It also has a minimum and maximum value of -0.0950% and 0.154328% respectively. Control variable (FS) also shows that the average firm size (of the sample companies during the period of the study is 7.15645 with standard deviation of 0.9618533. The minimum and maximum values of FS are 4.00199 and 8.126416 respectively.

**Table 2: Correlation Matrix**

Variable	ROA	ETR	EM*ETR	FS
ROA	1.0000			
ETR	-0.2675	1.0000		
EM*ETR	0.1436	0.2025	1.0000	
FS	0.4511	0.2047	-0.1315	1.0000

Source: STATA OUTPUT, 2015

The correlation matrix indicates that financial performance (ROA) have inverse relationship with tax avoidance of listed oil marketing companies in Nigeria evidenced from the coefficient of -0.2675, implying that effective tax rate decreased financial performance. Other variables such as the moderating variable of earnings management interacted with tax avoidance have positive relationship with financial performance via ROA (0.1436). Also, the control variable firm size has a positive relationship with the financial performance (0.4511). It signifies that an increase in the firm size lead to a rise in financial performance.

**Table 3: Multicollinearity test**

Variable	VIF	1/VIF
ETR	1.11	0.904533
EM*ETR	1.08	0.927788
FS	1.08	0.926891
Mean VIF	1.09	

The result from multicollinearity test shows that the VIF is less than 10 while the 1/VIF is

above 0.1. Therefore, this signifies the absence of multicollinearity and the regression model is well fitted.

**Table 4: Breusch Pagan/ Cook – Weisberg Test for Heteroscedasticity**

Ho: Constant variance

Variable: Fitted value of dllp

chi2(1) = 0.14

Prob > chi2 = 0.7035

The result from the above test indicates the chi – square of 0.14 and the probability of 0.7035. The result signifies that the null hypothesis is insignificant at 5% level of significant therefore the null hypothesis is accepted. This indicates the absence of heteroscedasticity.

**Table 5: Hausman Test**

	fe (b)	Re (B)	Difference (b-B)
ETR	-.1257754	-.2276385	.1018631
EM*ETR	.5238006	.6095706	-.08577
FS	-.0105224	-.0385213	.0279988

Source: Computed from the Annual Report and Account using Stata Software

Ho: differences in coefficients not systematic Chi2 7.06

Probability > chi2 = 0.0701

the result from Hausman specification test shows a chi2 of 7.06 and p value of 0.8049. The p value with 0.0701 shows insignificant difference in the estimated coefficient of the two models which violates the assumption of fixed effect approach. Furthermore, since the result favours random effect, there is need to further conduct a test for panel effect of the data using Breusch and Pagan Lagrangian multipliers test for random effect and OLS

**Table 6: Breush and Pagan Langrangian Multiplier Test**

	Var	Sd=sqrt(var)
ROA	.0395111	.198774
E	.0205904	.1434935
U	.0110197	.1049746

chibar2(01) = 13.55

Prob > chibar2 = 0.0001

From table 7, the Lagrangian multiplier test with chi2 of 13.55 and P value of 0.0001 signifies that random effect model is the most suitable model for this study. The study therefore concludes that the generalized least square regression of random effect is most appropriate technique of analysis.

**Table 8: Generalized Least Square Regression of Random Effect**

Variable	Coef.	Std. Err.	z	P> z
ETR	-.2276385	.2067298	-1.10	0.271
EM*ETR	.2311021	.0650841	3.55	0.001
FS	.5584842	.2108703	2.65	0.010
R-Square	0.3679			
Wald chi2(3)	111.56			0.0000

From the regression result presented in table 8, the R<sup>2</sup> which is the multiple co-efficient of determination gives the percentage or proportion of total variation in the dependent variable (ROA) which is jointly explained by the independent, moderating and control variables to be approximately 37%. This signifies that 37% of total variation in financial performance of listed oil marketing companies in Nigeria is explained by changes in ETR, EM\*ETR and FS.

The cumulative result hold sway as the Wald Chi2 has a high value of 111.56 which is significant at 5%. This means that the model can be well fitted with the variables selected. Table 8 indicates that effective tax rate (ETR) has an insignificant negative effect on the financial performance of oilmarketing companies in Nigeria, from the coefficient of -.2276385 with t-value of -1.10, which is statistically insignificant at 5%level of significance (p-value of 0.271). This result suggests that, the higher the level of effective tax rate, the lower financial performance,it is statistically insignificant at 5% level. Based on this, the study fails to rejects the null hypothesis one (H01) which states that, tax avoidance has no significant effect of financial performance of listed oil marketing companies in Nigeria. This implies that corporate tax avoidance does not interpret financial performance of listed oil marketing companies in Nigeria. This is consistent with Chen Yee, Sharoja and Mazni, (2018); Junaidu and Saidu (2018); Naiping, Nancy, Augustine and Mandella (2019) who found negative relationship between tax avoidance and financial performance.

The moderation effect of earnings management on the relationship between tax avoidance and financial performance is tested and the result from table 8 on the interaction between earnings management and tax avoidance (EM\*ETR) shows a positive coefficient of variation of 0.2311021 with t value of 3.55 and the p value of 0.001 which is significant at 5% level of significance. The findings reveal a positive and significant moderating role on the relationship between earnings management and tax avoidance. The study therefore rejects the null hypothesis two which stated that earnings management does not significantly moderate the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. The finding supports those of Shiwei and Siyu (2012); Sasiska, Didik and Luk (2018) but contradicted those of Ahmad and Amrie

(2018) and also supported agency theory.

The regression result shows that firm size has a positive coefficient of .5584842 and a z-value of 2.65 with a p-value of 0.010. Hence, as firm size of the studied firms increases, their profitability also increases. This is to the extent that a one point increase in assets of the firm will lead to 55% increase in financial performance. Thus, the p-value of 0.010 which is significant at 5% signifies that FS strongly drives financial performance of listed oil marketing firms in Nigeria.

## 5. Conclusion and Recommendation

The study examined the moderating effect of earnings management on the relationship between tax avoidance and financial performance in the context of oil marketing companies in Nigeria. The results reveal that tax avoidance negatively and insignificantly affect the financial performance of listed oil marketing companies in Nigeria. The study therefore concludes that tax avoidance does not determine the financial performance. That is tax avoidance practice is not merely a transfer of wealth from government to the shareholders of company as tax avoidance practices decreases possibility of managerial rent extraction from shareholders of sampled oil marketing companies in Nigeria

The indirect effect of tax avoidance and financial performance through earnings management indicated a positive significant relationship. The study concludes that managers who's their bonuses is tied to firm performance will use flexibility in accounting methods and choice to decreases the company tax liabilities. This also implies that tax burden increases managerial motivations to engage in earnings management practices. In line with the findings and conclusion, the study recommends that government policy should be directed towards strengthening these factors in order to stir up company financial performance.

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# **DETERMINANTS OF CORPORATE TAX AGGRESSIVENESS IN NIGERIA MANUFACTURING SECTOR**

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## **ABSTRACT**

*This study centered on the determinants of corporate tax aggressiveness in Nigeria manufacturing sector. The broad objective of this study was to determine the extent to which profitability, firm size, leverage, multinationality influence tax aggressiveness. Samples of fourty (40) quoted manufacturing on the Nigerian Stock Exchange were conveniently selected for a period of four (4) years (2015 – 2018). The Ordinary Least Square (OLS) regression technique was employed in estimating the data. The study found that there is a negative and insignificant relationship between profitability, multinationality and tax aggressiveness, while leverage and firm's size exhibited a positive and insignificant association with tax aggressiveness. In line with the findings, the researcher recommended that review the tax laws to ensure that the various loopholes which give companies room to engage in tax aggressive practices is greatly minimized.*

**Keywords: Firm Size, Leverage, Profitability, Multinational, Tax Aggressiveness**

## **Introduction**

Tax can be best describe as a compulsory charges which a government of a country imposes on the citizens with the aim rising funds to finance the activities of the country, such as provision of social amenities, security as well as enabling environment for the economic firmness (Onatuyeh & Odu, 2019). The government of a country is left with the responsibility to decide the amount her citizens is to pay as tax and on whom tax is to levied

(Egbunike, Emudainohwo & Gunardi, 2018).

In spite of the benefits government of a country derive from the tax, some people and corporate organizations still consider tax as unnecessary compulsory charges which government of the country compels them to pay. The reason for the establishment of a company is to make profit and distribute same to the various shareholders of the company, one dependable means to accomplish this objective, is to reduce business expenses, hence management see company income tax as one of the main causes of corporate financial loss as moderately important part of the prosperity of the shareholders and all important stakeholders are imposed by a country government through taxation (Richardson, Taylor, & Lanis, 2013). Because the basic objective of a company is to reduce tax responsibility and boost shareholders value, engaging tax aggressive tactics becomes very important (Ilaboya, Izevbekhai, & Ohiokha, 2016).

Onyali and Okafor (2018) say that one of the major serious compliance problem terrorizing Nigeria and many country of the world is corporate tax aggressiveness. As Onyali and Okafor (2018) put it, this act could be practice in the form of cutting down tax responsibility and tax evasion. Nevertheless, Nigeria and nearly all the country of this planet earth have put in place numerous anti-avoidance tax rules and regulations aiming at frustrating tax aggressiveness policies, still, corporate organizations still practice tax aggressiveness strategy with the assistant of tax professionals aiding corporate management in planning their actions in such a manner that will make them take advantage of the loopholes in the tax rules; thus corporate organization will be paying very little taxes.

In the light of the above, the researcher is motivated by a desire to examine determinants of corporate tax aggressiveness in Nigeria manufacturing sector.

### **Statement of Research Problem**

There are quite a number of studies on the determinants of corporate tax aggressiveness in Nigeria, but the findings of previous studies on tax aggressiveness in Nigeria are inconsistent; for example, the study of Ugbogbo, Omoregie and Eguavoen (2019); Kimsen and Siti (2018); Ogbeide (2017) uncovered a positive significant association between firm size and tax aggressiveness in Nigeria.

On other hand, study by Rani, Susetyo and Fuadah (2018) revealed that firm size negatively related with tax aggressiveness. The inconsistencies in previous studies crate a gap in knowledge on the determinants of tax corporate aggressiveness in Nigeria.

Additionally, the time period covered by some of the previous studies leaves a gap. The works of Ugbogbo, Omoregie and Eguavoen (2019) and Uniamikogbo, Bennee and Adeusi (2019) for instance, covered the period from 2013 to 2017. Rani, Susetyo and Fuadah (2018); Kimsen and Siti (2018) and Ogbeide (2017) covered the period of 2012 to 2016, while Oyeleke, Erin, and Emeni (2016) covered the period of 2012 – 2014. These periods can be regarded as not too current. Some of the findings of these studies may not

be relied upon in view of the fact that the studies have been taken over by the changes; hence this study is conducted with the aim of filling the gap discovered in previous studies. The following research questions are raised for the purpose of this study:

- i. What is the relationship between profitability and tax aggressiveness?
- ii. Is there any association between firm size and tax aggressiveness?
- iii. What is the connection between leverage and tax aggressiveness?
- iv. What is the association between multinationality and tax aggressiveness?

### **Objective of the Study**

The major objective of this study is to examine the determinants of tax aggressiveness in Nigerian manufacturing companies. The specific objectives of the study are to:

- i. determine the association between profitability and tax aggressiveness.
- ii. examine the relationship between leverage and tax aggressiveness.
- iii. examine the connection between firm size and tax aggressiveness.
- iv. examine the connection between multinationality and tax aggressiveness.

### **Research Hypotheses**

To empirically test the determinants of tax aggressiveness in manufacturing companies in Nigeria, the following null hypothesis are developed:

- i There is no sizeable connection between profitability and tax aggressiveness.
- ii. There is no sizeable connection between leverage and tax aggressiveness.
- iii. There is no sizeable connection between firm's size and tax aggressiveness.
- iv. There is no sizeable connection between multinationality and tax aggressiveness.

## **Literature Review**

### **Concept on Tax Aggressiveness**

Tax aggressiveness also known as tax evasion or avoidance and it can be considered as component of tax arrangement (Zaltul & Ilona, 2019). According to Boussaidi and Hamed, (2015) aggressive tax symbolizes different management behavior aim at reducing taxable income that might be legal or illegal. By this definition, one might regard tax aggressiveness as a policy put in place by management of corporate organization, a collection of procedure, practices and choices whose purpose is to boost corporate earnings when corporate expenses payable to host nation as well as other stakeholders.

### **Profitability**

It is a well acknowledged fact in the literature that profitability of companies is seen as one of the main interest of administrative specialist, shareholders, and even researchers (Dioha, Mohammed & Okpanachi, 2018). In line with observation, profitability is regarded

as the major vital and dependable pointer of organizational development because it offers a wide statistic about organizations capacity to elevate corporate earnings level (Ahmed, Naveed & Usman, 2011). This is why profitability is recognized as a significant purpose of monetary administration, because maximizing corporate profitability is regarded as one of the objective of monetary administration which in turn signifies a healthier financial performance of a company (Malik, 2011).

Ehi-Oshio, Adeyemi and Enofe (2013) describe profits as the incomes a company generated from its revenue having removed every operating cost. Boosting corporate profit is an extremely vital goal which allows a company to stay in business and to resist any form of competition a company might face from rival companies (Odusanya, Yinusa & Ilo, 2018). An organization who often make profit help in reducing unemployment, create wealth, likely to be extra inventive, capable of giving back to the society and also contribute nation at large by way of tax payment (Lazar, 2016).

### **Leverage**

Organization's capacity to shoulder all the organization debts could be best describe as corporate leverage (Rani, Susetyo & Fuadah, 2018). Also Hidayat (2017) is of the view that "leverage is the ratio used to measure the extent of the companies' assets financed by their debt or this ratio is to measure the companies' ability to pay all of their short and long term obligations". Minnick and Noga (2010) any organization with the issue of higher leverage ratios is capable of using interest expense on debt in reducing their payable income tax.

### **Firm Size**

In ensuring corporate steadiness, the idea of firm size is essential (Alex & Ngaba, 2018). Onyekwelu, Nnadi and Iyidibi (2018) defined firm size as the amount of corporate asset organization possess at any specific period. Corporate organizations with a huge size are considered as an unwavering corporate organization and are strong in terms of profit generation (Fitri, Agung & Ahmad, 2018). Oyelade (2019) explained that the performance of any company is influence by the size of the organization. It is a known fact that one of the objectives of corporate organization is to maximize firm size to enable them have an advantage over their rivals.

Kartikasari and Merianti (2016) say that "the size of company may be measured by total assets, total sales, number of employees, and market capitalization". Similarly, Abdullah, Ardiansah and Hamidah (2017) opine that market capitalization can be used to measure firm size. Abdullah, Ardiansah and Hamidah (2017) explained that market capitalization can best describe as the price to compensate somebody to purchase the entire organization.

## **Empirical Review**

Ugbogbo, Omoregie and Eguavoen (2019) examine corporate determinants of aggressive tax avoidance of companies in Nigeria. The study made do with forty (40) companies listed on the Nigerian Stock Exchange and cover a five year period – 2013 to 2017. The nature of the study necessitated the use of Ordinary Least Square (OLS) regression and e-view 8.0 econometric software in analyzing the sourced data. They discovered that firm size influences corporate tax aggressiveness positively, while the variables of profitability and leverage exhibited a negative association with corporate tax aggressiveness.

Rani, Susetyo and Fuadah (2018) examine the effect of corporate characteristics of profitability, leverage and firm size on tax avoidance moderated by earnings management using Indonesia as case study. They utilized 49 Indonesia listed manufacturing companies and it covered a five-year period (2012 – 2016). Panel data regression technique was used in analysis the sourced data for the purpose of the study. The study result shows that the variables of profitability and size were negative, but significantly influence tax avoidance, while leverage was positive and significantly influence tax avoidance.

Kimsen and Siti (2018) determine the association with profitability, leverage firm size and tax avoidance using eight companies quoted in the Indonesia Stock Exchange based on the purposive sampling technique they utilized. The study covered a period of five year (2012 – 2016). With the aid of panel data regression analysis, they found out that there is a significant effect of firm size on tax avoidance, while leverage influence tax avoidance positively.

Ogbeide (2017) examined the association between firm characteristics variables of firm size, external audit quality, leverage, interest charges and tax aggressiveness between the period of 2012 – 2016. The data he generated were analyzed with the aid of panel and dynamic panel methods. The findings of the study shows that firm size, external audit quality and interest charges exhibited positive and significant association with tax aggressiveness, while leverage is significant but negatively related with tax aggressiveness.

## **METHODOLOGY**

### **Research Design**

The research design to be adopted in this study is a combination of a cross-sectional and longitudinal research design covering a time period of six (6) years that is 2012 – 2018 (six financial years). With the combination of a cross-sectional and longitudinal research design, the researcher will extract data that had occurred already and in which no further manipulation will be required to examine the determinants of corporate tax aggressiveness in Nigeria manufacturing sector.

## Population, Sample Size and Sampling Technique

The entire sixty-four (64) manufacturing companies quoted on the Nigerian Stock Exchange as at 31<sup>st</sup> December 2018 as evidenced in the Nigerian Stock Exchange Fact-Book (2018) made up the study population.

A total of thirty (30) quoted companies formed the sample size of this study. The convenient sampling technique was used in selecting each of the companies from the sixty-four (64) manufacturing companies quoted on the Nigerian Stock Exchange as at 31<sup>st</sup> December 2018 to form the sample size of thirty (30) quoted manufacturing companies in Nigeria. The justification of the researcher's choice of adopting convenient sampling technique and the use of thirty (30) quoted manufacturing companies is hinged on the fact that it is out of the touch of the researcher to accommodate all the quoted manufacturing companies on the Nigeria Stock Exchange due to time and difficulty in extracting the needed data for the selected variables of the study, hence the decision to make do with the convenient sampling technique, because the convenience sampling technique allows for the collection of sample size without using any formula. This is to ensure that all manufacturing company quoted on the Nigeria Stock Exchange as at 31<sup>st</sup> December 2018 have an equal chance of been represented.

## Model Specification

The model for this study is expressed in it functional form as,

$$\text{TAXAG} = f(\text{FSIZE}, \text{LEV}, \text{CPRT}, \text{MULT})$$

.....(1)

Expressing equation in econometric form, we have

In econometrics we have,

$$\text{TAXAG}_{it} = \beta_1 \text{FSIZE}_{it} + \beta_2 \text{LEV}_{it} + \beta_3 \text{CPRT}_{it} + \beta_4 \text{MULT}_{it} + U_t \quad \text{.....(2)}$$

### Where:

TAXAG	=	Tax Aggressiveness
FSIZE	=	Firm Size
LEV	=	Leverage
CPRT	=	Profitability
MULT	=	Multinational Corporation

"i" for firms

"t" for time

e<sub>it</sub> for error terms

### Operationalization of Variables

S/N	Variable	Variables Acronym	Measurement	Source	Expected sign (apriori expectation)
5.	TAXAG	Tax Aggressiveness	This is taken as total tax expense/pre-tax income	Boussaidi & Hamed (2015)	
6.	LEV	Leverage	This was taken using Leverage as reported in the financial statement	Nermeen, et al (2014) and Mishari, & Abdullah, (2014)	-
7.	CPRT	Profitability	Is measured using profit after tax	Gupta & Newberry, 1997)	+
8.	MULT	Multinationality	Assigning 1 if there is existence of subsidiaries abroad, otherwise 0.	Dayday and Zaam (2017)	+

*Source: Author's Compilation, 2020.*

### Data Analysis Technique

For the purpose of the empirical analysis, this study used descriptive analysis, correlation analysis and pooled Panel Least Square (PLS) multiple regression technique as the underlying statistical tests. A descriptive study of the data was conducted to obtain the sample characteristics. The multiple regression analysis was performed to test the relationship between the independent variables and dependent variable (tax aggressiveness). Some conventional diagnostic tests such as normality, multicollinearity, heteroscedasticity, autocorrelation or serial correlation LM test and Hausman test were conducted to address some basic assumptions underlying regression analysis.



## DATA PRESENTATION AND ANALYSIS

**Table 1: Descriptive Statistics**

	<b>TAXAG</b>	<b>FSIZE</b>	<b>LEV</b>	<b>CPRT</b>	<b>MULT</b>
Mean	0.383150	7.079340	6.206405	5.860114	0.365854
Median	0.296182	7.243343	6.238502	6.055631	0.000000
Maximum	6.456442	8.916817	8.280407	7.747662	1.000000
Minimum	-1.224114	2.562293	1.633468	2.471292	0.000000
Std. Dev.	0.652831	1.085574	1.129036	1.087871	0.483144
Skewness	5.524109	-1.125827	-1.008273	-0.587384	0.557007
Kurtosis	48.37489	5.356275	4.933174	3.171536	1.310256
Jarque-Bera	14903.12	72.58353	53.32472	9.631598	27.99110
Probability	0.000000	0.000000	0.000000	0.008101	0.000001
Sum	62.83668	1161.012	1017.850	961.0588	60.00000
Sum Sq. Dev.	69.46870	192.0908	207.7796	192.9046	38.04878
Observations	164	164	164	164	164

**Source: *Eviews 9* (2020)**

The descriptive statistics in table 4.1 shows the characteristics of the variables from the forty (40) manufacturing companies that formed the overall sample of the study. As observed, the mean value of the dependent variable corporate tax aggressiveness (TAXAG) showed negative and positive values ranging from -1.224114 to 6.456442 suggesting that the level of corporate tax aggressiveness of the companies for the period under review skewed towards the positive. The mean values of all the other independent variables [Firm Size (FSIZE), Leverage (LEV), Corporate Profitability (CPRT) and Multinationality (MULT)] equally showed positive values with mean values of 7.079340, 6.206405, 5.860114 and 0.365854 respectively. The standard deviations of each of the variables showed minimal dispersion ( $\pm$ ) from the mean values which are highly desirable. More so, the probability values of the Jarque Bera test for all factors are significantly lower than the 0.05 indicating that the series are uniformly distributed.

### **Table 2: Correlation Analysis**

Covariance Analysis: Ordinary

Date: 07/21/20 Time: 06:03

Sample: 1 164

Included observations: 164

Correlation t-Statistic Probability	TAXAG	FSIZE	LEV	CPRT	MULT
TAXAG	1.000000 ----- -----				
FSIZE	-0.051007 -0.650061 0.5166	1.000000 ----- -----			
LEV	0.006256 0.079622 0.9366	0.803060 17.15276 0.0000	1.000000 ----- -----		
CPRT	-0.028958 -0.368732 0.7128	0.821630 18.34603 0.0000	0.707367 12.73730 0.0000	1.000000 ----- -----	
MULT	-0.090932 -1.162190 0.2469	0.117778 1.509578 0.1331	0.076894 0.981602 0.3278	0.064644 0.824510 0.4109	1.000000 ----- -----

**Source: Eviews 9 (2020)**

Table 2 presents the correlation matrix of variables adopted in the study. The aim is to show how the variables are related among themselves and to also check for possible high correlations which could lead to multicollinearity problem. As observed from the result, an significant negative correlation exists between the dependent variable Corporate tax aggressiveness (TAXAG) and the variables of Firm Size (FSIZE), Corporate Profitability (CPRT) and Multinationality (MULT) at -0.051007, -0.028958 and -0.090932 respectively, while the variable of Leverage (LEV) showed a positive and significant correlation with the dependent variable of Corporate tax aggressiveness (TAXAG) at 0.006256. However, all the variables that have significant association with the dependent variable of Corporate tax aggressiveness (TAXAG) passed the scale at 1% level of confidence. This suggests that all the independent variables move in the same direction with the dependent variable. It is also observable that the issue of high-correlation is not evident among the variables as none of the correlation coefficients is above 0.90.

**Table 3: Variance Inflation Factors**

Variance Inflation Factors

Date: 07/21/20 Time: 06:00

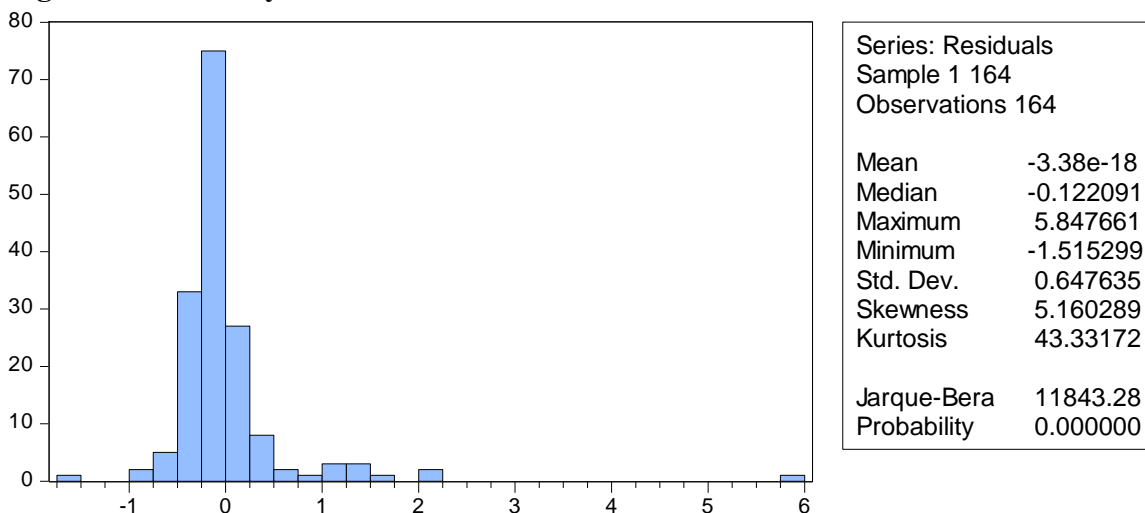
Sample: 1 164

Included observations: 164

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
FSIZE	0.010002	195.6539	4.468202
LEV	0.005947	90.24876	2.873860
CPRT	0.007017	95.05577	3.148029
MULT	0.011503	1.605064	1.017845
C	0.115309	43.97988	NA

**Source: Eviews 9 (2020)**

Table 3 shows nonexistence of multicollinearity in the Variance Inflation Factors outcome. The centered VIF assessments of the independent variables are extremely less than the benchmark of 10. In the result, Firm Size (FSIZE) accounted for a centered VIF of 4.468202; Leverage (LEV) 2.873860; Corporate Profitability (CPRT) 3.148029, and Multinationality (MULT) 1.017845. Every variable used in this study possessed a centered VIFs that are not significantly above 10 and this means that there is no issue of multicollinearity.

**Figure 1: Normality Test****Source: Researchers Computation, 2020**

This figure above revealed the outcome of the histogram normality and other

descriptive statistics of the variables selected in this study. The outcome accounted for a mean Jarque-Bera test of 11843.28 and related probability value of 0.000000 which is significantly lower than the 5% level indicating that the variables are not steadily distributed. Thus, the issue of endogeneity arising from the heterogeneous nature of the data are likely evident.

### Estimation Results

Dependent Variable: TAXAG

Method: Least Squares

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Sample: 1 164

Included observations: 164

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FSIZE	-0.092565	0.100009	-0.925564	0.3561
LEV	0.073476	0.077118	0.952775	0.3422
CPRT	0.007810	0.083767	0.093235	0.9258
MULT	-0.112712	0.107250	-1.050933	0.2949
C	0.577892	0.339571	1.701830	0.0907
R-squared	0.215854	Mean dependent var	0.383150	
Adjusted R-squared	-0.208904	S.D. dependent var	0.652831	
S.E. of regression	0.655731	Akaike info criterion	2.023881	
Sum squared resid	68.36732	Schwarz criterion	2.118389	
Log likelihood	-160.9583	Hannan-Quinn criter.	2.062248	
F-statistic	0.640363	Durbin-Watson stat	2.032732	
Prob(F-statistic)	0.634468			

### Source: Researcher's Computation via Eviews 9 (2020)

The analysis shown in table above, reveals the regression results in which the dependent variable Tax Aggressiveness (TAXAG) was regressed on the independent variables. Statistics reveal Adjusted  $R^2$  of -0.208904. This suggests that about 20% of the systematic variation of the dependent variable Tax Aggressiveness (TAXAG) is accounted for by the independent variables, leaving about 80% unaccounted for by these variables. This further means that the variables that determine Tax Aggressiveness (TAXAG) in Nigeria, given the circumstances, in terms of scope, go beyond variables assembled for this study. The model is however significant and good as shown by the f-statistic of 0.640363 and probability value of 0.634468 with little or no indication of the presence of auto correlation (the Durbin Watson is 2.032732).

From the analysis, it was found that Firm Size (FSIZE), Leverage (LEV), Corporate Profitability (CPRT) and Multinationality (MULT) had an insignificant impact on the Tax Aggressiveness (TAXAG), the dependent variable. It was discovered that the variables of Firm Size (FSIZE) and Multinationality (MULT) were negatively and significantly related to Tax Aggressiveness (TAXAG). These findings suggest that these variables do not drive Tax Aggressiveness (TAG). It is to be noted that Leverage (LEV) and Corporate Profitability (CPRT) are equally insignificant but positively influence Tax Aggressiveness (TAXAG).

## **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **Summary of Findings**

The following constitutes the major findings of the study.

1. There is a negative and insignificant relationship between profitability and tax aggressiveness.
2. There is a positive and insignificant relationship between leverage and tax aggressiveness.
3. There is a positive and insignificant relationship between firm's size and tax aggressiveness.
4. There is a negative and insignificant relationship between multinationality and tax aggressiveness.

### **Conclusion**

This study focuses on the determinants of corporate tax aggressiveness in Nigeria manufacturing sector. Specifically, the study looked at firm specific variables of firm size (FSIZE), Leverage (LEV), corporate profitability (CPRT) and multinationality (MULT) affect tax aggressiveness of selected listed manufacturing companies in Nigeria. The study employed multiple regression estimation approach on information extracted from a sample consisting of forty (40) listed manufacturing companies in Nigerian Stock Market between the years 2015 to 2018. The variables were relapsed to check for the existence of significant relationships between the dependent (tax aggressiveness) and independent variables (firm size (FSIZE), Leverage (LEV), corporate profitability (CPRT) and multinationality (MULT)). The results showed that none of the selected variables were found to be statistically significant with tax aggressiveness for the period under review.

### **Recommendations**

From emanation of the analysis, we proffer the following recommendations.

1. Review the tax laws to ensure that the various loopholes which give companies room to engage in tax aggressive practices is greatly minimized.

2. Tax regulators should be properly trained on how to detect and minimize the various mechanisms that companies use to engage in tax aggressiveness.
3. The incidence of double taxation should also be stopped as this would encourage companies to pay proper taxes and resort less to tax aggressiveness.
4. Tax revenue realized from corporate bodies should be channelled adequately and if this is done, it will encourage companies to pay tax and not engage in tax aggressiveness to reduce tax liability.

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## APPENDIX

Dependent Variable: TAXAG

Method: Least Squares

Date: 07/21/20 Time: 05:59

Sample: 1 164

Included observations: 164

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FSIZE	-0.092565	0.100009	-0.925564	0.3561
LEV	0.073476	0.077118	0.952775	0.3422
CPRT	0.007810	0.083767	0.093235	0.9258
MULT	-0.112712	0.107250	-1.050933	0.2949
C	0.577892	0.339571	1.701830	0.0907
R-squared	0.215854	Mean dependent var		0.383150
Adjusted R-squared	-0.208904	S.D. dependent var		0.652831
S.E. of regression	0.655731	Akaike info criterion		2.023881
Sum squared resid	68.36732	Schwarz criterion		2.118389
Log likelihood	-160.9583	Hannan-Quinn criter.		2.062248
F-statistic	1.640363	Durbin-Watson stat		2.032732
Prob(F-statistic)	0.034468			

Variance Inflation Factors

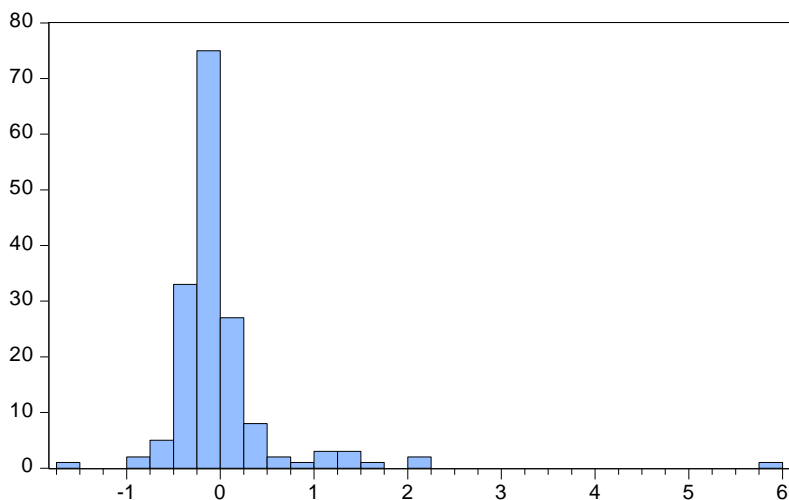
Date: 07/21/20 Time: 06:00

Sample: 1 164

Included observations: 164

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
FSIZE	0.010002	195.6539	4.468202
LEV	0.005947	90.24876	2.873860
CPRT	0.007017	95.05577	3.148029
MULT	0.011503	1.605064	1.017845
C	0.115309	43.97988	NA





#### Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.349006	Prob. F(4,159)	0.0023
Obs*R-squared	16.17354	Prob. Chi-Square(4)	0.0028
Scaled explained SS	321.7715	Prob. Chi-Square(4)	0.0000

#### Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 07/21/20 Time: 06:01

Sample: 1 164

Included observations: 164

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.168646	1.354317	1.601284	0.1113
FSIZE	-1.615616	0.398867	-4.050512	0.0001
LEV	0.626851	0.307572	2.038065	0.0432
CPRT	0.995383	0.334090	2.979388	0.0033
MULT	-0.103405	0.427746	-0.241744	0.8093

R-squared	0.098619	Mean dependent var	0.416874
Adjusted R-squared	0.075943	S.D. dependent var	2.720607
S.E. of regression	2.615262	Akaike info criterion	4.790619
Sum squared resid	1087.496	Schwarz criterion	4.885127
Log likelihood	-387.8308	Hannan-Quinn criter.	4.828986
F-statistic	4.349006	Durbin-Watson stat	2.021333
Prob(F-statistic)	0.002300		

TAXAG

FSIZE

LEV

CPRT

MULT

Mean	0.383150	7.079340	6.206405	5.860114	0.365854
Median	0.296182	7.243343	6.238502	6.055631	0.000000
Maximum	6.456442	8.916817	8.280407	7.747662	1.000000
Minimum	-1.224114	2.562293	1.633468	2.471292	0.000000
Std. Dev.	0.652831	1.085574	1.129036	1.087871	0.483144
Skewness	5.524109	-1.125827	-1.008273	-0.587384	0.557007
Kurtosis	48.37489	5.356275	4.933174	3.171536	1.310256
Jarque-Bera	14903.12	72.58353	53.32472	9.631598	27.99110
Probability	0.000000	0.000000	0.000000	0.008101	0.000001
Sum	62.83668	1161.012	1017.850	961.0588	60.00000
Sum Sq. Dev.	69.46870	192.0908	207.7796	192.9046	38.04878
Observations	164	164	164	164	164

Covariance Analysis: Ordinary

Date: 07/21/20 Time: 06:03

Sample: 1 164

Included observations: 164

Correlation

t-Statistic

Probability

	TAXAG	FSIZE	LEV	CPRT	MULT
TAXAG	1.000000				
	-----				
	-----				
FSIZE	-0.051007	1.000000			
	-0.650061	-----			
	0.5166	-----			
LEV	0.006256	0.803060	1.000000		
	0.079622	17.15276	-----		
	0.9366	0.0000	-----		
CPRT	-0.028958	0.821630	0.707367	1.000000	
	-0.368732	18.34603	12.73730	-----	
	0.7128	0.0000	0.0000	-----	
MULT	-0.090932	0.117778	0.076894	0.064644	1.000000
	-1.162190	1.509578	0.981602	0.824510	-----
	0.2469	0.1331	0.3278	0.4109	-----

# AUDIT COMMITTEE MECHANISMS AND FINANCIAL REPORTING LAG IN THE PRE AND POST IFRS ADOPTION PERIODS IN NIGERIA

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## ABSTRACT

*The study examined the effect of audit committee mechanisms on the financial reporting lag of companies listed on the Nigerian Stock Exchange (NSE) before (pre) and after (post) the adoption of IFRS in Nigeria. Specifically, the study tried to explain whether the three selected audit committee mechanisms (audit committee independence, audit committee diligence and shareholder as audit committee chairman) are more effective in facilitating the timing of financial reporting among Nigerian firms after the adoption of IFRS. The study sampled a total of one hundred and nineteen (119) companies listed on the NSE over the periods 2007 to 2017 amounting to a panel of 1309 observations. The data was analysed using descriptive statistics, correlation matrix, and panel regression models, including moderated regression analysis (MRA) for the estimations. The results of the descriptive statistics indicated a downwards decrease on the average financial reporting lag of the sampled companies, ascertain the level of significance, the results of both the paired sample t-test and Mann-Whitney U tests confirmed that there is significant difference in the reporting lag between the pre and post-IFRS adoption periods and outcome of the panel regression showed that the direction (based on the coefficient signs) of the relationship between the dependent and all the explanatory variables did not vary in the pre and post-IFRS adoption periods. However, in terms of statistical significance, the outcome suggests that (in the pre-IFRS periods) only the variable of audit committee independence significantly affect financial reporting lag, while shareholder as audit committee chairman is the significant determinants of financial reporting lag in the post-IFRS periods. Also, relationship between audit committee mechanism and financial reporting lag of listed companies in Nigeria are significantly related in the pre and post IFRS adoption periods and the result of the interaction model confirmed that the implementation of IFRS acts as a 'moderator' that strengthens the joint effect of the explanatory variables on financial reporting lag. The study recommends that the management of Nigerian listed companies should increase the engagement of more shareholders to chair the audit committees.*

**Keywords:** Audit Committee Chairman, Audit Committee Diligence, Audit Committee Independence, Financial Reporting Lag, IFRS.

## 1. INTRODUCTION

Beginning from January 1, 2012, Nigeria jettisoned the erstwhile Statement of Accounting Standard (SAS) for the International Financial Reporting Standards (IFRS) in order to make listed companies more attractive for investment and to be abreast with global best practices, among other reasons. This became necessary as the widespread adoption of IFRS was considered imperative and germane for effective participation in the global economic space (Adewale & Ibukun-Falayi, 2018). Wong (2018) also considered IFRS adoption as one of the most impacting regulatory changes in the history of financial reporting. In addition, the improvement of corporate transparency, enhancement of the comparability of financial statements and quality of the entire financial reporting constructs are among the major goals of IFRS. Therefore, due to the enviable goals of adopting IFRS, it is noted that about one hundred and fifty (150) countries and reporting jurisdictions around the world currently permit and/or require the use of IFRS for reporting practices of listed companies (Alade, 2018; American Institute of Certified Public Accountants [AICPA], 2018).

The widespread acceptance and adoption of IFRS by both developed and developing economies have proliferated the discussions and research interests on its impact on several organisational outcomes as well as the financial reporting quality. As regard the latter, Wong (2018) asserted that one of the issues that have remained unresolved is the ‘timeliness’ of financial reporting (henceforth it is used interchangeably with financial reporting lag). Since the primary objective of the IFRS-based financial report is to provide high quality financial information concerning economic entities that will be useful for economic decision making, the derivation of such benefits may not be completely actualized if the financial reporting lag does not significantly reduce in the post-IFRS era, compared to the pre-adoption periods (Adewale & Ibukun-Falayi, 2018).

This prediction appears unlikely since IFRS is considered more complex and requires more detailed disclosures compared to most local standards. Thus, auditors would need more time to explore the audit evidence thereby prolonging the issuance of audit report, which implicationally increases the financial reporting lag (Amirul & Md Salleh, 2014). In essence, the expected enhancement of financial reporting quality, as a result of IFRS adoption, may not be adjudged to be fully achievable if the timeliness of such financial information is not prompt enough compared to the pre-IFRS adoption periods. Thus, the recent influx of investigations towards the IFRS adoption’s effect on timeliness of financial reporting in literature is expected, as timeliness remains one salient qualitative characteristic of financial report which determines the relevance and decision-usefulness of financial information which IFRS adoption is expected to enhance (Nulla, 2014).

Most academic pundits, such as Pena and Franco (2017:851) concluded that “the adoption

of IFRS, by itself, is not enough to improve the quality of financial information”. The recent study by Adewale and Ibukun-Falayi (2018) also claimed that most Nigerian companies are still lacking in some financial reporting quality dimensions though they have adopted IFRS. One observable point of note from these submissions is that the IFRS affects some financial reporting quality constructs (such as timeliness), in different jurisdictions, remains a lingering question yet to be sufficiently and perfectly answered.

Considering that the description of financial reporting lag encompasses both audit and management delay, as it usually takes some time depending on management’s discretion to convene the Annual General Meeting (AGM) after the auditor has submitted his reports, it is highly probable that management contributes significantly in determining the extent of financial reporting lag (Abernathy, Kubick & Masli, 2018; Khlif & Samaha, 2014). Uwuigbe, Eluyela, Uwuigbe, Obarakpo and Falola (2018) noted that the responsibility for appropriate and timely financial reporting lies on the shoulder of the board of directors as the apex governing body of a firm as well as audit firm mechanism. Hence, audit committee mechanisms such as audit committee (audit committee size, independence, diligence, and shareholder membership) can be among the strong influencers of financial reporting lag – especially if/when the board (and its sub-committee) remains the highest internal corporate governance system of a company, while financial reporting forms a crucial part of the corporate governance mechanism (Uwuigbe et al., 2018). The researcher conjectures that these mixed results in previous studies could be conditioned by factors emanating from the methodological issues.

## **Research Objectives**

The broad objective of the study is to examine the effect of audit committee mechanism on financial reporting lag in the pre and post IFRS adoption periods in Nigeria. However, the specific objectives are to:

1. find out if there is a significant difference between the pre-IFRS financial reporting lag and the post-IFRS financial reporting lag of listed companies in Nigeria;
2. determine whether the impact of corporate governance mechanisms on financial reporting lag of listed companies in Nigeria is moderated by the IFRS adoption;
3. examine the influence of audit committee independence on financial reporting lag of listed companies in Nigeria before and after the IFRS adoption;
5. investigate the influence of audit committee diligence on financial reporting lag of listed companies in Nigeria before and after the IFRS adoption; and
6. determine the extent to which shareholder as audit committee chair influences the financial reporting lag of listed companies in Nigeria before and after the IFRS adoption.

## **Research Hypotheses**

**Ho1:** There is no significant difference in the changes of financial reporting lag between before (pre) and after (post) IFRS adoption among listed companies in Nigeria.

**Ho2:** There is no significant interaction effect of IFRS adoption on the relationship between corporate governance mechanisms and financial reporting lag of listed companies in Nigeria.

**Ho3:** The relationship between audit committee independence and financial reporting lag of listed companies in Nigeria does not significantly vary in the pre and post IFRS adoption periods.

**Ho4:** The relationship between audit committee diligence and financial reporting lag of listed companies in Nigeria does not significantly vary in the pre and post IFRS adoption periods.

**Ho5:** The influence of ‘shareholder as audit committee chair’ on financial reporting lag of listed companies in Nigeria is not significantly different in the pre and post IFRS adoption periods

## **Significance**

As a result, most recent studies have increased their enquiry on the determinants of the financial reporting lag from the dimension of corporate governance characteristics, however with different conclusions. There is therefore the need to observe how the change in reporting regulations (such as IFRS) affect the relationships between audit committee mechanisms and financial reporting lag, as well as examining how IFRS adoption affects financial reporting lag in a pre and post basis. There is the likelihood that, considering the changes in code of corporate governance as revised in 2011 prior to IFRS adoption, the relationship between audit firm mechanisms and financial reporting lag would vary in the pre and post IFRS adoption periods in Nigeria. These forms part of the motivations behind this study which seeks to compare the effect of IFRS adoption on financial reporting lag of Nigerian listed companies (in a pre and post-IFRS basis) and also examines whether or not IFRS moderates the relationship between audit committee mechanisms and financial reporting lag.

## **2. REVIEW OF RELATED LITERATURES**

### **Concept of Financial Reporting Lag**

The general purpose of financial statement disclosure is to keep interested parties abreast of the financial position of the company which will in turn act as a guide towards making informed business decisions. Information reportage is considered highly relevant in the owners (principals) versus management (agents) relationship where the former is less involved in the day-to-day running of the organisation, having ceded the function to the latter in line with agency theory. Financial reporting thus becomes the only means through

which information asymmetry is diminished. However, it has to be timely for it to satisfy its purpose. Financial reporting lag, therefore, refers to the interval of days between the company's fiscal year-end and the release date of annual financial statement (Arif, Marshall, Schroeder, & Yohn, 2016). In the view of Al-Daoud et al (2014), financial reporting lag is among the two aspects of timeliness in financial reporting, the first being the 'frequency of the reports'; and second, the 'financial reporting lag'. The first form of timeliness (that is, frequency of financial reports) is described as how often the firm issues its financial information in terms of monthly, quarterly or half-yearly (Ku Ismail & Chandler, 2007). The second form of timeliness (financial reporting lag) equally has two types namely: (i) audit report lag, and (ii) management report lag (Al-Daoud et al, 2014). The former refers to the period between the company's year-end and the date of audit report, while the latter refers to the period from the financial year-end of the company to the audited financial reporting publication period (Zaitul, 2010). For the purpose of this study, financial reporting lag is defined as the period it takes a company to make public (publish) its audited annual financial reports, in keeping to their stewardship role of satisfying the information need of its shareholders and in accordance with regulatory provisions.

## **Overview of IFRS**

International Financial Reporting Standards (IFRSs) are standards, interpretations and the framework issued by International Accounting Standards Board (IASB) in guiding the preparation of accounting reports. They are a set of principle-based, high-quality, understandable standards for general purpose financial reporting; designed to encourage professional judgment and discourage over-reliance on detailed rules. It is becoming, or rather has become the global standard for the preparation of public company financial statements. The term IFRS comprises IFRS issued by IASB; IAS issued by IASC; and interpretations issued by the Standing Interpretations Committee (SIC) and the International Financial Reporting Interpretations Committee (IFRIC) of the IASB (Elosiuba & Okoye, 2018). Prior to this time, efforts were geared towards Harmonization of Accounting Standards. This simply means decreasing dissimilarity in accounting concepts and principles adopted in most capital markets in nations around the world. Thus, the idea to have a unified set of Accounting Principles was brought into reality to straighten the international differences that restrained investment opportunities worldwide (IFAC, 2008). In view of the fact that one's environment affects the way and manner accounting is practiced, this perceived cultural factor of such environment comprises their individual belief system and the value they uphold; the accountants' value system is also determined by the Cultural Environment prevalent in that country. Further contributing factors to International Accounting Standards differences are taxation method, legal system and inflation of that geographical region. The International Accounting Standards Committee

(IASC) as a body was thus created to bridge the gap of International Accounting Standards' differences.

The period of IFRS requires companies to make more timely disclosures in order to achieve the financial statements' objective, which is to show a true and fair view of a company's activities. IFRS aims to achieve three main objectives: (1) to help standardize the diverse accounting policies and eliminate the incomparability of financial statements within an entity and across entities; (2) facilitate the presentation of high quality, transparent and comparable information in financial statements; and (3) reduce the accounting alternatives available and eliminate the element of subjectivity in financial statements which is usually exploited for manipulated reports. It thus represents a single set of high quality, universally acknowledged accounting standards that can enhance equivalence of financial reporting across the globe. This expanded comparability of financial information could bring about better investment decisions and guarantee a more ideal allotment of resources across the global economy (Jacob & Madu, 2009). Cai and Wong (2010) also observed that having a single set of internationally acceptable financial reporting standards will dispose-off the requirement for restatement of financial statements, yet guarantee accounting diversity among countries, consequently encouraging cross-border movement of capital and greater integration of the global financial markets.

### **IFRS Adoption in Nigeria**

Prior to the IFRS adoption era, most countries had their own locally developed accounting standards with relevant regulatory provisions and statutory bodies given the task for its development and issuance. In Nigeria, the then NASB (Nigerian Accounting Standards Board) was responsible for developing and issuing standards known as SAS (Statements of Accounting Standards). As a private sector initiative, the NASB was established in 1982 and was closely associated with ICAN. It (that is, NASB) later became a government agency in 1992 and was reporting directly to the Federal minister of commerce (Ibanichuka & Asukwo, 2018). The primary function, as stipulated in the July 10<sup>th</sup> 2003 Act, was to create, publish and periodically update SASs to be adhered to by indigenous companies in the preparation of their financial statements and to popularize and enforce the strict compliance of the standards. Due to the ever growing globalization which brings about more business rivalry, it becomes basic that nations and organisations alike sort out issues that will influence them to end up being more appealing to investors' capital which is tantamount to the proverbial beautiful bride (Sanyaolu et al., 2017). According to Oshodi and Ikhatua (2018), the need to globalise the capital markets is the brainchild behind the quest for the adoption of a single set accounting standard. Others like Sanyaolu et al (2017) attributed the quest for the adoption of a single set accounting standard to the numerous cases of corporate collapse and most especially the case of some U.S. giant companies. It was believed that the adoption will confer more dignity on the financial statements



prepared by companies. In view of the mandate of NASB to advance the production of generally acceptable financial reports and top-notch accounting standards that are predictable with international practices, it initiated a Stakeholders' Committee on the Roadmap to the Adoption of IFRS in Nigeria on October 22, 2009.

On Wednesday, 28 July 2010, the Nigerian Federal Executive Council acknowledged the proposal of the Committee on the Roadmap to the Adoption of IFRS in Nigeria, that it would be in light of a legitimate concern for the Nigerian economy for reporting elements in Nigeria to receive all inclusive acknowledged, top notch accounting standards by completely embracing the International Financial Reporting Standards (IFRS) in a Phased Transition (FIRS, 2013). In December 2010, after the endorsement of the Federal Executive Council, the Nigerian Accounting Standards Board (NASB), (now assigned as Financial Reporting Council of Nigeria [FRCN]) issued a usage roadmap for Nigerian's reception of IFRS which set January 2012 date for consistence for freely cited organisations and banks in Nigeria. As per FIRS (2013), the Central Bank of Nigeria (CBN) and the Securities and Exchange Commission likewise received this date for consistency and has issued direction in consistence with the booklets to guarantee full execution of IFRS in Nigeria. Segments 8, 52 and 53 of the Financial Reporting Council of Nigeria Act, 2011 impacted on the appropriation of International Financial Reporting Standards.

### **Audit Committee Independence**

Audit committee independence represents the percentage of independent non-executive directors on the total number of audit committee members. In the context of corporate governance, audit committees have been long seen as a key institution in helping the board of directors upgrade the straightforwardness and uprightness of financial information reporting. The audit committee is considered effective when their core functions are performed without interference from management. The Companies and Allied Matters Act 1990, as amended and consolidated in the 2004 Act, stipulates that every public company in Nigeria must have an audit committee. The functions of the committee as spelt out in section 359(6) are to: “(i) ascertain whether the accounting and reporting policies of the company are in accordance with legal and agreed ethical practices; (ii) review the scope and planning of audit requirements; (iii) review the findings on management matters in conjunction with the external auditors and departmental responses thereon; (iv) keep under the effectiveness of the company’s system of accounting and internal control; (v) make recommendations to the board with regard to the appointment, removal and remuneration of external auditors of the company; and (vi) authorize the internal auditor to carry out investigations into any activities of the company which may be of interest or concern to the committee.”

However, Buchalter and Yokomoto (2003) argued that among the functions of the audit committee that their major objective is to ensure the accuracy of financial reports. As need

be, the audit committee ought to include three non-executive board individuals and three shareholders chosen from among them at every yearly general gathering. Be that as it may, the board of directors' names audit committee agents and presents them to shareholders for their endorsement at the yearly general gathering (that is, AGM). Splitting the audit committee participation into an equivalent number of portrayals is to guarantee the independence of the committee, in this way making more trust in the board activities, improved financial control and greater validity to the workings of the committee and friends' financial reporting process (Kibiya, Che-Ahmad & Amran, 2016).

### **Audit Committee Diligence**

Audit committee diligence is used to classify how effective the audit committees are in performing their activities. Most studies refer to it as audit committee effectiveness, audit committee meeting, audit committee activity, et cetera. The common thing is that it is captured by the number of meetings held by a company's audit committee to discuss issues regarding the company during a financial year. Audit committee diligence, proxy by frequency of audit committee meeting, is a significant aspect of an effective board of directors (Vafeas, 1999). The adequacy of audit committee depends on the degree to which the Committee can resolve issues and to enhance their observing capacity of organisation's activities (Abbott, Park & Parker, 2000). A more active audit committee is relied on to give a compelling checking component. The more successive the audit committee meets, the greater the chance to examine current issues looked at by the organisation (Vafeas, 1999). The Code of Corporate Governance expresses that the arrangement of a systematized forum urges the outside auditor to raise possibly vital issues from the onset. As the best practice, audit committee meeting ought to be hold in any event once every year without the nearness of executive board individuals. In any case, the aggregate number of gatherings depends on the organisation's terms of reference and the many-sided quality of the organisation's tasks. Something like three or four gatherings ought to be held notwithstanding different gatherings held in light of conditions that emerge amid the financial year (Finance Committee on Corporate Governance, 2001). In spite of the fact that the quantity of gatherings may not give a powerful observing instrument, it is noticed that an audit committee with no gathering or with modest number of gatherings is less likely to be a decent screen (Menon & Williams, 1994). Islam, Islam, Bhattacharjee, and Islam (2010) uncovered that an audit committee is a system that controls administrative motivation issues including the control of financial statements to get the best rewards. In such manner, a compelling audit committee improves the quality and validity of yearly audited financial report. Likewise, a powerful committee could ensure the financial reporting, internal control and administration hazard dependability (DeZoort et al., 2002). Therefore, through its checking obligations, the audit committee is required to give input to administration with the end goal to produce auspicious financial information.

### **Shareholder as Audit Committee Chair**

Section 359 (3&4) of the Companies and Allied Matters Act(CAMA), 2004 and the revised 2011 Code of Corporate Governance under part ‘E’ article 30 of corporate governance code clearly specified the formation of a six-member audit committee for public companies in Nigeria. Accordingly, the audit committee should comprise three (3) non-executive board members and three (3) shareholders elected from amongst them at each AGM (CAMA, 2004; SEC, 2011). The idea of splitting the audit committee membership into equal representations is to ensure independence and create more confidence in the board’s activities (Kibiya et al, 2016). However, while the audit committee representatives appointed by the board are subject to the approval of the shareholders at the AGM, the code did not specify who must chair the committee. The only provision is that the committee must be headed by an independent chair that is not the chair of the board of directors. Recent studies (e.g. Mohammed et al, 2018a; Mohammed et al, 2018b) have observed that having a shareholder as the audit committee chair will quicken the entire reporting process since the duties of the committee revolves around ensuring the accuracy of financial reports. In the same vein, shareholder’s equity holding affords them the power for sheer control of the company’s activities and render effective monitoring (Kibiya et al., 2016). It is expected however, that shareholders in the audit committee assuming the leadership responsibility of the committee will take into cognizance of their investment because the chair of the audit committee is more responsible in overseeing the financial reporting process (Schmidt & Wilkins, 2012), and therefore, liable to the breakdown of reporting process (Engel, Heyes, & Wang, 2010). According to Mohammed et al (2018b), the involvement of shareholders in the audit committee leadership would be a strong motivation for increased monitoring of management activities; as shareholders are expected to protect their investment by instituting higher level of commitment in firms’ reporting process and can as well punish external auditors who issue a going concern report arising from unclear circumstances (Mengena & Pike, 2005). Moreover, shareholders as top members of audit committee would be inclined to restore timeliness of financial reporting and the committee’s image as well as the whole corporate image (Nnadi, 1999), because investors and other stakeholders are more interested in firms timely financial report and the concern is noticed from companies with large shareholders’ equity (Aubert, 2009; Sengupta, 2004). Previous literatures indicated that the audit committee chairman is one of the firm’s high positions in the hierarchy and acts as a solid source of power (Hambrick & Mason, 1984; Sharma, Naiker, & Lee, 2009). The shareholders are required to effectively play dual roles of being owners and exhibit the ability to monitor financial reporting process that can lead to quality financial report which can be evaluated within a reasonable time limit as contained in the regulation (Sunusi, 2011). This present study therefore, argues that having shareholders in the leadership of the audit committee may improve timeliness of financial reporting.

## **Review of Empirical Studies**

Khelif and Achek (2016) found that IFRS adoption has increased audit report lag, which is a major contributor to financial reporting lag. The study of Yurisandi and Puspitasari (2015) showed that IFRS adoption only increased relevance, understandability and comparability of financial reporting, but not timeliness level, which had no changes in the period before and after IFRS adoption. Also, the findings of Pena and Franco (2017) in the United Kingdom did not support any improvement in the quality of the financial information after IFRS was put in place. The same with the study of Suadiye (2017) whose findings indicated that switching to IFRS does not improve financial reporting quality except value relevance in Turkey. Much earlier study by Walker and Hay (2013) equally showed significant positive association between IFRS adoption and audit delays - suggesting audit report lag has significantly increased following the adoption of IFRS in New Zealand. Habib (2014) also documented empirical evidence of a significant increase in the audit report lag in China after the adoption of these new accounting standards. Habib's findings also supported those by Malaysia researchers (Amirul & Md Salleh, 2014) whose study revealed that the ARL increased as new accounting standards are implemented. A more recent study by Oshodin and Ikhatua (2018) equally examined the reporting timing of 30 listed companies in Nigeria over the periods of 2009 through 2016. Their OLS regression result showed that, though the adoption of IFRS poses a negative influence on timeliness of financial reporting, such relationship is not significant. Despite the insignificant relationship observed by Oshodin and Ikhatua (2018), the earlier study by Fodio et al (2015) suggested that timeliness of financial reporting may have worsened in the post IFRS adoption era. In line with these inconsistencies in prior studies, this study hypothesized that the level of financial reporting lag of Nigerian listed companies does not differ when compared to pre and post IFRS periods. Ozoanigbo et al (2016) also conducted a study focusing on the effect of audit committee effectiveness (independence and expertise) on the financial reporting timeliness of nine (9) companies quoted under the pharmaceutical industry in Nigeria between 2011 and 2015. They adopted the ex post factor and longitudinal research design. Using regression analysis, their result revealed that 64% of changes in the financial reporting timeliness can be attributed to the audit committee's effectiveness. They also found out that the audit committee's independence has a positive and significant effect on the financial reporting timeliness of companies quoted under the pharmaceutical industry. Kibiya, Che-Ahmad and Amran (2016) investigated how audit committee characteristics affect financial reporting quality of 101 non-financial companies in Nigerian from 2010 to 2014. They employed a longitudinal panel of 505 observations in a regression estimate and found that audit committee independence and financial expertise are significant. This indicates that audit committee monitoring mechanisms influence quality financial reporting of listed non-financial firms in Nigeria. Sharinah, Mohd and Azlina (2014) examined (comparatively) the influence of

audit committee on timeliness of financial reporting pre and post (before and after) Malaysian code of corporate governance 2007. They sampled a total of 669 firms for each (that is, pre and post) period and adopted the panel regression analysis. They found that audit committee independence is significantly associated with financial reporting timeliness only before (pre) the release of MCCG 2007, and not after the implementation of the code. This saw only audit committee size and audit committee expertise being significantly related to financial reporting timeliness after (post) the release of MCCG 2007. This goes to show that the implementation of a regulation or standard may change the influence of some corporate governance characteristics on reporting lag. Handayani and Yustikasari (2017) also examined the effect of independent board of commissioners, competence of audit committee members on audit report lag. They used secondary data derived from the financial statements listed manufacturing companies in Indonesian Stock Exchange in 2013-2015, which were selected based on purposive sampling method cumulating to 72 observations. They used multiple regression method and found out that independent board of commissioners has no significant effect on audit report lag. The study by Akhor and Oseghale (2017) equally focused on the relationship between audit committee attributes and financial reporting lag of deposit money banks quoted in the Nigeria Stock Exchange for the periods of five years from 2011 to 2015. Using the ordinary least square regression, their results showed that audit committee independence has a significant relationship with financial reporting lag and recommended that banks should reduce the number of non-executive directors in the audit committee for timely release of audited financial statements to users of the financial information. Mohamad-Nor, Shafie and Wan-Hussin (2010) empirically examined how audit committee characteristics (including their size, independence, expertise and frequency of meeting) influence audit report timeliness. Using the multivariate analysis, they found out that having more audit committee members leads to more timelier financial reportage. So also, firms that their audit committees met more often were timelier. Their result showed that independence and audit committee competence assert negative influence on audit report lag. However, none of them was found to be statistically significant. This shows that audit committee members that meet often to iron-out issues relating to financial reporting are more efficient in fast-tracking the financial information disclosure. Sharinah, Mohd and Azlina (2014) conducted a comparative analysis of the influence of audit committee and timeliness of financial reporting, they compared the timeliness of financial reporting for pre and post Malaysian code of corporate governance 2007 using a sample of six hundred and sixty-nine (669) firms for both (pre and post) periods. The result of their panel least square analysis revealed that audit committee meetings are significantly associated with financial reporting timeliness only before the release of the new code in 2007, and became insignificant when tested with the post-MCCG 2007 data. This is a pointer that most of the corporate governance variables proposed for this study may not have same effect on financial

reporting lag when tested in a pre and post IRS basis. Emeh and Ebimobowei (2013) also examined the effect of audit committee and timelines of financial reports for thirty five firms quoted in the Nigeria Stock Exchange (NSE) for the period of 2007-2011. Their finding revealed that audit committee meeting is not significantly related to timeliness of financial reports. Same as Akhor and Oseghale (2017) whose results showed that audit committee meeting has no significant relationship with financial reporting lag in the banking sector. Mohammed et al (2018a) and Mohammed et al (2018b) have tested the relationship between shareholders as chair of audit committee and financial reporting lag in Nigeria. Thus, shareholders as chair of audit committee is considered the new variable in accounting research and can certainly open a new virgin area for debate. The shareholders are required to effectively play dual roles of being owners and exhibit the ability to monitor financial reporting process that can lead to quality financial report which can be evaluated within a reasonable time limit as contained in the regulation (Sunusi, 2011).

## **Review of Theory**

This sub-section focuses on the underlying theory that attempt to explain the background and historical developments of the study.

### **Agency Theory**

Basically, agency theory (as popularised by Jensen & Meckling, 1976) is used to define the contractual situation where the real owners of the company (principals) cede the responsibility of the day-to-day running of the business on the care of the agents (management), where the latter has authorities to make business decisions (Jensen & Meckling, 1976). Since the principals have less information as to the real happenings in the organisation, there is a possibility that the managers may exploit the information gap (information asymmetry) and act opportunistically towards attaining their own goals which may be at the expense of the principals. Thus, financial reporting becomes one of the tools through which the owners can be kept abreast of the true financial position of the company, which hitherto is their major interest. Management is required to perform their stewardship function by issuing periodic financial statements for the consumption of the stakeholders. The financial information disclosure is expected to act as a signal of good or bad news to stakeholder to guide their next investment action. In this examination, the agency theory is utilized to clarify how the full union with IFRS keeps the administration of recorded companies from controlling or deferring financial figures disclosure. After all, agency theory accepts that both the administration of companies and the shareholders are level headed riches maximisers. In this manner, the division of possession and control from administration inside a firm empowers the administration gathering to act astutely when an irreconcilable circumstance emerges.

## METHODOLOGY

### Research Design

The research design adopted for this study is expo-facto and longitudinal research design which helps to examine financial reporting lag and corporate governance characteristics for the period of 2012 to 2018. The justification for using ex-post facto or longitudinal research design is that it permits of observing one or more variables over a given period of time. The research approach is very relevant in testing the hypothesis of the study and in answering the research questions raised on the effect of audit firm rotation on auditing quality in Nigeria. The study adopts the *ex-post facto* research design due to its suitability for the quantitative survey research paradigm that underpins this study, because the quantitative measures of the variables, such as financial reporting lag and corporate governance characteristics, cannot be altered or controlled by the researcher.

### Population and Sampling of the Study

The population of this study consists of the entire companies (both financial and non-financial) listed on the first-tier of the Nigerian Stock Exchange (NSE) as at 31<sup>st</sup> December, 2017. A total of one hundred and seventy (170) companies fall into this category and thus constitute the population of the study. This number constitutes companies from 11 sectors including: Financial sector (57), Agriculture (5), Conglomerates (6), Construction/Real Estate (9), Consumer Goods (21), Healthcare (10), ICT (7), Industrial Goods (14), Natural Resources (4), Oil and Gas (12); and Services (25). However, for the purpose of determining the sample size, the sampling technique will be derived from Burley's formula that was propounded and popularized by Yamane (1967). The 5% error margin is applied on the population using the formula stated below:

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

.Equ 3.1

Where: n = sample size; N = population size (i.e. 170); e = desired level of significance, (in this case is 5. From the above computation, a total of one hundred and nineteen (119) companies (which is about 70% of the entire population) form the sample size of the study. The convenient and systematic sampling techniques were used randomly in selecting each of the companies from the population. The justification for these methods is primarily to ensure that all the companies in each of the sectors that constitute the population were represented.

**Table 1: Sample Selection**

<b>Sectors</b>	<b>Total Number Listed in NSE</b>	<b>Number sampled</b>	<b>Total Observation</b>	<b>% of population sampled</b>
Agriculture	5	5	55	100%
Banking	23	13	143	57%
Conglomerate	6	6	66	100%
Construction & Real Estate	9	3	33	33%
Consumer	21	18	198	86%
Healthcare	10	7	77	70%
ICT	7	5	55	71%
Industrial	14	14	154	100%
Insurance	34	21	231	62%
Oil & Gas	12	9	99	75%
Natural Resources	4	4	44	100%
Services	25	14	154	56%
<b>Total</b>	<b>170</b>	<b>119</b>	<b>1309</b>	<b>76%</b>

**Source: Researcher's Compilation, 2019**

Table 3.1 shows the details of the sample selection. As observed, the financial sector is represented in the sample by a total of 34 companies (13 banks and 21 insurance firms). The entire five companies in the Agricultural sector was captured by the sample, same applies to the six (6) companies in the Conglomerate sector, fourteen (14) in the industrial sector and all the four (4) that made up the natural resources sector. Pooled together, the sample is made up of a panel of 1309 observations in an eleven-year period (2007 to 2017), while the proportion of the population of 170 companies captured by the study is 76%.

### **Model Specification**

In order to test for the relevance of the formulated hypotheses regarding the corporate governance determinants of financial reporting lag of companies listed on the Nigerian Stock Exchange, the following panel regression models, as remodified from previous studies (Ahmed & Che-Ahmad, 2016a; Al Daoud et al., 2015; Ibadin et al., 2012) is specified for this study. The assumption is that, the dependent variable is a linear function of the independent variable.

$$Y_1 = f(\text{Audit committee mechanisms}) \dots \dots \dots (1)$$

Where  $Y_1$  is the financial reporting lag; while audit committee mechanisms comprise of independence, diligence and shareholders involvement attributes.

The regression models are shown below:



### Model 1 (Pre-IFRS)

The functional form is given as;

$$FRL = f(\text{ACI}; \text{ACD}; \text{SHC}) \dots (2)$$

While the explicit model in econometric form is given as:

$$FRL_{it} = \gamma_0 + \gamma_1 \text{ACI}_{it} + \gamma_2 \text{ACD}_{it} + \gamma_3 \text{SHC}_{it} + \mu \dots (3)$$

### Model 2 (Post IFRS)

The functional form is given as;

$$FRL = f(\text{ACI}; \text{ACD}; \text{SHC}) \dots (4)$$

While the explicit model in econometric form is given as:

$$FRL_{it} = \beta_0 + \beta_1 \text{ACI}_{it} + \beta_2 \text{ACD}_{it} + \beta_3 \text{SHC}_{it} + \mu \dots (5)$$

### Model 3 (Moderating effect)

The functional form is given as;

$$FRL = f(\text{ACI}; \text{ACD}; \text{SHC}; \text{IFRS}) \dots (6)$$

While the in econometric form is given as:

$$FRL_{it} = \alpha_0 + \alpha_1 \text{ACI}_{it} + \alpha_2 \text{ACD}_{it} + \alpha_3 \text{SHC}_{it} + \alpha_4 \text{IFRS}_{it} + \alpha_5 (\text{ACI}, \text{ACD}, \text{SHC} * \text{IFRS}) + \mu \dots (7)$$

Where:  $\gamma_0, \beta_0, \alpha_0$  = Constants or Intercepts;  $\gamma_1$  to...  $\gamma_3$ ;  $\beta_1$  to...  $\beta_3$ ;  $\alpha_1$  to...  $\alpha_3$  = Unknown coefficients or parameters to be estimated;  $it$  = “i” represents a particular firm and “t” for a particular year (time); FRL = Financial reporting lag; ACI = Audit committee independence; ACD = Audit committee diligence; SHC = Shareholder as audit committee chair; IFRS = IFRS adoption;  $\mu$  = Stochastic error term

### Data Analysis Techniques

Considering the outlined specific objectives and the corresponding hypotheses, the study made use of inferential, comparative and descriptive statistical techniques. Generally, the descriptive analysis of the data was conducted to obtain the sample characteristics in respect to the selected variables. However, for the purpose of the first hypothesis, both the Paired Sample T-test and Mann-Whitney tests were used for the comparative analyses to help determine if there is a significant difference between the pre and post IFRS financial reporting lag. For the purpose of the second objective/hypothesis, the Moderated Multiple Regression was used in determining the interaction effect of IFRS adoption on the nexus between corporate governance and financial reporting lag. Then, the panel data technique was used for the purpose of achieving the remaining objectives three to eight. Other

conventional diagnostic tests such as Panel Model Test (Hausman Test), normality, multicollinearity, heteroskedasticity, autocorrelation and model specification test were also conducted to address some basic underlying regression analysis assumptions. Both Eviews version 9 and SPSS 24 econometrics software packages were used for the analyses; the former was deployed for the purpose of the panel data analysis, while the latter was used for the comparative tests.

**Table 2: Measurement of Variables**

s / n	Variables	Definition	Type	Measurement	Source	Apriori sign
1.	FRL	Financial reporting lag	Dependent	Natural logarithm of difference between year-end and when the financial report is published.	Fodio et al (2015); Mohammed et al (2018a)	-nil-
2.	ACI	Audit committee independence	Independent	The proportion of independent nonexecutive directors on audit committee.	Emeh and Ebimobowei (2013)	+
3.	ACD	Audit committee diligence	Independent	The frequency (number) of audit committee meeting in the financial year.	Akhor and Oseghale (2017)	+
4.	SHC	Shareholder as audit committee chair	Independent	A dummy variable of '1' if the Chairman of the audit committee is a shareholder, 0 otherwise	Abernathy, Beyer, Masli and Stefaniak (2014); Mohammed et al (2018b)	+
5.	IFRS	IFRS adoption	Moderator	Dichotomous variable of '1' for years between 2012 – 2017 and zero (0) for periods 2006 to 2011.	Fodio et al (2015); Jermakowicz et al (2018)	+

**Source: Researcher's Compilation (2019)**

## DATA PRESENTATION AND ANALYSES

Fixed and random effect panel regression procedures were estimated. However, in order to make a choice on the most desirable model to adopt/interpret, the Hausman test (as presented below in Table 3) was conducted to help determine the most appropriate between the fixed and random effect models. The following hypothesis applies:  $H_0$ : Random Effect Model is consistent  $H_1$ : Fixed Effect Model is consistent; Decision Rule: If p-value is less than 5 percent we can accept the alternative hypothesis that the fixed effect is more consistent.

**Table 3: Hausman Tests**

<b>Model One (Pre IFRS)</b>			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.451370	9	0.0421
<b>Model Two (Post IFRS)</b>			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.548012	9	0.0209

**Source: Researcher's Compilation from Eviews 9 Output, 2019**

From the outcomes of the two (2) Hausman test results presented in Table 3, it could be observed that both probability values of (4.2% and 2.1%) did not exceed the critical p-value of 5 percent, which confirms the appropriateness of the fixed effect model as the best method in capturing the relationships among the panels.

**Table 4: Fixed Effect Panel Regression Results (Models One and Two)**

-Model 1	Pre IFRS (2007 - 2011) Dependent Variable: FRL Total observations: 595 (119 cross-sections)			Model 2	Post IFRS (2013 - 2017) Dependent Variable: FRL Total observations: 595 (119 cross-sections)		
Variables	Coefficient	t-Statistic	Prob.	Variables	Coefficient	t-Statistic	Prob.
C	2.576539	10.14430	0.0000	C	601.6600	4.183387	0.0000
ACI	-0.264436	-1.927461	0.0455**	ACI	-18.44443	-0.451625	0.6517
ACD	0.006977	0.597364	0.5506	ACD	0.768151	0.206243	0.8367
SHC	-0.027142	-0.684181	0.4942	SHC	-60.16515	-3.728044	0.0002*

							**
<b>R-squared</b>		0.721273	<b>R-squared</b>			0.68	
<b>Adjusted R-Squared</b>		0.645474	<b>Adjusted R-Squared</b>			4985	
<b>F-statistic (p-value)</b>		9.52	<b>F-statistic (p-value)</b>			0.59	
<b>Durbin-Watson</b>		(0.000)	<b>Durbin-Watson</b>			9133	
		1.826719				7.97	
						9	
						(0.0	
						00)	
						2.46	
						4230	

Source: Researcher's Compilation from Eviews 9 output (2019) \*\*\*, \*\* significant at 1% and 5% respectively

As observed from Table 4, the joint statistical significance of both models cannot be rejected at 5% levels owing to the f-statistics values of 9.52 and 7.979 respectively for both models one and two. This is an indication that a linear relationship exists between the dependent and the explanatory variables in both models. The Durbin-Watson values of model one (1.83) is substantially close to 2.00 and is indicative of the absence of the problem of multicollinearity, while that of model two (2.46) also lies within the acceptable range in line with Field (2009)'s rule of thumb. On the proportion of variations in the dependent variable(s) that was accounted for by the explanatory and control variables taken together, the result showed a total of about 72.1% and 68.5% for model one and two respectively. However, the adjusted R-squared which controls for the effect of the inclusion of successive explanatory variables on the degrees of freedom stood at 64.5% and 59.9% respectively. This implies that the remaining proportions of about 35.5% and 40.1% respectively were not captured by the individual models and have been taken care of by the error term. Nevertheless, the above average values of the adjusted R-squares are indications that both models have good explanatory powers.

On the basis of the performance of the individual variables in terms of their levels of significance, it could be observed from model one that ACI (audit committee independence) have significant effects on the dependent variable of financial reporting lag (FRL), while the ACD and SHC were not statistically significant. The model two (run using only the post-IFRS adoption data) result shows that shareholder as audit committee chairman (SHC) passed the significance test at 5% owing to their low probability values of (p-value  $0.0329 < 0.05$ ), 1% (p-value  $0.000 < 0.0002$ ), 1% (p-value  $0.0124 < 0.0008$ ) and 1% (p-value  $0.0089 < 0.0071$ ) respectively. However, the remaining explanatory variables of model 2 (ACI and ACD) were not statistically significant due to high probability values of 0.6517 and 0.8367 respectively.

The direction of the contribution of each of the explanatory variables to the behaviour of

financial reporting lag (dependent variable) for the period under study is determined by the coefficients signs and their level of significance. On the former, an observation of the slope of coefficients of the independent variables (in model one) show the existence of negative relationships among ACI and SHC; and the dependent variable (FRL) as depicted by the inverse coefficient values of -0.264436 and -0.027142 respectively. The remaining explanatory variable, ACD has positive coefficient signs of 0.006977. A look at the model two (post-IFRS model) shows that the coefficient signs appeared the same as observed in the models one (pre-IFRS). Thus, the same variables that showed negative coefficient signs in model one replicated same in model two, and vice versa. However, they both differed in term of their levels of significance. The implication is that while increases in audit committee independence (ACI) have significant decreasing effects on financial reporting lag (FRL) before IFRS adoption, their effect in the post IFRS regime are not significant among the sample. On the other hand, in the post-IFRS period, increases in and shareholder as audit committee chairman (SHC) has significant increasing and decreasing effects (respectively) on FRL, other things being equal. The next sub-section tries to statistically determine if IFRS adoption moderates the effects of the explanatory variables on financial reporting lag (FRL).

### **Moderated Regression Analysis**

In line with the model specification in the previous chapter, a moderator variable (IFRS) was included in Model 3. The essence is to ascertain if the joint effects of the selected corporate governance mechanisms on the financial reporting lag will be moderated by the adoption of IFRS. The moderator variable here (that is, IFRS) is dichotomous in nature and was analyzed using Moderated Multiple Regression (MMR) for the purpose of testing the hypothesis two (Ho2) of the study. The sample consist of all the eleven years covered by the study (2007-2017) amounting to 1309 observations. The switch year (that is, 2012) that was excluded for the purpose of the comparative test was reinstated in the interaction model. The output is shown below:

**Table 5: Results of the Moderated Regression Analysis (Interaction Model Three)**

<b>Column A: <u>Unmoderat</u> <u>ed</u></b>	Sample (2007 - 2017) Dependent Variable: FRL Total observations: 1309 (119 cross-sections)	<b>Column B: <u>Moderat</u> <u>ed</u></b>	Sample (2007 - 2017) Dependent Variable: FRL Total observations: 1309 (119 cross-sections)
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Variables	Coefficient	t-Statistic	Prob.	Variables	Coefficient	t-Statistic	Prob.
C	2.597093	33.46478	0.0000	C	2.650589	38.92366	0.0000
ACI	-0.085480	-1.101166	0.2710	ACI	-0.057702	-0.853199	0.3937
ACD	-0.005593	-0.818444	0.4133	ACD	-0.012950	-2.098980	0.0360*
SHC	-0.031474	-1.900527	0.0576*	SHC	-0.048873	-3.258186	0.0012**
-nil-	-nil-	-nil-	-nil-	<b>IFRS^^</b>	<b>0.008019</b>	<b>21.01851</b>	<b>0.0000**</b>
R-squared			0.443457	R-squared			0.518600
Adjusted R-Squared			0.438734	Adjusted R-Squared			0.514139
F-statistic (p-value)			93.9 (0.000)	F-statistic (p-value)			116.3 (0.000)
Durbin-Watson			2.151651	Durbin-Watson			2.038725

Source: Eviews 9 (2019) Notes: ^^ =Interaction Term; \*\*\*, \*\*, \* significant at 1%, 5% and 10% respectively

From Table 5, it could be observed that the introduction of the moderator variable of IFRS (the interaction term) into the equation (see column B) increased the predictive power of the model from 44% to 52%, thereby causing an R-Squared Change of about 18.2%. This implies that the interaction of the explanatory variables and the moderator variable predicts a greater proportion of variations in FRL, compared to the model without the interaction term. In other words, the effect of explanatory variables on financial reporting lag (FRL) changes meaningfully depending on the presence of the moderator variable of IFRS. Also, the regression coefficient of the interaction term (IFRS) is positive and statistically significant at 1% level. Hence, the moderating variable of IFRS adoption strengthens the

casual effects of the selected corporate governance mechanisms on financial reporting lag (FRL).

### Test of Hypotheses and Discussion of Results

The null hypotheses formulated in this study were tested. The t-statistics and probability values of each of the variables were used for the hypotheses testing.

#### Test of Hypothesis One

**Ho1:** There is no significant difference in the changes of financial reporting lag between before (pre) and after (post) IFRS adoption among listed companies in Nigeria.

**Table 6: Result for the Test of Hypothesis One**

Paired Test:	Samples	Mean	Std. Deviation	Std. Error Mean	F	df	Sig. (2-tailed)
Pre_IFRS_FRL		35.22					
	9		87.505	3.587	9.82	594	0.000***
Post_IFRS_FRL							
Mann-Whitney Test:	N	Mean Rank	Sum of Ranks	Wilcoxon W	Z	Asymp. Sig. (2-tailed)	
Pre IFRS FRL	595	689.42	410207	121128	-9.43	0.000***	
Post IFRS FRL	595	501.58	298438				

**Source: Computed from SPSS 24 Output (2019)** \*\*\*significant at 1% level of confidence.

From Table 4.8, it could be observed that the results of both the Paired sample t-test (parametric) and the Mann-Whitney (non-parametric) test appeared same based on their respective level of significance. Both probability values are less than 0.05 implying that the observed reduction in financial reporting lag in the post IFRS period is statistically significant. This result is in tandem with the outcome of Osasere and Ilaboya (2018) which used similar approach in comparing the financial reporting lag of Nigerian listed banks (for GAAP and IFRS regimes) and they found out that there is a statistically significant difference in the time lag between the two reporting regimes at 5% level of significance. The result also agrees with that of Oshodi and Ikhatua (2018) who also found improvement in financial reporting lag of Nigerian firms during the post IFRS periods, although they did not test whether or not it was statistically significant. The results of Fodio et al (2015), Sanyaolu et al (2017) and Musa (2015) which showed that the financial reporting of Nigerian listed companies is timelier after the adoption of IFRS, also supports our result. However, the outcome of most studies from other climes such as Yurisandi and Puspitasari (2015) in Indonesia and Habib (2014) in China did not entirely support our result which could be attributed to differences in the reporting environments. Based on our decision

rule, the null hypothesis that the financial reporting lag of Nigerian listed companies before (pre) and after (post) IFRS adoption does not differ significantly can be rejected.

### Test of Hypothesis Two

**Ho2:** There is no significant interaction effect of IFRS adoption on the relationship between corporate governance mechanisms and financial reporting lag of listed companies in Nigeria.

**Table 7: Result for the Test of Hypothesis Two**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.650589	0.068097	38.92366	0.0000
IFRS	0.008019	0.000382	21.01851	0.0000***

**Source: Computed from Eviews 9 output (2019)**

As observed, the absolute t-statistic value of the interaction term (21.0185) is greater than the critical t-value of 1.90 at 5% level of significance at 1308 (that is, n-1) degrees of freedom (2-tailed). More so, its probability value of 0.000 is far lower than the 0.05 benchmark. Hence, we reject the null hypothesis as it was stated above. This implies that IFRS adoption significantly moderates the relationships between the selected corporate governance mechanism and financial reporting lag of Nigerian listed companies.

### Test of Hypothesis Three

**Ho3:** The relationship between audit committee independence and financial reporting lag of listed companies in Nigeria does not significantly vary in the pre and post IFRS adoption periods.

**Table 8: Result for the Test of Hypothesis Three**

Pre IFRS	Coefficient t	t-Statistic	Prob.	Post IFRS	Coefficient t	t-Statistic	Prob.
C	2.576539	10.1443	0.0000	C	601.66	4.183387	0.0000
ACI	-0.264436	-1.927461	0.0455*	ACI	-18.44443	-0.451625	0.6517

**Source: Computed from Eviews 9 output (2019)**

Table 8 shows that while the “absolute” t-statistic values of ACI in the pre-IFRS model of 1.93 is greater than the critical t-value of 1.90, while that of model two of 0.45 is lower. Also observed from both probability values, the former (ACI in model one) passed the significance test at 5% owing to the significant p-value of 0.0455, while the latter (ACI in model two) did not scale through due to the high probability value of 0.6517 (> 0.05). the outcome of most previous studies showed that the result is exactly the same as that by Sharinah, Mohd and Azlina (2014) which comparatively examined the influence of audit



committee on timeliness of financial reporting pre and post (before and after) Malaysian Code of Corporate Governance 2007. They found that audit committee independence is significantly associated with financial reporting timeliness only before (pre) the release of MCCG 2007, and not after the implementation of the code. Our result on audit committee independence in the post-IFRS period negates those by Akhor and Oseghale (2017); Emeh and Ebimobowei (2013); Ozoanigbo et al (2016); and Uthman, et al. (2018) which all found that audit committee independence significantly affects financial reporting lag. In line with the decision rule, the null hypothesis three can be rejected.

#### **Test of Hypothesis Four**

**Ho4:** The relationship between audit committee diligence and financial reporting lag of listed companies in Nigeria does not significantly vary in the pre and post IFRS adoption periods.

**Table 9: Result for the Test of Hypothesis Four**

<b>Pre IFRS</b>	<b>Coefficient</b>	<b>t-Statistic</b>	<b>Prob.</b>	<b>Post IFRS</b>	<b>Coefficient</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	2.576539	10.1443	0.0000	C	601.66	4.183387	0.0000
ACD	0.006977	0.597364	0.5506	ACD	0.768151	0.206243	0.8367

**Source: Computed from Eviews 9 output (2019)**

As shown in Table 9, the variable of audit committee diligence (ACD) was not statistically significant in both model one and two. This can be observed from the t-stat and probability values of 0.597364 (p-value = 0.5506) and 0.206243 (p-value = 0.8367) respectively for the pre and post IFRS models. The recent results of Akhor and Oseghale (2017); Onyabe, Okpanachi, Nyor, Onipe, and Mohammed (2018); Salawu, Okpanachi, Yahaya, and Dikki (2017) (all using post-IFRS data) also found that audit committee meetings have positive but statistically insignificant effect on audit report lag. Others conducted with pre-IFRS information (e.g. Be'dard, Chtourou, & Courteau, 2004; Emeh & Ebimobowei, 2013) also supports our finding on audit committee diligence. However, our result on ACD varies with those of Al Daoud et al (2015) and Mohamad-Nor, et al. (2010) which found that audit committee meeting has a significant negative influence on audit report lag. Based on our decision rule, we do not have enough evidence to reject the null hypothesis four (Ho4).

#### **Test of Hypothesis Five**

**Ho5:** The influence of 'shareholder as audit committee chair' on financial reporting lag of listed companies in Nigeria is not significantly different in the pre and post IFRS adoption periods

**Table 10: Result for the Test of Hypothesis Five**

Pre IFRS	Coefficient t	t-Statistic	Prob.	Post IFRS	Coefficient t	t-Statistic	Prob.
C	2.576539	10.1443	0.0000	C	601.66	4.183387	0.0000
SHC	-0.027142	0.684181	0.4942	SHC	-60.16515	-3.728044	0.0002** *

**Source: Computed from Eviews 9 output (2019)**

Table 10 shows an extract from the regression results pertaining to the variable of Shareholder as audit committee chair (SHC). It could be observed that the variable of SHC maintained the same coefficient sign in both models. However, while that of model one is statistically insignificant ( $t=0.684$ ;  $p\text{-value} = 0.494$ ), that of model two passed the significance test since the absolute t-stat of 3.728 and probability value of 0.0002 met the acceptable benchmark for a significant variable.

The result is consistent with Mohammed et al (2018a) which examined the effect of Shareholder's involvement in the audit committee on financial reporting lag of Nigerian companies and found that having Shareholder as audit committee chair enhances financial reporting timeliness. Thus, in line with the decision rule, the null hypothesis five ( $H_05$ ) can be rejected.

## CONCLUSION AND RECOMMENDATIONS

The study empirically examined the effect of corporate governance mechanisms on the financial reporting lag of companies listed on the Nigerian Stock Exchange (NSE) before (pre) and after (post) the adoption of IFRS in Nigeria. Specifically, the study tried to explain whether the three selected audit committee mechanisms (audit committee independence, audit committee diligence and shareholder as audit committee chairman) are more effective in facilitating the timing of financial reporting among Nigerian firms after the adoption of IFRS. The study argued that: (i) the financial reporting lag of Nigerian listed companies before and after IFRS adoption are likely to differ significantly; (ii) the adoption of IFRS would likely moderate the relationship between corporate governance mechanisms and financial reporting lag in Nigeria; and (iii) the behaviours of each of the selected corporate governance mechanisms are like to vary between the pre and post IFRS adoption periods. Based on the outcomes of the panel regression, it can be concluded that the tendency to quicken the release of financial reports in Nigeria in the post-IFRS period is significantly motivated by lower board size and shareholders as audit committee chairman. In the pre-IFRS periods, however, the significant variable of interests is audit committee independence which poses significant negative effect on financial reporting lag.

Implicationally, the study shows that inferences regarding the direction of the effect of audit committee mechanisms on financial reporting lag may not validly be generalised within the premise of adoption of new accounting standards – as they are most likely to be the same. However, the strength (in terms significance level) of the direction of such effects will most likely differ significantly as observed from the outcome of this study.

## **Recommendations**

Based on the significance of the variable of shareholder as chairman of audit committee in the post-IFRS periods, the study recommends that the management of Nigerian listed companies should increase the engagement of more shareholders to chair the audit committees. Similarly, though having a shareholder as the chairman of the audit committee was found to be statistically significant in reducing financial reporting lag in the pre-IFRS regime, there is need for the audit committee to elect shareholders with professional financial knowledge for them to be able to contribute meaningfully on financial reporting matters.

Audit committee meetings (diligence) was statistically insignificant in both pre and post-IFRS periods. The study recommends that directors should closely follow-up the agendas of each committee meetings by the retrieval and assessment of the minutes of the meetings.

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# TAX PLANNING AND VALUE OF THE LISTED DEPOSIT MONEY BANKS IN NIGERIA

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## **Abstract**

*This study examines the impact of tax planning on the value of listed deposits money banks in Nigeria. To achieve this purpose, hypotheses were formulated and a review of extant literature was made. Non-survey, descriptive research design was adopted and the population of the study consists of the (16) listed DMB's in Nigeria. Data for the study were generated from the listed DMBs' annual report and accounts for a ten-year period; 2006–2017. In addition to descriptive statistics and correlation analysis, the stated hypotheses were statistically tested with regression analysis. The findings reveal that effective tax rate has no significant impact on value of listed deposit money banks in Nigeria. The non-impact goes contrary to the prediction of Hoffman's tax planning theory. Also, cash effective tax rate and tax savings from tax planning activities have positive and significant impact on the value of listed deposit money banks in Nigeria. It was therefore, recommended that Federal Inland Revenue Service (FIRS) should reviewed tax assessment and returns of listed deposit money banks in Nigeria, in order to minimize any form of strategic tax behavior by management; and to periodically conduct tax audit of the various banks to examine whether there was any form of mischaracterization of financial statements; and any bank that violates the provision of tax laws in the act of tax planning should be properly investigated and prosecuted.*

**Keywords: Tax, Tx Planning, Banks**

## **1. Introduction**

Taxation has always been a concern of universal impact because it affects every nation irrespective of national disparity. In Nigeria, tax is a notion that has been considered as old as mankind which can be described as an amount, effort, contribution or service rendered either in kind (goat, cow, farm produce, clearing of grass etc.) or monetary value contributed into a common purse for the running of the society. According to Omotoso (2001), modern tax is a compulsory charge imposed by a public authority on the income of individuals and companies as stipulated by the government decrees, acts or case laws

irrespective of the exact amount of services rendered to the payer in return. Thus, taxes constitute the principal source of government revenue and the beauty of any government is for its citizen to voluntarily execute their tax obligations without much coercion and harassment (Adedeji & Oboh, 2012).

One of the most important responsibilities for corporate tax manager is to plan or minimizing a company's overall tax liability. Supposedly, firm's tax liability is proportionally related to its profitability; attaining firm's wealth maximization objective through diverse means of increasing profitability poses more challenge on firm's ability to reduce its tax liability. According to Scholes, Wolfson, Erickson, Maydew, & Shevlin, (2009:84) effective tax planning is seen as strategies that maximize the firm's expected discounted after-tax cash flows. Aside from being vast in the tax laws, the tax consultants of any organization should have extensive knowledge of the company, its history and how the organization operates. It extends to the coordination of parties with diverse interests and information, involving domestic and foreign operations across multiple segments of the business including finance and financial reporting, management and technology (Maydew & Shackelford, 2005). However, in a well-organized economy, Morien (2008) argue that paying taxes in business is almost unavoidable. Effective tax planning strategies should produce benefits in terms of wealth creation for the company. For this reason, tax planning is actually a subset of the overall financial planning of a company which needs to take into account investment, financing and wealth building strategies of the company.

To this end, examining the impact of tax planning on firm value has become essential especially when one looks at some of the financial indicators of the banks operating in Nigerian banking industry, some have been increasing but still the banks experience problems of high corporate tax rates and multiples of other taxes that lead to high effective tax rates far above the statutory company income tax rate. With the introduction of the Information Technology tax, there are about forty different taxes levied on companies and individuals (Taxes and Levies, Approved List for Collection Act 1998, Bammeke, 2012). Many of these taxes from the different levels of government overlap and are forcefully extracted from corporate organizations. The effect of these exactions of course is high cost structure for firms (Nwaobia, 2014). In addition, tax costs and eventual payout deplete the disposable income of individuals as well as the distributable profits of corporate organizations. These taxes in fact, do translate to a substantial cost to organizations and if not properly planned and managed can have adverse impact on the bottom line, cash flow and capacity to invest. This raised a concern as to whether such a phenomenon could be attributed to the issues of high corporate tax rate.

These conflicting positions warrant taking into consideration the impact of tax planning on firm value and this therefore stimulates investigating deposit money banks operating in Nigeria. While previous empirical studies such as Riza (2003), Viavo (2007) and Friesse and Mayer (2008) have established that tax planning has a significant influence on value

of the firm, it should be noted that tax planning has its associated costs. The study aimed at examining the impact of tax planning on firm's value of listed deposit money banks in Nigeria.

In consequence, it is imperative to ask the following research questions which would serve as a guide for the study:

- i. What is the impact of effective tax rate on the value of listed deposits money banks in Nigeria?
- ii. What is the impact of cash effective tax rate on the value of listed deposits money banks in Nigeria?
- iii. What is the impact of Tax Saving on the value of listed deposits money banks in Nigeria?

The study covered all the listed deposits money banks in Nigeria over the period of twelve years (2006 - 2017). The timing was considered adequate to examine the impact of tax planning on firm value of the Nigerian listed deposits money banks.

## **Literature Review**

A review of extant literature such as Avi-Yonah (2005), Ribstein (2006), Auerbach (2006) and Oyerinde (2010) revealed that utmost interest of shareholders is wealth maximization, and one reliable means of achieving this, is through cost minimization. Okoye and Akenbor (2010) claim that one of the costs of doing business and therefore constitutes a serious barrier to wealth maximization is taxation. In order to minimize the cost of taxation, tax planning becomes imperative for management. Thus, necessitate the study of tax planning on firm value in the Nigerian listed deposits money banks, even though there are various studies conducted on evaluating tax planning and corporate governance such as Sanda, Mikailu and Garba (2005), Desai and Dharmapala (2008), Muhammad (2009), Rohaya, NurSyazwani, and Nor'Azam, (2010), Abdul-wahab (2010), Balakrishnan, Blouin and Guay, (2011), Sabli, and Noor, (2012), Gatsi, Gadzo and Kportorgbi, (2013), Nwaobia, (2013), Kiabel and Akenbor, (2014) Mahfound (2015), Maina and Menba, (2016). However, several others have examined tax planning on firm value such as Noor, Fadzillah and Mastuki, (2010); Garbarino, (2011); Armstrong, Blouin, and Larcker, (2012); Abdul-Wahab and Holland, (2012) and Kportorgbi, (2013). By contrast, a limited number of research studies have examined tax planning on firm value of companies in developing economies such as Desai and Dharmapala (2009); Chasbiandani and Martani, (2012); Ftouhi, Ayed and Zemzem, (2014); Kawor and Kportorgbi (2014) and Heitzman and Ogneva (2015). Although, Carter, Simkins and Simpson, (2003); Aliani, and Zarai, (2012a,b) and Lasteri and Wardhani (2015) gave emphasis on tax planning to firm value with board diversity as moderating variable. Yet few studies give concern to the Nigerian context in which tax planning in terms of financial indicator is examined in relation to firm

value. This forms the rationale behind examining the impact of tax planning on firm value in the Nigerian listed deposits money banks.

However, several studies (Riza, 2003; Viavo, 2007; Friese and Mayer, 2008; and Sartori, 2009) have also been conducted in the area of tax planning particularly in developed nations of the world, but only few of those studies relate corporate tax planning on firm value. Moreso there seem to be inadequate empirical literature in Nigeria on variables (effective tax rate, cash effective tax rate and tax savings) under study particularly in banking industry. Despite these conflicting views and positions, companies embark on tax planning to consequently reduce their tax liability through legal means. Scholars have researched into strategies employed in reducing the tax liability of companies and the effect of these strategies on the overall firms' value and performance. For example, Wahab and Holland, (2010) and Desai and Dharmapala (2007) discovered that tax planning benefits shareholders through increased tax savings and by extension increase in per share earnings as well as market price of the shares. Thus, tax planning has become a significant activity that is fully integrated to the corporate planning of many organizations. To this end, the study aimed at examining the impact of tax planning on firm's value of listed deposit money banks in Nigeria.

The study is anchored on the Hoffman's Tax planning theory, Political cost theory, the Managerial Opportunism theory (an extension of the agency theory) and Stakeholders theory. According to Hoffman (1961;256) tax planning seeks to divert cash, which would ordinarily flow to tax authorities, to the corporate entities. Tax planning activities are desirable to the extent that they reduce taxable income to the barest minimum, without sacrificing accounting income.

## **2. Methodology**

The study used a non-survey research design and was out based on historical panel data. The design was used to establish the causal relationship between tax planning on value of deposit money banks in Nigeria. The design is believed to be adequate and appropriate to estimates the empirical relationship of tax planning on market value of deposits money banks in Nigeria. With a population that consists of all the sixteen (16) listed deposits money banks on the first-tier securities market of the Nigeria Stock Exchange as at 31<sup>st</sup> December 2017 as shown on the table 3.1 below, Judgment sampling technique was used in arriving at sample size of the study:

**Table 3.1: Population of the Study**

S/no	Name of Banks	Year of Listing
1	Access Bank	1998
2	Diamond Bank	2005
3	Eco Bank	2006
4	Fidelity Bank	2005
5	First Bank Nig. Plc	1971
6	First city Monument Bank Plc	2004
7	Guarantee Trust Bank Plc	1996
8	Ja'iz Bank Plc	2012
9	Skye Bank	2005
10	Stabic IBTC Bank Plc	2005
11	Sterling Bank Plc	1993
12	Union Bank Plc	1970
13	United Bank for Africa Plc	1970
14	Wema Bank Plc.	1991
15	Zenith Bank Plc.	2004
16	Unity Bank Plc.	2005

**Source: NSE Report 2017**

This study is based on secondary source of data which are extracted from the annual reports and accounts of the listed deposits money banks in Nigeria for the periods (2006-2017) of the study.

### **Variables of the Study and their Measurement**

The study employed two (2) set of variables dependent and explanatory variables. The dependent variable is the Market value represented by Tobin's Q, while the explanatory variable is divided in to two: the independent variable which includes Effective tax rate (ETR), Cash effective tax rate (CETR) and Tax savings (TS) and control variables that includes Profitability (ROA), Leverage, and Bank size

### **Dependent Variables**

The depended variable of the study is the market value of deposits money banks which is proxies by Tobin's Q (market capitalization plus book value of debt scaled by total assets. Scholars have widely employed Tobin's Q as a proxy for firm value, particularly in valuing publicly traded companies (Nwaobia, Kwarbai & Ajibade, 2015; Tahir and Razali, 2011; & Smithson & Simkins 2005).

### **Explanatory Variables**

The explanatory variables of the study include effective tax rate, bank size, profitability, tangibility and leverage as independent variables and bank age served as control variables.

## Independent Variables

The study employed the following as independent variables viz; effective tax rates, bank size, liquidity, profitability, tangibility and leverage:

- i. **Effective Tax Rate (ETR):** This is defined as the tax paid in year  $t-1$  divided by profit before tax in year  $t$  as used by Rego (2003), Khaoula, Amor and Ayed (2013) and Kawor and Kportorgbi (2014) to measure a reflect tax planning activities that decreases a firm's tax liability. ETR is a commonly used measure of a firm's tax burden. ETR provides a basic summary statistic of tax performance which describes the amount of taxes paid by a company relative to its profit before tax.
- ii. **Cash Effective Tax Rate:** This is another measure of tax planning widely used in taxation literature to capture tax planning activities. It is measures as cash tax paid scaled by net operating cash flow.
- iii. **Tax Savings:** This is defined as the difference between effective tax rate and statutory tax rate of 30% applicable to corporate bodies in Nigeria as used by Kawor and Kportorgbi (2014)

## Control Variables

1. **Bank Size (BZ):** This is measured as the log of total asset. Its widely believed that, Large firms are reported to have sufficient resources and better opportunities to undertake tax planning strategies, for example, by utilizing the tax incentives provided to them. (Nwaobia, 2014).
2. **Profitability (ROA):** Returns on asset reflect the management ability to generate profits on the investments that has been made. The rationale behind the choice of return on asset is that a successful tax planning activities will increase profit to be earned. It is measured as profit before tax divided by total asset as used by (Tayyabat, 2013; Awan, 2014; and Nawaf, 2015).
3. **Leverage (LEV):** This is defined as the interest bearing debt divided by total assets as used by Chen (2004), Biddle, Hilary and Verdi (2009), Sehrish, Zeeshan and Bilal (2013)

## Correlation Matrix

Correlation analysis was used to determine the level of association between the tax planning and value of the deposit money banks in Nigeria. The result of the correlation matrix was used in developing the assumptions for the regression because the result might reveal the nature of the associations, as there is no association if the value of the result is 0. On the other hand, a correlation of  $\pm 1.0$  means there is a perfect positive or negative association.

## Model for Analysis

Multiple regressions were used to measure the overall impact of tax planning on the value of deposits money banks in Nigeria. The following models were used to estimate the impact of independent variable on the dependent variable which is the modification of Ftouhi, Ayed and Zemzem (2015).

*Tobin's Q* = *F* (*ETR*, *CETR*, *TS*, *ROA*, *LEV*, *BS*)

*Tobin's Q* =  $\beta_{0it} + \beta_1 ETR_{it} + \beta_2 CETR_{it} + \beta_3 TS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 BS_{it} + \varepsilon_{it} \dots$

Where:

Tobin's Q = Market Value

ETR = Effective Tax Rate

CETR = Cash Effective Tax Rate

TS = Tax Savings

ROA = Return on Assets

LEV = Leverage

BS = Bank Size

$\varepsilon_{it}$  = Error Term

$\beta_0 - \beta_{5it}$  = Regression coefficient of Independent Variables

## Results and Discussions

Its important to note that, Robustness Test of Independent and Dependent Variables is conducted to ensure the validity of all statistical inferences and fitness of the model, so that the impact of the distribution problem is mitigated. Multicollinearity test was also conducted which implies that one independent variable is a linear function of another independent variable. It is an assumption for the multiple regression models that the independent variables are not perfectly correlated. Multicollinearity exists, when there is a perfect correlation between two or more independent variables and where there is a perfect correlation among the dependents variables errors may be inflated and the estimates for a regression model cannot be uniquely computed. Thus, this study employs Variance Inflation Factor (VIF) to check whether there is evidence of Multicollinearity in this study. The VIF measures the variance of an estimator compared to what the variance would have been if the independent variable was not collinear with any of the other explanatory variables (Aczel 1993 as cited in Garko, 2016). However, VIF in excess of 10 denote presence of Multicollinearity. Thus, multicollinearity test was conducted to check whether there is a correlation between independent variables which will mislead the result of the study. The result shows that the VIF is less than 5 which signifies absence of multicollinearity.



Heteroskedasticity test was also conducted to check whether the variability of the error term is constant or not. The presence of Heteroskedasticity signifies that the variation of the residuals or term error is not constant which would affect inferences in respect of beta coefficient, coefficient of determination  $R^2$ , t-statistics and F-statistics of the study. Test of heteroskedasticity ensures that the regression fits all the value of the independent variable and this is possible only if the residuals do not vary with independent variable and therefore are random in nature. The results show significant probability 0.0000. This signifies present of heteroskedasticity and absence of homoskedasticity, which lead to run robust regression to correct the error

Normality Test of Residuals was conducted as well, this is to check for data normality or the distribution pattern of the research data, normality assumption should be taking in to account for using parametric account statistical test. The results of the tests suggested that, the data significantly differ from normal distribution, as evidenced by the p-value of 0.0000. Therefore, the study failed to accept the null hypothesis since the p-value is less than 5%. To correct this, a robust regression was run.

### **Descriptive Statistics**

This sub section presents the descriptive statistics of the data extracted on the study and the explanatory variables of the study. It presents the data in a summarized form which includes mean value, maximum value, minimum value and standard deviation of both dependent variable (Tobin's Q) and the explanatory variables (ETR, CETR, TS, ROA, LEV and bank size). This provides a basic insight in to the nature of the data upon which analysis is done.

**Table 4.1: Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min.	Max	Skewness	Kurtosis
Tobin's Q	180	0.4698	0.7632	0.0287	6.9058	0.0000	0.0000
ETR	180	0.1322	0.1670	-0.5871	0.9804	0.0000	0.0000
CETR	180	-0.0063	0.1008	-0.8081	0.2742	0.0000	0.0000
TS	180	0.1194	0.1651	-0.6804	0.8871	0.0000	0.0000
ROA	180	0.0177	0.0567	-0.5313	0.2829	0.0000	0.0000
Lev	180	0.1384	0.1643	0.0000	0.7097	0.0000	0.0160
Bsize	180	11.8323	0.4481	10.8604	12.8366	0.2925	0.0180

**Source: Stata Output**

Table 4.1 shows the mean score of 0.4698 for Tobin's Q and a minimum value of 0.0287 with a maximum value of 6.9058. The standard deviation of 0.7632 signifies significant variation among the sample deposit money banks in Nigeria in terms of firm value. The average score for effective tax rate from Table 4.1 is 0.1322 and maximum value of 0.9804,

this implies that on average, the effective tax rate of deposit money banks in Nigeria is 13% and the maximum tax burden measures by ETR is 98% with minimum rate of -59%. The standard deviation of 0.1670 indicates small variation among the sampled banks in terms of ETR. The cash effective tax rate which is measures as tax paid divided by net operating cash flow has a mean score of -0.0063 and maximum value of 0.2742 with minimum value of -0.8081. This indicates that, the average CETR is -0.63% and the maximum burden is 27%. The standard deviation of 0.1008 suggests insignificant variation among the sample banks in terms of CETR. Similarly, tax saving which is another proxy for tax planning has a mean score of 0.1194 and a minimum value of -0.6804 with maximum value of 0.8871. This suggests that on average, the tax saving from tax planning activities is 11.9% and maximum saving of 89%. The standard deviation of 0.1651 implied insignificant variation among selected banks in terms of tax savings. Profitability proxied by return on assets has an average of 0.0177 and maximum of 0.2829, this indicates that on average, the deposits money banks in Nigeria earned a profit of 1.8% and a maximum of 28% on assets employed within the period of the study and has a minimum loss of -53%. The standard deviation of 0.0567 suggests small variation among sampled banks in terms of ROA. Leverage measured as the proportion of interest bearing debt to total assets shows a mean score of 0.1384 and maximum value of 0.7097 with minimum value of 0.000. This indicates that average debt in financing the bank's assets are 14% and maximum of 71%. The minimum value 0.000 indicates that some banks did not incurred debt within the period of the study. The bank size has a mean score of 11.8323 and minimum value of 10.8604 with maximum value of 12.8366. This implies that, the average value of banks assets is ₦11.8b and maximum ₦12.8b. The standard deviation of 0.4481 indicates insignificant variation among the sample banks in terms of bank size.

## **Correlation**

Table 4.2 presents the correlation matrix of the variables. Correlation matrix shows what type of relationship exists between two variables. It explains change in one variable because of the change in the other variable. The correlation matrix is use to describe the strength of relationship between two variables in this study. In order to examine the strength and relationships among the regressions, a correlation matrix of the variables for the sample deposits money banks is discussed in Table 4.2 below.

**Table 4.2: Correlation of the dependent Variable and the Explanatory Variable**

Variables	Tobin's Q	ETR	CETR	TS	ROA	Lev	Bsize	Vif
Tobin's Q	1.0000							
ETR	-0.0900	1.0000						
CETR	0.1140	0.0701	1.0000				3.60	
TS	0.1398	-0.4442	-	1.0000				
ROA	0.2808	0.0260		-0.0782	1.0000		1.01	
Lev	0.2829	0.1279		0.2092	-0.2798			
Bsize	-0.2151	0.1015		-0.0311	1.0000		3.48	
		-0.0426		-	0.0049			
		0.0261			0.1923		1.01	
		0.2685		-				
		0.0793					1.02	
							1.0000	
							1.06	

Source: Stata Output

Table 4.2 shows the correlation coefficients on the relationship between the dependent variable (Tobin's Q) and the explanatory variable (ETR, CETR, TS, ROA, Lev and Bank size). The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative) while the density of the value of the correlation coefficient indicates the extent of the relationships. The correlation coefficient on the main diagonal is 1.0, because each variable has a perfect positive linear relationship with itself. The correlation results presented in Table 4.2 indicates a weak negative relationship between effective tax rate (ETR) and bank size and firm value represented by Tobin's Q of listed deposit money banks with coefficient values of -0.0900 and -0.2151 respectively. On the other hand, weak positive associations exist between cash effective tax rate (CETR), tax saving (TS), ROA and Leverage of listed deposit money banks in Nigeria with coefficient values of 0.1140, 0.1398, 0.2808 and 0.2829 respectively.

### Regression results on Tax planning and firm value

This section presents the regression results of pooled ordinary least square (OLS) techniques and the results of GLS (fixed effect) estimation techniques in Table 4.3. However, the analysis is made on fixed effect based on the outcome of Hausman specification test which reveals that fixed effect is more reliable and better aligned than random effect. The summary of the regression results is obtained based on this model of the study.

**Table 4.3: GLS (Fixed Effect) Regression Results****Pooled OLS Regression**

<b>Variables</b>	<b>Coefficient</b>	<b>/t/</b>	<b>P&gt;/t/</b>	<b>Coefficient</b>	<b>/t/</b>	<b>P&gt;/t/</b>
Constants	0.7808	2.02	0.045	1.0813	3.67	0.000
ETR	0.3755	1.02	0.309	0.3136	2.55	0.012
CETR	0.5227	1.74	0.083	0.0919	0.86	0.392
TS	0.8378	2.30	0.023	0.3313	2.75	0.007
ROA	0.8074	1.39	0.167	1.9918	7.03	0.000
Lev	0.2139	3.45	0.001	1.0514	52.81	0.000
Bsize	-0.0494	-1.51	0.132	-0.0881	-3.57	0.000
R-sq:						
Within	0.1542					
Between	0.3452					
Overall	0.1903					
F-statistic	4.69					
P-Value	0.0001					
R <sup>2</sup>				0.2055		
Adj- R <sup>2</sup>				0.1779		
F-statistic				7.46		
P-Value				0.0000		

**Source: Stata output**

Table 4.3 presents the OLS regression result of the dependent variable (Tobin's Q) and the explanatory variable of the study (effective tax rate, cash effective tax rate, tax saving return on assets leverage and bank size). R-square shows the explanatory power of the model while F- value is for the overall significance of the model. The OLS regression results reveal the cumulative R<sup>2</sup> (0.20) which is the multiple coefficient of determination that gives the percentage of the total variation in the dependent variable explained by the explanatory variable. This suggest that 20% of the total variation in firm value of deposit money banksin Nigeria is influenced by the explanatory variable selected in this study while the remaining are course by the variable not selected by this study. This can be confirmed by the value of F-statistics of 7.46 at 1% level of significance. In the same vein, the GLS (fixed effect) in Table 4.3 shows the overall R<sup>2</sup>of 19% with F-statistics of 4.69 at 1% level of significance. This shows that both models are statistically fit in influencing firm value in deposit money banks in Nigeria.

The OLS regression results shown in table 4.3 revealed that effective tax rate (ETR) and tax saving (TS) have positive and significant influence on firm value proxied by Tobin's Q. This implied that tax planning activities in the Nigerian deposit money banks

does not influence banks value. This is consistent to the work of Maina and Memba (2016); Nwaobia and Jayeoba (2016) and Salawu and Adedeji (2017) and contrary to the work of Gupta and Newberry (1997) and Salawu and Adedeji (2017) who found that there is no significant impact of corporate effective tax rate on performance. While the GLS (FE) estimation results reveal positive and insignificant effect of ETR on firm value while positive and significant influence of CETR on firm value at 10% level of significant. Furthermore, the results from both estimations reveal positive and significant impact of tax saving on value of the firm at 10% and 5% levels of significance respectively. The OLS regression shows that, control variables return on assets, leverage and bank size are found to have positive and significant effect on firm value. However, using GLS (fixed effect) estimation techniques, the results show that leverage has positive and significant effect on banks value while ROA and bank size have no significant impact on the value of the banks.

### **Test of Hypotheses**

Three research hypotheses were postulated to empirically test the impact of tax planning on value of listed deposit money banks in Nigeria. The decision was based on the significance of correlation coefficient and P-values. In testing the hypotheses, the researcher adopts the 10% level of significance as used in social sciences research. To determine if the hypotheses can be accepted or rejected at 10% level of significance, the  $P > t$  value was compared with 0.1 in the regression, the null hypotheses was accepted if the  $P > t$  value is less than or equal to 0.1, and rejected if otherwise.

#### **Hypotheses I:**

**HO<sub>1</sub>** Effective tax rate has no significant impact on value of listed deposits money banks in Nigeria

Table 4.3 shows the coefficient of 0.3755 and the P-value of 0.309 for GLS fixed effect regression. This signifies that effective tax rate does not significantly influence the value of deposit money banks in Nigeria at 10% level of significance. Therefore, the study failed to reject the null hypothesis, that the effective tax rate has no significant impact on the value of listed deposit money banks in Nigeria. This finding is consistent with the finding of Salawu and Adedeji (2017) who found that there is no statistically significant relationship between effective tax rate and firm value.

#### **Hypotheses II:**

**HO<sub>2</sub>**. Cash effective tax rate has no significant impact on value of listed deposits banks in Nigeria.

Table 4.3 shows the coefficient of 0.5227 and the P-value of 0.083 for GLS fixed effect. This signifies that cash effective tax rates measures as cash tax paid scaled by net cash flows has positive and significant impact on value of listed deposit money banks in Nigeria at 10% level of significance. Consequently, the study failed to reject the null hypothesis. This suggest that tax planning play no role in influencing bank value of deposit money

banks in Nigeria. This can be attributed to managerial decision regarding tax planning activities that favour other stakeholders than the shareholders. The finding is consistent with agency theory assertion that not all management decisions help to achieve wealth maximization. Also, consistent with the finding of Wang (2010) who found that there is positive and significant impact of cash effective tax rate on firm value.

### **Hypotheses III:**

**HO<sub>3</sub>** Tax Savings has no significant impact on value of listed deposits money banks in Nigeria.

Table 4.3 shows the coefficient of 0.8378 and the P-value of 0.023 for GLS fixed effects. This implies that tax planning can be seen as a mechanism through which banks generate tax savings. Accordingly, the study failed to accept the null hypothesis. This is consistent with the findings of Kawor and Kporgbi (2014), Ftouhi *et al.* (2015) who found that there is positive and significant impact of tax savings on firm value.

### **3. Summary and Recommendations**

Based on the results of the regression analysis conducted, the following are the summary of the major findings:

- i. Effective tax rate has no significant impact on value of listed deposit money banks in Nigeria. The non-impact goes contrary to the prediction of Hoffman's tax planning theory.
- ii. Cash effective tax rate as measure of tax planning activities has no influence on value of deposits money banks
- iii. Tax savings from tax planning activities has positive and significant impact on value of listed deposit money banks in Nigeria.

Therefore, the following recommendations are proffered.

- i. Management of deposits money banks should engage in aggressive tax planning activities by exploring more tax minimization strategy in order to achieve less tax burden and increase its after tax earnings.
- ii. Banks' should use tax expert and consultants for effective tax planning that will meet corporate tax needs and should not hinge their firm value maximization mechanism on tax planning alone since this has been found in this study to explain variations in firm value indicator from a weak position.

### **Limitations and Areas for Future Research**

Though this research has provided some useful insights into the firm value of Nigerian listed deposits money banks, however, there are a number of limitations inherent in the study which the reader needs to put into consideration when evaluating the evidence.

- i. The study was restricted to listed deposits money banks on the Nigerian Stock Exchange (NSE), although the Nigeria banking industry comprises of many banks that were unquoted and operate as money deposit banks. Thus, the use of

listed deposits money banks limits the generalizability of the results. Even though data availability from the listed banks nullifies this limitation, the investing public is more interested in financial performance of listed deposit money banks than unlisted ones.

- ii. Since the research was conducted in the listed deposit money banks, it is questionable whether its findings can be generalized to other industries in the Nigerian economy due to differences among industries that formed the Nigerian economy. However, due to the nature and contributions of the Nigerian financial sector (Nigerian banking industry) to the Nigeria's economy; this study is called-for.
- iii. The regression model of the research used dependent and explanatory variables which can be measured in many ways. For instance the market value of equity can be proxied as lagged share price or annual closing price of market price of equity, and Tobin's q by return on assets. Leverage can be proxied as debt to equity, liquidity by cash to cash equivalent ratio. Likewise, size can be proxied as total turnover, age as year of incorporation.
- iv. The study period 2006 to 2017 is relatively small when compared with studies in developed world. A study for a relatively longer period may be able to accommodate inter DMBs comparison rather than the use of dummy variable. If used, the approach may likely produce different result.
- v. Also, an attempt can be made to examine the impact of tax planning and corporate governance on firm value using two different models as performance measures such as return on assets and return on equity.

Despite these limitations, this research work is a comprehensive study on tax planning and firm value of listed DMBs in Nigeria using the annual reports and accounts published by the NSE. The findings in some instances validate what was known in existing literatures. On the contrary, it invalidates what was known in prior studies. In addition, it represents an extension to prior studies in Nigeria.

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# USING TAX AUDIT AND INVESTIGATION TO BOOST REVENUE GENERATION IN NIGERIA

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## **Abstract**

*The need to raise revenue to meet the ever increasing infrastructural and other needs of Government has led the government to borrow money from national and international lenders. This has therefore brought huge debt burden to the nation which has been a topic for national debate in recent times. The need to look for alternative sources of funds to meet national needs cannot be overemphasized. The essence of this study is to explore the use of tax audit and investigation to boost revenue generation for the nation as alternative or an addition to borrowing and revenue from oil. The study adopted the theoretical approach. It employed review and trend analytical approach to discover how the use of tax audit and investigation can boost revenue generation in Nigeria. Therefore there is (i) an urgent need for the Government to enforce tax audit and investigation (ii) the use of tax audit and tax investigation should be a regular exercise not adhoc (iii) the capacity of the federal Inland Revenue Service (FIRS) staff should be strengthened.*

**Keywords:** Enforcement, National Needs, Revenue Generation, Tax Audit, Tax Investigation

## **1. INTRODUCTION**

### **1.1 Background to the Study**

According to Mainoma (2018), the imposition of tax is as old as organized human society and cuts across religion, culture and tradition. Raising tax revenue is in order to finance activities of the public sector is an important task of the government and it is a challenging one.

The first question to ask is what is tax? An English Dictionary defines tax as (1) money paid to the government other than for transaction- specific goods and services (11)

A burdensome demand. In other words, tax is money imposed by government on individuals, companies etc for services rendered by the government. In Nigeria, taxes are categorized as personal income tax, companies income tax, petroleum profit tax, value added tax, education tax etc.

The second question is what is tax audit? Tax audit is independent examination of accounts, tax returns, tax payments and other records of tax payer to confirm compliance with tax laws, rules and regulations and accuracy and correctness of tax paid and adhering to generally relevant accounting principles and standards. (Oyedokun, 2016 & Okonkwo 2014).

The third question is what is tax investigation? According to Kennedy, (2020) and Okonkwo (2014) tax investigation is a more detailed and painstaking examination of the tax payers records. It is usually triggered by suspicion of fraud, evasion and related offences. Tax investigation is level of enquiry aimed at determining what level of fraud or willful default or neglect, a tax payer perpetrated and to obtain evidence for possible prosecution of the culprit. Tax investigation is the second level engagement following an audit. (Bassey, 2013)

In other words, even though tax audit and tax investigation can sometimes be used interchangeably, they are not the same. Tax audit comes before tax investigation. Generally in Nigeria, we have high level of tax evasion, tax avoidance and tax delinquency' Many tax payers and even tax consultants are presumed to be dishonest in the presentation of their financial statements and computation of tax liabilities. Self-assessments are no longer trusted by revenue authorities hence the need to carry tax audit to ensure that companies and individuals are properly assessed has become a sine qua non. (Kennedy,2020). The Federal Inland Revenue service in 2018 recorded a total sum of #5.320 trillion from 2278 tax audit cases. Assuming tax audit was not conducted; such huge amount would have been lost by the Government in the year mentioned above. This has justified the need for enforcement and continuous application of tax audit and tax investigation as a veritable source of revenue generation.

## **1.2 Objective of the study**

The objective of this study is to examine how the use of tax audit and tax investigation can boost revenue generation in Nigeria.

## **1.3 Significance of the Study**

A study of this nature holds numerous benefits for many stakeholders. They include

- (a) Drawing the Government's attention to this all important source of revenue with a view of reinforcing the continuous use of tax audit and tax investigation
- (b) The findings of this study would further reveal better understanding of tax audit and tax investigation and what is involved in their application.

- (c) The knowledge revealed in the study would be useful to government, tax practitioners, tax administrators, auditors, accountants, lecturers, students and the general public.

## **1.4 Methodology**

The study adopts the theoretical approach. We employed review and trend analytical approach. The source of data used in the study is secondary data. Relevant literature, journals, text books, Acts, newspapers on accounting and taxation and tax investigation were consulted in arriving at informed conclusion and recommendations.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual Framework**

Conceptual review or framework has been defined as a sub section under literature which includes the definitions or meaning of concept as put forward by various authors/researchers. (Izedonmi, 2016).

### **2.2 Tax Audit**

Tax audit is an inspection of a taxpayer's business records and financial affairs to ensure that are the amount of tax reported and paid are in accordance with tax laws and regulations. This is an additional audit to the statutory audit and is carried out by tax officials from a relevant tax authority. This is not the same as the statutory audit with respect to the requirement of the Company and Allied Matter Act (CAMA) 1990 (as amended). It should also be noted that the criteria for selecting cases for tax audit include persistent losses, nil tax returns, refund cases, non-submission of returns, low tax yield, suspicion of tax avoidance, fraud or evasion, transfer mispricing, thin capitalization and most often when the taxpayers request for tax clearance certificate among others (Bitrus, 2014, Okonkwo 2014, Oyedokun 2014)

Obatola (2017) defines Tax Audit as the process of verifying any matter relating to the gains or incomes of a person, group of persons or corporate organization or any matter that relates to the entries in any book, account, document or return as the relevant tax authority having authority over the person, group of persons or corporate organization, from time to time, may specify in any guideline

Tax audit has also been defined by Somorin (2012) as the verification of documents and records to ascertain their authority, authenticity and conformity with tax laws and regulations i.e inspection or examination of the organizations accounts by specified persons as per the requirements of the income tax laws.

Tax audit exercise as concluded by Okonkwo (2014) is a very important compliance tool in most tax jurisdictions all over the world. It has contributed immensely in creating awareness amongst stakeholders, strengthening of the self-assessment tax system, bringing of more taxpayers into the tax net, increased generation of tax revenue and checking of various abuses in the tax system.

The purpose of tax audit is to determine a true and fair view of the business records for tax purposes. The tax audit officer is responsible to ensure that the reported amount is correct and that the amount of tax paid is correct accordance with tax laws and regulations. The other purpose of tax audit is to achieve the voluntary compliance with the tax laws and regulations and to ensure that a higher tax compliance rate is achieved under the Self-Assessment System (Oyedokun, 2016 & eeVonn, 2009).

The objectives of tax audit according to Kennedy (2020) and Bitrus (2014) are to enable the tax auditors to determine whether or not:

- i. Adequate accounting books and records exist for the purpose of determining the taxable profits or loss of the taxpayer and consequently the tax payable;
- ii. The tax computations submitted to the authority by the taxpayer agree with the underlying records;
- iii. All applicable tax legislation have been complied with;
- iv. Provision of an avenue to educate taxpayers on various provisions of the tax laws;
- v. Discourage tax evasion;
- vi. Detect and correct accounting and/or arithmetic errors in tax returns;
- vii. Provide feedback to the (tax administrators) on various provisions of the law and recommend possible changes;
- viii. Identify cases involving tax fraud and recommend them for investigation;
- ix. Forestall a taxable person's failure to render tax returns; and
- x. Forestall a taxable person rendering incomplete or inaccurate returns in support of the self-assessment scheme.

According to Kennedy (2020), the following are triggers of Tax Audit/Investigation. They include:

- (1) Big charges in income and profits
- (2) Big changes in costs (Direct and indirect )
- (3) Unusually high charitable deductions
- (4) Reporting huge or continuous losses
- (5) Paying taxes below industry average
- (6) Making mathematical errors
- (7) Related party transactions
- (8) Criminal activities
- (9) Huge shareholders or directors loans
- (10) Informant tips/whistle blowing
- (11) High VAT and WHT claims
- (12) Business restructuring ( mergers and acquisition)

- (13) Double tax agreement claims.
- (14) Huge capital allowance claims

Okonkwor (2014) identified the followings as some of the challenges facing tax audit exercise among others viz:

- i. Poor/lack of record keeping by tax payers
- ii. Lack of co-operation by taxpayers and Agents
- iii. Partial submission of books and records for inspection
- iv. Deliberate introduction of delays
- v. Aggression
- vi. Reconciliation meetings not taken seriously
- vii. Lack of audit skills by some Tax Auditors leading to prolonged reconciliation meetings.
- viii. Influence peddling; and
- ix. Inducement of Tax Auditors

## **2.2. Tax Investigations**

Investigation is the act or process of investigating or the condition of being investigated. It is a searching inquiry for ascertaining facts; detailed or careful examination. Investigation is a vital part of forensic accounting and auditing process but only applied when the event or transaction is beclouded. It is carried out when lapse has been established to ascertain who is responsible, the reason for the action including the extent of damage if any. It could be referred to as a detailed verification and clarification of doubt about a transaction or event (Oyedokun, 2016 & 2013).

Obatola (2017) defines Tax Investigation as the thorough or complete examination and verification of the records and accounts of an individual or organization with major objective of unraveling the circumstances of fraud or tax evasion, willful default or neglect and to assist in obtaining concrete evidences for possible prosecution of the individual or organization .Tax investigation is essentially a result of tax evasion and can either be civil or criminal in nature.

Tax investigation is a more detailed and painstaking examination of the taxpayer's records. It is usually triggered by suspicion of fraud, evasion and related offences. It involve the detailed examination of taxpayers' financial statement and other books of accounts to determine whether the taxpayers have complied with the provisions of the relevant tax laws in addition to the applicable accounting principles and standards (Okonkwo 2014, Bassey 2013).

According to Oyedokun (2015), a tax fraud investigation tries to determine whether tax fraud has taken place and tries to detect evidence of fraud that has occurred. Tax fraud is considered to involve misrepresentation with intent to deceive. If a company makes specific promises about a product, for example, in order to sell that product, they may be



guilty of fraud if they are aware that the product does not work as advertised. So also tax fraud is very real and costly. Tax investigation process is activated when the tax authorities suspect with concrete evidence that tax fraud had been committed by the taxpayer.

Bassey (2013) opined that tax investigation “is an enquiry to ascertain the level of fraud or willful default or neglect perpetrated by the taxpayer and to obtain evidence for possible prosecution of the culprit”. Tax investigators have greater power and authority than tax auditors as they have power to visit and take possession of relevant books of accounts without notice. They may also seal up the taxpayer’s premises and conduct in-depth examination as they may deem fit (Bassey, 2013)

### **2.2.1 Similarities between Tax Audit and Tax Investigation**

Tax audit and Tax investigation can sometimes be used interchangeably. Even though they are similar, they are not exactly the same. Tax audit can be regarded as a normal verification of the books and records of the taxpayer to ensure he has paid the correct tax. Tax investigation is a more serious task. It is carried out with the aim of obtaining possible evidences to prosecute the tax payer who has defaulted or evaded tax. Tax investigation is similar to forensic audit which is carried out with a view of obtaining evidences to prosecute a culprit in a court of law. Tax audit comes before Tax investigation.

### **2.2.2 Differences between Tax Audit and Tax Investigation**

<b>Tax Audit</b>	<b>Tax Investigation</b>
1. Triggers by non-reliability of financial statements	Triggers by criminality and fraud.
2. Usually limited to 6 years	It is unlimited. As many years it can cover
3. Leads to additional assessment, penalties and interest and may lead to imprisonment	Goes beyond additional assessment
4. Probability that tax payer will be charged to court is less	Probability that tax payer will be charged to court is high
5. Usually routine	Not routine and can be conducted surprisingly

(Kennedy, 2020).

### **2.2.3 Legal Basis of Tax Audit and Investigation**

Unlike the statutory audit that derived its power from the CAMA 1990 (as amended), the legal framework for tax audit and investigation are in relation to various tax laws. The tax laws confer power on the tax authorities to carry out tax audit and investigations. Some of the provisions could be inferred. In the word of Okonkwo (2014), there was no specific provision in Companies Income Tax Act (CITA) for tax audit prior to the introduction of the self-assessment scheme. Subsection 4 of Section 43 was, however, introduced to empower FIRS to carry out tax audit. “Nothing in the foregoing provisions of this Section or in any other provisions of the Act shall be construed as precluding the Revenue Service

from verifying by tax audit any matter relating to entries in any books, documents, accounts or returns as the Service may from time to time specify in any guideline.” An integral part of the self-assessment scheme is the need to periodically verify the tax returns filed by taxpayers through tax audit procedures. The tax audit exercise essentially is meant to enable the revenue authority to further satisfy itself that audited financial statements and the related tax computations submitted by the taxpayer agree with the underlying records. Examples of specific legal provisions according to Okonkwo (2014) and Bassey (2013) include:

- FIRS (Establishment) Act, 2007- S.8, S. 23, S 29 & S.35;
- Companies Income Tax Act Cap. C21, LFN 2004-S.60, S.66, S. 58 (Section 17, of the Companies Income Tax (Amendment) Act 2007;
- Personal Income Tax Act- S.46, S.47, S. 55, S.103;
- Petroleum Profit Tax Act Cap. P13, LFN 2004 S3(1), S.36;
- Value Added Tax Cap. VI LFN 2004. S. 39;
- Stamp Duties Act Cap. S8, 2004 S 24; and
- Education Tax Act Cap E4, LFN 2004 S. 2(1)(b). (Kennedy, 2020 & Onyedokun, 2016)

## **2.4 Theoretical Review**

This study is anchored on the policeman theory.

### **2.4.1 The Policeman Theory**

According to Izedonmi (2016), the most widely held theory until the 1940's is the policeman theory under which the auditor acts as a police focusing primarily on arithmetic accuracy and also on prevention and detection of fraud. However, a question which has been asked over time is whether it is the auditor's responsibility for discovering fraud like a police man? There is however an ongoing debate as to the auditor's responsibility as regards the detection and subsequent disclosure and by invariably of fraud bringing the shareholders into the basic public perceptions on which the theory was derived'

However, overtime, auditing has moved from the detection and prevention of fraud to the verifications of truth and fitness of financial statements which the theory has so far failed to explain.

Consequently, recent financial statements have resulted to careful reconsideration of this theory. The auditing literature however does not support this theory since the responsibility of the prevention and detection of fraud lies primarily with the management of a company who may obtain reasonable assurance that the responsibility has been discharged by establishing an adequate system of internal control.

In the case under consideration, ie Tax Audit and Tax Investigation, the aim is to discover

whether the tax payer has complied with relevant tax laws and if possible discover the fraud committed by the tax payer. In other words the tax auditor/tax investigator is acting like a policeman hence the relevance of the policeman theory for this study.

## **2.5 Empirical Review**

According to Oyedokun (2016), many scholars had conducted empirical studies on the need for taxation and how the proceeds would benefit the Nation at large, others premised theirs on tax compliance culture, tax audit, tax avoidance and revenue generation in the country. These are reviewed below:

A study conducted in Nigeria by Samuel and Tyokoso (2014) on an empirical investigation of taxation and revenue generation in Nigeria; found that both tax avoidance and tax evasion have significant effect on revenue generation in Nigeria. Regression analysis was used to analyses both primary and secondary data generated. The scope of this study was from 2001 to 2010, current issues left out.

Similarly, Stanley (2014) conducted a study titled *Effective Tax Administration and Institutionalization of Accounting Systems in Small and Medium Scale Enterprises; Evidence from Nigeria*". He used the econometric e-view to analyse the data obtained and he found out that lack of effective tax administration undermines the collection of profit tax from the operators of those sector. His study also revealed that several variables mitigate against the establishment of an effective tax administration in Nigeria. The study concentrated more on the SMS's than the Nigerian economy as a whole. Theoretical and empirical gaps also evident. In another study conducted by Machira and Irura (2009) on taxation and SMS's sector growth in Nigeria, they found that there is a significant correlation between taxation and SMS's sector growth. Data used for this study was collected using the questionnaire, interview and observation. It was analyzed using binary logistic regression empirical model. This study though concentrated only on the growth of SME's in Nigeria.

Edame and Okoi (2014) in their research effort examined the impact of taxation on investment and economic development in Nigeria. They used the ordinary least square (OLS) method to analyse the secondary data collected and it was revealed that taxation is negatively related to the level of investment and the output of goods and services (GDP) and it is positively related to government expenditure in Nigeria. Meanwhile Usman and Bilyaminu (2013) examined taxation and societal development in Nigeria. Secondary data was used and the study found that more tax compliance is significantly associated with adequate campaign and judicious utilization of tax funds.

Matthew (2014) analyzed the impact of tax revenue on the Nigerian economy using the Federal Board of Inland Revenue as a case study. He used chi-square and found that tax revenue significantly impacts on Federal government budget implementation. He also concluded that tax policies significantly affect revenue generation. Chigbu, Akujuobi and Ebimobowei (2011) conducted an empirical study on the casualty between economic

growth and taxation in Nigeria in 2014. They used econometrics model such as Augmented Dickey-Fuller and Johansen Co-integration to analyzed their data and they found out that taxation is a very important tool for fiscal policy which can stimulate economic growth of any country.

Adereti, Adesina and Sanni (2011) also studied the effect of value added tax on Nigerian economic growth from 1994 to 2008. Secondary data were collected and analysed using multiple regression. The study revealed a positive correlation between VAT and GDP. James and Moses (2012) in the United Kingdom examined the impact of tax administration on revenue generation in a developing economy with Nigeria as a case study. Primary data were collected via questionnaires and analyzed using simple percentages. They found that inadequate training of personnel, lack of modern information communication tools are some of the challenges facing effective administration of tax in Nigeria. Zakariya and Muzainah in 2015 looked into the problems and prospects of tax administration in Nigeria using Gombe as a case study. Secondary data and field survey were used by the researchers. They found poor working conditions, insufficient public awareness and poor remuneration among other things as problems facing Gombe state internal revenue service.

Akintoye and Tashie (2013) examined the effect of Tax Compliance on economic growth and development in Nigeria. Tax compliance is proxied on willingness to pay tax. A comparative analysis of willingness to pay taxes in two (2) large states of Nigeria, Lagos and Oyo was presented. Primary data was collected through the administration of questionnaires to self-employed in each senatorial district in Oyo and Lagos states. Frequencies and percentages were used to measure the demographic variables of respondents while chi-square technique was used to measure the difference between the willingness of citizens to pay tax and that of the willingness of citizen to pay tax in Lagos state. It was discovered that many Nigerians are complying with tax payment and the willingness to pay tax in Lagos is significantly higher than that of Oyo. It was suggested that government should pay attention to the factors that influence willingness to pay tax and improve on them.

The trust of the study conducted by Abiola and Asiwah (2012) was the Nigerian Tax Administration and its capacity to reduce tax evasion and generate revenue for development desire of the populace. The study made use of 121 online questionnaires containing 25 relevant questions. Descriptive statistics were used to analyze 93 usable responses. The study found among other things that increase tax revenue is a function of effective enforcement strategy which is the pure responsibility of tax administration. The study found out that Nigeria lack enforcement machineries which include adequate manpower, computers and effective postal and communication system.

Finally, Okafor (2012) explored the impact of income tax revenue on the economic growth of Nigeria as provided by the Gross Domestic Product (GDP). The ordinary least squares regression analysis was adopted to explore the relationship between the GDP (the

dependent variable) and a set of federal income tax revenue heads over the period 1981-2007. A simple hypothesis was formulated in the null form which states that there is no significant relationship between federally collected tax revenue and GDP in Nigeria. The regression result indicated a very positive and significant relationship. Suggestions were made as to strategies to be adopted to improve the system of tax administration to increase tax revenue generation.

### **3. DISCUSSION**

#### **3.1 Debt Burden**

The need to raise funds or revenue to meet the ever increasing infrastructural and other needs of Government has led the Governments to borrow money from national and international lenders. There is no doubt that this has brought huge debt burden to the nation, which has been a major topic for national debate in recent times. We cannot forget in a hurry the loan taken by the Federal Government from China to fund the railway and other infrastructural projects. While some citizens are of the opinion that some terms/clauses stated in the loan agreement are capable of mortgaging the national sovereignty, some other citizens are of the view that the clauses are normal and in line with international borrowings. Whichever side one belongs, there is no doubt that our debt burden is increasing by the day.

A recent publication in Vanguard Newspapers of 15<sup>th</sup> September, 2020, claimed that Nigeria spent #1.1trn to service foreign debts in quarter two of 2020. Another publication in the Punch Newspaper of 27<sup>th</sup> September, 2020 stated that fresh World Bank, AfDB, IDB Loans may raise Nigeria's debt to #31.7trn. In another report, Nigeria public debt rose to \$79.5 billion (#28.63 trillion) as of the first quarter of 2020 i.e.31/3/2020. This represents a 15% increase from the figure that was recorded for the corresponding period in 2019 which was about \$69.09 billion (#24.94 trn) DMO, 4<sup>th</sup> July, 2020.

#### **3.2 The Need for Alternative Source of Revenue**

Arising from the above discussion, the need for the nation to look for alternative source/s of funds cannot be overemphasized. The authors of this study are of the belief that tax audit and tax investigation is one of the veritable sources of revenue for the governments. That if it is properly harnessed and enforced, it can boost revenue generation of Nigeria. It was reported that the Federal Inland Revenue Service (FIRS) in 2018 recorded a total of #5.320 trillion in tax collection with revenue of #212.792 billion from 2278 tax audit cases. (Kennedy, 2020). This has justified the need for tax audit and investigation as a veritable source of revenue for the Governments

### **4. SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **4.1 Summary and Conclusion**

From the above discussion, it is crystal clear that the Governments need revenue to meet

the ever increasing infrastructural and other needs of the citizens. It was also established that as the resources of Governments are limited, they have to resort to borrowing. It is also revealed that borrowing especially from international lenders has brought about huge debt burden to the nation. The need to look for alternative means of ameliorating our debt burden cannot be over emphasized, hence we advocate for the use of tax audit and tax investigation as a means to boost revenue generation in Nigeria.

#### **4.2 Recommendations**

- (1) There is an urgent need for Government to reinforce tax audit and tax investigation in Nigeria.
- (2) The use of tax audit and tax investigation should be a regular exercise not adhoc.
- (3) The capacity of the federal inland revenue service (FIRS) staff should be strengthened.

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# THE ROLE OF FORENSIC ACCOUNTANTS IN TAX FRAUD PREVENTION IN NIGERIA

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## **Abstract**

*Over the past decades, actual tax revenue generated has consistently fall short of the budgeted tax revenue expected due to tax fraud; this is issue has left government with little funds to finance the huge capital expenditure needed for economic development. It is important to address the issue of tax fraud in Nigeria. As such, this study examines the role of forensic accountants in prevention of tax fraud in Nigeria. The study adopts a survey research design. Data is collected with the aid of questionnaires (5 Likert's scale) targeted at practicing financial accountants, forensic accountants, tax experts and academics. Out of 200 questionnaires sent online, 38 were returned which formed the sample for the study. Data gotten is analyzed with Descriptive statistics (mean and percentages). Findings revealed that the role of forensic accounting has not improved tax fraud detection and prevention in Nigeria which consequently has negative impact on tax revenue generation in Nigeria. In consonance with the study findings, the study recommends that, government should create a strong data base for all eligible tax payer that is electronical. Also, there should be data harmonization across all sectors of the economic so as to prevent easy facilitation of offshore account running, false payroll filing, payment of employees in cash and non-remittal of withholding tax. By doing this, tax payers can easily be tracked and any event of tax fraud easily be detected by forensic accounting experts. There should be creation of specific court by law for special and speedy prosecution of tax fraudsters aided by forensic evidence. This will improve the effectiveness of tax administration in Nigeria.*

**Keywords: Tax fraud, forensic accountants and tax revenue**

## **INTRODUCTION**

Over the past decades, actual tax revenue generated has consistently fall short of the budgeted tax revenue expected due to tax fraud; this is issue has left government with little funds to finance the huge capital expenditure needed for economic development. It is

important to address the issue of tax fraud in Nigeria so as to encourage more tax revenue generation; and the best possible method to adopt in checkmating tax fraud in Nigeria as prescribed by authors like Almustapha and Hamza (2016); Folayan and Adeniyi (2018) is through effective tax administration and effective role of forensic accountants in tax fraud detection and prevention. The Nigerian government has witnessed many forms of tax fraud by citizens in a bid to deliberately evade tax; these tax fraud issues have consistently impacted revenue generation in Nigeria adversely (Almustapha & Hamza, 2016), which is a big problem that needs to be explored in order to seek ways to mitigate such issues. Tax fraud has grown rapidly over the last few years, and there is need to consider the services of professionals such as forensic accountants to reduce the pressure and potentials of tax frauds (Abdullahi & Mansor, 2015). Regardless of the type or nature of tax fraud and the sectors it occurs, its' effect on tax revenue generation cannot be overemphasized (Mehrra & Farahani, 2016) thus the role of forensic accountants in preventing such financial illegality is eminent.

As mentioned in Murray (2017), taxes have always been the most important source of the state budget. But taxpayers are constantly looking for ways to avoid paying taxes or to reduce the amount of tax liability which is why some tax payers result to tax fraud. Tax fraud is currently a serious problem of each economy in the world. According to Onyeka and Nwankwo (2016), tax fraud has a negative effect on the state budget and on the situation of public finances. Tax fraud is carried out as the result of the economic behaviour of taxpayers, which in most cases the tax payer thinks it is as a result of lacunas in tax laws and administration (Saxunova, Sulíkova & Szarkova, 2017). Tax fraud limits countries in the implementation of their economic policy as a result of reduction in revenue generated from tax. Countries, try to combat these phenomena, analyse their range and to accept necessary actions to detect tax fraud and reduce tax fraud occurrence but the problem is, 'tax fraud evolution is faster than the actual regulation of laws or tax administration mechanisms to prevent tax fraud' (Wilson, 2007). Authors like Gravelle (2015); Levi (2008), believe that multinational companies, rich individuals, and government officials are more likely to commit tax fraud as these set of people have the capability and intention to hide their wealth. These is noticed in the recent high-profile leaks from off-shore financial institutions such as the Panama Papers or Luxemburg leaks which is tied to multinational companies, rich individuals and government officials across the globe.

Fagbemi, Uadiale and Noah (2010), mentioned that the Federal Inland Revenue Services (FIRS) report presented to the federal executive council on National Tax Policy for 2009, says that sustainable development in the context of tax refers to the pattern of revenue generation, which is able to meet the needs of the present generation of Nigerians, without negatively impacting the ability of future generations to meet their own needs. Generally, taxation is regarded as a sustainable source of government revenue due to the stability and certainty of the tax system (Almustapha & Hamza, 2016) but tax revenue uncertainties

come amidst tax fraud as a result the future generation potentials in line with adequate development cannot be attained if revenue is not made available as a result of tax fraud. Unlike other sources of revenue, taxes are constantly available in so far as economic activity is carried on in the society but one challenge to the consistency of tax revenue is basically the administration and collection of tax revenue and tax fraud has proven to be a setback to tax revenue generation in Nigeria (Folayan & Adeniyi, 2018). However, recent developments in the global and local financial institutions such as international financial regulatory bodies, international tax laws and international financial crime bodies have significantly checkmated the occurrence of tax fraud globally (Fazli, Mohammed & Mohamed, 2014).

It is in line with this that the study intends to create awareness on the importance of the role, forensic accounting can play in detecting tax fraud, preventing tax fraud and putting in place an effective tax system which can help in securing a stable flow of revenue for government of Nigeria. Nigeria's need for revenue base diversification from oil revenue to tax revenue can hardly be achieved if the right tax mechanisms are not in place to block all tax revenue leakages (Modugu & Omoye, 2014). The tax fraud research through application of forensic accounting theories and technique will therefore promote and encourage putting in place appropriate tax administration mechanisms that will prevent tax evasion and bring about revenue growth.

## **THEORETICAL LITERATURE**

To understand the theoretical underpin of tax fraud it is eminent to explore both tax theories and fraud theories. The underlining principle of tax fraud is; having the ability to pay but intentional evading payment of tax for certain reasons. The question that should come to mind is, why will a tax payer who has the ability to pay intentionally evade tax? This is best explained by the Ability to pay theory, the fraud triangle theory and fraud diamond theory.

As cited in Oyebanji (2014), the ability to pay theory as propounded by Jean Jacques Rousseau (1712-1778); Jean- Baptiste Say (1767-1832); and John Stuart Mill (1806-1873) posit that taxes should be imposed according to a person's ability to pay base on his or her earnings. It is widely known that public expenditure should be expected from those that have and not from those who have not. This is certainly the foundation of progressive tax, as the tax rate increases then the taxable amount is expected to increase also. This principle of ability to pay is definitely the best equitable tax system, and this has been widely practice globally in our contemporary world. The preposition of ability to pay theory has made authors like Oyebanji (2014); Manea (2014); Gurama, Mansor and Pantamee (2015) argued that tax payers are progressively and equitably taxed. But if they are equitably taxed, then what gives rise to tax fraud? This is explained by the fraud triangle theory.

According to Abdullahi and Mansor (2015), perceived pressure as a result of factors leads to unethical behaviors; this is the first factor of the fraud triangle theory. Every fraud perpetrator faces some pressure to commit unethical behavior. These pressures can either be financial or non-financial pressures. Albrecht, Albrecht and Albrecht (2008), pointed out that, since the pressure to commit fraud may not be real it is important to use the word perceived. If the perpetrators believed that they were pressurized, this belief could lead to fraud. Perceived pressure can exist in various ways, especially financial need. Financial pressure is recognized as the most common factor that lead an entity or individual to engage in tax fraud (Manurung & Hadian, 2013). The second necessary element of fraud to occur is perceived opportunity. Opportunity is created by ineffective tax administration or law that allows an individual to commit tax fraud. The concept of perceived opportunity suggests that people will take advantage of circumstances available to commit tax fraud (Kelly and Hartley, 2010). The nature of perceived opportunity is like perceived pressure in the sense that the opportunity does not have to be real too. However, the opportunity exists in the perception and belief of the perpetrator. Rationalization is the third element of the fraud triangle theory. The rationalization concept indicates that the perpetrator must formulate some morally acceptable idea to him before engaging in unethical behavior. Rationalization refers to the justification and excuses that the immoral conduct different from criminal activity. If an individual cannot justify dishonest actions, it is unlikely that he or she will engage in fraud. Some examples of rationalizations of fraudulent behavior include; intentionally evading tax by laundering and investing in tax havens. But not everyone who has the ability to pay, who is pressured, who has the opportunity and rationalization can commit tax fraud (Gbegi & Adebisi, 2013). According to Wolfe and Hermanson (2004), who is a proponent of the fraud diamond theory, one must possess the necessary traits or skills and abilities for the person to commit tax fraud. It is where the fraudster recognized the particular fraud opportunity and ability to turn it into reality. Position, intelligence, ego, coercion, deceit, and stress, are the supporting elements of capability (Wolfe and Hermanson 2004). It is this capabilities of individuals as propounded by the fraud diamond theory that facilitates the ease of tax fraud in Nigeria.

### **Concept of Tax Fraud**

Tax Fraud “is a form of deliberate evasion of tax which is generally punishable under law (Saxunova, Sulíkova & Szarkova, 2017), this includes situations in which deliberately false statements are submitted or fake documents are produced (Thanasak, 2013). The offenses of tax fraud are placed in the field of criminal financial activities, because the damage created by illegal evasion of paying tax obligations is reflected in depleted budgeted tax revenue, the criminal investigation of tax fraud ought to take into consideration certain peculiarities in the process of prosecution and trial of tax fraudsters. As stated in Pellegrini and Enrico (2016), in order to discover and prove the elements of the tax fraud offense,

three procedural steps are eminent; identifying/detecting the occurrence of tax fraud, prosecution by the criminal investigators and the criminal proceedings by the court of law which is most often backed by the law. In carrying out these procedures, the most appropriate forensic tools must be identified and put in place in order to detect the methods used by the tax fraudsters to intentional evade tax payment. Tax fraud offenses are generally crimes of danger to the revenue generation prowess of the state, as noted above, and in light of the financial consequences, they fall into the category of financial crimes against the state (Srivastava, Mock & Turner, 2005). Tax fraud is seen as an intentional criminal act, in most cases the intention being classified according to purpose such as avoiding the payment of tax liabilities (Abdullahi & Mansor, 2015). Tax fraud is unique in a way such that the perpetrator usually tries to place his/her actions in pseudo-legality in order to inspire confidence and thus evade the criminal proceeding. According to Lister (2007), tax fraud offenders are well acquainted to the financial and tax law, they have knowledge of international financial laws, or know the mechanisms employed in order to intentionally evade tax from originating country of operation, all this capability posit the fraud diamond theory as argued by Normah and Hesri (2010), which are being used for the purpose of deliberate evasion of tax and non remittance of tax revenue to the originating country.

Rasha and Andrew (2012), asserts that, tax fraud encompasses a wide variety of tax-related investigations, including money laundering, corruption, terrorist financing and other financial crimes such as suspicious tax avoidance that threaten the strategic, political and economic interests of jurisdictions. According to Kenyon and Tilton (2006), tax fraud investigations span a broad spectrum of individuals and economic operators, from large businesses to self-employed individuals and government officials. Over the world, countries set anti-fraud units of the tax administration who are structured in a way that enables them to proactively identify, detect, investigate and prosecute tax fraud (Bierstaker, Brody & Pacini, 2006); this is done to influence taxpayer compliance and combating major tax fraud cases.

### **Tax Fraud Schemes**

According to Murray (2017), tax fraud/evasion schemes can take a variety of forms such as:. Examples of more prevalent methods of evasion are pyramiding, employee leasing, paying employees in cash, filing false payroll tax returns or failing to file payroll tax returns (Murray, 2017).

- a) Pyramiding of employment taxes is a fraudulent practice where a business taxes are withheld from its employees but they are failed to be remitted to the tax authorities. Enterprises involved in pyramiding frequently file for bankruptcy to get rid of the liabilities accrued and then start a new enterprise under a different name and commence a new scheme.

- b) Employment Leasing is another legal business practice, which is sometimes subject to abuse. Employee leasing is the practice of contracting with outside entities to handle all administrative, personnel, and payroll concerns for employees. In some instances, employee leasing companies ignore the payment of employees' taxes to tax authorities collected by employer. These taxes may be used then for financing owner's business or personal expenses.
- c) Paying Employees in cash, fully or partially, is a common method of evading income and employment taxes resulting in lost tax revenue to the government especially if this is done deliberately.
- d) Filing False Payroll Tax Returns or Failing to File Payroll Tax Returns - are two other practices for evading taxes, preparers tax obligation on behalf of the employees submit false payroll tax returns, sometimes they understate the amount of wages on which taxes are owed or they fail to file employment tax returns.
- e) Using Off-shore Accounts- government officials, physical entities, and corporations often use off-shore accounts to hide their income and assets from government institutions, to avoid taxing. Many foreign jurisdictions offer financial secrecy to investors who live in other countries to attract them to "tax havens". In these tax havens, the amount of tax liability is usually very low or zero. These are also forms of tax fraud.
- f) Corporate Tax Fraud- corporate tax fraud involves intentional actions of a taxable entity which are; value added tax evasion in the form of transfer pricing (Gravelle, 2015), fraud realized when invoicing and bookkeeping, free goods and services, and fraud realized with advance payments.
- g) Money laundering is carried out to hide the original source of finances, to persuade the government that money comes from credible sources. It occurs mainly in situations when money comes from illegal activities. This is also a form of tax fraud.
- h) Hiding income under illegal Pension Funds and tax shelter activities are also forms of tax fraud.

Florenz (2012) stated that 'tax fraud has a variety of fiscal effects and revenue losses from noncompliance and tax fraud is an eminent cause of revenue loss. Tax evasion and fraud thus contribute to undermining the legitimacy of government and is criminal in all entiresities. Dorminey, Fleming, Kranacher and Riley (2010), affirmed that, tax fraud has undoubtedly affected adversely the government revenue generation capability and the economy as a whole and observed that, the taxpayer indulges in tax fraud by resorting to various practices. These practices erode moral values and build up inflationary pressures. This point can be buttressed with the fact that because of the tax fraud, individuals and companies have a lot of money at their disposal (Abdullahi & Mansor, 2015). This increases the quantity of money in circulation but without a corresponding increase in the

revenue of the government or public infrastructures. Marion and Muehlegger (2008) added that, lack of compliance with tax laws are likely to alter the distortionary costs of raising a given level of government revenue and may affect the distributional consequences of a given tax policy.

Adebisi and Gbegi (2013), asserts that tax fraud are problems that face every tax system, the Nigerian situation seems unique when viewed against the scale of corrupt practices prevalent in Nigeria. Under direct personal taxation as practiced in Nigeria, the major problem lies in the administration of the taxes. Nigeria, have witnessed tax fraud cases where multinationals, government officials and individuals have all involved in one tax fraud or another (Afubero & Okoye, 2014). Such scenarios, no doubt, say a lot about the lacuna in Nigerian tax administration system both in its design and in the disposition of some taxpayers towards taxation. This is worrisome as it's adverse effect on revenue generation is obviously felt. Gurama et al., (2015) supported this claim with their assertion that Nigeria loss a great of revenue to tax fraud related issues annually. Although there are legal framework put in place to punish tax fraudsters, it perhaps raises questions on the efficiency and effectiveness of tax laws and tax administration in Nigeria (Uche and Ugwoke, 2003). Government in an effort towards solving this problem had even gone to the extent of engaging the services of tax consultants and financial regulatory agencies. Alabi (2001) as cited in Onyeka and Nwankwo (2016), mentioned that 'government has made efforts, the problem of tax fraud still persists' but the need to specifically bring on board forensic accountants with the requisite expertise to investigate and prosecute tax fraudsters is necessary. There is no doubt that revenue due any government will be reduced by the unpatriotic act of tax fraud which can be attributed to corruption.

## **Empirical Review**

Folayan and Adeyini (2018), carried a research on the effects of tax evasion on government revenue generation in Oyo State Nigeria. He issued out structured questionnaire to a sample of one hundred and sixty five respondents who were randomly selected across the state while secondary data were gathered from National Bureau of Statistics (NBS), Office of Budget and Economic Planning, and Internal Revenue Office using data from 2011- 2016. Data collected were analyzed using descriptive and inferential statistics tools. His findings showed that, the amount of Internally Generated Revenue (IGR) between 2011 and 2016 did not meet the estimates revenue as it was expected. This means that the fall in government revenue is as a result of tax fraud practices.

Manea (2014), mentioned that the issue of tax fraud/evasion is now a constant concern of all countries in the world, being regulated differently in relation to the financial and economic implications, the way in which they were committed, the principles underlying the fiscal policy of the authorities or of the investigative methodology. In terms of



investigating crimes of evasion which pertains tax fraud and forensic experts, it must be said that the method is specific to the investigation of financial and economic crimes in general and tax fraud in particular. Manea (2014) stated in changing the criminal procedural law in February 2014 also brought changes in the running of the forensic investigation, in the prosecution, trial phase, and changes which were felt in the case of tax fraud offenses in Romania.

Saxunova, Sulíkova and Szarkova (2017) focused on studying tax avoidance and tax evasions evolution, highlighting the factors influencing occurrence of these phenomena from the historical perspective. They examined who the typical fraudster is, since the auditors may identify the problems with tax avoidance and tax evasion because of knowing better the personality type who is liable of committing tax fraud as this may be considered as a risk element in performing audit. They objected and question the behaviour of some entrepreneurs as far as ethics is concerned, especially in connection with looking up tax paradises as the headquarter for a new established company due to low or zero tax rates. Also, the objective of the study is to examine and analyze tax fraud as a part of economic crime globally. Their findings show that tax fraud is now on the increase as a result of globalization and they recommended expert involvement in the investigation and prosecution of tax fraud practices.

Gurama, Mansor and Pantamee (2015) reviewed taxation and tax evasion concept and provided a brief overview of Nigerian tax system. Their paper in an attempt to achieve its goal provided conceptual and empirical evidence of evilness of tax evasion and what motives behind the phenomenon globally. Furthermore, they provided brief but precise knowledge of Nigerian tax system, tax policy and underpinning tax law of the country. Similarly, objectives and guiding principle, driving institution of Nigerian tax system, administration and policy and concept of U-TIN were also discussed. They made recommendations to government on the aspect of improving tax administration and the prosecution of tax related offenses through employment of forensic expert services.

Onyeka and Nwakwo (2016) examined the impact of tax evasion and avoidance on growth of the Nigerian economy. The study adopted the ex-post facto research design and data were obtained from Central Bank of Nigeria Statistical Bulletin for the period 1999 - 2012. The Ordinary Least Square Regression (OLS) model was used to test the hypothesis. The result emanating from the findings of their study suggests that tax evasion and avoidance had negative significant impact on growth of the Nigerian economy.

Abdullahi and Mansor (2016) took a conceptual approach by first examining the concept of fraud, then discussing the convergence of the two classical theories, and finally differentiating them. By doing so, the similarities and differences between them were highlighted and appreciated for fraud prevention purposes. The study used secondary

sources of information obtained from journal articles, textbooks and the internet. The discussion of the two theories contributes to the understanding of frauds especially by forensic accountants, auditors, fraud examiners and other antifraud bodies as needed tool for effective tax fraud investigation and prosecution.

In Nigeria, Folayan and Adeyini (2018); and Abdullahi and Mansor (2016) used quantitative data in order to examine the level of tax fraud that has made actual tax revenue fall short of the budgeted tax revenue. Their findings were in line with expected empirical proposition of Onyeka and Nwakwo (2016) who found that tax fraud has a negative impact on revenue generation in Nigeria but they all fail to suggest a way through which tax fraud can be checked using tax administrative tools. Outside Nigeria, the studies on tax fraud carried out by Manea (2014); Saxunova, Sulíková and Szarkova (2017); has incorporated the role of forensic accountants in preventing tax fraud. As a result this study seeks to incorporate the approaches used by studies outside Nigeria to examine the role of forensic accountants in tax fraud prevention in Nigeria using both the fraud triangle and diamond theories as adopted by Abdullahi and Mansor (2015).

### **Research Question**

The following research questions are set to be answered;

- i. What are the roles of forensic accountants in prevention of tax fraud in Nigeria?
- ii. Has forensic accountants aided the detection and prevention of tax fraud in Nigeria?

### **METHODOLOGY**

The study adopts a survey research design. Primary data is collected with the aid of questionnaire targeted at practicing financial accountants, forensic accountants, tax experts and academics. The study employs the use of descriptive statistics (mean and percentages) for analysis of data collated. This research study is conducted in Nigeria during 2020. 200 questionnaires were issued and 38 returned answered which then form the sample size for the study. The questionnaire were administered using a 5 structured Likert's scale of; Strongly agree (5), Agree (4), Neutral (1), Disagree (3) and strongly disagree (2).

*Decision rule: The average of 3 is considered the benchmark that forms the accepted opinion (Decision).  $< 3$  is disagree while,  $\geq 3$  is agree.*

### **RESULT AND ANALYSIS**

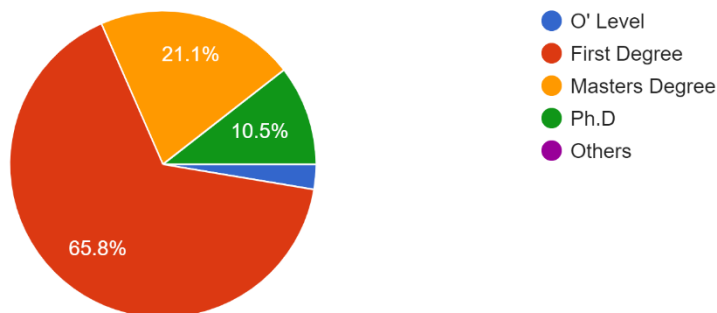
#### **Validity of Data**

To ensure that the data for analysis reflects the preposition made by the study, questionnaires were targeted at the public who have knowledge about tax fraud in Nigeria

as a result of their educational qualification and occupation.

#### Qualification

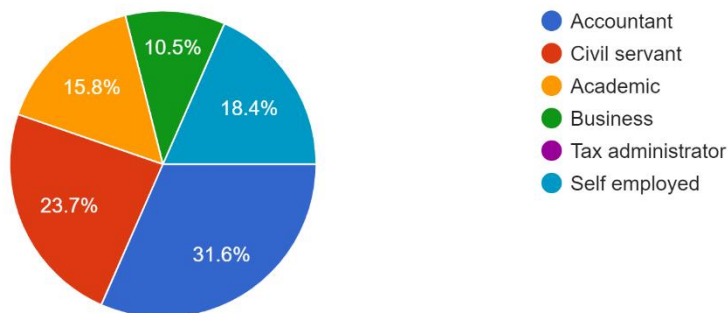
38 responses



From the chart above, the highest respondent are those with first degree, they constitute a total 65.8%. Respondent with masters degree constitute 21.1% while, those with Ph.D constitute 10.5%. The respondent with the least educational background are those with O' Level as they constitute just 2.6% of the total respondent. This means the respondent are highly educated and informed about tax fraud issues as 97.4% of the total respondent have first degree and above.

#### Occupation

38 responses



From the occupation chart above, majority of the respondents are accountant with a record of 31.6%. Civil servants have a record of 23.7%. Those who are self employed cut across

18.4% of the total respondents while those in academics account for 15.8% of the total respondents. Finally, the number of respondents in business account for 10.5% of the respondents. This is a further prove that the respondents' occupation are in line with the topic of discuss thus, their respective response is valid enough to draw inferences to support the empirical findings of the study.

## Analysis of Response

**Descriptive Statistics Table**

	N	Minimum	Maximum	Mean		Std.
	Statistic	Statistic	Statistic	Statistic	Std. Error	Deviation Statistic
Tax administration in Nigeria is effective	38	1.00	5.00	2.7368	.19114	1.17828
Tax administrators have accurate data of tax payers in Nigeria	38	1.00	5.00	2.6579	.14251	.87846
There is high level of non-compliance to tax payment in Nigeria	38	1.00	5.00	3.7895	.16071	.99071
Non-compliance to tax payment by tax payers is deliberate	38	1.00	5.00	3.1579	.21838	1.34619
Tax fraud has reduced tax revenue generation in Nigeria	38	1.00	5.00	4.2632	.12892	.79472
Forensic accounting has aided the detection and prevention of tax fraud in Nigeria	38	1.00	5.00	2.8684	.22683	1.39828
Valid N (listwise)	38					

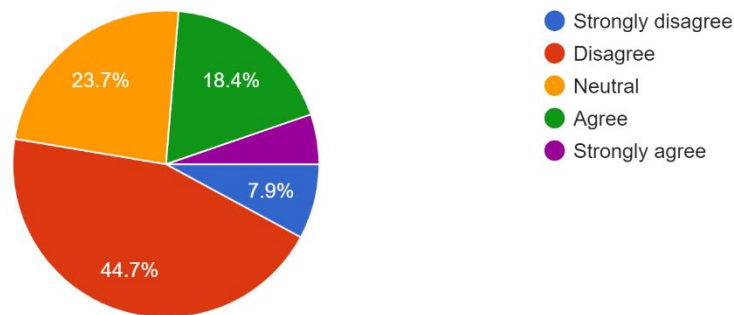
**Source: Authors' Computation 2020**

From the descriptive statistic table above, N represents the valid number of responses which is 38. The minimum and maximum statistics represents the Likert scale figures attached to each response as explained in the methodology of the study. The minimum response (Neutral) recorded is 1.00 while, the maximum response is 5.00 (Strongly agree). The various mean statistics represents the average decision of respondents that forms the

accepted criteria for decision rule of the study.

Tax administration in Nigeria is effective

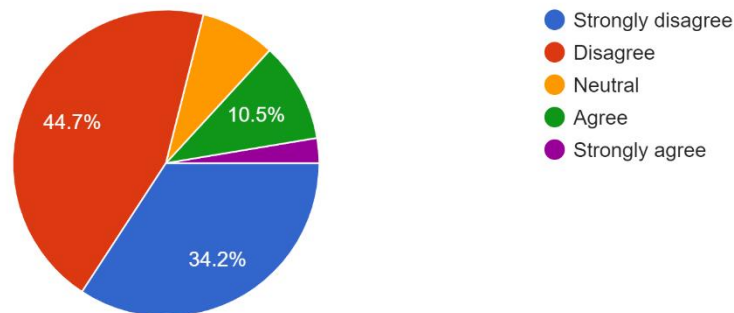
38 responses



Questions were asked about the effectiveness of tax administration in Nigeria. Out of the responses gotten, 23.7% of the respondent are neutral, 7.9% strongly disagree while, 44.7% disagree. On the other hand, 18.4% agree while, 5.3% strongly agree that tax administration in Nigeria is effective. To draw inferences, the average calculated response is 2.7368 which is within the disagree average thus, the respondent generally disagree that tax administration in Nigeria is not effective.

Tax administrators have accurate data of tax payers in Nigeria

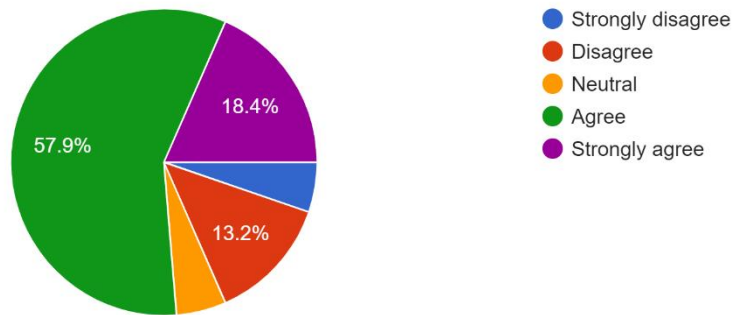
38 responses



On the accuracy of tax data, 34.2% of the respondent strongly disagree while, 44.7% of the respondent disagree that tax administrators have accurate data of tax payers in Nigeria. On the other hand, only 10.5% agree that tax administrators have accurate data of tax payers in Nigeria. On an average (2.6579), the respondent disagree that tax administrators have no accurate data of tax payers in Nigeria.

### There is high level of non-compliance to tax payment in Nigeria

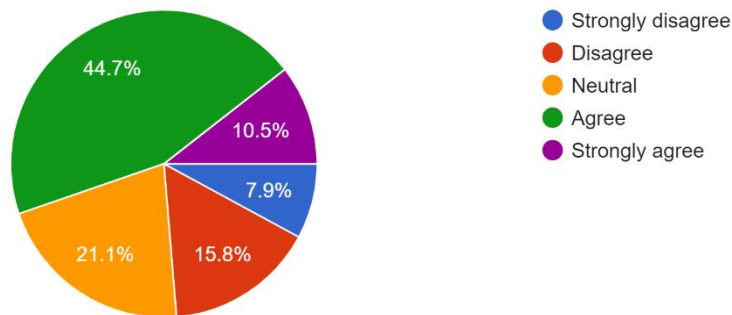
38 responses



On the level of tax compliance, 57.9% of the respondents agree while, 18.4% strongly agree that there is high level of non-compliance to tax payment in Nigeria. On the other hand, 13.2% disagree that there is high level of non-compliance to tax payment in Nigeria. On an average (3.7895), the respondent agree that there is high level of non-compliance to tax payment in Nigeria.

### Non-compliance to tax payment by tax payers is deliberate

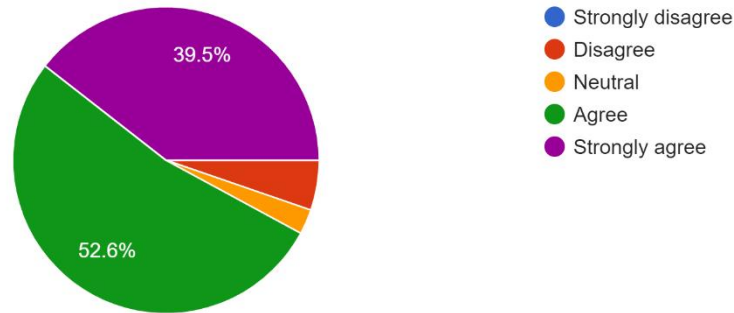
38 responses



Question on the deliberate non-compliance to tax payment which amounts to deliberate tax evasion and tax fraud was asked. 44.7% of the respondents agree, 10.5% of the respondent also strongly agree that non-compliance to tax payment by tax payers in Nigeria is deliberate. While, 21.1% of the respondent are neutral, 15.8% disagree and 7.9% strongly disagree that non-compliance to tax payment is deliberate. On an average (3.1579), the respondent agree that non-compliance to tax payment in Nigeria is deliberate.

### Tax fraud has reduced tax revenue generation in Nigeria

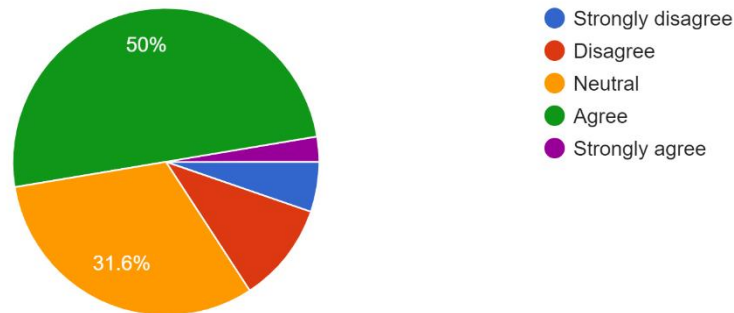
38 responses



Because of the prevalent issues of tax fraud in Nigeria as noted by the respondents, the respondent further agree (4.2632 mean average) that tax fraud in Nigeria has reduced tax revenue generation in Nigeria. While, 52.6% agree, 39.5% strongly agree that tax fraud has reduced tax revenue generation in Nigeria. On the other hand, only 7.9% of the respondents have a divergent opinion.

### Forensic accounting has aided the detection and prevention of tax fraud in Nigeria

38 responses



From the chart above, 50% of the respondents agree that forensic accounting has aided the detection and prevention of tax fraud in Nigeria, 31.6% of the respondent are neutral while, the remaining 28.45 fall within the category of those who disagree, strongly disagree and strongly agree. On an average, the respondent disagree that forensic accounting has not aided the detection and prevention of tax fraud in Nigeria. The high deviation around the mean of 1.39828 recorded shows that the respondent had a holistic divergent view of the efforts made by forensic accountant in detection and prevention of tax fraud in Nigeria.

## **Discussion of Result**

Theoretically, it is established by the fraud triangle theory that tax frauds are deliberate actions taking by tax payers which enables tax evasion, also, scholars like Manea (2014); Gurama, Mansor and Pantamee (2015); Folayan and Adeyini (2018); have empirically proved that tax fraud has a negative impact on tax revenue generation. The findings of these previous authors is collaborated by the findings of this study in which it is established that tax fraud reduces tax revenue generation.

It is further established that forensic accountants actively detect tax fraud occurrences. What is baffling in the case of Nigeria is the fact that forensic accounting has not aided the prevention of tax frauds in Nigeria due to poor data on tax payers, non-compliance attitude by tax payers, poor tax laws and administration mechanisms in place; these are all indications prepositioned by the fraud triangle/diamond theory which posit the Nigerian scenario gives opportunity for tax fraud to strives as a result of weak tax administration and the ill attitude of tax payers towards compliance to tax payment in Nigeria. Abdullahi and Mansor in 2016 conceptually analyzed tax fraud and they asserted that only if tax laws are strengthened that the evidence gathered by forensic accountant through tax fraud detection can aide the prosecution of tax fraudsters which will reduce and subsequently prevent tax fraud.

## **Conclusion**

The study concludes that tax fraud in Nigeria is prevalent as a result of weak tax laws and administrative mechanisms; this has weakened the prosecution of tax fraudsters and as a result forensic accountants tax fraud evidence detected has not aided the prevention of tax fraud in Nigeria. Also, deliberate actions of tax payers to evade tax has significantly reduced tax revenue generation in Nigeria.

## **Practical Implication**

If tax laws are not strengthened or the available tax administrative capabilities not improved, this will provide an enabling environment for tax fraud to grow in Nigeria. It is already theoretically and empirically proven that forensic accountants are not doing enough to prevent tax fraud in Nigeria; thus, if the right steps are not taken as recommended, Nigeria will continuously lose her tax revenue to tax fraudsters.

## **Recommendations**

The following recommendations become imperative:

- i. Government should create a strong data base for all eligible tax payer that is electronical. Also, there should be data harmonization across all sectors of the economic so as to prevent easy facilitation of offshore account running, false



payroll filing, payment of employees in cash and non-remittal of withholding tax. By doing this, tax payers can easily be tracked and any event of tax fraud easily be detected.

- ii. There should be creation of specific court by law for special and speedy prosecution of tax fraudsters. This will improve the effectiveness of tax administration in Nigeria.

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## Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Tax administration in Nigeria is effective	38	1.00	5.00	2.7368	.19114	1.17828
Tax administrators have accurate data of tax payers in Nigeria	38	1.00	5.00	2.6579	.14251	.87846
Tax payers comply and corporate with tax administrators and tax laws	38	1.00	5.00	2.7895	.17754	1.09441
Taxes are regularly paid to government tax administrators as at when due	38	1.00	4.00	2.8684	.13688	.84377
There are records of non-compliance to tax payment by tax payers	38	1.00	5.00	2.9211	.22749	1.40235
There is high level of non-compliance to tax payment in Nigeria	38	1.00	5.00	3.7895	.16071	.99071
Non-compliance to tax payment by tax payers is deliberate	38	1.00	5.00	3.1579	.21838	1.34619
Non-compliance to tax payment in Nigeria is a result of loopholes in tax laws	38	1.00	5.00	3.7368	.20549	1.26671
Tax laws in Nigeria are standard and effectively administered	38	1.00	4.00	2.6579	.16983	1.04691
Effective tax administration in Nigeria is of global best practice	38	1.00	5.00	2.7632	.18258	1.12548

Tax evasion in Nigeria is deliberately planned	38	1.00	5.00	3.3158	.22662	1.39701
Deliberate tax evaders are effectively prosecuted in Nigeria	38	1.00	4.00	2.7105	.12456	.76786
Prosecution of deliberate tax evaders is supported by forensic evidence	38	1.00	4.00	2.4474	.19488	1.20129
The forensic accountant evidence has aided the prosecution of tax fraud in Nigeria	38	1.00	4.00	2.2368	.21146	1.30351
Tax fraud has reduced tax revenue generation in Nigeria	38	1.00	5.00	4.2632	.12892	.79472
There is strict monitoring, supervision, and accountability of funds recovered tax fraudsters	38	1.00	4.00	2.6053	.14868	.91650
Tax laws in Nigeria are harmonized with other nations tax laws	38	1.00	4.00	2.5789	.20531	1.26559
There is a synergy between Nigeria and the global community in the prosecution of tax fraudsters	38	1.00	4.00	2.6316	.19386	1.19506
Forensic accounting has aided the detection and prevention of tax fraud in Nigeria	38	1.00	5.00	2.8684	.22683	1.39828
Valid N (listwise)	38					

# ASSET-BASED EFFECT OF DIVIDEND PAY-OUT ON FINANCIAL PERFORMANCE OF THE LISTED CONGLOMERATE FIRMS IN NIGERIA

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## **Abstract**

*Primarily, the study aimed at examined the impact of dividend policy on the financial performance of the listed conglomerate firms in Nigeria. Guided by Positivism research philosophy, the study employed descriptive causal research design. All conglomerate firms listed on the Nigerian stock exchange were taken as the Population of the study. However, only three firms were actually utilized due to discrepancies in the financial records (specifically with regards to dividend payments) of those firms dropped thus, using census sampling three conglomerate firms listed on the Nigerian stock exchange was the sample size. Secondary method of data collection was adopted to get detailed financial records of the sampled firms for the period of ten years (2009-2018). Pooled OLS test (robust) was used for data analysis on STATA version 14.0 which shows a positive impact at 63%. It was concluded that, dividend policy have significant impact on the financial performance of the listed conglomerate firms in Nigeria based on their reported Return On Assets (ROA) hence, management of the firms should geared their effort toward improving financial performance strategies which in turn will enhance their firms' earnings and will eventually lead to an increased dividend payouts.*

**Keywords:** *Dividend policy, financial performance and listed firms*

## **1.0 Introduction**

Dividend policy remain a mystery in corporate finance that is still gaining scholarly attention due it influences on the overall composition of what determine the future prospect of any corporate entity with shareholders taking part in financing it operations. In essence, when cash surplus exists and is not needed by the firm, then management is expected to pay out some or all of those surplus earnings in the form of cash dividends or to repurchase

the company's stock through a share buyback program. Geoffrey , Mirie, Eramus & Duncan (2017) summerised Dividend policy as a set of arrangements which provides management with guidelines and regulations to determine the proportions of the firm returns to be retained and that which to be distributed to the shareholders as cash dividend respectively. Thus, dividend paid will be used in this study as a proxy to describe dividend policy.

Financial performance is a gauge to express the general financial productivity of an organization over a span of financial period and aids in comparison of financial results of other firms in the same sector. In conclusion, it can be deduced to say that, financial performance is a general term which explains the extent to which a firm has succeeded in its core operation of resources utilization. To this end it's pertinent to make it clear that, there is no one universally accepted proxy for measuring financial performance of a firm. However, from a wider perspective, financial performance of a firm takes both accounting and market-based dimensions (Waggoner, Neely & Kennerley, 1999) hence, this study considers Return on assets to measure it. This is in line with the view of Leah (2008).

Conglomerate Company normally stands for a combination of multiple business entities operating in an entirely different industries under one corporate name, usually Conglomerate Company involve a parent undertaking and many other subsidiaries. Often conglomerate is a multi-industry company which are usually large and multinationals. However, on the Nigeria stock exchange Conglomerate is classified as sector on its own. They made of up companies controlling the stake in number of smaller companies which conduct business separately The sector was reported in January 2018 by Punch Newspaper to have led (measured by volume) the activity chart on the Nigerian Stock exchange with 4.110 billion shares valued at 10,016billion naira traded in 2,454deals. It thus contributed then about 58% and 24% to the equity turnover volume and value of the market (NSE) respectively.

## **2.0 Conceptual Review**

Dividend policy as a concept is concerned with financial policies regarding paying cash dividend in the present or paying an increased dividend at a later stage via issuance of additional share bonuses that will attract their own separate dividend in future time. Decision on whether to issue dividends and at what amount, is determined mainly on the basis of the company's inappropriate profit (excess cash) and influenced by the company's long-term earning power (Emmanuel, Wasiu , & Job-Olatuji, 2018). Financial performance was viewed in Leah (2008) as the measurement of the outcome of firm strategies, policies and operations in monetary terms. These results are reflected in the firm return on assets and return on investments. Likewise, Adams and Mehran (2005) described financial performance as the end result of primary utilization of firm assets to generate proceeds during ordinary business operations. Financial performance can moderately be understood as a general measure of a firm overall financial level over a particular time

duration and can be used for comparison of general performance of different firms operating in the same industry.

## **2.1 Empirical Review**

Many previous studies on the relationship between dividend policy and firm performance (Kimunduu, Mwangi & Ochieng, 2017; Kanti & Subrat, 2018; Mohammed, 2007; and Ur, & Aabid, 2013) continue being an unresolved predicament with few interrogating the causality relationship between financial performance and dividend policy. Adelegan (2003) for instance evaluated the asymmetric information about dividend payment of quoted companies in Nigeria. Using a study on 882 on a sample of 62 quoted firms in Nigeria that cover the period of 1984 – 1997, the study found a positive and significant impact of dividend policy on performance. Similarly, Nasir, Abdullah and Nawaz (2011) employed Multi linear regression analysis in examining the effect of dividend policy on share price volatility among financial sector of listed firms on Karachi securities exchange. Their findings depicted that, there was a significant negative relationship between dividend yield and price volatility likewise between dividend payout and price volatility.

Baker and Powell (2012) adopted survey technique to take the opinion of Indonesian managers about the factors influencing dividend policy, dividend issues, and explanations for paying dividends. It was found that dividend policy has a positive and significant relationship with performance. Lee, Lin, Chiang and Kuo (2012) investigated the intra-industry effects of cash dividend announcements for U.S. real estate investment trusts (REITs). The results suggest that REIT dividend announcements have contagion effects. In addition, consistent with the existing literature, these contagion effects are found to be asymmetric and more prevalent for dividend-decreasing events. Also, M'rabet and Boujjat (2016) in assessed the relationship between dividend policies and financial performance of selected listed firms in Morocco. Using data from the annual reports of the sampled quoted firms and analyzed using panel data regression model, the study reveals that dividend policy is an important and significant factor affecting firm performance and their relationship was also strong and positive which therefore showed that dividend policy was relevant. Ozuomba, Anichebe and Okoye (2016) sought to find out how share value cum shareholders wealth is affected by dividend policies. Based on survey design that cover a one-year period with a sample of 10 quoted companies in the Nigeria stock exchange with the use of ANOVA analysis, this study shows the relevance of dividend and further proves that dividend policies of public limited companies influence the wealth of shareholders in Nigeria.

Moreover, from Pakistan, Khan, Babar, Fahad, Muhammad & Hafiz (2016) investigated the relationship between dividend payout ratio and profitability of their firms. Two main sectors of Pakistan were selected: energy and textile. The study covers a time span of 1996-2008. Firms' performance was measured by earning per share (EPS) and return on assets



(ROA). The results of logarithmic regression show that no matter what industry is, there is a negative impact of dividend payout ratio on next year earnings of a firm. Likewise, Olufade (2018) while confirming Uwalomwa, Jimoh and Anijesushola (2012) in his study which investigated the relationship between the financial performance and dividend payout among listed firms' in Nigeria opinioned that, Variables are ownership structure, size of firms and the dividend payouts. The period of 2006-2010 was utilized as the main source of data collection for the 50 sampled firms in that study. It was found that, there is a significant positive association between the performances of firms and the dividend payout of the sampled firms in Nigeria. The study also revealed that ownership structure and firm's size has a significant impact of the dividend payout of firms too.

Famil, Ali & Yunus (2017) carried out an investigation on a relationship between dividend policy and financial performance of firms listed at the Istanbul stock exchange. The study used data of 172 non-financial companies within a time span of four (4) years from 2008 up to 2011. Their analysis using multiple regression and t-test showed that dividend payments had influence on the sampled companies' financial performance.

Similarly, Enow & Eslyn-Bleighnaul (2018) conducted a study on effect of dividend policy on share price of all quoted companies in South Africa. They concluded that increased in dividends corresponded positively to share price increases. These findings demonstrate formidable and powerful findings in their exchange market still in Africa Charles, Joseph & Jane (2014) examined the payments of dividends on the share performances of the firms listed in the Nairobi Securities Exchange. They examined 29 quoted firms with a span of ten years from the year 2003 up to the year 2012 where it was also established that, there exist a significant correlation among the variables. Ali & Bilal (2018) carried out a study to investigate the impact of dividend policy on share price volatility in the Jordan Stock Market. The study findings depicted that, there is a negative significant relationship between both dividend yield and payout ratio with share price volatility.

In conclusion with specific emphasis from Nigeria, Odion, Idewe and Murad (2019) studied the relationship between dividend policy and financial performance of listed deposit money banks in Nigeria for the period covering 2009 to 2014. It was found that dividend policy and financial performance are positively aligned, indicating that, the more banks paid out dividend the more increase in financial performance is evident. They also argued that, the multiplier effect of this relationship will definitely spread across significant portion of many other sectors due to service complexity of the banking sector and its service-role for all. Thus taking as a searchlight, their study gingered the motivation of this work to carry out similar investigation in another complex sector of the Nigerian economy with a view to find out the impact of dividend policy on the financial performance in another sector high impact industry hence, the conglomerate sector was chosen going by its recent track record as captured in the introduction of this paper

## **2.2 Theoretical review**

Linkage between dividend policy and financial performance is theoretically guided by Jensen and Meckling (1976) agency theory which advocates that two parties; the shareholder and the managers are in harmony in their interests. Although Modigliani and Miller (1961) have earlier argued that, firm value and financial performance is associated to the ability of a firm to generate more earnings hence dividend policy is ineffective determinant of firm financial performance (dividend irrelevance theory). However, signaling theory holds an assumption that, dividend policy serves as a communication signal which pass valuable information to investors concerning future financial performance of the firm. This assertion was confirmed and the theory have underpinned previous studies (Nagajeyakumaran, 2014 & Al-Kuwari, 2009). Hence, both the work of Modigliani and Miller and Signaling theory will be theoretical guide of this study.

### **Signaling Theory**

The signaling theory proposes that dividend policy can be used as a device to communicate information about a firm's future prospects to investors. Charles, Joseph, & Jane (2014) asserted that, cash dividend announcements convey valuable information, which shareholders do not have about management's assessment of a firm's future profitability thus, reducing information irregularity. Investors may therefore use this information in assessing a firm's share price. The intuition underlying this argument as raised in Ebire, Mukhtar & Onmonya (2018) is based on the information irregularity between managers and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. Dividend policy under this model is still assumed to be relevant (Anthonia & Odeleye, 2018) which is in agreement of an earlier position of Justus (2018), Consuelo & Inmaculada (2015) and Khadija, Sadia, Maria & Sadia (2017) thus, the theory is considered to depict the direction of this study for better understanding of the dividend policy.

### **Dividend Irrelevance Theory**

This theory holds a view that investors are indifferent between dividends and retention of generated capital gains. Invariably, it's assumed that, if they want cash, they can sell stock. Bayaraa (2017), Anthonia & Odeleye (2018) and Djayani & Muhammad (2017) shared a common view that, if investors don't want cash, they can use dividends to buy stock. It was Modigliani-Miller who support the rationality behind Dividend irrelevance and for decades it enjoys acceptance and wide application until in recent researches where this theory is grossly criticized majorly on unrealistic assumptions (no taxes or brokerage costs considered), hence may not be true. However, despites it shortcomings the study utilized it only in the area of gaining understanding why investors may be indifferent with dividend policy while empirical studies are confirming its impact on the overall performance of the companies.

### 3 Research Methodology

The study is guided by Positivism research philosophy which essentially entails adhering to the view that only “factual” knowledge gained through quantifiable observations, including measurement are trustworthy, because that lead to statistical analyses and it’s assumed that, Research should be empirically observable via human senses where Inductive reasoning should be used to develop statements (hypotheses) that will be tested during the research process. However, in positivism philosophy, the researcher is independent from the study and there are no provisions for human interests within the study. The study also employed descriptive causal research design.

Causal descriptive research according to Dubovskiy (2018) is conducted to identify the extent and nature of cause-and-effect relationships. It’s similarly used to assess impacts of specific changes on existing norms, processes or even focuses on an analysis of a situation or a specific problem to explain the patterns of relationships between variables

All conglomerate firms listed on the Nigerian stock exchange (as at June, 2019) were taken as the Population of the study. However, only three firms were actually utilized due to discrepancies in the financial records (specifically with regards to dividend payments) of those firms dropped thus, using census sampling three conglomerate firms listed on the Nigerian stock exchange was the sample size. Secondary method of data collection was adopted to get detailed financial records of the sampled firms for the period of ten years (2009-2018). Pooled OLS test (robust) was used for data analysis on STATA version 14.0. The study is on the Dividend policy (measured with dividend paid) on the financial performance (measured with Return on Assets) of the sampled firms.

#### Model Specification

The following model was used for the study which is a modification of Odion, Idewe and Murad (2019)

$$ROA_{it} = \beta_0 + \beta_1 LDIV_{it} + \beta_2 LTA_{it} + \varepsilon_{it}$$

Where:

<i>ROA</i>	=	Return on assets
<i>LDIV</i>	=	Log of dividend paid
<i>LTA</i>	=	Log of total assets
$\beta_0$	=	Parameter to be estimated
$e_{it}$	=	Error term assumed to satisfy the standard OLS assumption.
$\beta_1$ - $\beta_2$	=	Partial derivatives or the gradient of the independent variable.

## 4.0 Results and Discussion

### 4.1 Descriptive Statistics

The descriptive statistics is presented on Table 4.1 showing the measures of central tendency such as mean and measures of dispersion (the spread of the distribution) such as the standard deviation, minimum and maximum of the variables.

**Table 4.1: Descriptive Statistics of the Variables**

Variables	Obs.	Mean	Std. Dev.	Min	Max
ROA (%)	30	0.0160326	0.086199	-0.2873892	0.1607844
LDIV (₦)	30	5.797259	0.7434227	3.34811	6.977553
LTA (₦)	30	7.739098	0.377347	7.137842	8.47296

**Source:** Descriptive Statistics Result using STATA 14.0.

From Table 4.1, the mean ROA for the sampled listed conglomerates in Nigeria is 0.016, indicating that the average profit earned by the companies is 1.6% of their total assets with a maximum loss of 29% of their total assets and maximum profit of about 16% of their total assets. This indicates a high variation of performance among the companies as depicted by the value of standard deviation (8.6%) which is higher than the mean value. Log of dividend paid recorded a mean value of 5.797259 implying that on average most of the companies' paid dividend of about ₦5.8 million. It also recorded a minimum value of ₦3.3million and a maximum value of ₦7.0 million for all the sampled companies within the study period. This indicates a low variation of dividend payment among the companies as depicted by the value of standard deviation of ₦0.7 million which is lower than the mean value.

Size of the companies recorded a mean value of ₦7.7 million, implying that on average most of the sampled listed companies have total assets amounting to ₦7.7 million. It also indicates a minimum value of ₦1.3 million and a maximum value of ₦8.5 million for all the sampled listed companies within the study period. This also indicates a low variation of total assets among the sampled listed companies as depicted by the value of standard deviation of ₦0.4 million which is lower than the mean value.

### 4.2 Correlation Analysis

Table 4.2 shows the correlation values between the dependent and independent variables and also the relation among the independent variables. The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative); the absolute value of the correlation coefficient indicates the strength, with larger values indicating stronger relationships. The correlation coefficients on the main diagonal are 1.0, because each variable has a perfect positive linear relationship with itself.

**Table 4.2: Correlation Matrix of the Dependent and Explanatory Variables**

<b>Variables</b>	<b>ROA</b>	<b>LDIV</b>	<b>SIZE</b>	<b>VIF</b>
ROA	1.000			
LDIV	0.596	1.000		2.17
SIZE	0.077	0.735	1.000	2.17

**Source:** Correlation Matrix Results using STATA Version 14.0.

As shown on Table 4.2, the relationship between dividend payment with ROA strong and positive with correlation coefficient value of 0.596. Also, weak and positive relationship exist between ROA and size of the companies with the correlation coefficient value of 0.077.

### **4.3 Regression Analysis**

#### **4.3.1 Robustness Test of Independent and Dependent Variables**

The robustness test was conducted in order to ensure the validity of all statistical inferences for the study, so as to assess data distribution problems (if any) in addition to the problems of outliers before deciding on the appropriate statistical method to use. The tests carried out included multicollinearity test, heteroscedasticity test, normality test of residuals, Hausman specification test and Breusch-Pagan Lagrange Multiplier (LM) test. Multicollinearity test were carried out to check whether there is high correlation between independent variables which will mislead the result of the study. The Variance Inflation Factor (VIF) was carried out to test for multicollinearity. The VIF estimates were found to be consistently smaller than ten (10) which mean that multicollinearity was not a problem (Table 4.2). Heteroscedasticity test is useful in determining whether or not the variability of error terms is constant or not. The presence of heteroskedasticity signifies that the variation of the residuals or errors term is not constant. The Breusch-pagan/Cook-weisberg test for heteroskedasticity was carried out and the result reveals that errors have constant variance (Non-heteroscedastic), which indicates that pooled OLS estimators have the minimum variance of all unbiased estimators and also the P-value was reliable which suggest that there is absence of heteroskedasticity. This is evidenced by the insignificant prob>chi2 value of 0.3466 (Appendix).

Normality implies that errors (residuals) should be normally distributed and this can be tested using normal plot or numerically using Skewness and Kurtosis tests for normality. The result for Skewness and Kurtosis test shows significant prob>chi2 value of 0.0006, which suggest that error terms are not normally distributed (kdensity and normality plot in Appendix). Robust regression is performed as remedial action.

Hausman specification test was conducted in order to choose between GLS fixed and random effects. The null hypothesis shows that random effect is preferable as evidenced by the  $\text{prob} > \chi^2$  value of 0.1193. Thus, Breusch-Pagan Lagrange Multiplier (LM) test was used in order to choose between pooled OLS and random effect regression. The null hypothesis in the LM test is that variance across entities is zero, that is, there is no significant difference across units (i.e. no panel effect). The results indicate an insignificant  $\text{Prob} > \chi^2$  value of 1.0000 which prefer pooled OLS to random effect (Appendix).

#### 4.4 Regression Results

The interpretation, analysis and discussion of the result were done using pooled OLS (robust) regression as suggested by the Breusch-Pagan Lagrange Multiplier (LM) test. The pooled OLS robust regression result on Table 4.3 shows the value of the  $R^2$  as 0.6385 which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variables jointly. Hence, it signifies that approximately 64% of total variation in ROA of sampled listed conglomerates in Nigeria is caused by dividend paid and size of the companies. Table 4.3 also shows the F-statistics value of 22.1 with the corresponding P-value of 0.0000. The P-value of 0.0000 implies that the relationships among the variables were not due to mere chance and as such the results from the regression can be relied upon.

**Table 4.4: Pooled OLS (robust) Regression result**

Variables	GLS RE (ROA)
Constant	0.4425*** (2.70)
LDIV	0.1076*** (6.58)
LTA	-0.1342*** (-5.00)
Obs	30
Hettest	0.3466
LM Test	1.0000
$R^2$	0.6385
F	22.1
Sig.	0.0000

**Source:** Result Output from STATA 14.0.

**NOTE:** \*\*\*, \*\* and \* indicate 1%, 5% and 10% significant levels respectively; the z-value is presented in parenthesis while the other figures represent the coefficient.

Table 4.4 shows that dividend policy has positive and significant impact on financial performance at 1% level of significance, with the coefficient and t-value ( $\text{ceff}=0.1076$ ,  $t=6.58$ ). The positive impact of dividend policy on financial performance of the sampled listed conglomerates. From the foregoing result in respect of all the variables, the null hypothesis of the study which states that dividend policy does not have a significant impact on financial performance of listed conglomerates in Nigeria is tested. The pooled OLS robust regression result in Table 4.4, shows that dividend policy has positive and significant impact on financial performance at 1% level of significance ( $\text{ceff}=0.1076$ ,  $t=6.58$ ), thus, based on this the null hypothesis of the study is rejected. This implies that dividend policy has positive and significant impact on financial performance. This finding is consistent with those of the prior studies in the area including some with moderating and mediating effect on the direct relationship which mostly consider board attributes (Ftouhi & Dabboussi, 2019) and firm attributes.

## 5.0 Conclusion and Recommendations

Based on the OLS (robust test) findings in four above, it can be conveniently concluded that, dividend policy has a significant impact (at 63%) on the financial performance of the listed conglomerate firms in Nigeria based on their reported Return on Assets (ROA). Meaning that, other measures can still have effect on their Corporate financial performance and can jointly account for almost 38%. This is in conformity with the findings in Mohsin, Iqra, Sadia & Butt, (2018) and Nduta (2016) which are similar studies conducted in Pakistan and Kenya respectively.

Therefore, the management of conglomerate firms listed on the Nigerian stock exchange should geared their effort toward improving net return per every asset employed as a mechanism toward enhancing financial performance strategies which in turn will augment their firms' earnings and in effect will lead to an increased dividend payout for their fund providers. Correspondingly, the management of those firms should efficiently manage their operating cash flows for it has a significant direct contribution to their firms' ability to improve dividend payment which can be evident in their reports at different timing.

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## Appendix

Population of the study:

- 1) A G LEventis PLC
- 2) Chellarams PLC
- 3) Jhon Holt PLC
- 4) SCOA Nigeria PLC
- 5) Transcop Nig. PLC
- 6) UACN Prop. PLC

Census Sample of the study:

- 1) A G LEventis PLC
- 2) Transcop Nig. PLC
- 3) UACN Prop. PLC

Notes:

1. Unicode is supported; see help unicode\_advice.
2. Maximum number of variables is set to 5000; see help set\_maxvar.

. \*(5 variables, 35 observations pasted into data editor)

. xtset cn yr,yearly

panel variable: cn (unbalanced)

time variable: yr, 2007 to 2018

delta: 1 year

. summarize roa ldiv lta

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	30	.0160326	.086199	-.2873892	.1607844
ldiv	30	5.797259	.7434227	3.34811	6.977553
lta	30	7.739098	.377347	7.137842	8.47296

. correlate roa ldiv lta

(obs=29)

	roa	ldiv	lta
roa	1.0000		
ldiv	0.5964	1.0000	
lta	0.0774	0.7347	1.0000

```
. regress roa ldiv lta
```

Source	SS	df	MS	Number of obs	=	29
				F(2, 26)	=	22.96
Model	.083268159	2	.041634079	Prob > F	=	0.0000
Residual	.04714954	30	.001813444	R-squared	=	0.6385
				Adj R-squared	=	0.6107
Total	.130417699	30	.004657775	Root MSE	=	.04258

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
ldiv	.1076263	.015958	6.74	0.000	.0748241 .1404285
lta	-.1341726	.0297508	-4.51	0.000	-.1953263 -.073019
_cons	.4424564	.1749385	2.53	0.018	.0828651 .8020476

```
. vif
```

Variable	VIF	1/VIF
ldiv	2.17	0.460167
lta	2.17	0.460167

Mean VIF	
2.17	

```
. hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of roa

chi2(1) = 0.89

Prob > chi2 = 0.3466

```
. predict e
```

(option xb assumed; fitted values)

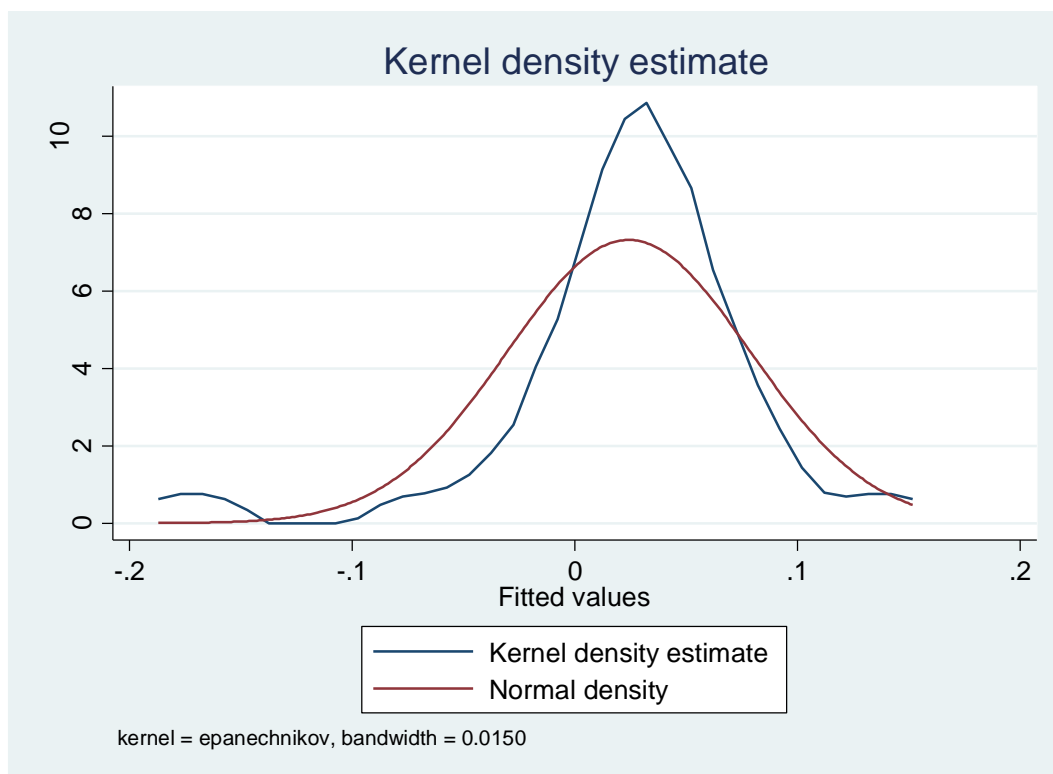
(6 missing values generated)

```
. sktest e
```

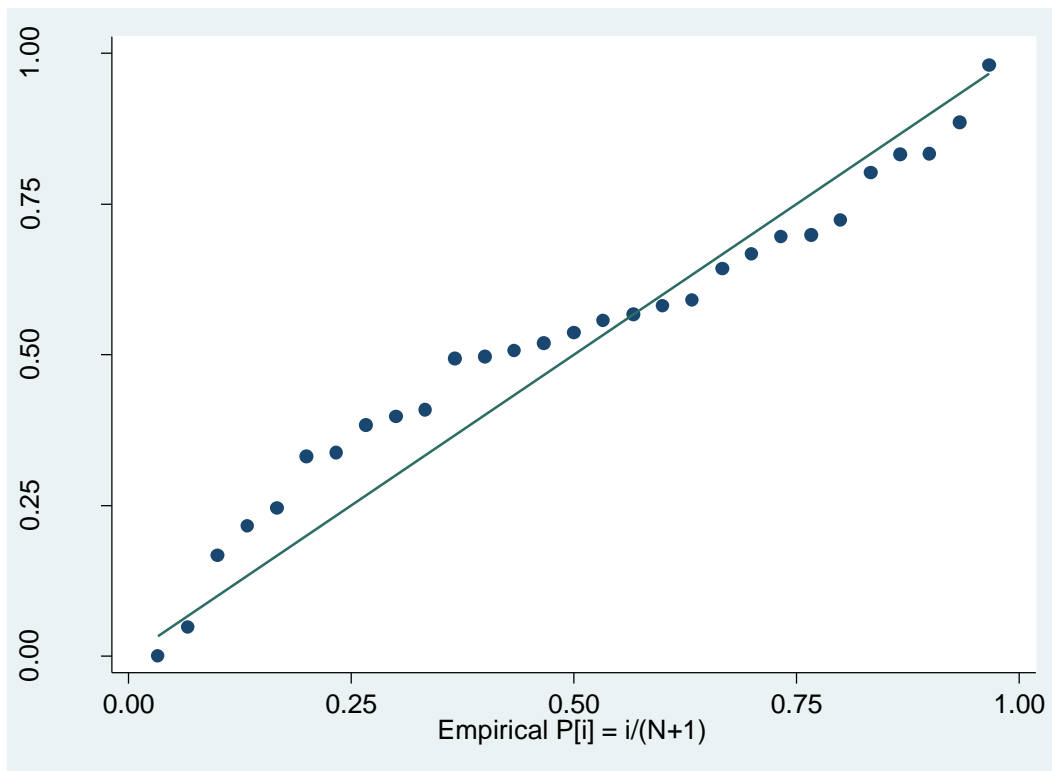
Skewness/Kurtosis tests for Normality

----- joint -----					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
-----+-----					
e	30	0.0019	0.0015	14.88	0.0006

```
. kdensity e,normal
(n()) set to 35)
```



```
. pnorm e
```



```
. regress roa ldiv lta,robust
```

```
Linear regression               Number of obs   =    29
                             F(2, 30)         =   22.01
                             Prob > F          =   0.0000
                             R-squared          =   0.6385
                             Root MSE       =   .04258
```

```
-----+-----
            |               Robust
      roa |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----+-----
      ldiv |   .1076263   .0163658     6.58  0.000     .0739859   .1412667
       lta |  -.1341726   .0268283    -5.00  0.000    -.189319   -.0790263
      _cons |   .4424564   .1637558     2.70  0.012     .1058514   .7790613
-----+-----
```

```
. xtreg roa ldiv lta,fe
```

Fixed-effects (within) regression      Number of obs    =    29  
Group variable: cn                      Number of groups   =    3  
R-sq:                                      Obs per group:  
    within = 0.6970                      min =    9  
    between = 0.6326                      avg =    9.7  
    overall = 0.5062                      max =    11  
    F(2,24)        =    27.60  
corr(u\_i, Xb) = -0.6543                  Prob > F        =    0.0000

```
-----+-----
      roa |   Coef.   Std. Err.      t    P>|t|   [95% Conf. Interval]
-----+-----
      ldiv | .1254255   .0171436    7.32  0.000   .0900428   .1608081
       lta | -.0702411   .0423055   -1.66  0.110  -.1575554   .0170732
    _cons | -.1572876   .3385516   -0.46  0.646  -.8560237   .5414485
-----+-----
sigma_u |   .047937
sigma_e |   .03980941
    rho |   .59183795 (fraction of variance due to u_i)
-----+-----
```

F test that all u\_i=0: F(2, 30) = 2.88                      Prob > F = 0.0759

. estimate store fixed

. xtreg roa ldiv lta,re

Random-effects GLS regression      Number of obs    =    29  
Group variable: cn                      Number of groups   =    3  
R-sq:                                      Obs per group:  
    within = 0.6535                      min =    9  
    between = 0.5642                      avg =    9.7  
    overall = 0.6385                      max =    11  
    Wald chi2(2)    =    45.92  
corr(u\_i, X) = 0 (assumed)              Prob > chi2       =    0.0000

```
-----+-----
      roa |   Coef.   Std. Err.      z    P>|z|   [95% Conf. Interval]
-----+-----
      ldiv | .1076263   .015958    6.74  0.000   .0763491   .1389035
       lta | -.1341726   .0297508   -4.51  0.000  -.1924832  -.0758621
    _cons | .4424564   .1749385    2.53  0.011   .0995832   .7853295
-----+-----
```

```
sigma_u |      0
sigma_e | .03980941
rho |      0 (fraction of variance due to u_i)
```

```
. estimate store random
. hausman fixed random
```

---- Coefficients ----

	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.

ldiv	.1254255	.1076263	.0177992	.0062645
lta	-.0702411	-.1341726	.0639316	.0300773

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

$\chi^2(2) = (b-B)'[(V_b-V_B)^{-1}](b-B)$

= 4.25

Prob>chi2 = 0.1193

(V\_b-V\_B is not positive definite)

```
. xttest0
```

Breusch and Pagan Lagrangian multiplier test for random effects

$roa[cn,t] = Xb + u[cn] + e[cn,t]$

Estimated results:

	Var	sd = sqrt(Var)
--	-----	----------------

roa	.0046578	.0682479
-----	----------	----------

e	.0015848	.0398094
---	----------	----------

u	0	0
---	---	---

Test:  $\text{Var}(u) = 0$

$\chi^2(01) = 0.00$

Prob >  $\chi^2 = 1.0000$



# THE DETERMINANTS OF ENVIRONMENTAL DISCLOSURE IN THE FINANCIAL REPORT OF LISTED COMPANIES IN NIGERIA

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## ***Abstract***

*Environmental disclosure by corporations has been increasing steadily in both size and complexity over the last two decades. This study aims at scrutinizing the Determinants of environmental disclosure in Nigeria. Hence the objectives include examining the effect of industry type, leverage and firm size on environmental disclosure. Historical data were obtained from the financial statements and account of selected forty (40) firms in both manufacturing and financial sectors listed in the Nigeria Stock Exchange. It was recommended that firms in certain operations that can have effect on the environment should disclose their financial commitments in the annual reports especially those firms that its operations have to do with pollution and other environmental hazard should disclose their environmental information. Adequate number of companies from both manufacturing and non-manufacturing sectors were used for the study with panel data survey of the firms.*

**Keywords:** *Determinants, environmental disclosure, firms, industry type, leverage, firm size, annual reports*

## **INTRODUCTION**

In recent years, the increasing popularity and significant of environmental reporting in an organization as well as the determinants of environmental disclosure seek to receive greater publicity on the clamour for disclosing environmental information in their annual reports which could be linked to demands by corporate stakeholders with pressure from regulators, including the power of environmental groups, the influence of competitors and multinational companies on improving corporate productivity and competitiveness (Muttanachai & Stanton, 2012). There has been wide-ranging of research on the determinants of environmental disclosure in academic research mainly in accounting. Walter Corrier and Michel (2006) exposed that environmental disclosure is highly desirable. Dhaliwal et al (2011) cited (Richardson & Welker 2001) where it was stated that environmental disclosure may in fact be disadvantageous to firm's cost of capital.

Antecedents of environmental disclosures have been issues of concern for decades. Antecedents of environmental disclosures became more rampant among nations of the world by the beginning of 1990s, but have also become issues of concern among researchers since 1970s in form of corporate social reporting (Lodhia, 2010). Specifically, antecedents of environmental disclosure gain consciousness after the United National Conference on Environmental and Development (UNCED) held in Rio de Janeiro in June, 1992. Since then, there have been significant rises in the number of developed and developing countries that have passed laws about environmental disclosure and as well number of firms that have made environmental disclosure important aspects in their annual reports and accounts for the interest of stakeholders (Freedman & Jaggy, 2005). According to Arias and Crowther (2009) the primary purpose of environmental disclosure is to examine and incorporate in the firm annual reports issues that bother on environmental hazard that are not taken cognisance of in traditional or conventional accounting function that stakeholders can use for decision making.

Disclosure of corporate environmental activities stressed the necessity for a close monitoring of natural resources and the corporation's harmful effect on the society it operate. Environmental effects caused by activities of firms especially those in the manufacturing, oil and gas and banking include pollutions like noise, waste, hazardous emission, spillages, degradation etc (Parmigiani, Klassen & Russo, 2011). Paul and Pal (2001) posit that environmental disclosure is with reference to making environmental related costs more transparent with company accounting systems and reports. Adeyemi and Ayanlola (2015) further noted that though self-induce vices, regulatory, laxity, inauspicious macroeconomic environment, and endemic corruption in the economy are major constraints to the discharge of social and environmental accounting information. Ezhilarasi and Kailash (2015) show that company size and environmental certification are important factors in explaining environmental disclosure practices of corporate organisation. Aghdam (2015) indicates that highly sensitive firms are more willing to disclose environmental information when compared to low sensitive environmental companies. Small firms are expected to disclose their environmental practices in their annual reports in order to enhance their competitiveness and performance (Emenike, Akamelu & Umeoduagu, 2017).

However, several studies have been carried out on environmental disclosure in development countries like Nigeria in different perspectives (e.g. Ahmad, 2017; Ndukwe. & Onwucheka 2015; Ohidoa, Omokhudu, & Oserogho, 2016). Outcomes of their studies were mixed and inconclusive, hence, the need to validate these studies. This study specifically examines influence of firm size, profitability, industry type, leverage and managerial shareholding on environmental disclosure. Having examined the introduction,

the remaining sections are structured as follow: Part 2 focuses on review of related literature; Part 3 looks at the methods and procedures used in this study; Part 4 particularly examines outcome of analysis and discussion of findings; and Part 3 was critically on conclusion and recommendations put forward.

Meanwhile, Moshud (2020) cited (Beefs & Southier 1999) where he stated that viewing from within the scope of a firm's strategy; environmental disclosure naturally occupies a prominent place. Muttanachai and Stanton (2012) pointed out that environmental disclosure reports are means of reinforcing corporate responsibility for environmental situations. According to Leuz, (2003) and Healy and Palepu, (2001) environmental disclosure extending beyond financial performance measures may be in fact value relevant for investors as it assist in bridging the growing gap between traditional financial statement and market valuation needs. Conversely, Cornier and Magnan (2003) emphasize that in French content, proprietary, cost (leverage and profitability) volume and ownership) are important determinants of a firm's environmental disclosure or report strategy. Most of the studies on the reasons and determinants of environmental disclosure were investigated in developed countries such as: USA, UK, Canada, Australia, Japan with few from developing countries (Abdul 2010).

Environmental disclosure with the aid of companies has been increasing regularly in both size and complexity over the last two decades (Srinivasa, 2014). Research interest over the years has tried to apprehend and provide an explanation for this area of corporate reporting which seems to lie outside the traditional domains of accounting disclosures. The evolving task in contemporary business activities is the need to reconfigure their overall performance indices to include societal and environmental issues as part of the standard objective of doing business.

The study adopted a combination of cross sectional data and time series (panel) survey data of firms quoted in the Nigerian stock exchange. However, panel data survey of the firms cover a period of three years (2011- 2013). A sample size consists of fifty (50) companies from both manufacturing and non-manufacturing sectors were used for the study. The model for this study was adapted from the work of Mejda and Hakim, (2013).

## **LITERATURE REVIEW**

### **CONCEPT OF ENVIRONMENTAL DISCLOSURE**

The concept of environmental disclosure reporting gained greater publicity right from the United National conference on environmental and development (UNCED) held in Rio de Janeiro in June 1992. Ishak (2010) defined environmental disclosure as an environmental management strategy to communicate with stakeholders. Environmental disclosure is as

well commonly regarded as corporation social responsibility reporting (Degan, 2007). Meanwhile, Parker (1986) as cited in Setyorini and Ishak (2010) defined corporate environment disclosure as the reporting by corporation on the social impact of corporate activities, the effectiveness of corporate social programs, as a way corporation is discharging its social responsibility and the stewardship of its social resources at large.

Environment disclosure is viewed in different perspectives, but channelled towards the same direction. Zakimi and Hamid, (2004) posit that environmental disclosure is used by firms to express to the public cost implications of their activities which has impacts on the society. According to Lodhia (2006), corporate environmental disclosure is defined as a reporting process by which firms disclose environmental information in their annual financial statements and accounts in order to communicate their financial positions to the respective stakeholders for the purpose of providing evidence of stewardship report. Berthelot, Cormier and Magnan (2003) is of the view that environmental disclosure is the disclosures that is associated with firm's past, present and future environmental management decisions, activities and performance. Pahuja (2009) describes environmental disclosure as firms' consciousness to report more environmental information on the annual reports when compared to firms which do not. Thus, these firms may have more propensities for the disclosure of environmental information on the financial statements more than their environmental performance. These corporate entities also face greater pressure from stakeholders within and outside the corporation. It is along this line, Dixon, Mousa & Woodhead (2005) explain that the reasons for disclosing environmental information on the annual financial statements of quoted firms is to increase the rate of meeting the terms of environmental rules, regulations as well as pressure for clean water and clean air. Environmental disclosure by companies shapes external perceptions of the company, assist stakeholders assess whether the company is a good corporate citizen, and ultimately give reasons for the company continued existence to its stakeholder's satisfaction.

Dhaliwal, Li, Tsang & Yang, (2009) allege that environmental disclosure by company reduces or even remove information gap that exists between company and the stakeholders, thereby; lowering the company's cost of capital. According to Dutta and Bose, (2007) environmental disclosure is a way of passing information (both financial and non-financial) regarding the resources and social performance of the disclosing corporation. Shil and Igbal (2005) defined environmental disclosure as a holistic method of ensuring good corporate governance by a way of transparency or precision in its society's actions. According to Carroll, (2010) environmental disclosure is firm's commitment and loyalty to operate in an economically and environmentally sustainable way while taking into cognizance the interests of all the stakeholders of the firm. Zakimi and Hamid, (2004) define

environmental disclosure as environmental management approach to convey environmental information to stakeholders. In other words, environmental disclosure involves the reporting of environmental information that will reflect the natural environment, environmental protection and resources used. Dixon, Mousa & Woodhead (2005) define environmental disclosures as reporting environmental issues that comprises of: the growing number of environmental regulations as well as pressures groups which bother on social and environmental implications of a company. Ndukwe and Onwucheka (2015) note that voluntary stance of environmental reporting has often been used as a cliché for firms to under report their effect on the environment. This is responsible for the negligence of several corporate entities with regards to corporate social and environmental reporting. Corporate environmental disclosure is an instrument for communicating firm's environmental performance. In effect, environmental disclosure is a continuous commitment in reporting cost incurred by corporate entity towards contributing positively in improving quality of life of the workforce and their families, host community and the society in general.

Accordingly, there has been a major enlargement in the figure of companies in both developed and developing countries making environmental disclosures a matter of necessity in their annual reports and other communication media (Deigom & Gordorn, 1996). Henderson and Parson (2004) explained that environmental reporting covers sustainability so that it reflects concerns about environmental protection, intergenerational equality, the earth and its resources. Following that initiative, many studies have noted that increasing popularity and significant of environmental reporting organization seek to operate within the bounds and norms of their respective societies. Deegan (2002) states that they endeavor to make ensure that their activities are perceived as legitimate by outside parties because a corporation is part of a broader social system. Furthermore, when there is a change in social expectation or stakeholders' concerns, corporation aim at ensuring that their activities in terms of human, environmental and other social consequences respond to those changes to meet social expectations (Deegan, 2001).

Conversely, Campbell, Gaven and shrives, (2003) posit that if companies do not operate in a manner consistent with community expectations, they will be penalized so as to be successful. Thus, corporation must adapt their activities to meet community expectations. According to Wheel and Sillanpea, (1998) environmental reporting is one way to communicate effectively with stakeholder. Moreso and Robert (1994) found that building trust and loyalty contribute to business performance in organization where they are to be responsible to these stakeholders and depend upon their continued approval, to maintain a successful operating environment. Meanwhile, Deegan, Ramkin, and Voguo (2000) argued that firm must seek accord between outsider perceptions of their social concern and their

activities or actions serving corporate needs. While Campbell et al, (2003) postulate and explain how social and environmental disclosure can be used to narrow or close the existing gap between company actions and social concerns.

### ***Empirical Evidence on Determinants of Environmental Disclosure***

Several authorities in developed countries have empirical evidences in relation to environmental disclosure than in the developing countries. Previous studies are however discussed below.

### ***Firms' Industry Type and Environmental Disclosure***

Several previous studies revealed that, companies were classified according to various criteria. Predominantly, companies are separated into two types; high or low profile companies (Choi, 1999; Hackston & Milne, 1996; Patten, 1992). High profile companies are those operating in highly environmentally sensitive industries (Perry & Sheng 1999; Stray & Ballantain 2000; Ho & Taylor 2007), and are however, more exposed to the political and social environment than low profile companies (Newson & Deegan, 2002). Using the association between the levels of corporate environmental disclosure in annual reports and type of industry, many studies Ahmad and Sulaiman,(2004); Ho and Taylor, (2007) and Newson and Deegan, (2002) have established that companies in high environmentally sensitive industries disclose more environmental information in annual reports than companies in low profile industries. Conversely, an early study by Cowen et al. (1987) and a later one in India (Sahay, 2004) found no relationship between type of industry and the levels of corporate environmental disclosure. Upon this backdrop of conflict assertions, we therefore hypothesized that; *there is no significant relationship between industry type and environmental disclosure.*

### ***Firms' Leverage and Environmental Disclosure***

Investors in companies and lenders depend solely on financial statements for the evaluation of a firm's financial standing and credit rating. Thus, managers are disposed to increase disclosure to reduce agency costs between insiders and creditor (Mejda & Hakaim, 2013). Cormier and Magnan (2002) and Brammer and Pavelin (2006) demonstrated a negative association between environmental disclosure and leverage. Nevertheless, Roberts (1992) and Naser *et al.* (2006) reported a positive relationship. Most studies in environmental disclosure determinant investigate companies which operate in polluting sectors. These firms concerned are more likely to be punished. Based on this established facts, the bankers and lenders will pay more attention to these companies' communication about corporate environmental responsibility. As a result, the polluting companies will have a preference to report more environmental information if they have more debt. Mejda and Hakaim (2013) found that firm with higher debt are more probable to disclose environmental

information. Hence, we state that; *Firms' leverage has no significant relationship with environmental disclosure.*

### ***Firms' Size and Environmental Disclosure***

Abdul ((2010) stakeholder theory; state that larger companies come under more scrutiny than smaller companies. Therefore, these companies feel the heaviness to disclose more social information to obtain approval from the stakeholders for continued survival (O'Donovan, 1997). Larger firms are as well perceived to be important economic entities and thus have greater demands placed on them to provide more information for customers, suppliers, analysts and government bodies (Cooke, 1991). Making information available is equally made easier because these larger firms possess the necessary resources to furnish stakeholders with the pertinent information and hence producing extra data at a competitive cost than smaller firms (Cooke, 1991, 1992). A positive relationship between size of a corporation and the amount of environmental disclosure has been consistently found by prior studies (Stanny & Ely, 2008; Raar, 2002; Stanwick & Stanwick, 2006 and Ho & Taylor, 2007). Roberts (1992) found a negative association between the size of the company and the level of Corporate Social Responsibility disclosure.

Legitimacy theory suggests that larger companies have to act more in response to disclosures to have a greater influence on social expectations because they have more stakeholders than small companies (Cowen, Ferreri, & Parker, 1987). To verify the truism of the above findings, we hypothesized that; *Firms' sizes have no significant relationship with environmental disclosure.*

## **THEORETICAL FRAMEWORK**

Freeman and Reed (1983) have recognized stakeholders as the groups who have an interest in the actions of the corporation. In a follow up study, Freeman (1984) revisited stakeholder theory and redefined stakeholders as any person or group who has an interest in the company due to the fact he (or she) can affect or is affected by the firms activities. Mpofu and Karedza (2013), has described stakeholders as any person or group who can have an effect on or is affected by means of the actions, decisions, policies, practices, or goal of the organization. Kassinis and Vafeas (2006) argued that stakeholders can be recognized through the legitimacy of their claims which is substantiated with the aid of a relationship of alternate between themselves and the organization. These stakeholders encompass stockholders, creditors, managers, employees, customers, suppliers, local communities and the conventional public.

According to Freeman and Reed (1983), the stakeholders' theory offers prosperous insights into the elements that inspire managerial behavior in relation to the social and environmental disclosure practices of companies as the activity of the companies affect the

a number of stakeholders of the firm vis a vis environmental impacts and cost disclosures of the firm. Previous social and environmental accounting research like Fokeye, Odianonsen and Aanu (2015); Ebiringa (2013) which utilized these theories indicate that companies respond to the expectations of stakeholders groups particularly and generally to these of the broader community in which they operate, through the provision of social and environmental information inside the annual reports.

Firms legitimize their activities and the number of stakeholders also legitimizes their demands on a number environmental issues and disclosures vis-a-vis their interest and demands. The legitimacy theory, according to Dowling and Pfeffer (1975), is typically described as the congruence between an organization's value system and that of the large social system, of which the company is a part. They similarly stated that companies are seeking to establish congruence between the social values associated with or implied by means of their activities and the norms of suitable conduct in the larger social system of which they are part of. Hence, companies voluntarily disclose environmental information to show that they are conforming to the expectations and values of the society within which they operate.

Dowling and Pfeffer (1975) counselled that legitimacy theory is beneficial in examining corporate behavior. This is due to the fact legitimacy is essential to organizations, constraints imposed through social norms and values and reactions to such constraints provide a focus for analyzing organizational behaviors taken with respect to the environment. Uwalomwa (2011) made claims that the legitimacy theory is applicable due to the fact it emphasizes that through definition, firm environmental disclosure should conform to at least one of the techniques as the implementation of any legitimization approach have to contain both communication (disclosure) through the organization, as well as addressing norms, values or beliefs of relevant publics.

### **ENVIRONMENTAL ACCOUNTING DISCLOSURES & ENVIRONMENTAL COSTS**

These are costs that the organizations incur to prevent, monitor and report environmental impacts (KASNEB, 2014). US EPA (1995) defines five tiers of environmental costs namely; conventional, hidden, contingent, image and relationship and societal. These costs are broadly divided into two: private costs and societal costs. Private costs are borne by the firm whereas societal costs are borne by society.

**Private Costs:** Conventional costs are the costs of capital equipment, raw materials and supplies. The costs of using raw materials, utilities, capital goods, and supplies are usually addressed in cost accounting and capital budgeting but are not usually considered environmental costs. However, decreased use and less waste of raw materials, utilities,



capital goods, and supplies are environmentally preferable, reducing both environmental degradation and consumption of natural resources.

**Hidden Costs:** this refers to the results of assigning environmental costs to overlook future and contingency costs. There are several types of environmental costs that may be potentially hidden from managers: First are the upfront environmental costs, which are incurred prior to the operation of a process, system, or facility. These can include costs related to siting, the design of environmentally preferable products or processes, qualifications of suppliers, evaluation of alternative pollution control equipment, and so on.

Whether classified as overhead or R&D, these costs can easily be forgotten when managers and analysts focus on operating costs of processes, systems, and facilities. Secondly, we have the regulatory costs from activities such as monitoring and reporting of environmental activities and emissions, the cost for searching for environmentally responsible suppliers and ongoing cost of cleaning contaminated land (KASNEB, 2014).

**Contingent Costs** are environmental costs that are not certain to occur in the future but depend on uncertain future events. They are a cost that may or may not be incurred at some point in the future. For example, the cost that is involved in remediating future spills (KASNEB, 2014).

**Image and Relationship Costs:** these are less tangible costs because they are incurred to affect subjective perceptions of management, customers, employees, communities, and regulators. This category can include the costs of annual environmental reports community involvement activities and costs expended voluntarily for environmental activities (KASNEB, 2014).

**Societal Cost:** is described as costs that organization imposes on others for which they may not be held legally responsible and which cannot be compensated for in the legal system (KASNEB, 2014). For instance, damage caused to a river because of polluted waste-water discharge, or to ecosystems from solid waste disposal or to asthmatics because of air pollutant emissions are all examples of external costs for which an industry often does not compensate (Uwaloma, 2011).

### **NON-FINANCIAL INDICATORS**

According to Karambu and Joseph (2016), Non-financial information is information that concerns the environmental objectives, the management, the policy and other appearances that can broadcast environment performance in non-financial information. The disclosure requirements according to Global Reporting Initiatives under Non-financial information concerning the environmental objectives are:

**Compliance** (Monetary value of significant fines and the total number of non-monetary sanctions for noncompliance with environmental laws and regulations)

**Performance indicators on the environment** i.e. water, air, soil).

These indicators are defined by the Global Reporting Initiative, and other organizations. The disclosure requirement according to Global Reporting Initiatives comprised under Performance indicators on the environment are:

**Water** (Total water withdrawal by source; Water sources significantly affected by the withdrawal of water; Percentage and the total volume of water recycled and reused).

**Biodiversity** (Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas; Habitats protected or restored; Strategies, current actions, and future plans for managing impacts on biodiversity; Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk).

**Emissions, Effluents, and Waste** (Total direct and indirect greenhouse gas emissions by weight; Other relevant indirect greenhouse gas emissions by weight; Initiatives to reduce greenhouse gas emissions and reductions achieved; Emissions of ozone-depleting substances by Weight; NO, SO, and other significant air emissions by type and weight; Total water discharge by quality and destination; Total weight of waste by type and disposal method; Total number and volume of significant spills; Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally; Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff) (Karambu & Joseph (2016).

**Products and Services** (Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation; Percentage of products sold and their packaging materials that are reclaimed by category).

**Materials** (Percentage of materials used that are recycled input materials)

**Energy** (Direct energy consumption by primary energy Source, Indirect energy consumption by primary Source; Energy saved due to conservation and efficiency improvements, Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives; Initiatives to reduce indirect energy consumption and reductions achieved).

## **FINANCIAL INDICATORS**

Financial indicators include; investments and acquisitions of environmental assets, costs, provisions). These indicators expose in monetary terms the behaviour of firms regarding environmental reporting. The disclosure requirements according to Global Reporting Initiatives under financial indicators are:

**Transport** (Significant environmental impacts of transporting products and other goods

and materials used for the organization's operations, and transporting members of the workforce).

**Overall** (Total environmental protection expenditures and investments by type) (Karambu & Joseph (2016).

## **THE CONCEPT OF FIRM VALUE**

Firm value describes the assets a firm owned. It is necessary because it portrays the prosperity of the business owners. It is the responsibility of the management who serves as the agent of the owner of the corporation to optimally maximize the values of the firm which form the core objective of any corporation. When there is a high firm value it shows that the firm is wealthy and therefore the shareholders' wealth is utilized. The firm value indicates the successfulness level of the shareholders and investors. The performance of companies is shown through the firm value. Firm value is the angle where the Investors also observe the company, and it is relevant to stock price. Ftouhi, Ayed and Zemzem (2010), opined that the increase in stock price will gain high firm value. The performance of a firm can be defined or measured in various different ways including profitability, market share growth, return on investment, return on equity and liquidity. A firm can, by being environmentally sustainable, differentiate its products and thus increase its revenue. Similarly, a firm can save costs on resources, regulatory costs, capital and labour and therewith increase its profit. Profitability, as well as corporate financial performance, was used by a number of researchers as an explanatory variable for differences in disclosure. However, the association between corporate performance and corporate social and environmental accounting disclosure is -arguably one of the most controversial issues yet to be solved (Choi, 1998). According to Bhagat and Black (2002), high Tobin's q shows how effective management of a company has produced a higher market value from the same asset.

## **EMPIRICAL REVIEW**

Khlif, Guidara and Souissi (2015) carried out a study on corporate social and environmental disclosure and corporate performance: evidence from South Africa and Morocco. The purpose of the study was to inspect the relationship between corporate overall performance and social and environmental disclosure for two African leading countries namely, South Africa (common law country) and Morocco (civil regulation country). The sample consisted of 168 annual reports spanning from 2004 to 2009. A content evaluation of companies' annual reports was used to measure the extent of voluntary social and environmental disclosure. Results showed that social and environmental disclosure has a huge tremendous impact on corporate performance only in the South African setting. The findings emphasized the need to explicitly reflect on consideration on the legal and institutional setting prevailing in each context.

Dibia and Onwuchekwa (2015) carried out a research on the Determinants of Environmental Disclosures in Nigeria: A Case of Oil and Gas Companies, they made use of the cross-sectional research design. A sample of 15 companies drawn from the oil and gas sectors of the Nigerian Stock Exchange for 2008-2013 financial years was used for the study. Secondary data was sourced from the annual reports of the sampled companies whilst the binary regression approach was used for data analyses. The findings of the study were that there is a significant relationship between firm size and corporate environmental disclosures; there is no significant relationship between profit and corporate environmental disclosures; there is no significant relationship between leverage and corporate environmental disclosures and there is no significant relationship between audit firm type and corporate environmental disclosures.

As Ebiringa, et al (2013) observed, there is considerable consensus in the literature with regards to the effect of company size on corporate environmental disclosure practices. The effect has been identified as positive as a firm size is expected to increase its information reporting level. There are at least three reasons for this link. First of all, large firms are more willing to disclose information to reduce their political costs, since their higher visibility can easily lead to more litigation and governmental intervention. Secondly, owing to more developed internal reporting system, the costs associated with a higher disclosure level are lower for large firms. Thirdly, smaller firms are more likely to hide crucial information because of their competitive disadvantage within their industry. The authors further posited that corporate size would be related to social responsibility activities because larger companies are more likely to be scrutinized by both general public and socially sensitive special interest groups.

Galani *et al* (2011) conducted a study on the Relationship between Firm Size and Environmental Disclosures. The study investigated the level of environmental reporting in corporate annual reports. Specifically, it investigated the extent to which Greek companies have implemented a set of environmental accounting practices and analyzed the relationship between various firm characteristics and environmental disclosures. The results obtained showed that the degree of development of environmental accounting practices is low and there is a positive relationship between corporate size and the disclosure of environmental information in annual reports. However, neither profitability nor listing status seemed to explain differences in environmental disclosure practices between Greek companies.

## **METHODOLOGY**

This study adopted ex-post facto research design for empirical study. This design will be appropriate for the study because it assists in determining the determinants of

environmental disclosure of manufacturing firms in Nigeria. The population of this study will cover selected manufacturing companies (consumer and industrial goods producers) that are quoted on the Nigeria Stock Exchange (NSE).

### **Model specification**

The models that will be used to test the entire hypothesis are:

$$ED = \beta_0 + \beta_1 FS_{it} + \beta_2 PR_{it} + \beta_3 BC_{it} + \beta_4 AT_{it} + \varepsilon \dots \text{model 1}$$

Where;

ED= Environmental Disclosure (4= for maximum disclosure of an environmental information on the checklist. 1 = Non-Disclosure)

$\beta_0$  = the intercept/constant;

$\beta_1, \beta_2, \beta_3, \beta_4$  = are the parameters;

FS= Firm Size (Natural log of total assets)

PR = Profitability (Net income divide by total assets)

BC= Board Composition (Total Number of board members)

$\varepsilon$  = the residual/error term (1 – Big four Audit firms 0 – Non-big four Audit firms)

it= The different independent variables of firm  $i$  at time  $t$ .

## Environmental Disclosure Checklist

The following information is the minimum required environmental information;

S/N	ELEMENTS
<b>A. Environmental policy:</b>	
1	Actual statement of policy
2	Establishment of environmental management systems
<b>B. Environmental pollution:</b>	
<b>Waste(s) management</b>	
1	Research on new methods of production to reduce environmental pollution
2	Pollution-prevention technologies
<b>C. Environmental Energy:</b>	
1	Energy saving and conservation
2	Use/development/exploration of new sources, efficiency, insulation etc.
3	Utilization of waste materials for energy conservation
<b>D. Environmental audit:</b>	
1	Reference to environmental review, scoping, audit, assessment, including independent attestation
2	Obtaining certification for Environmental Management Systems/ISO 14001
3	Execution of environmental policies
<b>E. Environmental financial:</b>	
1	Reference to financial/economic impact
2	Past and current expenditure for pollution control
3	A record of the allocation of specific fund

## Discussion and Findings

### DISCUSSION

The Annual Report of forty (40) Listed Companies in both manufacturing companies and non-manufacturing companies in Nigeria were examined to appraise the check list for the minimum required environmental disclosure to meet the approved global standard. On the

checklist the maximum disclosure of environmental information rating at 4 while non-disclosure of environmental disclosure rated at 1

Additionally, the effect of firm size, profitability or leverage, firm size, board composition and auditor type as the determinant of environmental disclosure were also examined.

## FINDINGS

### FIRM SIZE

Minimum Required Environmental Information with maximum rating for each of the parameter on the checklist

Environmental Policy = **EP** (3); Environmental Pollution = **ET** (3); Environmental Energy = **EE** (4); Environmental Audit = **EA** (4); Environmental Finance = **EF** (3)

<b>High Profile</b>	<b>Rating for Disclosure of Environmental Information</b>				
<b>Number</b>	EP (3)	ET (3)	EE (4)	EA (4)	EF (3)
18	3	3	4	4	3
12	2	2	3	3	2
<b>30</b>					
Low Profile					
7	2	2	3	3	2
3	1	1	1	1	1
<b>10</b>					

### PROFITABILITY

<b>High Profile</b>	<b>Rating for Disclosure of Environmental Information</b>				
<b>Quantity</b>	EP (3)	ET (3)	EE (4)	EA (4)	EF (3)
20	3	3	4	4	3
12	2	2	3	3	2
<b>32</b>					
Low Profile					
5	2	2	3	3	2
3	1	1	1	1	1
<b>8</b>					

### BOARD COMPOSITION

<b>High Profile</b>	<b>Rating for Disclosure of Environmental Information</b>				
<b>Quantity</b>	EP (3)	ET (3)	EE (4)	EA (4)	EF (3)
22	3	3	4	4	3
12	2	2	3	3	2
<b>34</b>					

#### Low Profile

4	2	2	3	3	2
2	1	1	1	1	1
<b>6</b>					

#### AUDIT SIZE

<b>Big Four Type (Quantity)</b>	<b>Rating for Disclosure of Environmental Information</b>				
	EP (3)	ET (3)	EE (4)	EA (4)	EF (3)
22	3	3	4	4	3
12	2	2	3	3	2
<b>34</b>					
Others					
4	2	2	3	3	2
2	1	1	1	1	1
<b>6</b>					

#### CONCLUSION AND RECOMMENDATION

##### Conclusion

It is therefore concluded that profitability, auditor type, board composition and firm size jointly influences the environmental disclosure of both manufacturing and non-manufacturing firms in Nigeria. This predicated on the findings of the study and it is shown that firm size exerts the most significant impact on the environmental disclosure of manufacturing firms in Nigeria.

##### Recommendation

In essence, it is recommended that regulatory bodies should initiate policies that will make the disclosure of environmental information compulsory in Nigeria and the board of directors should step up their oversight functions to include environmental disclosures by setting up an environmental monitoring and disclosure committee. Also, the companies should invest their resources into developing and protecting the environment as this has a positive impact on their profitability. The external auditors should also persuade their clients to disclose information relating to the environment as this has an impact on their reputation. Also, the low profiled firms among the listed companies in Nigeria should also raise their bar and endeavour to improve on their disclosure of environmental information.



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# **USING ENVIRONMENTAL TAXATION AS A TOOL FOR DETERMINATION OF DAMAGE COST FROM CEMENT INDUSTRY AIR POLLUTION REDUCTION: A CONTEXTUAL APPROACH TO SUSTAINABLE ENVIRONMENTAL POLICY (CASE STUDY OF ASHAKA CEMENT INDUSTRIAL SUBURB AREA NIGERIA)**

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## **Abstract**

*The most common Form of pollution in our environment is air pollution which poses significant risk to human health .The main objective of the study is to examine the health implication of Ashaka industrial cement pollution on the residence of the surrounding community, in Ashaka suburb area, Gombe State. quantitative design was used as the primary research tool in this study which questionnaire was administered to the communities leaving near the cement industrial area. Data collected were total estimated health damage cost on Asthma, cough and chest pain, Pneumonia and Skin diseases by using cost of illness method. The data was further analyzed using Kruskal Wallis nonparametric method was performed to test the significance between different strata of each distance and the diseases under the study. The result has shown that the distance from the cement air pollution has a significant statistical influence on the diseases that are commonly association with the cement air pollution. The result conclude that the estimated tax to be place on these industries after estimating the damage cost of pollution are: Cement industry is to be tax ₦3.23 per tones and ₦ 0.16 per bag damage cost of cement. Recommendations, environmental justice has to be done as most of these damages are caused by external factors, the industries as a result of their nature of productions which is not environmentally friendly leading the host communities suffered.*

**Keywords: Cement, Environment, Gombe, Nigeria, Pollution,**

## **1.0 INTRODUCTION**

Many air pollution problems globally are noticed as a result of industrialization, urbanization and population increase. In addition to the rapid expansion of motor vehicle fleets have also increased, crude oil consumption and subsequently heightened ambient

levels nitrogen oxides (NO<sub>x</sub>), Carbon monoxides (Co) and related pollutant in our cities. Cement is the most widely used essential construction materials; there are many hazardous environmental pollutions such as particulate matters, various oxides, and heavy metals, which are released in its production process. (Kim, and Hans 2015), cement content is composed of mixtures of materials made up of calcium oxide, and silica glass with a lesser amount of Aluminum oxide, magnesium oxide, and other heavy metals that are hazardous to human health. (Iyame, Ebornayi, & Alakija, 2005, Adekoye, 2006 Abimbola, Kehinde, & Olatiyi, 2010). The Nigerian cement industry was one of the eldest import substitution industries in the country. The history of the cement industry has been dated back to pre colonial era around 1957. In the beginning there were only three cement plants in Nigeria, which were predominantly located in the north, east and Midwestern region. As of today there were more than seven cement industries in Nigeria, thus are as follows: West African cement industry (WAPCO), Ashaka cement industry plc, Benue Cement Company plc (BCC), Sokoto Cement Company, BUA Cement Company, Calabar Cement Company, and Edo Cement Company.

One major problem of cement industry in Nigeria is the problem of demand vs supply inequality since inception, there is no available supply to meet the ever growing demand of the cement couple with instability of power which make the cost of production to be upsurge, due to rapid growth in industrialization and urbanization.

With limited pollution control mechanism, at present massive primary pollutants directly emitted to the atmosphere and secondary pollutant subsequently formed can easily cause a perennial epidemic of respiratory disease as well as damage to agriculture, materials, and ecosystem. Particulate matters are the most damaging air pollutants to human health (EPA 2013), the world bank(2014) estimated that the total cost of environmental air pollution in China amounted to \$1.4 trillion ( 13% of its GDP). China is one of the worse country heavily impacted by the adverse effect of air pollution (Hashim, Gobi, Ho, & Li, 2020). Fortunately for us, environmental concerns are now in the forefront of discussion on economic growth, while the manifestation of environmental abuse will differ depending on the condition of each country, they are generally of two kinds (i) those that arise primarily because of poverty and population growth and (ii) those that arise from increase in industrialization and urbanization leading to pollution of water, air, and land. The paper is divided into four sections. Section one introduction section two review of literature methodology is treated in section three. Conclusion and recommendations in the last section, the paper, therefore, aims to investigate the determination of damage cost from cement industry air pollution

The production output of cement in Nigeria is estimated to be 45 million tonnes per annum (The punch news paper, 2019).The production of cement necessitates the use of raw materials likes: Limestone, Marbles, Shale and Gypsum. These raw materials are empirically tested that they are chemically made up of gases and compound that contains



greenhouse gases. These raw materials are known to have release carbon dioxide and sulphate into the environment as the process of cement production continues. Limestone is over eighty percent calcium carbonate while Shale and Marble each is over fifty percent calcium carbonate and over forty percent magnesium carbonate, gypsum has over fifty percent sulphate and about thirty percent calcium oxide. Coal gas and other petroleum products used in powering cement production are also hydro carbons which on heating releases carbon which combines with oxygen to form carbon dioxide that is release in the air in causes of cement production. It has been empirically investigated in various country for instance, a study conducted by (Milkar, 2010, Emannueal & Chukwueloka, 2019), estimated that at a particular cement plant in western part of Slovenia, injected 27 kg of mercury in its system during a production process through mostly the raw material and fuel accounting for 10.9 kg/yr which clearly show that as the production increase the rate of mercury emitted also increase. And these mercury causes many health impact particularly children and pregnant women.

Shafili & James, 2017, Emete & Dania, 2019, stated that at Uttah Pradesh India long exposure to the pollutant release from cement production can result into Chronic Bronchioles, Heart diseases, Asthma attack and even premature death. Furthermore, research carried out by Baby, et al (2008), on Jaypee Rewa cement industry concluded that cement dust contain heavy metal like nickel, cobalt, lead, chromium, pollutants hazardous to the biotic environment, with impact on vegetation, human and animal health and eco systems.

## **2.0 Literature Review**

### **2.1 Air pollution as an externalities from the cement industry**

Air pollution from cement and other particulates matters have plagued the urban and rural areas of our Nation for many years, both as serious health hazards and as an economic burden. Users of the air as a waste disposal mechanism have treated it as free resources with no regard for the damage incurred by the receptor of the dirty air. Unfortunately, no self-regulatory market force exists that can bring this diseconomy into an acceptable equilibrium. An outside regulatory force which can affect the abatement of air pollution is needed to achieve control of air pollution to a level acceptable to the community (Richard, 2012). Air pollution from motor vehicles, electricity generating plants, industry, and other sources, natural and man-made, can harm human health injure crops and forests, damage building materials, and impair visibility. To mitigate these harms, the US Environmental Protection Agency (USEPA) sets standards for the maximum concentration of pollutants in the air (USEPA, 1998).

Therefore, industrial pollution emanating from cement factories and industries, the health risks of pollution, how far can air pollution emanating from cement industries go? And what are the types of heavy metals emanating from cement factories? The heavy metals

such as mercury; lead, and cadmium was looked at as the major air pollutants emanating from cement factories around the world (Sharma, 2004).

The modernization and industrialization of developing countries like Nigeria have led to the increased use of fossil fuels and their derivatives. As such, developing countries are confronted with the great challenge of controlling atmospheric pollution, especially in the rapidly growing urban centers. Air pollution is an important problem in industrial areas which may have an adverse effect on the health of the population. Air pollution is due to the discharge of toxic fumes, gasses, smoke and dust into the atmosphere (Park & Park, 2012).

According to Mashhood & Arsalan (2011), rapid growth in urban population, increasing industrialization, and rising demands for energy and motor vehicles are the worsening air pollution levels. He added other factors, such as poor environmental regulation, the less efficient technology of production, congested roads, and age and poor maintenance of vehicles, also add to the problem. He further added that air pollution is a cause of ill health and death by natural and man-made sources. Major man-made sources of ambient air pollution include tobacco smoke, combustion of solid fuels for cooking, heating, home cleaning agents, insecticides industries, automobiles, power generation, poor environmental regulation, the less efficient technology of production, congested roads, and age and poor maintenance of vehicles. The natural sources include incinerators and waste disposals, forest and agricultural fires.

Concern about air pollution in urban regions is receiving increasing importance worldwide, especially pollution by gaseous and particulate trace metals (Azad & Kitada, 2012). A great deal of attention has focused on particulate matter (PM) pollution, due to their severe health effects, especially fine particles. Several epidemiological studies have indicated a strong association between elevated concentrations of inhalable particles (PM<sub>10</sub> & PM<sub>2.5</sub>) and increased mortality and morbidity (Perez & Reyes, 2002; Lin & Lee, 2004; Namdeo & Bell, 2005). Particulate matter pollution in the atmosphere primarily consists of micron and sub-micron particles from anthropogenic and natural sources. The characterization of fine particles has become an important priority of regulators, and researchers due to their potential impact on health, climate, global warming, and long-range transport (Dockery & Pope, 2012.).

Numerous studies and the lack of effective policies reveal that air pollution continues to threaten public health (Cropper, Simon, Alberine & Sharma 2009). Studies of long-term exposure to air pollution (especially particles) suggest an increased risk of chronic respiratory illness (Schwartz, 2012) (Dockery, 2012) and of developing various types of cancers (Hemminki & Pershagen. 2000). In a study carried out on the WHO datasets, (Kunzall, Kalser, Medina, Studnicka, Chanel & Filliger. 2000.) found that 6% of the deaths in Austria, France, and Switzerland might be associated with exposure of the population to particulate air pollution. Major air pollution problems are occurring at urban and industrial

centers, increasing pollution levels, however, can also be observed at remote sites as a consequence of agricultural practices and mineral mining and processing. Motor vehicle traffic is the main contributor to the deterioration of air quality in the urban centers. The high average of the fleet, poor fuel quality, insufficient car maintenance and high concentration of vehicles in the areas with inadequate infrastructure all contribute to the high pollutant load. Other important pollutant sources are industrial activities including the cement industry.

As we know India is one of the leading developing countries that have undergone rapid industrialization in the few decades of near past. India today is among the first ten industrialized countries of the world (Sharma, 2004). Besides steel and power, the cement production of India is recognized as one of the most important industries. The consumption pattern of cement is often on the high side. Furthermore, in Nigeria case, due to high demand of cement from vested angles in Nigeria, Ashaka cement industry are currently investing in capacity expansion in order to bridge the supply gap, as such the production capacity has being raised to its total annual production of 1.3 million metric tons per annum. (Umar, 2012).

According to Lorde and Pacyna (2011) stated that industrialization is an essential feature of economic growth in developing countries; industrial practices may also produce adverse environmental health consequences through the release of air and water pollutant and the disposal of hazardous water. Air pollution in developing countries is derived not only from the emission of pollutants from relatively large industries, like iron and steel, non-ferrous metals and petroleum products industries but also from the fugitive emission of pollutants from small-scale industries/factories such as cement industries, lead factories etcetera.

Robert (2004) stated that one of the consequences of the industrialization and industrial revolution across the world and the demand for improved quality of life has increased exposure to air pollution emanating from industrial activities, traffic, and energy Production Company. Industries today have contributed immensely to the development of its host community or communities in which they are situated and to a larger extent, the entire world.

Joint WHO/Convention Task Force on the health aspect of air pollution (2007) implied that the development of industries comes with its own peculiar problems. To assess the risk to human health in relation to long-range transport of cadmium, lead and mercury, the experts consider the ability of those metals to be transported over long distance after their release into the environment. The protocol on heavy metal (2012) confirmed that in spite of the decrease in environmental exposure to these three metals due to technological improvements and the elimination of air, or in some process products and materials, these metals are still present in the atmosphere and carried to places remote from the sources of emission by means of long-range transboundary air pollution.

The world health organization reports that three million people die each year from the

effects of air pollution. More than 4.2 million children under five years of age who die of respiratory infection each year in developing countries and many of the survivors grow up with respiratory disease that plagues them for the rest of their lives. Children thus suffer more harm than adults do from lead additives in gasoline and carbon monoxide gasses from cement factories.

The blooming of cement factories has resulted in environmental deterioration and, in turn, degrades the human health status in the whole world. Studies have shown adverse respiratory health effects in the people exposed to cement dust, exemplified by increased frequency of respiratory problems (Adak, & Purohit, 2007). It has also been revealed that people of cement dust zone are badly affected by respiratory problems, gastrointestinal diseases (Ikli, Demir, User, Beker, Akar, & Kalyoncu, 2003). According to Ike (2003), several studies have also demonstrated linkages between cement dust exposure, chronic impairment of lung function and respiratory symptoms in the human population. Cement dust irritates the skin. Its deposition in the respiratory tract causes a basic reaction leading to increased pH values that irritate the exposed mucous membranes (Zelege, Moen, & Bratveit, 2010). Numerous studies and the lack of effective policies reveal that air pollution continues to threaten public health. Studies of long-term exposure to air pollution (especially particles) suggest an increased risk of chronic respiratory illness (Schwartz, 2012).

Besides health, cement factories are deteriorating environment as shown by studies. The exhaust gasses and particulate matters of the dust exhausted from cement plants are released to air and degrading air quality and thus creates considerable environmental pollution (Adak, 2007). Since the early 1980s, it has become clear that air pollution affects the health of human beings and animals (Parada, Gonzalez & Bergqvist, 2012), damages vegetation, soils and deteriorates materials and generally affects not only the large metropolitan areas but also the medium-sized urban areas. Air pollution has a great impact on human health, climate change, agriculture and natural ecosystem (Molina & Molina, 2004).

Due to the high demand of cement from vested angles in Nigeria, Ashaka cement industry are currently investing in capacity expansion in order to bridge the supply gap, as such the production capacity has been raised to its total annual production of 1.3 million metric tons per annum. (Umar, 2012).

## **2.2 Health Impacts of Cement Air Pollution**

Airborne respirable dust measuring from less than 5 to more than 40 milligram per meter cube ( $\text{mg}/\text{m}^3$ ) have been recorded in the work place of cement factory workers. The aerodynamic diameter of the cement dust range from 0.05 to 20 ( $\mu\text{m}$ ). This small size make the whole respiratory tract a target for cement dust deposition more especially the parking section workers (Mwaiselage; Bratvelt, 2005 & Chukwudi & Ubosi, 2016, Emanuel

&Okeke, 2019). Furthermore, Alneaimi, 2010 reaffirmed that cement workers in Nigeria are often from lower socioeconomic class and their employment are frequently on part time basis without requisite training and deployed to work site without proper personal protective equipment or ventilation, this results to so many health problems ranging from Asthma, bronchiole and other related respiratory diseases. In a research conducted by Emanuel & Alabi, 2015, Emanuel &Okeke, 2019, confirmed that cement dust pollution causes morbidity, chronic obstructive pulmonary, preterm delivery, psychasthenia, endocrine disruption, and infertility. The severity depends on the duration of exposure, concentration and element constituents of the dust and individual sensitivity.

Diseases that are common to cement pollution. According to Syed (2006), the aerodynamic diameter of cement particles makes it a potential health hazard, as these are respirable in size and reaches in internal organs particularly lungs leading to occupational lung diseases. This size distribution would make the trachea-bronchial respiratory zone, the primary target of cement deposition. The main route of entry of cement dust particles in the body is the respiratory tract and or the gastrointestinal tract by inhalation or swallowing respectively. Both routes, especially the respiratory tract are exposed to numerous potentially harmful substances in the cement mill environment. Besides cement dust, various gaseous pollutants are also contributed by cement factories which cause pollution and ultimately affect human health. The various organ systems which get affected because of cement factories include:

**Respiratory system:** In the respiratory system, these cause lungs a cough and phlegm production, chest tightness, impairment of lung function, obstructive and restrictive lung diseases, Pleural thickening, fibrosis, emphysema, lung nodulation, pneumoconiosis and carcinoma of the lung (Syed, 2006).

**Gastrointestinal system:** Oral cavity, mechanical trauma, mucosal inflammation, loss of tooth surface, periodontal diseases, dental caries, dental abrasion, liver diffuse, swelling and proliferation of sinusoidal (hepatic) lining cells, sarcoid type granulomas, perisinusoidal and portal fibrosis and hepatic lesions are caused in the gastrointestinal system (Syed, 2006)

**Stomach:** In the stomach, it causes stomach ache and cancer

**Central nervous system (brain):** Usually causes a headache and fatigue.

**Lymphatic system:** Spleen diminished lymphatic tissue and splenic lesions. Other effects include: affect on eyes, skin, and bones, irritation in eyes, running eyes and conjunctivitis, skin irritation, itching, skin boil and burn, osteonecrosis, lesion of the humerus, thinning of the cortex and reduction of epiphysis cartilage (Goldsobel & Chipps, 2010).

**Allergic reactions that interfere with breathing:** Allergic reactions create many breathing problems, from simple runny noses to life-threatening respiratory arrest. The immune system's abnormal response to harmless allergens unleashes histamines and other substances that work to restore equilibrium. The side effects of this process result in

respiratory and other allergy symptoms. Complications can occur in people with extreme sensitivities to the allergenic proteins in some pollen, foods, household pollutants, animal secretions, and other substances. Pre-existing respiratory conditions also contribute to the severity of allergic effects on the respiratory system (Halidu, 2012).

**Chronic bronchitis:** Bronchitis is an infection of the bronchial tree. The bronchial tree is made up of the tubes that carry air into the lungs. When these tubes get infected, they swell and mucus forms. This makes it hard for a person to breathe. The person may cough up mucus and many wheezes (Halidu, 2012).

**Asthma:** Asthma (AZ-ma) is a condition in which the airflow in and out of the lungs may be partially blocked by swelling, muscle squeezing, and mucus in the lower airways. These episodes of partial blockage, called asthma "fares" or "attacks," it can be triggered by dust, pollutants, smoke, allergies, cold air, or infections (FEPA,2011).

**Emphysema:** In emphysema, the alveolar tissue is partially destroyed and the remaining alveoli are weakened and enlarged. The bronchioles collapse on exhalation, trapping air in the alveoli. Over time this process impairs the ability to exchange particulate matter oxygen and carbon dioxide with the circulatory system, leading to breathing difficulties, Emphysema is a noncontiguous disease that results from multiple factors, including a genetic predisposition to the condition, smog, cigarette smoke, and infection (FEPA, 2011).

**Lung cancer:** Studies of the American cancer society cohort directly link the particulate exposure to lung cancer. For example, if the concentration of particles in the air increases by only 1%, the risk of developing a lung cancer increases by 14% (Pope, Burnett, Thun, Calle, Krewski, Ito, Thursto 2002). Further, it has been established that particle size matters as ultrafine particles penetrate further into the lungs (Valavanidis, Fiotakis & Vlachogianni 2008).

**Pneumonia:** Pneumonia is an inflammation and infection of the lungs. Although pneumonia is a special concern for older people and those with chronic illnesses, it can also strike young, healthy people as well. In infectious pneumonia, bacteria, viruses, fungi or other organisms attack the lungs, leading to inflammation that makes it hard to breathe. Pneumonia can affect one or both lungs. Infection of both lungs is referred to as double pneumonia (FEPA,2011).

**Tuberculosis:** Tuberculosis is caused by a bacterium that attacks the lungs and sometimes other body tissues as well. If infections in the lungs are left untreated, the disease destroys lung tissue. In the past, antibiotics have controlled tuberculosis, but recently, new antibiotic-resistant strains of the tuberculosis bacterium have evolved. These new strains now pose a significant public health problem (Valavanidis, Fiotakis & Vlachogianni 2008).

**A cough:** A cough is a sudden and often repetitively occurring reflex which helps to clear the large breathing passages from secretions, irritants, foreign particles, and microbes. The cough reflex consists of three phases: an inhalation, a forced exhalation against a closed glottis, and a violent release of air from the lungs following the opening of the glottis,

usually accompanied by distinctive sounds (Chung & Pavord, 2008). Coughing can happen voluntarily as well as involuntarily. Coughing may be caused by air pollution including tobacco smoke, particulate matter, irritant gasses, and dampness in the home (Goldsobel & Chipps, 2010). The human health effects of poor air quality are far reaching, but principally affect the body's respiratory system and the cardiovascular system.

**Wheezing:** This is a high-pitched whistling sound during breathing. It occurs when air flows through narrowed breathing tubes. There may be various causes of wheezing such as asthma, bronchitis, breathing of any foreign substance or dust (David & David, 2010).

Besides humans, cement affects directly the quality of soil as it adds a number of harmful substances to it. Although, the basic constituents of cement dust are calcium ( $\text{CaCO}_3$ ), silicon ( $\text{SiO}_2$ ), aluminum ( $\text{Al}_2\text{O}_3$ ), ferric and manganese oxides (Akpan, Amodu and Akpan. 2011). Its production produces known toxic, carcinogenic and mutagenic substances, such as particulate matters, sulfur dioxide, nitrogen dioxide, volatile compounds, long-lived dioxins and heavy metals (Davidovits, 2012). The calculations and burning processes of cement production produce poisonous gasses that cause injuries to plants and animals (Abimbola, Kehinde & Olatunji. 2007, Gbadebo & Bankole 2007).

## **2.4 Concept of Sustainable Development**

Nigeria like any other nations is faced with environmental sustainability challenges ranging from deforestation; poverty; overpopulation; deterioration of urban fiscal quality; desertification; soil erosion and flooding among others. (Uweigbe, 2015) Rapid population growth puts damage on natural resources which result in degradation of our environment. The mortality rate has increased due to no better medical facilities which have resulted in decrease lifespan. More population simply means more demand for social amenities, more demand for food, clothes, and shelter. whereas, forestry contributes about 3 percent of the Nigerian GDP and accounts for the high proportion of domestic energy food and medical supply of the rural population as well as increasing the urban population (Awosika, 2014). Deforestation is the cutting down of trees to make ways for more homes and industries. Rapid growth in population and urban sprawl are two of the major causes of deforestation. Deforestation contributes to the global warming as decrease forest size put carbon back to the environment. Deforestation all over the world harnesses forest resources, to clear land for wood and for various action reasons. Its causes major problems for one simple reason, it decreases the number of trees, which clean the environment, provides oxygen and also affects rain patterns.

## **3.0 Methodology**

### **General features of the study area**

The study area comprises of the village surrounding the cement factories in Ashaka which

includes Wuro Arci, Gwangila, Jaura saje, Garin Abba. These villages are lying less than 20 km from the cement factory which is located in Nafada local government Gombe state North eastern Nigeria boarder with Fika Local Government Area Yobe State from the East. Ashaka cement factory is located on latitude  $10^{\circ} 88'47''$  and longitude  $11^{\circ} 51'48''$ . The climate of the area is humid tropical characterized by wet (April – November) and dry season (December to March). The vegetation around the cement areas is mostly Millet, Corns, Maize and to some extent cassava which were produced by the community year in year out long before the establishment of the factory.

The communities under the studied area were predominantly peasant farmer and were mostly male gender with about 78.5 percent of the population meaning there is about 293 Male and 80 Female who was saved with the Questionnaire, most of them were married (above 89 % in both areas), and the household size was quite large in both cases ranging from 3- 8 persons. The literacy level of the peoples in the vicinity of cement area is about 42.7 % this may also create a lower awareness of the danger of cement dust air pollution in the targeted area, and so the tendency to value lowers the damaging impact. Majority of the respondent in the area are indigenes and on ethnocentric grounds indigenes in cement producing area are more likely to avert damage and seek for greater intervention by the government to reduce the air pollution.

Further, the main objective of this study is to determine the damage cost of pollution. The researcher focused on the health effect of the communities who were mostly affected by some air pollution diseases such as Asthma, Cough and Chest pain, Pneumonia, and skin disease these diseases were analysed using the cost of illness method. The aim of a cost of illness approach is to identify and measure all the costs of a particular disease, including the direct, indirect, and intangible dimensions. “Direct” costs consist of treatment costs, rehabilitation, and prevention. Whereas the “Indirect costs” (sometimes called “productivity costs”) consist of ‘lost contribution’ to the economy and to the society following from either premature mortality, or from illness or disability. The intangible costs, on the other hand, are the death; years lost due to premature mortality, and lost quality of life. The output, expressed in monetary terms, is an estimate of the total burden of a particular disease to society (Rice, 1994). It is widely believed that estimating the total societal cost of an illness is a useful aid to policy decision making. However, the costs of illness studies have been the cause of much debate among health economists (Behrens & Henke, 1988). Two methods of costing illness exist thus, are the prevalence and incidence approaches. The prevalence method is the commonest and estimates the total cost of a disease incurred in a given year. Incidence method sums the cost in the current year and future years of cases arising in the current year.

This research adopts the prevalent method because is normally carried out within one accounting year.

To recap, the purpose of this study is to explore how environmental taxation will be used



as the determination of damage cost reduction from cement industry air pollution by the polluters. A quantitative design was used as the primary research tool in this study which questionnaire was administered to the communities leaving near the cement industrial area. The questionnaire was used after minor modification such as grammatical mistakes were checked and original scale (6 points Likert scale) ranging from 1 (“Strongly disagree” “very low” “Much worse”) to (Strongly agree” “very high” “Much better” was used. Data collected were total estimated health damage cost on Asthma, cough and chest pain, Pneumonia and Skin diseases by using cost of illness method. The data was further analyzed using Kruskal Wallis nonparametric method was performed to test the significance between different strata of each distance and the diseases under the study.

#### 4.0 Results

**Table 4.1 Total estimated health damage cost from cement industry**

<b>Diseases</b>	<b>Total cost ₦</b>
Asthma	2,478,457.96
A cough and chest pain	1,011,039.41
Skin diseases	953,356.25
Pneumonia	703,044.89
Value of statistical life	577,781,067.60
Total Including the value of a statistical life	<b>582,926,966.11</b>

Source: Survey Data, 2018

The table shows the value of the statistical life of ₦ 577,781,067.60 for twelve people who were reported to have lost their lives as a result of inhalation hazardous particulate matter. Out of this seven were premature children that are under the age of eighteen, whereas five were adults. The calculation of the value of statistical life was arrived using the formula:

**Value of Statistical Life (VSL) = GDP Per capital x (L –X)**

**Table 4.2 Total estimated health damage cost from cement industry**

<b>Diseases</b>	<b>Total cost ₦</b>
Asthma	2,478,457.96
Cough and chest pain	1,011,039.41
Skin diseases	953,356.25
Pneumonia	703,044.89
Total	<b>4,192,542.26</b>

Excluding Value of statistical life

Source: Survey Data, 2018

The table shows the summary of the total damage cost which was emanated from the

Ashaka cement industry, from the table it has shown that Asthma diseases have the highest record of damage cost, of ₦ 2, 478,457.96 this is due to the fact that the sample of peoples interviewed and responded to the questionnaire which was administered are predominately residing closer to the cement industry just between 0-4 km. Due to high inhalation of dust and other hazardous particulates matters form the vicinity which leads to the high cases of Asthma diseases.

Whereas a cough and chest pain equally has a very significant high number of health damage cost in the selected communities which were rank second in the table with a total estimated health damage cost of about ₦ 1, 011,039.41 Moreover, it has been empirically tested by health economics that wherever, there are high cases of Asthma it invariably goes along with a persistent cough and chest pain, sneezing to some extent because its attack the respiratory airways.

Furthermore, from the same table, the skin diseases is also one that community also complained by the residence inform of rashes appearance all over their body due to outdoor air pollution coming from the cement industrial side, although it has been documented that it is more frequent during the dry season between January to April. Consequently, a Pneumonia disease is also reported but not frequently by the communities. However, the table excludes the value of statistical life because of clarification reasons with the other table but having the same information with exception of the value of statistical life.

### **Computation for tax value under the cement industry**

Total Quantity of Cement Produced Per annum 1,300,000 Metric Tones p.a

Price per Bags N2300 per 50kg

Total Damage cost of Cement Pollution excluding lost of life = ₦ 4, 192,542.26 p.a

$$\text{Per tones damage Excluding cost of life} = \frac{4,192,542.26}{1,300,000} = N3.23$$

Total Damage cost of Cement Pollution Including Cost of lost of Life ₦ 582,926,966.00

$$\text{Per tones damage Including cost of life} = \frac{582,926,966}{1,300,000} = N448.41$$

$$\text{Per one Bag} = \frac{50\text{kg}}{1000} = 0.05\text{tones} \quad \text{Therefore, per bag damage cost is} = 0.05 \times \text{₦ } 448.41 =$$

₦ 22.42

Per bag damage cost excluding cost of life  $0.05 \times 3.23 = N0.16$

### Proposed environmental tax on cement industry

Per tones damage cost	Tax value ₦
Excluding cost of life	3.23
Including cost of life	448.41
Per bag damage cost of cement	22.42
Per bag damage cost excluding cost of life	0.16

Source: Survey Data, 2018

## 5.0 Discussion of results

The result has shown that the distance from the cement air pollution has a significant statistical influence on the diseases that are commonly association with the cement air pollution. the result of the data collected through primary source has indicates that the total health damage cost of the tested diseases as a result of contact with the cement particles from the surrounding communities is about ₦ 4, 192,542.26 p.a excluding value of statistical life equivalent to \$ 11,809.97 dollars.

## 5.1 Conclusions

The result conclude that the estimated tax to be place on these industries after estimating the damage cost of pollution are: Cement industry is to be tax ₦3.23 per tones damage cost of cement excluding cost of value of statistical life and ₦ 448.41 per tones damage cost including value of statistical life, furthermore, ₦ 22.41is estimated per bag damage cost including value of statistical life . Whereas per tones damage cost excluding value of statistical life of one bag is ₦ 0.16

## 5.2 Recommendation

The estimation derived from the study can be recommended to open up a discussion on environmental justice as most of these damages are caused by external factors the industries as a result of their nature of productions of goods and services which are hazardous to the environment while the host communities suffered

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# COVID-19 PANDEMIC, DIRECT DIASPORA REMITTANCES AND BEHAVIOUR OF MACROECONOMIC AGGREGATES IN NIGERIA

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## Abstract

This study examined the relationship between COVID-19-affected direct diaspora remittances to Nigeria and aggregate consumption, aggregate savings and economic growth in Nigeria from the onset of the global spread of COVID-19 in January 2020 and attendant lockdown to June 2020. Analysis of secondary data on these identified variables using the correlation technique shows that direct diaspora remittances to Nigeria during the study period positively correlated with aggregate savings, aggregate household final consumption expenditures, economic growth and composite manufacturing Producing Managers Index; and negatively with composite non-manufacturing Producing Managers Index. Increasing aggregate domestic consumption, aggregate savings and overall economic growth in periods of decline in remittances due to pandemics requires the recognition of direct diaspora remittances as income stabilizer; the introduction foreign exchange policies to increase its growth; and the reduction of the cost of these remittances to encourage remittances and increase actual amounts received with spiral positive effects on urban and rural household socioeconomic consumption, provision of shelter, education for the urban and rural poor, capital formation, economic growth and reduction in poverty..

**Keywords:** Aggregate consumption, Aggregate savings, COVID-19, Direct diaspora remittances, Economic growth, Producing manufacturing index

## 1.0 Introduction

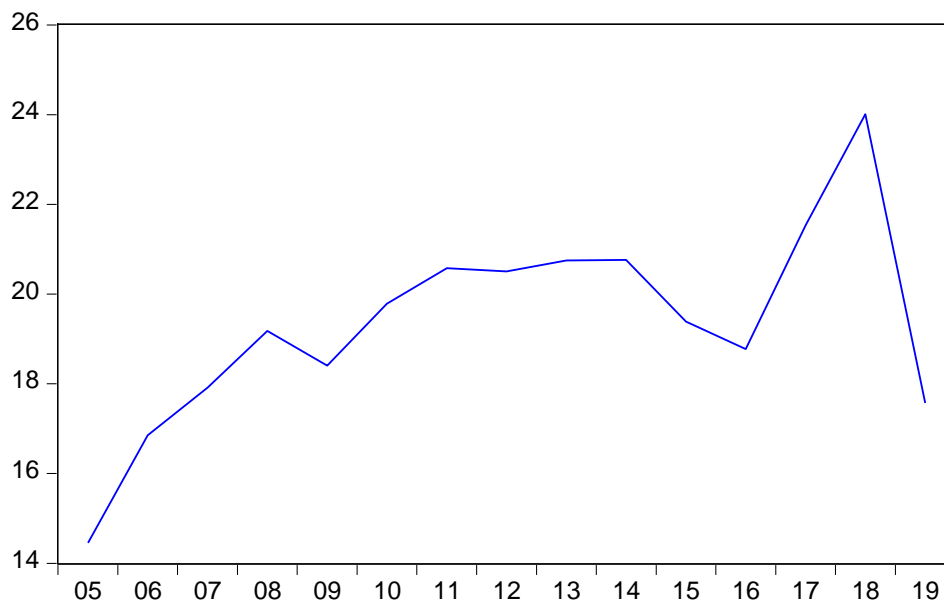
Movements in macroeconomic aggregates (consumption, savings and real GDP) are known to depend on available economic abilities and capabilities of microeconomic units. These abilities and capabilities enable microeconomic units to execute economic activities (consumption and savings) with varied effects on economic growth. Displacements in ownership and access to economic resources make microeconomic units, individuals, to move their services to destinations in need of their services and at economically acceptable price. Lack of economic resources, need for better employment, wars and natural disasters has resulted in movement of labour across borders. These migrants have economic aims: to secure employment in their host country, provide the basic socio-economic needs while

in the host country, cater for their relations back in their home countries through remittances home, and invest in physical and other capital resources back home. Recipients of these remittances spend them to provide education, housing, consumption on basic necessities and healthcare. These help pull dependents at home out of abject poverty.

Global statistics shows that about 258 million persons live in another country with remittances at \$714 billion in 2019. The World Bank (2020) noted that remittances to developing and emerging economies exceeded foreign direct investments into these countries in 2019 with India as the highest recipient with \$83 billion. Remittances are known to be expended on property acquisition, debt repayment, investments (Asare, Gebrewolde, Saab, Sandi. Sili, Wilkinson and Yang, 2020) and entrepreneurial activities (Yang, 2020) with positive effects on economic activities, disposable income, consumption, savings and further investments in recipients' home countries. Oxfam International (2020) stated that diaspora remittances make funds available to recipients to meet daily needs of shelter, food, medicine and education. Kangmennang, Bezner-Kerr and Luginaan (2018) noted that remittances smoothen consumption directly and via investments resulting in enhanced welfare of households. Yang (2008) noted that remittances augment finances for recipients in periods of economic shocks. The countercyclical and smoothening effects of remittances in recipient countries will seem with negative effects on consumption (Sayeh and Chami, 2020). According to Ratha et. al. (2008), remittances provides a more stable source of foreign exchange than foreign direct investments (FDIs). Remittances received are spent and saved with positive effects on overall economic growth.

COVID-19 pandemic resulted in migrant job losses as companies and businesses in advanced economies in North America, Europe and developed parts of Asia. Migrants were known to have suffered economically in their host countries with many not covered by social insurances of their host countries. This affected remittances back home, the consumption, spending and wellbeing of dependent relatives in their home countries worsening the poverty status of these dependants.

Before the COVID-19 pandemic, direct diaspora remittances to Nigeria has high. Total direct diaspora remittances increased from \$14.45567 billion in 2005 to \$16.85457 in 2006, \$17.91948 billion in 2006 an \$19.17672 billion in 2008. Remittances declined slightly in 2009 to \$18.40329 (Fig. 1). This increased steadily to \$20.76157 in 2014, followed by declines to 2016. It increased further to \$24.00953 billion in 2018 followed by a sharp decline to \$17.570 billion in 2019. These values were higher than corresponding values for foreign direct investments into the country within the period. The National Bureau of Statistics (2019) showed that diaspora remittances to Nigeria in 2018 contributed \$7.6 billion and \$17.6 billion to investment and consumption respectively, with remittances from USA contributing \$7.2 billion to both.



*Figure 1: Direct Diaspora Remittances, 2005-2019*

Source: Statistical Bulletin, 2019

In Nigeria, the COVID-19 pandemic resulted in total lockdown in the country with restriction of movements, closure of businesses, job losses and salary, increasing dependence on remittances which were in short supply. These aggravated the declines in consumption, savings and overall economic growth in the country during the period of this lockdown (March, 2020 to June, 2020). This study aims to examine the behaviour of direct diaspora remittances to Nigeria during the COVID-19 lockdown, and its effects on macroeconomic aggregates (consumption, savings and economic growth) during this study period.

### **COVID-19, Global remittances and economic growth**

The COVID-19 pandemic which started in Wuhan in China in 2019 spread rapidly around the globe. One measure to limit the spread was restriction of human movement and closure of businesses to minimise human contact and contraction of the virus. Restricted movements and social distancing measures in migrants' host countries limit the ability of migrants to work and search for new jobs. Sayeh and Chami (2020) noted that migrants losing their jobs definitely reduce the amounts remitted. Remittances across the globe were further limited by restrictions in international travels which is known to be a safe channel for international cash movements, and closure of money transfer offices during the lockdown. Takenaka, et. al. (2020) noted that while countries supplying migrants contained the pandemic early, the host countries are currently still struggling with new spikes. Sayeh and Chami (2020) contended that a constrained economy will negatively affect micro credit to small businesses and the self-employed with negative effects on employment, disposable



income, consumption, savings, investment and overall economic growth.

Sayeh and Chami (2020) noted that the closure of businesses in migrants' host countries due to COVID-19 pandemic with its negative effects are transmitted to low-income diaspora-dependent countries through declines in expected remittances. Takenaka, et. al. (2020) observed that the economic shock of COVID-19 is transmitted via global decline in GDP and closure of businesses, with declines in employment and fall in price and demand for crude oil. An earlier study by Barajas, Chami, Ebeke and Tapsoba (2012) showed that a 1% decline in economic growth in migrants' host countries results in a 1% decline in economic performance of remittance-recipient countries having remittances making up at least 10% of its GDP.

According to Abdih, Barajas, Chami and Ebeke (2012), government finances from taxes on remittances are also negatively affected with spiral negative effects on government socio-economic activities of government. Asare, Gebrewolde, Saab, Sandi. Sili, Wilkinson and Yang (2020) noted that remittances constitute a large proportion of foreign exchange inflows to developing countries with positive effects on macroeconomic stability. Statistics by Oxfam International (2020) shows that migrants account for 3.4% of the world's population contributing 9.4% to GDP globally. The agency noted that global economic contraction is sure to affect 37.5% of the workforce with negative effects on their economic resources. Takenaka, Villafuerte, Gaspar and Narayanan (2020) noted that Asia and the Pacific region accounts for 33% of global migrant workforce. Oxfam International (2020) reported that global remittances to low and middle income countries in 2018 was \$529 billion increasing to \$554 billion in 2019. Countries in the Northern area of Central America received \$22 billion in remittances in 2018 with Guatemala receiving \$8.2 billion. Yemen received \$3.8 billion in 2019 (representing 13% of GDP). Remittance to GDP ratio in 2019 for Haiti according to Oxfam International (2020) was above 36%.

Due to the COVID-19 pandemic, the IMF (2020b), the African Union Commission (2020) and the African Development Bank (2020) projected a decline of -1.6%, 0.8% - 1.1%, and between 0.7% - 2.8% respectively in GDP growth in Africa. The Organisation for Economic Co-operation and Development, OECD (2020) noted that Nigeria, South Africa and Angola have posted 2.3%, 0.9% and -0.3% growths in GDP in 2020. The OECD (2020) noted that Nigeria and Egypt receives 60% of remittances into Africa. The World Bank (2020) noted that total remittances to Sub-Saharan Africa for 2020 might decline from the estimated \$48 billion for 2019 to \$37 billion in 2020. The World Bank (2020) estimated a decline in international remittances by 19.7% to \$445 billion due to COVID-19 induced job losses with expected significant reduction in livelihood and macroeconomic activities in recipients' countries. Deloitte (2020) estimated that over 170 countries globally have experienced declines in GDP due to COVID-19 pandemic with France, Germany, UK, US and Japan suffering -7.2%, -7.0%, -6.5%, -5.9% and -5.2% declines respectively. These declines are transmitted to low and middle income countries through declines in

remittances. In Africa, the IMF (2020a) and the African Union Commission (2020) have estimated that Angola, South Africa, Zambia, Nigeria and the Democratic Republic of Congo will suffer -1.4%, -5.8%, -3.5%, -3.4% and -2.2% declines in GDP respectively with Sub-Saharan and African average declines at -1.6% and -0.80% respectively. The African Union Commission (2020) noted that remittances account for more than 5% of GDP in thirteen African countries with remittances accounting for 23% of GDP in Lesotho, and 12% of GDP in the Gambia, Comoros Island and Liberia. Statistics show that expected sub-regional declines in Asia are Central Asia by \$3.4 billion, China by \$7.9 billion, South East Asia by \$11.7 billion, the Pacific region by \$26.7 billion, and East Asia excluding China by \$1.7 billion. On Somalia, Majid, Hammond, Adirahman, Adan and Kleist (2020) noted that remittances of between \$1.3 billion - \$2 billion yearly which sustained 40% of the population have declined by 50%.

With the cost of remittances at 8.9% for Sub-Saharan Africa, North Africa and the Middle East at 7% in the face of dwindling remittances, the actual receipts will be negatively affected with spiral negative effects on consumption, investment, savings, lending and overall economic growth. The IMF (2020) opined that a 5% reduction in the cost of remittances will increase actual receipts by recipients by \$16 billion. The receipt may be higher with the elasticity of this cost (Gibson, McKenzie and Roho, 2006). Though internal remittances (remittances within the country) exists, lack of data had excluded their consideration in computing total remittances. Remittances from outside the country or continent (external remittances) are usually considered in studies, and is also considered in this study. Using data on Bangladesh, Kamal and Rana (2019), and Wadood and Hossain (2017) concluded that the effects of remittances on welfare are higher with foreign remittances. Findings by Imai, Gaiha, Ali and Kaicker (2014) showed that international remittances positively influence consumption in recipients' country, physical capital accumulation and production capacity.

## **2.0 Literature review**

Empirical literatures on the COVID-19 pandemic, direct diaspora remittances and performance of economic aggregates are universal in their conclusions. Salas (2014) and Acharya (2014) concluded that direct diaspora remittances provides the educational and healthcare needs of dependants, reducing out of school numbers and maintenance of a healthy workforce. Research results by Mashayekhi (2020) showed that diaspora remittances reduce poverty, and positively influences economic growth in the receiving countries. Where these are saved and invested in production and infrastructures, Mashayekhi (2020) noted, has a multiplier effect on economic growth in the receiving country. Findings by Orozco (2020) showed that remittances directly affect incomes which are saved. This amount Orozco (2020) added, increases as incomes of migrants grow. Research results from the study of coastal areas of China by Zhu (2020) showed that

migrants' remittances contributed to investments at home, and make way for investment-based local development. Findings from the study of ten countries dependent on migrant remittances in Asia by Yoshino, Taghizadeh-Hesary and Otsuka (2017), showed that a 1% growth in migrant remittances to these countries reduces poverty by 22.6% and the severity of poverty by 16%. From the study of El Salvador, Vasquez (2020) concluded that remittances sent home in normal economic situation increases spending and economic expansion at home. Conversely, remittances sent to home country during periods of economic crisis are put into savings and investments. Majid et. al (2020) observed that globally, remittances increase in periods of crises.

The Food and Agriculture Organisation, FAO (2020) argued that remittances by migrants contribute significantly to human capital, rural development, food security and real GDP. Findings by Thiam (2020) showed that remittances to Senegal contributed to poverty reduction, adding that the amount remitted would have been higher if there existed reliable and efficient remittance channels. Findings by Ambler, Aycinena and Yang (2015) showed that reduction in cost of migrant remittances, increases the amounts and frequency of transfers. Nanba and Clotteau (2020) argued with evidences that efficient postal service providing remittance services increases savings both among low and middle income earners in the migrants' country of residence and home country. Isaacs (2020) suggested that information on cheap and available remittance channels by made available to enable migrants make informed decisions on choice of reliable and cost-effective remittance transfer channels. Similarly, Dipeolu (2020) opined that the reduction in the cost of remittances will increase net remittances. On remittances by different genders, Mane (2020) and Madi (2020) suggested the reduction of remittance costs and hindrances to remittance to increase the effects of remittances by females on economic growth in their home country.

Research results from the study of Bangladesh by Chowdhury (2020) showed that diaspora remittances have helped the country achieve its poverty alleviation and Millennium Development Goals (MDGs). This positive results according to Chowdhury (2020), are higher when saved and invested in production and infrastructural development. On factors facilitating remittances, the ownership of bank accounts at home by migrants according to Orozco (2020) increases remittances by 9%. Orozco (2020) noted that 30% of migrants build savings at home, adding that recipients of remittances in Guatemala save, and increase their savings as remittances increase. Conclusion by Gapen (2009) showed that international remittances increase development financing, diminish volatility in macroeconomic activities with positive effects on investments. On gender effects on remittances, Orozco (2020) stated that females remit 9% less than males, but remittances by both sexes increase by 5% annually.

With the pandemic, closure of businesses in migrants host countries, loss of migrant jobs and closure of borders, remittances have been negatively affected. The expected drop in

remittances in 2020 according to Oxfam International (2020) has exposed the vulnerable to greater poverty. Fall in remittances according to Takenaka, et. al. (2020) increases the vulnerability of regular recipients with reduction in savings, consumption and spending on basic necessities and education. FAO (2020) observed that poor working conditions and crowded living conditions of migrants in their countries of abode increased their susceptibility to COVID-19 infection, loss of jobs and means of livelihood. Loss of migrant jobs affected the livelihood of the migrants, their remittances and the livelihood of their dependents in their country of origin. The loss of jobs in countries of residence according to Oxfam International (2020) has left sources of remittances struggling with meeting their own basic necessities and bills with nothing to remit to dependants in their home country. The fall in the global price of crude oil and gas exports from countries hosting these migrants has aggravated migrant job losses. Comparing migrant and non-migrant job loss rates during the last global economic crisis and the CPVID-19 pandemic, the World Bank (2020) observed that 11.1% and 16.4% of migrants lost their jobs in 2007 and 2009 respectively in Europe. This figure according to the World Bank (2020) is far higher than that of non-migrants within the same period in Europe. This trend the World Bank (2020) added, may be higher under the COVID-19 pandemic.

The FAO (2020) noted that remittances into Sub-Saharan Africa has declined by 23% compared with the global average of 20% during the lockdown with expected negative effect on the livelihood of countries and families dependent on the inflows for education, health and basic household expenditures. Asare, Gebrewolde, Saab, Sandi. Sili, Wilkinson and Yang (2020) observed that the sharp decline in remittances caused by the COVID-19 pandemic has negatively affected dependants' access to education, healthcare and consumption. Asare et. al (2020) contended that a decline of 19.7% in remittance inflows significantly affected trade and fiscal balances with significant threats to stability of macroeconomic activities. This Asare et. al (2020) added, has worsened the current economic crisis in recipients' country and limit their ability to meet financial obligations. Inclusion of migrants in the COVID-19 economic response plans of their host countries according to FAO (2020) would have catered for their immediate need of livelihood and dependent relatives back at home through remittances. Barajas et. al (2020) and Asare et. al (2020) noted that the declines in remittances has negatively affected the lending ability of deposit money banks to the economy with attendant increase in cost of borrowing. Sayeh and Chami (2020) stated that a 20% decline in remittances has resulted in remittances losing its status as a major source of foreign exchange above FDI.

Findings by the United Nations (2020) showed that the decline in remittances has contributed in worsening exchange rates of currencies of remittance-dependant countries to world currencies with negative effects on their GDPs. On the need to conserve foreign currencies, apex banks across countries according to Oxfam International (2020) have introduced strict outward foreign exchange transfer measures inhibiting importation of

industrial raw materials and machines with spiral negative effects on industrial performance, employment, disposable income, consumption and economic growth. de Vasconcelos (2020) observed that subjecting incomes received to tax at source and to tax on remittances amount to double taxation, and reduces the amounts received in the home country.

Sayeh and Chami (2020) argued that the loss of diaspora remittances has significantly magnified economic crisis in low-income countries. The loss Sayeh and Chami (2020) added, has increased fiscal, economic and social demands on governments of these low-income countries. In Asia, the Asian Development Bank, ADB (2020) observed that the pandemic caused reduction in employment. This according to Takenaka, et. al. (2020), significantly reduced wages in Asia and the Pacific by between \$359 billion - \$550 billion; noting that migrant employees were greatly affected. Findings by Takenaka, et. al. (2020) showed that 60% of the largest remittance-recipient countries (Bangladesh, China, Pakistan, Philippines and Vietnam) are located in the region. With remittances to the region declining due to the economic shock by \$31.4 billion with South East Asia recording a decline of \$28.6 billion. Declines in remittances from the Middle East according to Takenaka, et. al. (2020) is expected to account for 53.7% of this decline. Takenaka, et. al. (2020) argued that with devastated economies of the Middle East, developed parts of Asia and Europe due to the pandemic, the economic status of migrants from the region were negatively affected. Takenaka, et. al. (2020) added that the estimated remittances for 2020 will significantly fall far below the \$315 billion for 2019, with expected negative effects on income, consumption, savings and micro investments.

The decline in remittances to Pakistan according to Salik (2020) has resulted in fall in savings, investments and household living standards at the micro level. This Salik (2020) added, has weakened the ability of households to cope with non-climatic and climatic crisis. At the macro level, Salik (2020) stated that exchange rate in Pakistan has been adversely affected with spiral negative effects on foreign exchange reserves, aggregate savings and development expenditures. In Africa, Bisorg, Ahairwe and Njoroge (2020) argued that declines in remittances back home has limited the continent's ability to tackle the pandemic, achieve the objectives of the Sustainable Development Goals (SDGs), reduction in hunger, poverty, and gender and income inequality. Research results from the analysis of macroeconomic data from across African countries by the European Union, EU (2020) showed that the effect of the decline in remittances to the continent depend on the country itself and the population. EU (2020) noted that severe effects were felt in Zimbabwe, Liberia, Lesotho, Mali, Burkina Faso and Niger as a greater percentage of the population depend on remittances. The EU (2020) added that the limited availability of digital money transfer mechanisms in these African countries inhibited remittances. The near absence of social protection in African countries according to the United Nations (2020) has worsened the socio-economic of COVID-19 and situation of these countries.

Harnessing the benefits of migrant remittances to the Philippines according to Gonzaga (2020), requires the establishment of functional financial system to ease remittances to micro businesses, financial assets and domiciliary accounts with positive effects on disposable incomes, consumption and economic growth. Optimising the gains of diaspora remittances in Ghana according to Ampomah-Asiedu (2020) requires the collaborative efforts of government (to improve governance and accountability systems), migrants (to develop a system of stabilising remittances), the private sector (to develop reliable remittance channels), and the Central Bank (to provide requisite supervisory frameworks providing guidance for the operation of remittance channels). Hamedane (2020) recommended the removal of inhibitions to remittances to Morocco to improve the size of remittances with positive effects on savings, consumption, investment and economic growth. On the Philippines, De Vries (2020) argued that creation of a favourable environment for migrants to invest, re-orientation of Philipinos towards investment, development of programmes by government for the provision of additional investment financing for migrant investors where needed, and integration of remittances to productive investments are essential for increasing remittance inflows. Swing (2020) posited that increasing remittances require the introduction of migration policies to improve access to jobs by migrants in their host countries. This according to Kang (2020) is only feasible with the recognition of the rights of migrants in their host countries. Diop (2020) argued that remittance of incomes back home is a right of migrants under the ILO Migration for Employment Convention, No. 97 (as revised), 1949. This Diop (2020) added, ensures the expansion of globalization to migrants. Melde and Anich (2020) opined that efforts at protecting migrants and their remittances must be hinged on protecting the rights of migrants. This effort according to Melde and Anich (2020) should be tailored to meet the needs of both female and male migrants.

Chami and Fullenkamp (2020) argued that remittances have its merits and demerits, with the demerits cancelling out the merits leaving a minute merit effect on the country. The effect of the sharp decline in remittances according to Asare et. al. (2020) is expected to linger long after the pandemic as migrant jobs in Europe, North America and developed parts of Asia will slowly be restored after the pandemic. But according to Dipeolu (2020), the drop in remittances to Africa may be short lived. Loss of employment by migrants according to Sayeh and Chami (2020) may result in reverse migration back home increasing employment crisis at home with its negative socio-economic consequences. The inability to clearly relate remittances with economic growth according to Clemens and McKenzie (2018) is attributable to dearth of sufficient data and errors in measurements.

### **3.0 Methodology**

Total monthly data on direct diaspora remittances (DDR), aggregate savings (AGGS), aggregate consumption (AGGCO), real GDP (RGDP), composite manufacturing

Producing Managers Index (CMPMI), and composite non-manufacturing Producing Managers Index (CNMPMI) during the period of the COVID-19 pandemic socio-economic distortions (January to June 2020), were obtained from the Central Bank of Nigeria Economic Report, January-June (2020), World Bank (2020) and IMF (2020c) Sub-Saharan Africa Regional Outlook Reports. To ascertain the relationship between the COVID-19-affected direct diaspora remittances and aggregate consumption, aggregate savings, overall economic growth, composite manufacturing Producing Managers Index, and composite non-manufacturing Producing Managers Index during the study period, we use the correlation technique.

#### 4.0 Data presentation and analysis

Data on direct diaspora remittances, aggregate consumption, aggregate savings, real GDP, composite manufacturing Producing Managers Index, and composite non-manufacturing Producing Managers Index for the period January-June 2020 are shown on Table 1.

Table 1: Nigeria's direct diaspora remittances, aggregate consumption, savings, real GDP, composite manufacturing Producing Managers Index, and composite non-manufacturing Producing Managers Index for the period January-June 2020

Period	Direct Diaspora Remittances (\$'Billion) )*	Aggregate Savings (\$'Billion)*	Aggregate consumption (\$'Billion) **	Real GDP (\$'Billion) **	Non- Manufacturing Purchasing Managers Index*	Manufacturing Purchasing Managers Index*
January 2020	2.05	64.46	336.76	458.410	58.9	59.1
February 2020	1.02	65.816	344.01	468.040	58.6	58.3
March 2020	3.45	67.066	350.54	476.930	49.2	51.1
April 2020	1.128	64.987	339.68	462.145	49.2	47.6
May 2020	1.124	62.972	329.15	447.819	49.2	42.4
June 2020	1.120	59.131	309.07	420.50	48.1	41.2

\*Central Bank of Nigeria Economic Report, January-June (2020)

\*\* World Bank (2020) and IMF (2020c)

At the onset of the global spread of COVID-19 in January 2020, total direct diaspora remittance to Nigeria was \$2.05 billion. It declined by 50% in February to \$1.02 billion. This was followed by a sharp increase to \$3.45 billion in March 2020. Direct diaspora remittances consistently declined again to \$1.128 billion in April, \$1.124 billion in May, and \$1.120 in June 2020 (Table 1). During the study period, Nigeria's RGDP grew by 2.21% in January 2020 to \$458.41 billion. It increased further by 2.1% and 1.9% to \$468.04 billion and \$476.93 billion in February and March 2020 respectively. In April 2020, RGDP declined by 3.1% to \$462.145 billion. It declined further by 4.1% and 6.1% in May and June 2020 to \$447.819 billion and \$420.50 billion respectively (Table 1). Composite non-manufacturing Purchasing Managers Index (PMI), an indicator of purchases of non-manufactured item in the country (a measure for aggregate consumption non-manufactured goods) declined marginally on a month-by-month basis from 58.9 in January to 48.1 in June 2020. Composite manufacturing Purchasing Managers Index (PMI), an indicator of purchases of manufactured item in the country (a measure for aggregate consumption manufactured goods) declined from 59.1 in January to 41.2 in June 2020 (Table 1). During the study period, aggregate savings in Nigeria increased from \$64.46 billion in January 2020 to \$67.066 billion in March 2020. This was followed by a steady decline to \$64.987 billion in April 2020 and \$59.131 billion in June 2020. Within the study period, household final consumption expenditure increased from \$336.76 billion in January 2020 to \$350.54 billion in March 2020. It declined to \$339.68 billion in April 2020 and further to \$309.07 billion in June 2020.



## 4.1 Data analysis

Analysing the data on Table 1 using the correlation technique, we have the result on Table 2.

Table 2: Correlation result of study variables

	DDR	AGGS	AGGCO	RGDP	CMPMI	CNMPMI
DDR	1	0.53604788 90383274	0.53516728 21675297	0.53525219 02737746	0.27946928 37177768	- 512461325
AGGS	0.53604788 90383274	1	0.99998948 39822041	0.99998906 0375068	0.66598138 18806736	0.36167462 86548409
AGGCO	0.53516728 21675297	0.99998948 39822041	1	0.99999998 57391764	0.66346793 41112969	0.35882397 82725731
RGDP	0.53525219 02737746	0.99998906 0375068	0.99999998 57391764	1	0.66342269 00860668	0.35875018 98348428
CMPMI	0.27946928 37177768	0.66598138 18806736	0.66346793 41112969	0.66342269 00860668	1	0.90611772 2699568
CNMPMI	- 0.05858703 512461325	- 0.36167462 86548409	- 0.35882397 82725731	- 0.35875018 98348428	- 0.90611772 2699568	- 1

## 4.2 Research results and policy implications of findings

At the onset of the global spread of COVID-19, Nigeria's direct diaspora remittances experienced a shock 50% decline in February 2020. It increased significantly in March 2020. This was followed by another decline in April 2020 which continued to June 2020. Nigeria's RGDP experienced marginal growths from January-March 2020. This was followed by steady declines from April-June 2020. Aggregate savings and consumption experienced similar behaviour patterns during the period. These behaviour patterns show that though direct diaspora remittances had consistently exceeded FDI inflows and revenues from oil sales, its decline seemed not to immediately affect aggregate savings, aggregate household final consumption and RGDP. This indicates aggregate economic activities in Nigeria does not rely solely on direct diaspora remittances as with oil revenues for public sector expenditures, and FDI inflows for industrial expansion expenditures. It is received and employed as supplementary current disposable and investment incomes. Thus, direct diaspora remittances serve as an income stabilizer and are employed to augment existing income.

Further research results on Table 2 shows that direct diaspora remittances (DDR) positively correlated with aggregate savings (AGGS), aggregate consumption AGGCO), real GDP (RGDP) and composite manufacturing Producing Managers Index (CMPMI) during the study period with correlation coefficients of 0.53605, 0.5351, 0.5353 and 0.2795

respectively. This indicates that the sharp decline in direct diaspora remittances positively stabilised and enhanced aggregate savings, aggregate consumption, real GDP and composite manufacturing Producing Managers Index during the COVID-19 pandemic and the attendant lockdown period. Foreign exchange reforms may seem necessary to reduce remittance costs to increase total and actual remittances received to ensure its sustained contribution to sustaining and stabilising aggregate household final consumption expenditures, aggregate savings and RGDP. An industrial policy during pandemics aimed at increasing the purchase and consumption of manufactured goods (with positive effects on employment, disposable income, savings, consumption and RGDP) may seem necessary. Results on Table 2 also show that direct diaspora remittances negatively correlated with composite non-manufacturing Producing Managers Index. This indicates that dwindling remittances received during the COVID-19 pandemic were not expended on the acquisition of services. This explain the placement of consumer priorities in periods of minimal cash inflows from abroad, with recipients of remittances preferring to expend “precious” remittances received on physical goods instead of on services. These services seem to have been ignored and done away with, and where feasible home-provided to reduce expenditures. Thus, during the COVID-19 pandemic and attendant lockdown, acquisition of services was not seen as priorities. Remittances hitherto expended on these services seems to have been channelled to savings, capital accumulation and consumption of physical goods.

## **5.0 Conclusion**

From the research results, we conclude that:

- (i) Direct diaspora remittances to Nigeria experienced a significant decline at the onset of the global spread of COVID-19 in January 2020, increasing in March 2020 and followed by another decline in April 2020;
- (ii) Nigeria’s RGDP, aggregate savings and household final consumption expenditure experienced marginal increases at the onset of the global spread of COVID-19 in the first quarter of 2020, but declined with the introduction of the lockdown thereafter;
- (iii) Direct diaspora remittances positively correlated with aggregate consumption, aggregate savings, real GDP, composite manufacturing Producing Managers Index during the COVID-19 pandemic and attendant pandemic lockdown; and
- (iv) Direct diaspora remittances negatively correlated with composite non-manufacturing Producing Managers Index during the study period.

## **5.1 Recommendations**

To improve and sustain aggregate economic activities in Nigeria during periods of declines in direct diaspora remittances due to pandemics, we recommend that:

- (i) The Nigerian government should recognise direct diaspora remittances as an income stabilizer and introduce foreign exchange policies to increase its growth with spiral positive effects household socioeconomic expenditures, reduction in poverty, provision of shelter, education for the urban and rural poor, increase in capital formation and economic growth;
- (ii) In periods of pandemic and lockdowns, cost of remittances should be reduced (as a foreign exchange policy) to encourage remittances and actual amounts received with positive effects on urban and rural consumption, savings and economic growth;
- (iii) Intergovernmental alliances aimed at protecting migrants in their host countries should be encouraged in periods of pandemic to secure their stay and work with positive effects on remittances, aggregate savings, consumption and economic growth;
- (iv) Hindrances to savings, acquisition and consumption of manufactured goods in periods of pandemics in Nigeria should be eliminated by the government to improve aggregate savings, aggregate consumption and real GDP;
- (v) Socio-economic suasions discouraging expenditures on services during periods of pandemics should be introduced by the Nigerian government to curtail expenditures on services, increasing amounts saved and expended on consumption of manufactured goods, and capital formation with positive effects on RGDP

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# **CORPORATE TAX INCENTIVES AND RE-INVESTMENT PATTERNS OF QUOTED MANUFACTURING FIRMS IN NIGERIA**

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## **ABSTRACT**

*This paper examines how corporate tax incentives could influence the re-investment patterns of quoted manufacturing firms in Nigeria. Data for the study was extensively drawn from documentary evidence comprising the annual reports and accounts of the sampled companies for ten (10) years (2006 to 2015). Being an unbalanced panel data of 14 firms, both time series and cross sectional, panel data methodology was adopted for data analysis. The ordinary least squares (including robust OLS), Fixed effects and Random effects were used to estimate the regression model. The overall regression result revealed significant impact of the incentive variables on Liquidity and Capital adequacy. However, a contrary outcome has been documented in relation to Return on asset and Return on equity. It therefore implies that the burden of corporate tax bears more on the firms' liquidity and capital rather than on profitability, which affects their re-investment bids thereafter. The study recommends increased awareness for listed firms to avail the use of incentive for better performance. The study also recommends the need for the tax authority to allow the payment of Company Income Tax to be on Actual Year Basis, instead of the existing practice of Preceding Year Basis that shifts the burden of taxation of companies from profit to cash or capital.*

**Keywords: Corporate Tax Incentives, Re-investment Patterns, Quoted Manufacturing Firms**

## **1.0 INTRODUCTION**

The controversy as to whether corporate tax is an incentive to firms' growth has been on-going since in the 1970s, with treatise and debates on it yet to be laid to rest. In recent times however, tax turns to be a very significant consideration for the allocation of investment among countries (Axarloglou, 2005), and a subject of discussions as well, in the midst of academics, institutions and organizations.

As confirmed by the World Bank Reports of 1988, 1998 and 2008, there has been a significant decline in the quantum of global investment generally, and in particular the rate of Return on Investment (ROI) in Africa, over the years



and precipitously during the recent past decades. In view of this dwindling tempo, over 160 countries worldwide – from the least developed to the most advanced economies – have set up national investment promotion agencies to compete for investment generally (Morisset, 2003). More specifically, the Nigerian Investment Promotion Commission (NIPC) was established by NIPC Act No.16 of 1995, to promote, co-ordinate, and monitor all investments in Nigeria. Against this backdrop, tax incentive has been a worldwide promotional efforts of countries in sustaining, inter alia, domestic investments, and this drive continues unabated, particularly in the wake of the global economic crisis of 2008, and the on-going public health crises of 2020, i.e. ‘Covid-19’.

To this end, despite the queries as to the efficacy of tax incentives as determinants of investment and its performance in recent years (Sanni, 2011), countries increasingly continue to employ a mix of them for development of particular sectors, areas or regions. For example, in a survey carried out by the United Nations Conference on Trade & Development (UNCTAD, 2000), in over 45 countries from all regions of the world, nearly 85 percent of the countries surveyed offer various types of fiscal incentives. Similarly, many Organization for Economic Conference & Development (OECD) and some non-OECD countries report tax incentives in their Tax Expenditure Report from 2006 (OECD, 2007). In Nigeria, the incentive scheme that gives allowances to companies that establish operations in rural areas where certain facilities are not available is a typical case in mind (UNCTAD, 2000; and Adelegan, 2008). .

For the purpose of this paper, tax incentives include effective tax rate, tax savings, debt tax shield, and capital allowance ratio. Essentially, they are sets of corporate tax variables considered measurable and econometrically feasible, and are proxies for incentives derivable either from the level of tax rates or discernible from the adopted tax system (Morisset, 2003; OECD, 2007; James, 2009; Muhammad, 2010). In the same way, certain indicators of growth or performance within the manufacturing sector are applied, which include Return

on Asset, Return on Equity, Liquidity, and Capital Adequacy. They are variables that fundamentally constitute significant components for measuring performance of the manufacturing sector (Sanda, Mikailu & Garba, 2005; Aliu, 2010; and Ohaka & Ironkwe, 2014).

As countries key in to adopting fiscal incentives as major policy tools for sustaining economic growth and development, the academics strive to find the likely effect of tax incentives on performance of manufacturing firms. Hence, using firm-level data, with a view to predicting the re-investment patterns of firms, this paper examines the extent to which corporate tax incentive variables impact on performance indicators of the quoted manufacturing firms in Nigeria.

### **1.1 Statement of the Problem**

The pivotal roles played by manufacturing sub-sector in an economy cannot be overstressed. Essentially, the manufacturing firms are the vibrant of the real sector with the potentials of employment generation, wealth creation and poverty alleviation. Based on this expectation, Nigeria has employed a number of strategic policies differently aimed at enhancing the performance of its manufacturing sector. Bundle of policies notwithstanding, performance in the sub-sector remains on the decline over the years. At the moment, it is instructive to note that high cost of doing business is one of the major impediments to the performance of these firms (UNIDO & CSAE, 2006; World Bank, 2008; Borodo, 2010; Pitigala & Hope, 2011; & NBS, 2015), and corporate tax, all along, constitutes a significant portion of these sets of cost (World Bank Group's Doing Business Reports, various years).

To this effect, whether corporate tax incentives can significantly predict the re-investment patterns of quoted manufacturing firms is an issue that irks the research minds and yet to be subjected to empirical test.

Studies conducted on the incentive effect of corporate tax devour much of their erudition on Foreign Direct Investment (FDI), with sizable on performance of manufacturing firms, coupled with differentials and inconclusive findings

(Osimiri, 2002; Adelegan, 2008; James, 2009; Talpos & Vancu, 2009; Sani, 2010; Cohn, 2011; Teraoui, Kaddour, Chicht & Rejeb, 2011); Gatsi, Gadzo & Kportorgbi, 2013; Ekpung & Wilfred, 2014). Further to that, studies of the above sorts are, for the most part, cross-country and country-specific with focus on aggregate data even as firm-level data constitutes the best form for performance. To date and to our Knowledge, no study on the incentive effect of corporate tax, with a focus on performance of manufacturing companies in Nigeria, has endogenously reflected on the firms' re-investment patterns. This is what this paper is poised to synthesize.

## **1.2 Objectives of the Paper**

The objectives of the study are;

- i) To examine the predictive influence of corporate tax incentives on ROA of quoted manufacturing firms in Nigeria
- ii) To examine the predictive influence of corporate tax incentives on ROE of quoted manufacturing firms in Nigeria
- iii) To determine the impact of corporate tax incentives on the liquidity positions of quoted manufacturing firms in Nigeria
- iv) To establish the predictive influence of corporate tax incentives on quoted manufacturing firms' capital adequacy.

## **1.3 Hypotheses of the Study**

For the purpose of this paper, the following research hypotheses have been formulated:

Ho<sub>1</sub>: Corporate tax incentives do not have significant predictive influence over ROA of quoted manufacturing firms in Nigeria.

Ho<sub>2</sub>: Corporate tax incentives have no significant predictive influence over ROE of quoted manufacturing firms in Nigeria.

Ho<sub>3</sub>: Corporate tax incentives have no significant impact on the quoted manufacturing firms' Liquidity position.

Ho<sub>4</sub>: Corporate tax incentives do not have significant predictive influence on Capital Adequacy of quoted manufacturing firms in Nigeria.

## **2.0 CONCEPTUAL AND THEORETICAL ISSUES**

### **2.1 Concept of Corporate Tax Incentives**

Incentives, such as rebates, subsidies, etcetera, are practicable tools employed by policy makers for encouraging certain investment behaviors within an economy. The objectives are thus: to compensate for perceived deficiencies in the investment environment (Sanni, 2011); to boost domestic investment (Chen & Mintz, 2011); to protect and promote infant industries (UNCTAD, 2000); and to attract types of investment or to change its conduct (Morisset & Pirnia, 2001; Morisset, 2003). In the same vein, since investment is one of the variables that are used for determining ROI (Sabari, 2005); and ROI is widely regarded as an essential measure of company profitability (Rajan, Reichelstein & Soliman, 2006); and as well forms an aspect of the first criteria for evaluating performance (Teraoui *et al.* 2011), incentives are, to this effect, also expected to cushion the effect of tax burden on corporate firms and eventually improve their financial performance.

To this end, where incentives are tax inclined, the benefits accorded are usually measurable and are often directed at specific enterprises or sectors (Sani, 2010; UNCTAD, 2000). In this respect, the incentives are specifically designed to either increase the rate of return of firms or to reduce or redistribute costs or their risk levels (UNCTAD, 2000).

### **2.2 Approaches to Corporate Tax Incentives**

Three major approaches to tax incentives are recognized in tax literature. These approaches, according to Morisset & Pirnia (2001), and Morisset (2003), are: targeted approach; non-targeted approach and extreme approach. The various approaches are availed by corporate firms both within and across countries. Besides, countries typically pursue growth related reforms using a combination of these approaches (James, 2009).

Under the targeted approach, the famous tax incentive is a reduction in the corporate income tax rate for specific investments or companies in particular sector of the economy. This incentive approach is effectively applied in the form of tax holidays and temporary tax rebates for certain types of investments or establishment. The incentive approach also operates through tax allowances or tax credits which allow fast write- offs of investment expenditures of the targeted firms. According to Morisset (2003), many governments in both developing countries and in the industrial world favour the targeted approach to tax incentives. More specifically, four MENA countries of Jordan, Lebanon, Morocco and Tunisia offer targeted incentives to specific sectors or locations (OECD, 2004). In the year 2000 also, the Indian government retained incentives being exclusively offered to exporters located in export processing zones or qualified as export-oriented units (James, 2009). In the same vein, countries such as Ireland, Singapore and few other governments, have had remarkable success with targeted tax incentives (Morisset & Pirnia, 2001). In Nigeria, most incentives rolled out by successive regimes since 1961 have been on the targeted approach and have been specifically directed at investments, establishments or sectors that the governments want to promote. More importantly, at least the current policy of the government which ensures that incentives are sector based and not granted arbitrarily is instructive in this context (Okauru, 2009).

The non-targeted approach advocates low effective corporate tax rate for all firms, with no regard for sectors or establishments. Only a few countries have adopted this approach, although with much attraction to the international investors. More specifically, small economies such as Hong Kong (China), Lebanon and Mauritius have taken to this incentive option (Morisset, 2003). The non-targeted incentive regime is not too popular in Nigeria, despite its accompanied benefits.

The last of the incentive approaches is the extreme option. Under the extreme approach, government taxes are eliminated for all investors. This incentive approach is practiced in countries that have become tax havens (Morisset, 2003). In adopting the extreme approach, some of these countries tend to suppress all direct income taxes (such as corporate tax) and rely on indirect consumption and employment taxes (such as the VAT and the Pay As You Earn (PAYE) taxes). Certain countries, especially in the Caribbean and Pacific regions have become tax havens through the adoption of the extreme approach to tax incentive (Morisset & Pirnia, 2001).

## **2.3 Variables Employed in the Study**

### **Effective Tax Rate**

Effective Tax Rate (ETR) is a tax incentive variable derivable from the level of tax rate. In other words, the ETR is specifically derivable from the Statutory Tax Rate (STR), which, according to Muhammad (2010), represents the nominal tax fixed by the government, as applicable to all companies registered and operating in Nigeria. Since ETR is based on STR, it is arguably inferred that both tax variables are simultaneously and jointly set by governments (Klemm & Van Parys, 2009). Essentially, the ETRs arrived at are often lower than the STRs (Radian, 1980). For the purpose of this paper, the ETR is calculated by dividing actual tax paid by preceding year earnings before tax. The ETRs have been employed variously in previous studies, such as, Whally (1975); Lucas (1990); Mendoza, Assaf, and Linda (1994); Desai, Foley & Hines (2003); Hyun, Kwack and Lee (2006); World Bank (2008); Djankov, *et al.* (2010); Muhammad (2010); Mulyadi, Soepriyanto and Anwar (2012); Ahiabor & Amoah (2013); and Ekoja and Jim-Suleiman (2014).

### **Tax Savings**

When the ETR arrived at conceivably becomes lower than the STR, the result is tax savings. Studies have employed tax savings differently. For instance,

while Kawor and Kportorgbi (2014)'s study, on one hand, employed tax savings as an incentive variable, Ogundajo and Onakoya (2016)'s, on the other, as tax planning tool. In this paper, Tax savings is employed as an incentive variable and is proxied as the difference between ETR and STR.

### **Debt Tax Shield**

Essentially, the interest payments in respect of all interest bearing obligations (debts) of the firms, whether long or short term, constitute the debt tax shield in this study. Debt Tax Shield has been employed as incentive tool in previous studies (Devereux, Griffith, and Klemm, 2002; Adelegan, 2008; and Djankov, *et al.* 2010). Adelegan (2008), for instance, finds a significant positive relationship between Debt Tax Shield and investment performance.

### **Capital Allowance**

Another important tax incentive variable to be considered, within the ambit of the Nigerian corporate tax system, is capital allowance. Capital allowance is a form of relief granted to companies, and is an incentive instrument linked to the corporate income tax (Morisset & Pirnia, 2001; Zubairu, 2014). According to Morisset and Pirnia (2001), this relief is employed by governments to influence the effective taxes and location decisions of companies, particularly the multinationals. In Nigeria, capital allowance is considered as an allowance granted, in lieu of depreciation, to a taxpayer who has incurred a Qualifying Capital Expenditure (QCE) during a year of assessment for the purpose of a trade or business (see Section 2, CITA, Cap C 21, LFN, 2004).

### **Return on Asset**

Return on Asset (ROA) depicts the extent to which or the effectiveness with which a firm is generating profits from its available assets (Kurfi, 2003). While ROA principally exists as a splinter variable of Return on Investment (ROI), Return on Equity (ROE) constitutes the other. ROI is the rate of return

generated from the firm's investment activities (Abdel-Jalil, 2014).

### **Return on Equity**

Essentially, ROE reveals the actual return to shareholders and measures the effectiveness of its usage by the management (Kurfi, 2003). ROE has been employed as proxy for manufacturing firms' performance in several studies (Beck, *et al.* 2005; Sabari, 2005; Aliu, 2010; Ohaka & Agundu, 2012; Ohaka & Ironkwe, 2014).

### **Liquidity**

Followed closely to ROA and ROE is Liquidity. Liquidity is the term used to depict the extent to which a firm can meet its short term obligations as they fall due (Kurfi, 2003). Generally speaking, liquidity is vital for a going concern, and is considered as one of the key ingredients that makes firms safer institutions, hence, becomes essential in performance measurement.

### **Capital Adequacy**

Corporate firms usually maintain Capital Adequacy ratio as part of capital structure combination (Ibrahim, 2009; Adesina, Nwidobie, & Adesina, 2015). Similarly, although firms are financed mainly through equity and or debt, the two modes differ in substance. According to Zubairu (2014), the difference between equity and debt finances is that while dividend on equity is tax deductible, interest on debt is tax free. Capital Adequacy is proxied in this paper as equity ratio, and is simply measured as equity over total assets.

## **2.4 Theoretical Framework**

This paper owes its theoretical bases to Khaldunian theory and the Tobin's Q. Reasons for their adoption are not farfetched. Fundamentally, while the Khaldunian theory advocates for low tax regime, the Tobin's Q postulates a tax-less world. Both low tax regime and tax-less world are major assumptions



that somewhat constitute the contextual basis upon which this paper was built.

### **3.0 METHODOLOGY**

Essentially, this paper investigates the potentialities of four distinctly related tax variables - Effective Tax Rate, Tax Savings, Debt Tax Shield, and Capital Allowance Ratio, in predicting the re-investment patterns of quoted manufacturing firms in Nigeria. For this purpose, the study adopts analytical research design. Further to that, the paper employs panel data methodology, accompanied with OLS, Fixed Effects and Random Effects. The panel data methodology is adopted because the set of data employed is a combination of both time series and cross-sectional data for the selected firms. Data employed is exclusively secondary, and for a period of ten (10) years from 2006 to 2015. As at 31<sup>st</sup> December, 2015, population of the quoted manufacturing companies in Nigeria is seventy-four (74) in number, as listed on the floor of the Nigeria Stock Exchange (NSE) and published in the NSE Fact book of 2015. Non-probability method was adopted to determine the sample size for the study. On this note, using purposive sampling technique, the sample size of the manufacturing firms is 14. The size is arrived at by employing the following filters:

- a. The firms' financial records are available and accessible for at least five (5) of the years within the study period.
- b. The firms must remain listed on the floor of the NSE up to 31<sup>st</sup> December, 2015.
- c. The manufacturing firms with average paid-up share capital below ₦1billion within the study period are not considered.

To this effect, the selected firms are viz. Ashaka Cement PLC, Cadbury Nigeria PLC, Dangote Cement PLC, Dangote Flour Mills PLC, Dangote Sugar PLC, Dunlop Tyres and Rubber PLC, Honey Well Flour Mills PLC, International Brewries PLC, Lafarge Cement PLC, Multi-Trax Integrated Foods PLC, National Salt Company of Nigeria PLC, Nigerian

Breweries PLC, PZ Cussons Industries Nigeria PLC, and Unilever Nigeria PLC.

### 3.1 Model Specification

The model for this study examines the extent to which the criterion variables – ROA, ROE, Liquidity, and Capital Adequacy (as proxies for performance of the sample firms) are influenced by a set of predictor variables – Effective Tax Rate, Tax Savings, Debt Tax Shield, and Capital Allowance Ratio. The equations developed for the regression model are represented in the below notations:

$$ROA_{it} = \beta_{0it} + \beta_1 ETR_{it} + \beta_2 TXSV_{sit} + \beta_3 DTXSLD_{it} + \beta_4 CAR_{it} + \beta_5 FSIZ_{it} + \beta_6 TANG_{it} + \beta_7 LEV_{it} + u_{it} \text{ ----- (1)}$$

$$ROE_{it} = \beta_{0it} + \beta_1 ETR_{it} + \beta_2 TXSV_{sit} + \beta_3 DTXSLD_{it} + \beta_4 CAR_{it} + \beta_5 FSIZ_{it} + \beta_6 TANG_{it} + \beta_7 LEV_{it} + u_{it} \text{ ----- (2)}$$

$$LQDT_{it} = \beta_{0it} + \beta_1 ETR_{it} + \beta_2 TXSV_{sit} + \beta_3 DTXSLD_{it} + \beta_4 CAR_{it} + \beta_5 FSIZ_{it} + \beta_6 TANG_{it} + \beta_7 LEV_{it} + u_{it} \text{ ----- (3)}$$

$$CADQ_{it} = \beta_{0it} + \beta_1 ETR_{it} + \beta_2 TXSV_{sit} + \beta_3 DTXSLD_{it} + \beta_4 CAR_{it} + \beta_5 FSIZ_{it} + \beta_6 TANG_{it} + \beta_7 LEV_{it} + u_{it} \text{ ----- (4)}$$

Where:

ROA = Return on Asset

ROE = Return on Equity

LQDT = Liquidity

CADQ = Capital Adequacy

$\beta_0$  = Constant /Slope

$\beta_1$ - $\beta_4$ = Coefficient of Independent variables

I = Individual bank (firm)

T = time/period

ETR = Effective Tax Rate

TXSVs = Tax Savings

DTXSLD= Debt Tax Shield

CAR= Capital Allowance Ratio

$\mu$  = Error Term

In addition to the several notable diagnostic analytical tests conducted, Haussmann and Lagrange tests were carried out to choose between Fixed Effect and Random Effect regression models. The data was analyzed using STATA Software, Version 13.

## **4.0 DATA ANALYSIS**

### **Sample Descriptive Statistics**

The table (4.1) below presents the descriptive statistics for all the variables (dependent and independent) employed in the study. This includes the number of observations captured, the average mean, volatility level, the minimum and the maximum values.

<b>Variabl es</b>	<b>Observati on</b>	<b>Mean</b>	<b>Standar d Deviati on</b>	<b>Mi n</b>	<b>Max</b>
ROA	131	0.21834 35	0.37102 73	0	3.379
ROE	131	0.63096 96	2.75083	- 1.0 64	28.97 9
LQDT	131	0.10856 49	0.14194 13	0	1.003
CADQ	131	0.60132 06	0.72051 28	0	6.966
ETR	131	0.14498 47	0.16050 12	- 0.0 2	0.8
TXSVs	131	- 0.08470 99	0.21786 59	- 0.3 3	0.5
DTXSL D	131	0.21783 2	0.44679 46	0	3.13
CAR	131	0.38772 52	0.36344 6	0	2.479
FSIZ	131	7.64461 1	1.67980 55	5.6 88	10.05 5
TANG	131	0.57086 26	0.87099 69	0.1 28	10.22 4
LEV	131	0.65022 14	2.39276 2	0	22.47 3

**Table 4.1 Sample Descriptive Statistics**  
**Source: STATA Regression Results, 2017**

ROA = Return on Asset; ROE = Return on Equity; LQDT = Liquidity; CADQ = Capital Adequacy; ETR = Effective Tax Rate; TXSVs = Tax Savings; DTXSLD = Debt Tax Shield; CAR = Capital Allowance Ratio; FSIZ = Firm Size; TANG = Tangibility; LEV = Leverage.

Table 4.1 above indicates that the dependent variables of ROA, ROE, LQDT, and CADQ have a mean of about 21.83, 63.10, 10.86 and 60.13 percent respectively.

It implies that the itemized variables bear the respective proportions of the companies' total assets or equity as performance within the period. Among this set of variables, ROE records the highest volatility as the standard deviation amounts to 275.083 percent compared to ROA with 37.10 percent, LQDT 14.19 percent and CADQ recording 72.05 percent. ROA, ROE, LQDT and CADQ respectively record maximum values of 337.9 percent, 289.79 percent, 100.3 percent, and 696.9 percent but with 0 as minimum all through; except ROE that records -1.064 percent. The sharp difference between the maximum and minimum values for ROE is manifested in its high standard deviation.

The average ETR for the companies is approximately 14.77 percent of earnings before interest and taxes (EBIT), but it records a high volatility as the standard deviation amounts to 15.01 percent. Comparatively, the Statutory Tax Rate (STR), being a rate fixed by the government, is usually not the same with the ETR. This is because while the STR is applied on the taxable profits ascertained in accordance with relevant statutory provisions, ETR relates actual tax payment to EBIT. On this note, since EBIT would in most cases be higher than taxable profit, ETR and STR would rarely be the same. The TXSVS, being a product of the difference between ETR and STR, records a mean of 0.85 percent and 21.79 percent as the extent of dispersion from the mean. The average DTXSLD of the firms within the period is 14.60 percent with a very high volatility that records an approximately standard deviation of 34.06 percent, a reflection of the maximum value of 313 percent.

The companies' average CAR for the period is approximately 51.79 percent of the total fixed assets, equally with a high volatility as the standard deviation amounts to 40.45 percent. This is also a reflection of the substantial difference between the maximum values recorded for CAR. On the FSIZ, there is no wide variation between the companies in terms of size, as indicated by the standard deviation of 101 percent approximately, and a mean of 783 percent. Within the period, the proportion of tangible asset to total asset (Tang), is approximately 32 percent, indicating that about 68 percent of the companies' total assets

constitute current assets and investment. The firms' average LEV for the period is 62.58 percent approximately, reflecting the proportion the interest yielding debt obligations (liabilities) bear on the total assets of the sample companies. Similarly, there is a manifested high level of volatility of this variable as indicated by the standard deviation of 176 percent approximately. This is due to the wide variation between the maximum and minimum leverage within the period.

#### **4.1 Discussion of Regression Results**

The regression results relating to the determinants of manufacturing firms' performance and their re-investment patterns, are presented in four sub-sections. For each splinter of the variables, the Ordinary least squares, Fixed effects and Random effects were used to estimate the regression models.

The first sub-section covers Return on Asset (ROA) as a dependent variable, thus both tax variables and control variables are together regressed against it to determine their influence on it. The second sub-section exists in a similar arrangement with the first one except that Return on Equity (ROE) is the dependent variable. The third and the fourth sub-sections separately modelled, captured Liquidity (LQDT) and Capital Adequacy (CADQ) respectively, as dependent variables, and they are regressed against the same sets of variables (tax and control variables).

#### 4.1.1 ROA as a Dependent Variable

**Table 4.1 Regression Results -ROA Model (1)**

Variable	Coefficient	Z	Prob. (z)
Constant	0.2745	1.46	0.144
ETR	0.2776	1.96	0.050
TXSVS	-0.1009	-0.85	0.395
DTXSLD	0.0394	0.72	0.473
CAR	-0.0127	-0.25	0.805
FSIZ	-0.0245	-1.04	0.300
TANG	0.0209	0.76	0.450
LEV	-0.0005	-0.05	0.963
R <sup>2</sup> (overall)	0.0597		
Wald Chi <sub>2</sub>	7.02		
Prob > Chi <sub>2</sub>	0.4267		

**Source: STATA Regression Result, 2017**

Table 4.1 presents the regression results relating Return on Asset (ROA) to Effective Tax Rate (ETR), Tax Savings (TXSVS), Debt Tax Shield (DTXSLD), and Capital Allowance Ratio (CAR). The results show that none of the variables, except the ETR, is significant. Similarly, the R<sup>2</sup> (0.0597); and Wald Chi.2 (7.02); both signify that the variables cannot significantly explain the behaviors of the dependent variables. The overall result represented by the Prob. > chi2 (0.4267) signifies that the model is not fit, and that jointly the independent variables cannot predict the dependent variables. Thus, the result provides evidence for the acceptance of **null hypothesis 1** of the paper.

#### 4.1.2 ROE as a Dependent Variable

**Table 4.2 Regression Results- ROE Model (2)**

Variable	Coefficient	T	Prob. > t
Constant	-4.4597	-0.64	0.530
ETR	0.1506	0.48	0.637
TXSVs	-0.4612	-0.58	0.568
DTXSLD	-0.5929	-1.27	0.214
CAR	-0.4704	-0.82	0.420
FSIZ	0.6705	0.72	0.479
TANG	-0.0874	-0.89	0.382
LEV	-0.0057	-0.08	0.941
R <sup>2</sup> (within)	0.0329		
F.	0.42		
Prob > F	0.8809		

**Source: STATA Regression Result, 2017**

Table 4.2 contains Model 2 which relates Return on Equity (ROE) to Effective Tax Rate (ETR), Tax Savings (TXSVs), Debt Tax Shield (DTXSLD) and Capital Allowance Ratio (CAR). The overall result of the ROE indicates that the model is not well fitted, which reveals the absence of a significant predictive influence of corporate tax incentives over ROE of the sample firms. This is predicated on the overall result R<sup>2</sup>, F and the probability >F of 0.0329, 0.42 and 0.8809 respectively. Hence, the results provide evidence for the acceptance of **null hypothesis 2** of the paper.



#### 4.1.3 LQDT as a Dependent Variable

**Table 4.3 Regression Results- LQDT Model (3)**

Variable	Coefficient	Z	Prob.> z
Constant	0.0030	0.04	0.971
ETR	0.1829	2.89	0.004
TXSVS	0.0919	1.75	0.080
DTXSLD	-0.0157	-0.64	0.523
CAR	0.0075	0.33	0.743
FSIZ	0.0115	1.10	0.269
TANG	0.0079	0.64	0.524
LEV	0.0012	0.25	0.799
R <sup>2</sup> (overall)	0.1256		
Wald chi2	24.75		
Prob. > chi2	0.0008		

**Source: STATA Regression Result, 2017**

From Table 4.3 above, the overall result indicates that the model is well fitted, and that the independent variables can jointly and significantly impact on the LQDT model, as given by the Prob.> chi2 (0.0008). Thus, the results provide evidence for the rejection of null **Hypothesis 3** of the paper.

#### 4.1.4 CADQ as a Dependent Variable

**Table 4.4 Regression Results- CADQ Model (4)**

Variable	Coefficient	T	Prob.>t
Constant	-0.7251	-0.86	0.398
ETR	-0.1797	-1.05	0.302
TXSVS	-0.2371	-1.02	0.318
DTXSLD	-0.0461	-0.56	0.579
CAR	0.4121	2.24	0.034
FSIZ	0.1233	1.13	0.267
TANG	-0.1048	-8.10	0.000
LEV	0.0055	-0.41	0.688
R <sup>2</sup> (within)	0.1226		
F.	40.10		
Prob. > F	0.0000		

**Source: STATA Regression Result, 2017**

The overall result of the CADQ model, from Table 4.4, indicates that the model is well fitted, and that the independent variables can jointly and significantly predict the CADQ, as given by the R<sup>2</sup>(0.1226), F- statistics (40.10), and Prob. > F (0.0000). Thus, the results provide evidence for the rejection of null **Hypothesis 4** of the study.

## 5.0 CONCLUSION AND RECOMMENDATIONS

The results have shown the robustness of the four tax variables (ETR, TXSVs, DTXSLD, and CAR) in predicting LQDT and CADQ as performance components. This paper's finding is consistent with the 'Khalidunian' Theory, which built a relationship between tax incentive policy, government revenue/expenditure, and productivity. Essentially, the theory argues for decreasing tax burden on firms and enterprises, with a view to ensuring greater profits, robust performance and re-investment bids by companies and revenue to the government. Further to that, the results provide evidence on the

significant relationship that exist between LQDT, CADQ, and tax incentive variables, in line with the findings of Uwuigbe, *et al.* (2016), and Cohn (2011), which depict the fund/cash flow consequences of corporate taxation on performance of firms. Essentially, Cohn's result, for instance, indicates that companies reduce investment when they pay more from cash or capital as taxes, especially in an imperfect market situation. Contrary result was, however documented for ROA and ROE, which is consistent with Sabari (2005)'s findings.

Certain scenarios are conceivable from the above results. The statutory burden of corporate tax bears more on the firms' liquidity (i.e. cash or bank) and capital than its profit. This may not be unconnected with the fact that first, CIT is on a Preceding Year Basis (PYB), which makes payment of the tax not in the year the profit was earned. Second, the occasioned time lag between the Self-Assessment by the taxpayer and the Additional Assessment administered by the tax authority. Essentially, the Self-Assessment regime of the tax system allows a corporate taxpayer to calculate its tax liability and pay at the designated bank at the moment. Thereafter, the tax office, based on desk or field examination, subjects the taxpayer to additional taxes which must have shifted the tax burden or tax base, thus reducing the funds that might be available for re-investment. By implication, companies tend to reduce their re-investment bids when they pay more as taxes from cash or capital or both, especially in an imperfect market situation.

In the light of the study's findings, it is recommended that:

- i) Having established the incentive effect of corporate tax on the funds available for re-investment within the firm, awareness should be created or increased by the government (via the tax authority) for the quoted corporate firms to avail the advantage of tax incentives for improved performance.
- ii) Corporate taxpayers should file their tax payments on Actual Year Basis (AYB), instead of the existing practice of PYB which delays

payment of taxes and makes the burden on profit to be shifted to cash and capital. In the same vein, the self- assessment by the taxpayer should be done with precision to avoid or reduce the tax liability occasioned by the additional assessment that takes place thereafter. Thus, it will eliminate or reduce the tendency of corporate firms from paying taxes out of funds meant for re-investment.

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# DETERMINANTS OF TAX MORALE AND TAX COMPLIANCE: EVIDENCE FROM NIGERIA

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## **Abstract**

*This study examined the determinants of tax morale in Nigeria. The study adopted cross sectional research survey design as a method of investigation, four (4) private companies in Nigeria formed the basis upon which the sample size was derived for this study. Questionnaire was used as research instrument to elicit responses, a total of four hundred (400) questionnaire was administered out of which three hundred and eighty two was retrieved. Multiple regression was used to analyse the data. The study revealed that trust in government, employment, religion, age have significant relationship with tax morale and tax compliance, while culture and education have insignificant relationship with tax morale and tax compliance in Nigeria. The study recommends understanding the social psychological of a taxpayer would help in ameliorating the issue of tax compliance in Nigeria.*

**Keywords: Avoidance, Compliance, Demographic, Morale, Tax, Evasion**

## **Introduction**

Tax is a compulsory financial charge or some other type of levy imposed on a taxpayer (an individual or legal entity) by a governmental organization in order to fund government spending and various public expenditures (Charles, 2015). Failure to pay liabilities is punishable by law of the country. Taxes consist of direct or indirect taxes and may be paid in money or as its labour equivalent. The first known history of taxation took place in Ancient Egypt around 3000–2800 BC. Today subject of taxation has received considerable intellectual and theoretical attention in accounting several literatures. Taxation is one of the most vital subjects in governance both in developed and developing countries, taxes and other incomes are important source of revenue to the government (Teera & Hudson 2004). But the amount of revenue to be generated by the government from such taxes for its expenditure depends among other things the willingness of the taxpayers to comply with tax laws of the country (Eshag, 1983). Tax is not voluntary but mandatory in as much

one earn income , make profit, gains, sell goods and services, a proportion out of that profit must be paid as tax to the government, to enable government finance its expenditure for economic growth and development , failure to comply with the tax provisions suggests that a taxpayer may be committing an act of noncompliance (Kirchler, 2007).

The ability of a taxpayer to pay his or her tax liability make a tax system a fair and equitable one. Tax non-compliance occurs through failure to file tax return, misreporting income or misreporting allowable subtractions and expenses from taxable income (Soos, 1991). Tax is a powerful tool that have been used by successive government all over the world for the growth and development of the nation., Nigeria as a country is not exceptional, the truth of the matter is that Nigeria has not had efficient and concrete tax administration this was evidence in Nzotta (2007) when he asserted that despite the tax audit and investigation, Nigeria was still trying struggling with the issue of loses from its tax revenue. The then executive chairman Babatunde Fowler of federal board of internal revenue in 2019 asserted that Nigeria has lost over 15 billion to tax evasion .

Tax is a social contract between the citizen and the government of a nation, both are parties expected to be oblige to their responsibility, the citizen are expected to pay their taxes while the government is also expected to utilize these taxes for the welfare and benefits of the citizens. The trust relationship concept between the citizen and the government, shows it is expected that this taxpayers should be utilised for the benefits and purpose of the society, but over the years there have been gap in this contract of both parties are not yielding and living up to their responsibility, this has resulted in low level of tax compliance, tax evasion, tax avoidance. In recent times, cases of low level of tax compliance, tax evasion and tax avoidance has affected the capacity of the government of not been able to raise adequate revenue to finance its economic activities rather government had resorted to external borrowing for finances, recently Nigeria debt management office (DMO) revealed that the country debt has hit thirty-one (31) trillion naira , it was also revealed that Nigeria government has used 1.1 trillion naira to service debt in the second quarter of 2020, a country blessed with enormous resources. Mismanagement of public funds, corruption orchestrated by the country public officers has caused the country backwardness. Transparency international corruption perception index 2019 published in January 2020, rated Nigeria at 146 out of 180 countries that was surveyed with a perceived level of corruption in public sectors (corruption perception index, 2019)

In this regard a great amount of attention have been drawn on the part the government to enhance accountability and transparency and to deviate from the norms of using economic model as a benchmark for explaining the concept of tax compliance in the society as this hasn't yielded any positive result in terms of tax revenue drive. Tax evasion is a common phenomenon especially this part of sub-Saharan Africa like Nigeria ( Modugu, Eriabge, Izedomni 2012). This study is sacrosanct looking beyond the idea of using economic model to explain the concept of tax compliance in the society, this concept was

first advocated by Allingham and Sandmo (1972), Allingham and Sandmo (1972) work was an extended work of Becker model (1962) they specified that deterrence measures are the key factors to increasing tax compliance, because tax evasion is negatively correlated with audit probability, tax rate, fines, punishment and penalties.

Observing the issue of tax compliance registered around the world, many researchers have rarely linked using non economic factor to explain the issue of tax compliance. This studies have singled out tax morale as a concept in understanding the nature of tax compliance in the society, hence understanding the determinants of tax morale would help in reducing the issue of tax evasion , tax avoidance , low level of tax compliance and ensure adequate tax compliance in the society.

### **Statement of Problem**

The issue of tax evasion, tax avoidance, low level of tax compliance over the years have been a major problem for the Nigerian government and the relevant tax authorities of not been able to generate adequate revenue to finance its economic activities, rather the government on a daily basis had resorted to external borrowings for finances. So finding the determinants of tax morale by understanding the social psychological of a taxpayer using social demographic factors would help in explaining an alternative concept to the idea of the economic model concept that have dominated the concept of tax compliance for years. There have been numerous empirical studies published that have continued to encourage or uphold the idea of economic model concept in explaining the nature of tax compliance behaviour and yet no positive result have been achieved. James; Zaimah and kamil (2011) examined the role of financial condition and risk preference as an important variables in determining the nature tax compliance behaviour, they felt understanding the financial condition and risk preference of a taxpayer would help explain better the idea of tax compliance in the society. Kennedy; Modugu and Anyaduba ( 2014) examined the impact of tax audit and other qualitative attributes on the tax compliance level in Nigeria. Their result shows that there exists a positive relationship between tax audit and tax compliance. This study intend to analyse in detail the determinants of tax morale which has rarely been studied to best of my knowledge as a topic anywhere, this study intend to rectify the gap in knowledge and to further contribute to the frontier of knowledge.

### **Objectives of the Study**

The main objective of this study is to determine the determinants of tax morale. The specific objectives are to:

- find if trust in government has any impact on tax morale,
- investigate if culture has any impact on tax morale,
- examine if age plays a significant role on tax morale,
- investigate if religion has any effect on tax morale.,

determine if level of education affect tax morale, and find if nature of employment has any impact on tax morale.

### **Research Questions**

The following questions are drawn to provide understanding on the determinants of tax morale in Nigeria:

Does trust in government have any relationship with tax morale?

What is the effect of culture on tax morale?

Does age have any significant effect on tax morale?

Does religion affect the level of tax morale?

Does the level of education have any impact on tax morale?

Does nature of employment have any significant impact on tax morale?

### **Hypotheses**

The hypotheses on which this research study is based are stated in null form as follows:  
Ho:

Trust in government does not have significant relationship with tax morale,

Culture of the people does not have significant relationship with tax morale,

Age does not have significant relationship with tax morale ,

Religious belief of the people does not affect the level of tax morale,

Level of education does not have significant relationship with tax morale, and

Nature of employment does not have any significant effect on tax morale.

### **Literature Review**

#### **Conceptual Review of Tax Morale**

This chapter present a review of extant literatures on the study as well identifying the dependent variables and independent variables that make up the study. This chapter expatiates on the concept of tax morale, determinants of tax morale, prior empirical studies as well as the theoretical framework of the study as it relates to determinants of tax morale. In this study the Independent variables represent inputs or causes, thus, potential reasons for variation of the dependent variable. As the issue of tax compliance is becoming rampart understanding the determinants of tax morale become necessary in helping to understand nnnthe issue of tax evasion, tax avoidance in the society. According to Ajzen (1975) and Kirchler (2008) suggest that some taxpayer see tax evasion as ethical because they seems to be benefiting from the system and they seems less compliant, why some taxpayers sees tax evasion unethical and complain more.

Finding the determinants, the motivational factors, the drives, the value as to why taxpayers would want to pay their taxes voluntarily without coercion is very paramount to this study. The enforcement strategies and policies as advocated by Alligham and Sandmo

which is been adopted by our contemporary tax administrators and most accounting literatures as a way of ensuring tax compliance is gradually giving way for other areas to be explored in order to ensure adequate compliance in the society for the realisation of economic goals and objectives. Tax morale have been singled out by this studies as a major concept that can lead to high level of tax compliance in the society.

The primary purpose of taxation is to bring about economic growth and development rather than the citizens seeing it as a pecuniary burden that can lead to discouragement of investment. Modern approaches and researches are beginning to identify other areas as a way of ensuring adequate tax compliance in the society rather than sticking to the economic model or traditional model of tax compliance behaviour concept that have dominated the nature and concept of tax compliance for years now, the model seek to explain that taxpayer are rational being who always want to maximises his or her expected utility and in order to discourage this act, sanction must be meted on those taxpayer who tries to defaults from obliging to their tax responsibilities. One of the bordering question over the years that have continued to trail on debate, is that, why do some people pay their taxes and some other do not want to pay. Exploring the role of tax morale as a major determinant of tax compliance is a major stride in the right direction towards ensuring adequate compliance to tax laws and its policies (Alm; McClelland & Schulze 1992)

### **Concept of Tax morale**

The term “tax morale” was first coined by Schmolders back in 1960 who defined it as “the attitude of a group or the whole population of taxpayers regarding the question of accomplishment or neglect of their tax duties; it is anchored on citizens tax mentality and in their consciousness of being a citizens, which is the base of their inner acceptance of tax duties and acknowledgement of the sovereignty of the state (Schmolders 1960). Despite the definition given by Schmolders, tax morale is still a debated notion with different meanings.

Torgler and Schneider (2006) defined tax morale as the “moral obligation” or an “intrinsic motivation” to pay tax. Torgler (2002) and Frey (2003) stressed its relevance to understand the high observed level of tax compliance in the society. Luttmer and Singhal (2014) provide a survey and summarize the role of non-pecuniary motives and intrinsic motivations on actual compliance in detail. Dwenger (2016) use the term intrinsic motivations for tax compliance while some other papers use tax ethics or tax honesty to describe what we label tax morale.

Tax morale encompasses an umbrella term capturing non pecuniary motivations, non economic motive for tax compliance as well as factors that fall outside the standard of expected utility framework. It is now widely acknowledged that the decision to evade taxes is not only driven by extrinsic pecuniary factors such as economic gains, but also by intrinsic non-pecuniary motives. Following Luttmer and Singhal (2014), describe the term

tax morale as an umbrella term for such intrinsic tax-compliance motives. For example, individuals may have some intrinsic motivation to pay taxes or feel guilt or shame for failure to comply.

Researchers like Frey and Feld (2002); Feld and Tyran (2002) have attributed the response of voluntary compliance to a set of intrinsic motivation or attitude often referred to as tax morale. Tax morale emphasizes taxpayers' internal motivation, a large part of existing literature recognizes social interaction variables as determinants of tax morale. Besley, Jensen and Persson (2015), and Bénabou and Tirole (2011) showed for example, that the intrinsic motivation of taxpayers to pay their taxes is affected by social norms.

Preliminary research was conducted during the 1960s by the Cologne School of Psychology, they tried to narrow the bridge between economics and social psychology of tax compliance by emphasizing that tax compliance should not only be analyzed from the traditional neoclassical point of view, but also from social psychology perspective. They saw tax morale as a major determining factor that could lead to high level of tax compliance, this early work foreshadowed the emerging importance of behavioural economics as a concept in understanding individual and group behaviour, and it is reflected in a range of related approaches, which is rooted in the psychology of taxation (Lewis, 1982 & Kirchler, 2007).

For several years the economic model used as a benchmark for understanding tax evasion has been advocated by Allingham and Sandmo (1972) model emphasized that self-interested taxpayers choose how much income to report to the tax authority by trading off the benefits of tax evasion against the costs (the possibility of being caught and punished), in this model, the key policy parameters affecting tax evasion are the tax rate, the detection probability, penalties and fines imposed.

Low level of tax compliance is still being observed even as with the economic model is still being advocated by orthodox researchers and policy makers, tax authorities. Researchers are now beginning to find out why pecuniary measures are not being yielding as much as expected, searching for alternative means of ensuring adequate tax compliance and reducing tax evasion outside economic model is now becoming an indispensable phenomena in the hands of the researchers, tax authorities, policy makers. Allingham and Sandmo (in Alm, 1992) were also the first to recognize that the model did not capture all motivations for tax compliance, in writing, this is a very simple theory, and it may perhaps be criticized for giving too little attention to non pecuniary factors in the taxpayer's decision on whether or not to evade taxes. Many scholars, therefore, concluded that the explanation for the tendency to comply should not only be based on explanation from economic perspective alone but also from social psychological perspective using social demographic factors.

## **Determinants of Tax Morale**

### **Trust in government**

When a taxpayer perceived that the system corrupt and there is an inefficiencies in the distribution of wealth and resources of the nation, lack of provision of social amenities, the taxpayers may tend to act more reluctantly in paying their taxes, and this can consequently lead to lack of trust on the part of the government in place for their inefficient use of the nation resources for the benefits of the citizens, for example trust in government can lead to high level of tax morale in other word leading to adequate tax compliance in the society, once the citizen trust the government in place they are willing to support the government by paying their taxes regularly. A government that seems to be making good use of tax revenue collected, providing social amenities, infrastructure ,good roads , electricity etc will enjoy the support of its people in all ramification. Tax morale decreases when people believes that taxpayers money is not judiciously been spent, a notion supported by survey research, for example, Slemrod (2003) , Freys and Torgler (2007) find significant a positive effects of different trust in state variables on tax morale. Using a similar intuition, taxpayers who are proud of their country of residence may well be more willing to pay taxes because their government is doing well, investigating the link between the inefficiency of public spending and tax morale, Barone and Mocetti (2011) report that the attitude towards paying taxes (i.e., tax morale) improves when public resources are spent more efficiently.

### **Religion**

Studies show that those who claim faith or religious identity have more positive attitudes towards paying taxes, because they believe so much that, it is a sin to their religion to evade tax. Empirical research on crime behaviour by Hull (2000) reveals that delinquent behaviour and religious beliefs are negatively correlated. Torgler (2006) conducted an extensive investigation on this relationship and finds a strong causal relationship between different variables capturing religiosity and tax morale. The results are confirmed by Konrad and Qari (2009) for European countries and Torgler (2005) for Latin America. Religion is a belief and worship of a supernatural being ,it is belief that there supernatural being that demand moral uprightness in everything one do. People who sees more religious in nature would always want to live a moral life, thereby seeing tax evasion has unethical phenomena against their religion and doctrine, in other words people who seems more religious are always conscious and wanting to obey the norms of the society by paying their taxes, while those who are not religious sometimes may seen neutral. From the research conducted so far, it has proven that religion is one of major determinant of tax morale.

**Education** : Another determining factor of tax morale is education, which research have shown that, educated people tend to know better what the state provides and how it spends



collected tax revenues, hence, tax morale amongst the educated is higher than the uneducated. Education plays an important role in ensuring that taxpayers comply with their tax liability by creating that sense of awareness of the benefit of taxation to the society. Educated individuals have more positive thinking in terms of tax rationality than uneducated individual, thereby creating room for adequate tax compliance (OECD 2013).

**Age :** Studies have shown that elderly people are more conscious and more civil in their attitude when it comes to social responsibility as a citizen. Older people seem more justified in the area of tax compliance than the younger ones, they seem more acquainted with the social and economic sanction of not paying their taxes on a regular basis. Tittle (1980), for example, provides reasons for this, by arguing that old people are more experienced and thus more sensitive to social sanctions. The awareness of these social and economic sanctions, most times elderly ones are compelled to be up and doing in their social responsibilities than the young. In the same vein the younger ones who want to achieve life by all means would always want to look for slight opportunities and loopholes to evade taxes in some cases. There is no doubt that age is one important determinant of tax morale, as it symbolises maturity and experience.

**Employment:** Part-time workers and the self-employed have lower tax morale than full-time employees. Full-time employees are more likely to have income tax deducted by their employer and this somehow has influence on their tax morale. When it comes to the occupational status, almost all findings indicate that the self-employed have lower tax morale than other full time occupational groups (Alm; Torgler 2006, Frey & Torgler 2007). Theoretical explanations are very intuitive, taxes are more visible to the self-employed and there are more opportunities to evade tax by self-employed than compared to the employed.

### **Culture**

Culture refers to broad social norms that persist over long periods of time and across generations. Such persistence is one of the primary characteristics that distinguishes culture from contemporaneous peer effects, though the two are obviously related. In many advanced countries, it is the culture of most countries for examples like the United Kingdom citizens who see tax as part of their culture, this tends to motivate the level of tax morale they have towards paying their taxes. So the morale is always there to pay taxes, culture has way of influencing or improving the level of tax morale and tax compliance as it is seen as a tradition or way of life of the people and this affects the behaviour of the people (Torgler & Schneider 2007).

### **Theoretical framework**

**Social psychology theory :** In the field of psychology, social psychology is the scientific study of how the thoughts, feelings, and behaviours of individuals are influenced by the actual, imagined, and implied presence of others (Allport, 1985). The

terms thoughts, feelings, and behaviours refer to the psychological variables that can be measured in humans. Moreover, the notion that the presence of others may be imagined or implied suggests that humans are malleable to social influences even when alone, Social psychologists typically explain human behaviour as a result of the relation between mental state and social situation, it study the factors conditions under which certain behaviour, actions, and feelings occur. Traditionally, the emergence of this discipline bridged the gap between psychology and sociology. During the years immediately following World War II, there was frequent collaboration between psychologists and sociologists (Sewell,1989). In tax related context it look at the mental state of the taxpayers, the feelings , the thought, imagination towards a sovereign authority and its tax system. It provide in details how a taxpayer feel , think about the government , it tax system and fiscal activities. it is a combination of psychology and sociology discipline to help explain the concept of tax morale in the society in contrast to economic concept of tax compliance. It seek to provide explanations as to why taxpayer behave the way do in response to payment of tax, it bridge the ideology of the economics in line with the concept of social psychology of a taxpayer.

### **Methodology**

This study used cross-sectional research survey design. It is a process whereby data are collected from a particular point in time through the use of a questionnaires. Under this research design, data related to the variables are collected at about the same time basically describing the relationship between the variables under study. The study made use of primary data, collected through standardized questionnaire administered to the respondents.

In view of the researcher's inability to reach out to the entire population, and in order to gain the advantage of an in-depth study and effective coverage, samples were drawn using simple random sampling techniques from the four organizations. The four organizations are: Nigeria Breweries, Guinness Nigeria plc, Coca cola, 7up Bottling company, Taro Yamane formula ( $n = 1 + N/i + N(e)^2$ ) was used in determining the sample size which gave rise to  $n = 400$ , using a population of approximately 180,000,000 Nigerians (National population commission 2018), with an error limit of 5%, a sample size of 400 is considered adequate as computed above.

The dependent variable in this study is represented by tax morale while the independent variables are represented by trust in government , age, religion, culture, education and nature of employment. Multiple regression analysis was conducted to assess the relative predictive power of the independent variables on the dependent variable.

The Regression Model:

$$TMOR = \beta_0 + \beta_1TIG + \beta_2EDU + \beta_3CUL + \beta_4REL + \beta_5AGE + \beta_6EMP + ut$$

Where:

TMOR = Tax Morale  
 TIG = TRUST IN GOVERNMENT  
 REL= RELIGION OF THE PEOPLE  
 EDU= LEVEL OF EDUCATION  
 AGE = AGE GROUP  
 CUL = CULTURE OF THE PEOPLE  
 EMP = NATURE OF EMPLOYMENT  
 ut = Is the error term  
 aprior expectation :  $\beta_1 - \beta_6 > 0$

## DATA PRESENTATION AND ANALYSIS OF RESULTS

TABLE 1

Result Presentation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.716247	0.559334	3.068375	0.0025
TIG	0.199	0.4100	4.849	0.000
EDU	0.025611	0.012317	2.079340	0.0597
CUL	126501.3	213899.1	0.591407	0.5652
REL	13395373	5999331.	2.232811	0.0454
AGE	3051399.	1372685.	2.222942	0.0462
EMP	-16.61110	-16.61110	-2.498989	0.0280
R-squared	0.673638	Mean dependent var		2.336396
Adjusted R-squared	0.639126	S.D. dependent var		0.253620
S.E. of regression	0.248609	Akaike info criterion		0.084113
Sum squared resid	11.80504	Schwarz criterion		0.184109
Log likelihood	-2.285150	F-statistic		2.596185
Durbin-Watson stat	1.895293	Prob(F-statistic)		0.026818

Source researchers computation 2020

With the coefficient of the constant of 1.716247, it implies that when the independent variables bg

Education, culture, religion, age and nature of employment are held constant, the tax morale of Nigerians (TMOR) will be at a minimum level of 1.716247.

The coefficient of trust in government (TIG) shows a positive value of 0.199, implying that one unit positive improvement in trust in government in Nigeria will bring about positive increase in tax morale of Nigerians by 0.199 units and significant

The coefficient of education (EDU) shows a positive value of 0.026, implying that one unit positive improvement in education in Nigeria will bring about positive increase in tax morale of Nigerians by 0.026 units and insignificant

Culture of the people (CUL) shows a positive value of 126501.3, implying that one unit improvement in Culture of the people towards paying tax in Nigeria will bring about positive tax morale among Nigerians by 126501.3 and insignificant

The coefficient of religion (REL), shows a positive value of 13395373, implying that one unit improvement in religion will bring about a positive tax morale by 13395373 and significant

The coefficient of Age (AGE), shows a positive value of 3051399, implying that one unit change in Age in Nigeria will bring about a positive tax morale by 3051399 units and significant in Nigeria.

The coefficient of nature of employment (EMP) shows a negative value of 16.611, implying that one unit positive improvement in employment to public sector in Nigeria will bring about decrease in tax morale of Nigerians by 16.611 units and significant in Nigeria. Using the rule of thumb, which specifies that if the value of Durbin Watson (DW) is “2” it means that there is no positive autocorrelation in the residuals. This means that the model is not bias. With the DW statistic of ‘1.90’, approximately ‘2’, means that the equation has no autocorrelation, which means that equation is not biased.

## **Conclusion and Recommendations**

‘From the study, the following were found as determinants of tax morale and good instruments to measure tax morale in Nigeria, they are: trust in government (TIG), age (AGE), religion (REL), nature of employment (EMP), show a significant relationship to tax morale while education (EDU), culture (CUL) variables shows insignificant relationship with tax morale.

The essence of paying tax is to enable the government raise adequate revenue to finance its economic activities, provide essentials services, infrastructures etc, but the question that often arises and been asked over time, is that why do some people like to pay their taxes voluntarily without coercion and some do not like to pay. Over the years the methods, strategies and models the relevant tax authorities have been adopting in dealing with the issue of tax compliance in Nigeria hasn’t really yielded much as expected in terms of tax achievement, hence this has created gap in Nigeria tax system with the persistence of tax evasion, tax avoidance. The study concludes that the economic model that have formed the benchmark for understanding the concept of tax compliance behaviour for over forty (40) years now have not yielded any positive results in tax related matters. Understanding the social psychology perspective of a taxpayer by looking at social demographic factors would help in ameliorating the issue of tax compliance in the society, strengthen government commitment towards economic development and ensure a better society.

The study therefore recommend base on the findings from the studies:

The government should ensure transparency and accountability in utilisation of taxpayers money,

The government should ensure better tax policy formulation and modernise tax administration procedures, as this would help reducing the issue of corrupt practises and improve the taxpayer ideology,

The taxpayers should try as much as possible to see the immediate society as their own by paying their taxes voluntarily without coercion,

The government is no doubt the sole administrator of taxes, they should ensure, they judiciously utilise generated tax revenue for the benefits of its people, so that the citizen can have more confidence in them and support their administration,

The tax authorities should try as much as possible to sought for cooperation between them and the taxpayers as this can reduce the cost of tax administration.

Solely relying on economic model to determine tax compliance matters should be limited in nature as it possess some element of threat and deterrence, understanding the social psychology of a taxpayers by looking at their social demographic factors will help in ameliorate the issue of tax compliance in the Nigeria, and

Human being are rational being and difficult to deal with in reality, the traditional neoclassic economic model that stresses deterrence factors, tax audit, reward, penalties and fines should not completely be eroded because tax compliance needs some element of enforcement, the economic model should be complemented with the idea of social psychological perspective for adequate tax compliance.

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# ANALYSIS OF THE IMPACT OF FISCAL POLICY ON ECONOMIC GROWTH IN NIGERIA: 1985-2019

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## Abstract

*This paper examined the impact of some selected fiscal policy variables on Nigeria's economic growth covering the period of 40 years from 1985 to 2019 utilizing ordinary least square regression method. The findings reveal the following econometric effects on GDP as a measure of economic growth: federal government expenditure on economic services has positive and significant effect; expenditure on general administration has positive but insignificant effect; rates of inflation have negative but significant effect. In order to boost GDP and overall performance of the economy the paper recommends the need for the federal government to tilt the level of annual budgetary allocation in favor of economic services; productive government expenditure in conjunction with private sector investment plans should always outweigh expenditure on consumption and luxury items; and effective control of the rate of inflation should be part and parcel of federal government's medium and long term expenditure frameworks.*

**Keywords:** Government expenditure; Inflation; GDP; Economic growth

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## INTRODUCTION

The federal government in Nigeria has since the return of democratic system of governance in 1999 initiated divergent fiscal and many other macroeconomic policies with the aim of propelling economic growth and development of the nation. The fiscal policy options entailed planned expansion of government's sources of income and control of expenditure directed at achieving the desired government's short term and long term macroeconomic objectives. The efficacy of fiscal policy options as important macroeconomic instruments

for the realization of sustainable economic growth has been highlighted in the works of Jhingan (2008), Gbosi (2008), Philips (1997), Tombofa (1999), Agiobenebo (2003), and Brennan and Buchana (1980).

As a concept, fiscal policy provides the process by which the three tiers of government (federal, state and local) try to improve their Internally Generated Revenue (IGR) and simultaneously adjust their level of expenditure as encapsulated in their approved annual budgets with the aim of monitoring and influencing the performance of the economy. So in combination with the Central Bank of Nigeria (CBN's) monetary policies, which influence the pattern and level of monetary supply at any given point in time, fiscal decisions provide the surest way of enabling especially the federal government to implement the macroeconomic frameworks set out in the national budgets. These frameworks or objectives include improvement in the rate of employment, as well as realization of price stability, reduction of the level of poverty and attainment of sustainable economic growth (Odewunmi *et al*, 2012).

In the case of Nigeria, its potential for enhanced economic growth has been dwarfed as a result of a series of fiscal policy summersaults. This has led to rising level of inflation, currently put by the National Bureau of Statistics (2020) at 13.22%; high level of unemployment at 33.5%; combined level of unemployment and underemployment at 55.7%; and whopping figure of national debt burden at 33 trillion naira. The country is presently heading into another round of economic recession as a result of sharp decline in revenue earnings and uncontrolled management of expenditure largely exacerbated by the global covid-19 pandemic and weak fiscal policies. Overall, a lot of authors have tried to analyze many of the issues related to the nation's weak fiscal policies. These include rising level of inflation and decline in real income (Agu *et al*, 2014); corruption and mismanagement of public funds (Okemini and Uranta 2008; and Gbosi 2008); and lack of harmonization and coordination of fiscal policies (Onoh 2007, Anyanwu 2011, Amadi and Essi 2006, and Essi *et al*, 2011). This paper aims to determine the extent to which Nigeria's fiscal policy has impacted on the economy over the period 1980 to 2019.

## LITERATURE REVIEW

There is significant number of studies on the impact of fiscal policy on Nigerian economic growth. Most of these studies, including Oseni and Onakoya (2012); Sikiru and umaru (2011); Ubesie and Edeg (2016); Agu *et al* (2014); Peter and simeon (2011); Onuorah and Akujuobu (2012); and Onyemaechi (2014) have investigated the impact of fiscal policy on economic growth in Nigeria using regression analysis; Jonhansen co-integration and ordinary least square techniques.

The study by Oseni and Onakoya (2012) examined the fiscal policy options that contributed to economic growth in Nigeria using annual time-series data for the period of 1981 to 2010. Their results revealed a positive and significant relationship between sound fiscal policy and economic growth in the long run. In their study, Sikiru and umaru (2011), covering the period 1977 to 2009 and using Engle-Granger approach have established that productive expenditure, rather than fiscal decisions rooted in consumption covered by disproportionate recurrent spending, has positively impacted on economic growth during the period under review. The study by Peter and Simeon (2011) investigated the impact of fiscal policy variables on Nigeria's economic growth using annual time series data between 1970 and 2009 and adopted the arcane method of Vector Auto Regression (VAR) and error correction mechanism techniques. Their result has indicated that there is long-run equilibrium relationship between economic growth and fiscal policy variables. Ubesie (2016) examined the effect of fiscal policy on economic growth in Nigeria between the periods 1985 to 2015 utilizing Ordinary Least Square (OLS) regression and found that total government expenditure is significantly and positively related to government revenue, with expenditures climaxing faster than revenue. However, investment expenditures were found to be much lower than recurrent expenditures providing evidence that explains the weak growth of the country's economy. Other notable empirical works in the literature that have investigated the impact of fiscal policy on Nigeria's economic growth are: Agu *et al* (2014) who have found that total government expenditure between 1961 and 2010 have tended to increase with increase in revenue even though the increase in expenditure was far in excess to what was earned thereby slowing the rate of growth of the economy; Onuorah and

Akujuobu (2012) in their work have found that there is no statistical significance between public expenditure variables and the economic growth in Nigeria; Onyemaechi (2014) in his work covering the period 1980 to 2005 has found that there is a positive relationship between federal expenditures on economic services on the growth of the Nigerian economy. On the other hand he found negative relationship between government expenditures on administration and social and community services and economic growth over the period under review. This paper tried to extend the efforts of these authors by adding the rate of inflation and GDP among the variables that were used in analyzing the impact of fiscal policy on economic growth.

## METHODOLOGY

The relationship between econometric analysis of the impact of fiscal policy on economic growth in Nigeria is examined in this work using the Augmented Dickey–Fuller (ADF) and Phillips–Perron (PP) tests and annual time series data for the period of 40 years from 1980-2019. The data was obtained from the 2019 online data base of World Development Indicators (2019) and the Central Bank of Nigeria statistical bulletin (2019). The study tried to ascertain the relationship between economic growth and two broad components of government expenditure. These are expenditure on economic services (covering expenditure on agriculture, health, transport and communication) and administration (covering capital and recurrent expenditure). The results of the unit root tests show that all the variables are stationary at first difference which indicates that all the series are integrated at the same order of  $I(1)$ .

### *Model Specification*

To measure the relationship between GDP and the other explanatory variables we adopted a generic regression equation specified in the following econometrics form:

$$Y_t = f(GE_t, ADM_t, INF_t) + \varepsilon_t \dots \dots \dots (1)$$

Expressing the relation in linear form using the variables in natural log in order to minimize the scale effect of numbers from equation (1), we arrived at the following equation:

$$\ln Y_t = \beta_0 + \beta_1 \ln GE_t + \beta_2 \ln ADM_t + \beta_3 \ln INF_t + \varepsilon_t \dots \dots \dots (2)$$

Where:  $\ln Y_t$  = log of GDP

$\ln GE_t$  = log of federal government expenditure on economic services

$\ln ADM_t$  = log of General Administration Expenditure on recurrent expenses

$\ln INF_t$  = log of Rate of Inflation

## RESULT AND DISCUSSION

**OLS Results Estimation of**  $\ln Y_t = \beta_0 + \beta_1 \ln GE_t + \beta_2 \ln ADM_t + \beta_3 \ln INF_t + \varepsilon_t$

Dependent Variable: RGDP

Variable	Coefficient	Std. Error	t-Statistics	Prob.
LnFGE	0.228	0.036	6.345	0.000***
LnADM	0.023	0.017	1.395	0.172
LnINF	-0.008	0.024	-0.321	0.750
C	7.205	0.081	88.534	0.000
R-squared	0.723	Mean dependent var		7.172
Adjusted R-squared	0.700	S.D dependent var		0.240
S.E of regression	0.131	Akaike info criterion		-1.129
Sum squared resid	0.620	Schwarz criterion		-0.961
Log likelihood	26.589	F-statistic		31.392
Durbin-watson stat	0.677	Prob(F-statistic)		0.000

**Note:** \*Significant at 10% level. \*\* Significant at 5% level. \*\*\*Significant at 1% level.

**Source:** Authors' Computation, 2020

From the table above, the result indicates that the ratio of federal expenditure both on economic and administrative services has positive relationship on economic growth in Nigeria at 1% significance level. While expenditure on administration, though positive, it does not have a significant effect on economic growth. Also the result indicates that, though negative, the rate of inflation has significant effect on economic growth. Overall the regression result shows that the model estimates are generally robust except for the lower value Durbin-Watson. The computed  $R^2$  with the coefficient values of 0.723 implies that 72% of the total variation in the GDP is explained by the regressors; the remaining 27% are accorded factors exogenous to the model but covered by the error term; Also, the overall model is statistically significant at 5% confidence level as shown by the F-statistics

calculated of 31.392. The adjusted  $R^2$  is low and the Durbin-Watson value computed of 0.677 is far from the value 2; hence, depicting the presence of serial autocorrelation. The results confirmed that of (Agu *et al* 2014; Ubesie (2016); and Oseni and Onakoya (2012).

## CONCLUSION AND POLICY RECOMMENDATIONS

The findings of this work have revealed that fiscal policy has direct positive and significant impact on the growth of the Nigerian economy over the period 1980 to 2019. In other words, the study has confirmed a significant long term relationship between economic growth and government expenditure on economic/administrative services. It has also confirmed significant relationship between economic growth and rate of inflation. This indicates that effective fiscal policy framework is essential in aiding government's efforts to boost the economy of the country represented by higher levels of GDP and lower level of rate of inflation. Following from this conclusion, the following recommendations are proffered to aid policy and decision making: i) there is need for the federal government to tilt the level of annual budgetary allocation in favor of economic services far higher than the current situation where over 50% of budget allocations are made in favor of recurrent expenditure, which is heavily dominated by the demands of salary payments and related administrative expenses; ii) productive government expenditure in conjunction with private sector investment plans should always outweigh expenditure on consumption and luxury items; iii) effective control of the rate of inflation should be part and parcel of federal government's medium and long term expenditure frameworks. To achieve this target, the government will require the support of members of parliament to support its medium and long term fiscal policy decisions.

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# **APPLICABILITY OF FORENSIC ACCOUNTING AND FINANCIAL MISCONDUCTS: EVIDENCE FROM NORTHWESTERN STATES, NIGERIA.**

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## **ABSTRACT**

*This study examines the applicability of forensic accounting to determine whether the application of forensic accounting could assist in prevention and detection of financial misconducts in North Western states Nigeria. The study is conceptual. It was discovered that the increase of financial misconducts have affected the growth and development of many states in Nigeria and there is need for the application of forensic accounting to uncover fraud and other financial misconducts. The paper therefore recommends the application of forensic accounting at the North western States of Nigeria for detection and prevention of financial misconducts.*

**Keywords:** *forensic accounting, financial misconducts*

## **Introduction**

The growing level of fraud in Nigerian public sector particularly at the state government's level trigger the need of forensic accounting to detect and prevent frauds. There has been increase in financial fraud in Nigerian private and public sector involving all categories of people. From the politicians to the bank directors/executives, from the legal officers to the law enforcement personnel, from the civil servants to the school teacher, from the trader in the market to the hawkers on the street, the tendency for fraud and other financial misconducts is endless (Mukoro, Yamusa & Faboyede, 2013). This has increased the need for forensic accounting services to detect and prevent the continuous perpetuation of fraud. The detection and prevention of fraud may be effectively achieved with adequate application of forensic accounting. Forensic accounting have been described by Association of Certified Fraud Examiners ACFE, (2010) as the use of professional accounting skills in matters involving potential or actual civil or criminal litigation, including, but not limited to, generally acceptable accounting and audit principles; the determination of lost profits, income, assets, or damages; evaluation of internal controls; fraud; and any other matter involving accounting expertise in the legal system. Forensic accounting also called investigative accounting involves the application of accounting concepts and auditing techniques in resolving legal matters. Currently, forensic accountants or investigators have been engaged in detecting frauds in different financial

crimes. Krstic (2009) suggest the forensic accounting is employed by the management, owner or other users of financial statements to investigate and document financial frauds or inaccurate materially significant financial information in view of the alarming rate of financial fraud. For effective performance of forensic accounting duty (fraud detection and prevention) a solid knowledge and understanding of accounting and auditing, good communication ability and suitable information technology knowledge is needed.

Forensic accounting is a branch of Accounting which is primarily concerned with the systematic application of investigative and analytical skills for the purpose of gathering evidence for resolving complex financial issues which can be tendered before the court of law. Forensic means suitable for use in a court of law. Forensic Accounting is a science that deals with the application of accounting, auditing and investigating procedures to solve legal problems. Forensic Accounting involves gathering information on how fraud or any financial misconduct occurred, where the money or asset ended up, how it got there and who was responsible (Grippio and Ibex, 2003). Forensic Accountants are examiners and interpreters of evidence in legal cases; they offer expert opinion regarding their findings in court of law.

According to Metha and Mathur (2007), forensic accounting focuses on detection and prevention of financial frauds, it also create deterrence as it promote fear in the minds of the wrong doers that there is likelihood to be caught and punished. Razaee (2002) states that, professional forensic accountants react in response to criminal complaints, statements made in civil litigation, and rumor that come to the attention of authorities.

Financial misconduct involves any conduct by an accounting officer or an official of a department that results in material losses through criminal conduct, unauthorized, irregular, fruitless and wasteful expenditure. Thus, the act of corruption, fraud, theft, misappropriation and abuse which have a financial impact can constitute a financial misconduct. Types of financial misconducts according to South African Report of Financial misconducts 2008/2009 includes; financial mismanagement, corruption, fraud, theft, misappropriation and negligence. They are the major concern of developing nations. They are so endemic they are gradually becoming a normal way of life (Kasum,2009). Financial misconducts are unanimously described as detrimental. The impact of the problem are most obvious in developing countries where corrupt and fraudulent practices are rampant (Kasum 2007). And gradually characterised all aspect of life. The generality of the problems transcends public establishment, but affect the private- owned institutions. The magnitude of the problems couple with its indiscriminated escalation have resulted in the establishment of institutions such as the Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices Commission (ICPC) to fight against the problem. In addition, the academic discipline of Forensic Accounting has also emerge to help in the fight against all sort of financial misconducts.

Individual, corporate bodies and the governments of Nigeria take actions using divergent institutions like the police and the law court to detect and prevent financial misconducts. Whatever an investigator wants to do, will not be complete if the extent of which the affected person is affected is not quantified. This and other pecuniary areas are where the service of expert “forensic accountant” are been engaged for very long time worldwide and recently in Nigeria. But the awareness and use of these experts at state government level of northern Nigeria is low (Okoye and Gbegi 2013). Ojaide (2000) argues that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria requiring the visibility of forensic accounting service. This term fraud is defined by Aribaba (2013) as “ the act of deception for the purpose of making unlawful personal gains for oneself and others, thus creating loss for another person”.

Ribadu (2004) argues that the unprecedented level of corrupt practices in Nigeria, in spite of the government precautionary measures to curb them, continuous at an alarming rate due to the involvement of those assigned to check the problem, as officials who are mandated to check those corrupt practices are also part of the system. According to Waziri (2009) “corruption afflicts virtually all parts of the Nigerian society. It has eaten deep into the Nigerian value system” In the same vein Owolabi (2007) explain that in 2004, oil producing countries and public contracting in the oil sector were accused for irregular remittance of revenue, as well as tax evasion practices. He suggested that oil companies could help fight corruption by making public details of payment made to governments and state controlled oil firms.

This research would focus on assessing how Forensic Accounting would enhance prevention and detection of financial misconducts at state government’s level in Nigeria. the study would further determine whether the application of Forensic Accounting techniques could assist in prevention and detection of financial misconducts at states governments’ level.

The long years of military rule in Nigeria, is generally perceived by politicians and social analysts as the main reason for the high level of corruption and fraudulent activities in Nigeria. Kasum (2009) opines that the military regime had almost institutionalized corruption, as General Sani Abacha (1993-1998) was responsible for the missing of an estimated 4-5 Billion U.S Dollars. Similarly, it was alleged that during the military era, agencies established to fight corruption were either too compromising or got deeply involved in corrupt practices. Akumaye (2007) indicates that the repercussion of the corrupt practices in the Nigerian economy is the lost of Direct Foreign Investment which resulted in the economic instability as double digit inflation and poverty rate was high. Also, the issue of insecurity and unemployment were perceived as part of the repercussion of corruption. On the other hand, some scholars Gbegi and Adebisi (2009) opines that the civilian administration had promoted the problem of corruption.

The rate of financial misconducts perpetrated during the third and fourth republic at the three tiers of government in Nigeria eroded the confidence and trust of people on matters relating to transparency and accountability of the governments. Some states could not pay the salaries unless through the bailout from federal government, for instance, Bauchi, Plateau, Kaduna, Katsina, Zangfara, among others. And almost all the states have collected the refund from Paris club.

The federal government released details of Paris Club refund to states as retrieved from <https://www.vanguardngr.com/2017/.../release-paris-club-funds-states/> . Abia received ₦5.715b; Adamawa ₦6.114b; Akwa ibom ₦10b; Anambra ₦6.121b; Bauchi ₦6.877b; Bayelsa ₦10b; Benue ₦6.854b; Borno ₦7.340b; Cross Rivers ₦6.075b; Delta ₦10b; Ebonyi ₦4.505b; Edo ₦6.091b; Ekiti ₦4.772b,836b; Others are Enugu ₦5.361b; Gombe ₦4.172b; Imo ₦7b; Jigawa ₦7.107b; Kaduna ₦7.721b; Kano ₦10b; Katsina ₦8.202b; Kebbi ₦5.977,499,491:45; Kogi ₦6.027,727,595:80; Kwara ₦5.120,644,326:57; Lagos ₦8.371,938,133:11; Nasarawa ₦4.551,049,171:1; Niger ₦7.210,793,154:95; Ogun ₦5.739,374,691:4; Ondo ₦7.003,648,314:28; Osun ₦6.314,106,340:62; Oyo ₦7.901,609,864:25; Plateau ₦5.644,079,055:41; Rivers ₦10b; Sokoto ₦6.441,128,546:76; Taraba ₦5.612,014, 491:52; Yobe ₦5.413,103,116:59; Zangfara ₦5.442,385,594:49; and F C T ₦684,867,500:04. The total is ₦522.74 billion. The balance of ₦1.2 Trillion was also released to some states://www.thisdaylive.com/index.php/2017/12/17. All these are an effort by the present government to remedy the deficiencies of the previous state governments in terms of payment of salaries, pension and gratuities as well as provision of infrastructural facilities to the states.

Most former governors and their aids are involved in some kinds of financial misconducts particularly those from the northwestern zone. According to Isuwa and Olanmi (2018) EFCC reopened 14 former Governors corruption cases. It was gathered that sum of money in the corruption cases of some governors and their families and some influential Nigerians are put at over ₦183 billion. Those involved are former governor of Jigawa, Zangfara, Abia, Borno, Plateau, Gombe, Adamawa, Imo, Rivers, Benue, Enugu, Katsina, Kebbi, among others. This and many others not mentioned indicated high financial misconducts perpetrated at the state level particularly the Northwestern states. The consequence of these misconducts is indicated in the survey carried out by the National Bureau of Statistics on poverty index and ten poorest states in Nigeria 2017 poverty prevalence in which six out of the seven states of the North western geopolitical zone are included.

- 1 Zamfara-----91.9% poverty prevalence
- 2 Yobe -----90.2% poverty prevalence
- 3 Jigawa-----88.4% poverty prevalence
- 4 Bauchi-----86.8% poverty prevalence
- 5 Kebbi-----86.0% poverty prevalence

6	Sokoto-----	85.3%	poverty prevalence
7	Katsina-----	82.2%	poverty prevalence
8	Taraba-----	77.7%	poverty prevalence
9	Gombe-----	76.9%	poverty prevalence
10	Kano-----	76.4%	poverty prevalence

Based on the list, six out of the seven states of the North-West of Nigeria had the highest poverty rate in the country, which were facilitated by the gross act of financial misconduct.. Also Eiya and Otarlol (2013) posit that the print and electronic media is replete with news of charges brought against suspected persons accused of financial misconducts and charged to courts by the anti-graft agencies being dismissed for lack of credible and sufficient evidence. This manifested problem has necessitated the need to conduct study on how the problem can be effectively checked, detected and controlled using more effective mechanism, that will help good prosecution, litigation support and expert witnessing this will lead to recovering of these missing funds that will be used for developmental projects at the state levels

Most previous studies in forensic accounting are conducted in the developed countries with some few in the developing countries even the few conducted in the developing countries are focused in the private sector. Hence, forensic accounting received little attention in the public sector in Nigeria. And the ones conducted in the public sector are focused at the federal ministries and agencies. The few ones conducted at the state level, none was conducted in the Northwestern states. Also they are conducted in single states. Hence this study will be conducted to fill this gap in line with Imam 2013 that suggested further studies to be carried out on smaller scopes such as states ministries and local government councils in Nigeria thereby reducing the area of coverage. Examples of these studies are the study of Mironic, Bolina & alina (2012); Elitas, Emire & Karakoc (2011) in Turkey; Gray (2008) in U. S.A.; Koh, Arokiasamy & Suat (2009), Johnson, Ahmad & Shamsuddin (2014) and Mansoor (2014) in Malaysia; Oyier 2013, Wanjohi 2013, and Kalio & Ngahu (2012) in Kenya; Anomah, Ayebofo & Agyebeng (2014) in Ghana; Azadzadeh (2014) in Iran; Bhasin (2013) in Kazakhstan; Imoniana, Antunes & Farmigoni (2013) in Brazil. Those conducted at the single states in Nigeria includes the study of Ifeanyichukwu (2013) and Asuquo (2013) in Cross Rivers and Okoye & Gbegi (2013) in Kogi state. These factors justified the need to conduct the present study. The study of Imam (2013) titled “Forensic Accounting Model for Fraud Prevention and Detection in Public Sector” was conducted using the population from the office of the Accountant General of the Federation, office of the Auditor General of the Federation, EFCC office Abuja, and ICPC office Abuja, the study suggested further studies to be carried on smaller scopes such as states and local governments or ministries and agencies thereby reducing the area of coverage. This study will be conducted to fill this gap.

## **Research Question**

In view of the above problems identified the following research question is formulated. To what extent does the application of Forensic Accounting techniques assist in the prevention and detection of financial misconducts in the north-western states Nigeria?

## **Objective of the Study**

To determine whether the application of Forensic Accounting techniques could assist in prevention and detection of financial misconducts at the northwestern state Nigeria.

## **LITERATURE REVIEW**

The unrelenting series of embarrassing audit failure, over the years has prompted in paradigm shift in accounting. In the mid-20th Century when the fight for fraud detection was at its height, a few observers like Gray and Mousalli, (2006) predicted that in future there would be acceptance of general responsibility of the auditors to perform tests to detect material defalcation and errors if they exist. These events led to the hiring of fraud detection experts called forensic accountants. Forensic accounting is therefore defined as the practice of rigorous data collection and analysis in the area of litigation support, consulting, expert witnessing and fraud examination (Razae, Crumbley & Elmore, 2006). According to Howard and Sheetz, (2006) Forensic accounting is the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law by an expert.

The fear of fraud is the motivation for hiring the forensic accountant and he is expected to detect fraud where it exists (Grey & Mousalli, 2006:16). Forensic accounting therefore refers to the comprehensive view of fraud investigation and includes the interview process of related parties to a fraud, act of serving as an expert witness, among others. Bhasin, (2007) assert that the primary orientation of forensic accounting is explanatory analysis of phenomenon including discovery of deception, and its effects, introduced into the accounting domain. Degbaro and Olofinsola, (2007) contended that forensic investigation is about the determination and establishment of facts in support of legal cases. This means that the use of forensic techniques to detect and investigate crime and expose all its attending features and identify the culprits, is the main focus of forensic accounting. It involves the application of accounting concepts and techniques to legal problems (Gray 2008).

Forensic accounting is all encompassing as a practical field it includes: accounting fraud, forensic auditing, compliance, due diligence and risk assessment, detection of financial misrepresentation and financial statement fraud (Skousen and Wright, 2008). In the word of Owojori and Asaolu, (2009) forensic accounting is different from the old debit and credit accounting as it provides an accounting analysis that is suitable to the organization which will help resolving the disputes that arise in the organization. It demands reporting, where the accountability of the fraud is established and the report is considered as evidence in the

court of law or in administrative proceeding (Kasum, 2009). Forensic accounting is also defined as a science dealing with the application of accounting facts and concept gathered through auditing methods, techniques and procedures to resolve legal problems which required the integration of investigative, accounting and auditing skills (Arokiasamy and Cristal, 2009; Dhar and Sarkar, 2010).

In the view of Singleton and Singleton, (2010) forensic accounting refers to the analysis, inspection, and investigation, auditing and questioning process in order to reach the truth and to obtain an expert witness opinion. It also includes fraud examination, litigation support, and consulting. Forensic Accounting is also called investigative accounting or fraud audit which is a merger of forensic science and accounting. Similarly, Stanbury and Paley, (2010) defined Forensic accounting as the science of gathering and presenting information in a form that will be accepted by a court of Jurisprudence against perpetrators of economic crime.

It is also concerned with the use of accounting discipline to help determine issues of facts in business litigation (Okunbor & Obaretin, 2010). Forensic accounting is a discipline that has its own models and methodologies of investigative procedures that search for assurance, attestation and advisory perspective to produce legal evidence, tax evasion, bankruptcy, valuation studies and violation of accounting regulation (Dhar & Sarkar, 2010). Forensic accounting can also be applied in a setting where there is breakdown of ethical behaviour under a complacent board (Buckstein, 2012). Forensic accounting is a scientific accounting method of uncovering, resolving, analysis and presenting fraud matters in a manner that is acceptable in the court of law (Oyedokun, 2013). All this means that forensic accounting can be applied in a variety of situations (Singleton; & Flesher, 2003; Bhasin, 2007; Gray, 2008; Ozkul and Pamukcu, 2012;). Forensic Accounting can be applied in a multiple situation ranging from investigation of fraud and fraudulent practices and other white color crimes to litigation support; from expert witnessing to evidence gathering and arbitration; to business valuation, loss of earnings, professional liability, insurance claims and general damages and employee theft/fraud, financial statement fraud and corporate governance challenges.

Thus, forensic accounting is an umbrella term that has a multiple range of activities which can be considered as various sub-themes under it. While forensic accounting is an all-encompassing, all-time activity which continuously performs the aforementioned functions once put in place, forensic audit is a one-time, single-event function, involving specific procedures, directed towards establishing the existence or otherwise, of an alleged fraud or some misconduct, to gather evidence on how it was perpetrated, for how long it has existed and concealed, who is(are) responsible, quantify any loss suffered and recommend measures of remediation/punishment.

According to Saha, (2014) forensic accounting is an umbrella term which has several branches is a field of knowledge that comprises of accounting, auditing, investigative skills

–is more of a ‘bloodhound’ of accounting and plays the role of a ‘watch dog’. And it is used to sniff out fraud and criminal transactions in public organizations and other institutions suitable for legal review.

This view tends to agree with what most authors on Forensic accounting define it to be as having a number of components; involve investigation and documentation of financial fraud and white colour crimes such as embezzlement, allegations of corruption and financial fraud, estimates of loses, and damages, assets misappropriations and analyses of complex financial transactions (Coenen 2005; Modugu and Ayanduba, 2013).

Oyedokun, (2017) explained that forensic accounting could further explained to mean the application of accounting knowledge, me standards methods and standards for follow up and collection of forensic audit trail to track and trap criminals at their own game. It utilizes an understanding of the business information, financial reporting system, accounting and auditing standards and procedures.

From the definitions above forensic accounting means application of accounting techniques and concepts in issues concerning legal matters. The concept is introduced due to high rate of white-collar crimes like embezzlement, fraudulent financial practices and other various financial misconducts. It is employed to investigate various financial frauds by employees, clients, customers either individually or in collusion with one another for misappropriating the asset of an organization. It can also be applied to help government in the enforcement of regulatory requirements.

### **Financial Misconducts**

According to the Report of the Financial Misconduct of the South African Public Service Commission (2007/2008), financial misconduct entails any conduct by an accounting officer or an official of a department that result in material losses through criminal conduct, unauthorized, irregular, fruitless and wasteful expenditure. Thus, acts of corruption, fraud, theft, misappropriation and abuse, which have a financial impact, can constitute financial misconduct.

‘Financial misconduct encompasses’ fraud, corruption, theft, dishonesty or deceit by an employee, whether at the expense of the organization, other employees, customers, public or any other body or organization, as well as actions or inactions which fall below the standards of probity expected in public. Like any private organization, the state / local government expects the highest standards of conduct from its staff in receipt and disbursement of public funds, the state / local government has obligations which go beyond those applying to commercial companies. In particular, it has a duty to:

1. Protect public assets;
2. Ensure that management and other practices accord with the standards of probity expected of public sector bodies; and



3. Ensure that the resources available to it are used only in furtherance of the state/local government objectives. Fraud, corruption or any other kind of financial misconduct cannot be tolerated.

The ethical guides are for all members of staff, as Staff are expected to comply with the principles of conduct set out in civil service rules and financial memorandum for local governments. These principles are intended to apply in particular to the conduct of financial and related business, but when these are applied in the same way, they should be regarded as having a general application, to the full range of state/local government activity. Whenever a member of staff suspect that financial misconduct is taking place (or has taken place) they are expected to bring it to the attention of the authorities. Any such allegations will be investigated and dealt with in accordance with the procedure spelt out in the civil service rules and financial memorandum for local governments.

### 2.8.1 Types of Financial Misconducts

Financial misconduct entails any material losses through criminal, unauthorized, irregular, fruitless and wasteful expenditure.

Table 1: Types of Financial Misconducts

TYPES	DESCRIPTION	EXAMPLE OF REPORTED CASES
Corruption	The act of impairing integrity	Bribery
Financial mismanagement	Expenditure other than unauthorized expenditure incurred in contravention of, or that is not in accordance with a requirement of any applicable legislation.	<ul style="list-style-type: none"><li>• Wasteful &amp; fruitless expenditure</li><li>• Failure to follow procurement procedures</li><li>• Payment to service provider without receiving goods e t c</li></ul>
Fraud	The unlawful and intentional making of a misrepresentation which causes actual and/or potential prejudice to another.	<ul style="list-style-type: none"><li>• Social grant fraud</li><li>• Subsistence &amp; travel claim fraud.</li><li>• Capturing fraudulent transaction</li><li>• Petty cash fraud</li></ul>
Theft	The unlawful taking with the intent to steal something which is prone to being stolen.	<ul style="list-style-type: none"><li>• Theft of laptop/petrol/state fund/food/petty cash.</li><li>• Theft of cheques e t c</li></ul>
Misappropriation and abuse	The wrongful, improper or excessive use of public fund and/or assets in a person's care.	<ul style="list-style-type: none"><li>• Abuse of Government properties</li><li>• Damage of govt. vehicle</li><li>• Petrol car abuse</li><li>• Abuse of telephone</li></ul>
Gross negligence	Any act or omission without considering the consequences thereof.	<ul style="list-style-type: none"><li>• Loss of state property/fund</li><li>• Not authorized to approve expenditure.</li></ul>

Source: South African Report of financial misconduct 2007/2008

The above table indicate the types financial misconducts that can be perpetrated in government organisation at all the three tiers. These include corruption, financial mismanagement, fraud, theft, misappropriation and abuse and gross negligence. These types of financial misconducts are further classified as in the table above. The detection

and prevention of above is very important in order to achieve growth and development at all the three tiers of government in Nigeria.

These types of financial misconducts are used interchangeably by writers; Corruption according to Nkom (1982) is the pervasion of public affairs for private advantage. He was also of the view that corruption includes bribery or the use of unauthorized rewards to influence people in position of authority either to act or refused to act in ways beneficial to the private advantage of the giver and then that of the receiver. It includes the misappropriation of public funds and resources for private gains, nepotism etc. In a similar vein Levi and Nelkon 19966 described corruption as the use official position, resources or facilities for personal advantage, or possible conflict of interest between public position and private benefit. This involves misconducts by public officials and usually covered by a variety of internal regulations (public service rules and extant rules). From the above it is common to find people referring to corruption as the pervasion of public affairs for private advancement. Therefore, corruption in this sense includes bribery, kickbacks, misappropriation, misapplication, or the use of one's position to gain undue advantage. Thus any transaction which violates the duty of public office holder and aimed at acquiring resources illegally for personal advancement and self-gratification is seen as an act of corruption.

Financial mismanagement is the deliberately or not deliberately handling the resource of organizations in a way that can be characterized as wrong, bad, careless, inefficient, and incompetent that will reflect negatively upon the financial standing of a business/public organization (Nkom 1982).

Financial Malpractice as defined by Williams 2005 is any immoral, illegal, and unethical act and includes cheating, lie, defraud etc. also Khan 2005 put it as the misuse of entrusted power for private benefit. The forms according to him include bribe, cronyism and nepotism, political donations, kickbacks, artificial pricing and frauds of all kinds. He also classified frauds into three asset misappropriation, corruption and fraudulent statements. Fraudulent statements further classified into theft, misuse of asset, improper use of influence in a transaction for own benefit and falsification of financial statement respectively.

Adefila, Kasum and Olaniyi, (2006) Assert that financial malpractices are globally endemic. However, the rate at which public office holder in developing economies perpetrate financial malpractices is most alarming, as leaders of third world nations, embezzles public fund not minding whatever consequences their activities may have on their citizens as well as their image in the international community, when their nefarious act become known to the world.

## EMPERICAL REVIEW

Extensive studies on Forensic Accounting were conducted in many countries. Most of the findings of the studies revealed that Forensic Accounting is a new field, but necessarily required for the prevention and detection of fraud. The studies include the study Safiyanu, Saifullahi and Armaya'u (2019) which discusses whether the use and application of forensic accounting in public sector have an effect in detecting financial fraud in Nigeria. The paper review literature and concluded that forensic accounting service has significant effect in detecting financial fraud.

Efut and Ema, (2019) critically discussed the role of forensic accountants in the public sector. The study explains how forensic accountant can be employed to confront, detect and prevent fraud. The study is theoretical. It is concluded that the service of forensic accountant will assist in mitigating and possibly reduce fraud to its minimal.

Rajab (2019) examines the stakeholder's perception on whether the Indian Government financial audit has been converted to forensic accounting audit. The study adopted cross sectional study design with survey strategy through self-administered interview scheduled with 50 items. Data was collected from 120 sample of respondents having equal representations from 2 groups current and retired government employees and businessmen. The result shows that corruption and forensic accounting have important impact on the Indian government audit and the forensic accounting when used in an appropriate manner is likely to detect fraud and catalyze in bringing accounting reform.

Olokayode (2018) examines the potency of forensic accounting investigation techniques in corruption investigation and prosecution in Nigeria. Questionnaire was administered to EFCC, CCB, ICPC and police special fraud unit (PSFU). Data was analyzed via descriptive and inferential statistics and the hypothesis was tested using Kolmogorov – Smirnov test. Findings indicated that there was a significant and positive relationship between adoption of forensic accounting in corruption investigations and prosecution of corruption cases in Nigeria.

Ibrahim, (2018) investigated the factors influencing the adoption of forensic accounting in fraud investigation by EFCC. The study used qualitative method to inquiry using case study approach. EFCC is chosen as a case study and participants were purposively selected from senior, middle and first time management in EFCC. Data were gathered using semi structured interview, documentary evidence and non-participatory observation which were triangulated at arriving at the findings.

Wilson, Francis and Emeka, (2017) investigated the availability of forensic accounting education in Nigeria. Data was obtained through the use of questionnaire and analyzed using descriptive statistics, krushal Walis (K – W) and chi-square tests. The result indicated increasing market demand for fraud examiners and forensic accountants.

Osho, (2017) examines the effect of forensic accounting on university system in Nigeria. The study used ex-post factor design using data analysis of financial information extracted

from audited financial statement for the years 2005 – 2014. Findings revealed that university financial system in Nigeria is significantly affected by the combined effect of all the exogenous variables of the study.

Evans, (2017) examined the relevance of forensic accounting techniques in combating of financial and economic crimes. Survey research design was employed by sampling all the technical officers (66) of the organized crime office Ghana. Data was analysed using regression model. It was found out that forensic accounting has significant impact on the combating of economic and financial crimes in Ghana.

Fyneface and Sunday, (2017) examine Forensic Accounting and fraudulent practices in the Nigerian public sector. The specific objective of the study was to find out whether there is a significant relationship between Forensic Accounting and fraudulent practices in Nigerian public sector. The study employed the survey descriptive research design. The population of the study consisted of all public institutions in Edo State, Nigeria. However, ten (10) government establishments, both Federal and State owned, were randomly selected. Structured four-scale Likert-type questionnaire was used as the research instrument to elicit responses from the respondents who were mainly internal auditors, chief accountants, executive directors and directors of the selected institutions. The collected data were analyzed using frequency counts and simple percentages method. Findings of the study indicated that there was significant relationship between Forensic Accounting and reduction of fraudulent practices in the Nigerian public sector; and the prevalence of fraudulent practices in the Nigerian public sector has brought set back to the economy, untold hardship to the citizens and put the reputation and image of the country at stake.

In the area of litigation support, Hubber, (2017) examine the understanding and interplay between forensic investigation and legal issues a forensic accountant may encounter both during and subsequent to a litigation support .The study is mainly theoretical. The findings of the study suggested that forensic accountant must meticulously identify, categorise, record and cross-reference all publicly available documents discovered during forensic investigation.

## **CONCLUSION AND RECOMMENDATIONS**

The prevalent increases in financial misconducts at the state level in Nigeria have affected the growth and development of many states particularly the north western states where the poorest states are concentrated. This stirred the need for forensic accounting investigation to uncover fraud and any other financial irregularities at the state level in north western Nigeria. The review of this paper shows that forensic accounting service has a significant effect in detecting and preventing financial misconducts in Nigerian public sector. Therefore, the results strongly support the use and application of forensic accounting investigation towards detecting financial fraud in Nigerian state level In view of this, the paper suggests that the ICAN and ANAN as

the professional accounting bodies should encourage specialization on forensic accounting service among the professional accountants as provided in the U.S. by incorporating the service of members to deliver forensic accounting services. The Universities and Polytechnics in Nigeria should include a forensic accounting course in their curriculum to educate the undergraduate for the development of forensic accounting education. This could possibly help to improve their skills and learning objectives about the forensic accounting investigation process. The state government should also develop an interest to encourage forensic accounting specialization and awareness on the effect of fraud as this could allow strong monitoring of any fraudulent activities in both public and private organizations.

The implication of this study might awaken the regulators and professional accounting bodies towards encouraging specialization on forensic accounting service among the professional accountants as provided in most developed countries. May also serve as a basis of creating awareness amongst the accounting and auditing system management in Nigeria.

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# FORENSIC ACCOUNTING AND TAX FRAUD DETECTION IN THE NIGERIAN PUBLIC SECTOR

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## **Abstract**

*Financial fraud had for long been seen as a menace that led to the collapse of many organizations in the world. The Federal Government in a bid to reduce the cases of financial fraud, established many anti-graft agencies but yet the efforts seemed not to have yielded any results. Recently, the Federal Government approved the establishment of a new anti-graft agency, “The Proceeds of Crime Recovery and Management Agency. This goes to buttress that the issue of financial fraud, tax fraud inclusive has overwhelmed the government. Forensic accounting has been conceived as one of the most effective ways of reducing cases of tax fraud in Nigeria. Forensic accounting and tax fraud in the public sector was examined. The results showed that forensic accounting reduces the occurrence of tax fraud in the public sector and recommended that forensic accounting should be adopted by the public sector to meet up with the demand of technology.*

**Keywords:** Forensic Accounting, Tax Fraud Detection, Financial Fraud, Public Sector, Nigeria

## **INTRODUCTION**

Governments all over the world, Nigeria inclusive are confronted with the problem of lack of capital to finance their social responsibilities. These social responsibilities include among others, provision of good roads, pipe bone water, energy and electricity, redistribution of wealth and income to promote welfare of the citizenry and conducive environment for business activities to thrive. Meeting these social responsibilities is huge, therefore, government enjoins the citizens to perform their civic responsibilities by paying taxes. Taxation is one of the major ways through which government raises revenue to

finance its capital or recurrent expenditures. Bahadur (2018) submits that taxation is a primary tool to raise the revenue required by the government to finance its public expenditure responsibilities. The Institute of Chartered Accountants of Nigeria (2014) defined taxation as a compulsory contribution levied by a sovereign power, on the incomes, profits, goods, services or properties of individuals and corporate persons, trusts and settlements. Lamb, Lymer, Freedman, and James (2004) saw it as the system of imposing a compulsory levy on all income, goods, services and properties of individuals, partnership, trustees, executors and companies by the government. Such taxes when collected are used for carrying out governmental functions, such as maintenance of law and order, provision of infrastructure, health and education of the citizens, or as a fiscal tool for controlling the economy. Taxation has always been seen as a very important tool for national growth and development in most countries. It has been recognized as a major vehicle for long term development of infrastructures of the country or state. The importance of tax cannot be over emphasized yet some believe that paying tax is enriching a selected few at the expense of all others. In Nigeria, despite the enormous benefits of taxation, people still indulge in cases of tax fraud.

Tax fraud can be said to have occurred when an individual or corporate organization willingly and intentionally falsifies information on a tax return in order to reduce the amount of tax liability. Tax fraud essentially entails cheating on a tax return in an attempt to avoid paying the entire tax obligation. Tax fraud includes, claiming false deductions; claiming personal expenses as business expenses; and not reporting income. The term 'tax fraud' includes situations in which deliberately false statements are submitted, fake documents are produced, etc. Tax fraud is a form of deliberate evasion of tax which is generally punishable by law. Sanctions may include civil or criminal penalties. Nowadays, tax fraud and other fraudulent activities have become the order of the day in the Nigerian sectors, especially in the public sector where it begins to become a normal way of life in the midst of civil servants (Okoye and Akamobi, 2009 and Gbogi and Adebisi, 2014).

However, several reasons have been used to justify tax fraud in our contemporary times. Such reasons include: high tax rates, illiteracy, lack of proper awareness, corruption in public offices, lack of adequate training for tax officials, embezzlement of tax revenues, loopholes in the tax laws, inability to interpret complex tax laws, weak legal framework and failure on the part of the judicial system to enforce relevant statutes against tax defaulters (Mughal and Akram, 2012; Adebisi & Gbogi, 2013; Obafemi, 2014; Onyeka & Nwankwo, 2016; Folayan & Adeniyi, 2018). Despite the tremendous efforts by the anti-graft agencies, the tax authorities and the traditional auditors to eradicate tax fraud and other fraudulent activities, it is indeed discovered that tax fraud in its various natures continues to grow in frequency and severity. The failure of these agencies to tackle this

canker worm that has eaten deep into the fabrics of the Nigerian economy has given room for a more sophisticated approach to tackle it and such a more effective approach is forensic accounting. According to Baird and Zelin (2009), forensic accounting is important investigative tool for detection of fraud. It provides an accounting analysis to the court for dispute resolution in certain cases and it also provides the court with explanation to the fraud that has been committed. That is why forensic accounting may play a vital role in detecting and reducing tax frauds in the public sector. In this concept, forensic accountants provide an account analysis to determine the facts necessary to resolve a dispute before it is brought before the court or the lawsuit process takes its course (Ozkul & Pamukc,2012).

The increasing rate of tax fraud in the Nigerian public sectors has caused grave loss to the development of the Nigerian economy. Tax Fraud and other cases of tax related offences perpetrated by tax payers heavily affect the Nigerian economy, lower investment levels and reduce government revenue generation. The anti-tax fraud and tax authority strategies are often not effective enough to tackle this menace. Damages done to the economy and their budgets as a result of tax fraud can be enormous ranging from financial loss to reduction of economy performance, reputation, credibility and public confidence. Ojaide (2000) reveals that there is a distressing upsurge in the number of tax fraud and other fraudulent activities in the Nigerian public sector, stressing the need for a better approach to handle it. It is based on this that this study was therefore designed to examine forensic accounting and tax fraud detection in the Nigerian public sector.

Therefore, the main objective of this study is to examine forensic accounting and tax fraud detection in the Nigerian public sector. This study will sought to ascertain the extent to which forensic accounting is applicable in the public sector of Anambra State; and to determine the extent to which forensic accounting can detect fraud in the public sector of Anambra State.

## **LITERATURE REVIEW**

The review of related literature in this work was sub-divided into three sections, namely, the conceptual framework, theoretical and empirical framework.

## **CONCEPTUAL FRAMEWORK**

### **Financial fraud**

Financial fraud is seen as when one obtains a gain by deception. It is a fraud involving the unlawful conversion of the ownership of property, (belonging to one person) to one's own personal use and benefit. Financial fraud may involve fraud (cheque fraud, credit card fraud, mortgage fraud, medical fraud, corporate fraud, securities fraud (including insider trading), bank fraud, insurance fraud, market manipulation, payment (point of sale ) fraud,

health care fraud ); theft; scams or confidence tricks; bribery; sedition; embezzlement; identity theft; money laundering; and forgery and counterfeiting, including the production of counterfeit money, consumer goods and tax fraud.

### **Types of financial Fraud**

1. **Misappropriating income or assets.** Perpetrators obtain and misuse assets or income belonging to someone else. This often occurs when caregivers of seniors take pension and Social Security payments from victims, withholding the funds or using them for personal purposes.
2. **Fake relative scams.** A phone call is made, pretending to be the call-recipient's relative who is in trouble. The caller asks for money to be transferred to provide help in an emergency situation. These calls often involve someone calling a senior citizen and pretending to be a grandchild.
3. **Identity theft.** Personal identifying information is used without the individual's permission to obtain credit, services, or other benefits.
4. **Fraud in connection with financial institutions.** A victim is called pretending to be a financial institution that needs help fighting fraud in the call-recipient's accounts or that needs help finding an employee committing a fraud crime. The purpose of these scams may be to obtain the victim's Social Security number or financial information, or to obtain cash from the victim by claiming the money will be used as part of a trap to catch the criminal employee.
5. **Power of attorney fraud.** A victim is convinced to give general or limited power of attorney to the person committing the fraud crime. The person who is given power of attorney may pose as an asset manager or otherwise have an official title, but ends up using the victim's money and assets for personal gain.
6. **Charity scams.** This scam involves obtaining donations for a fake charity, or using a fake charity to obtain identifying details of the victims.
7. **Advance fee fraud.** Victims are persuaded to part with money in anticipation of later receiving even substantial cash or valuable assets. This financial fraud scam often takes the form of foreign lottery fraud, where victims must pay "taxes" on large winnings that never come. However, there are many variations of advance fee fraud scams.
8. **419 Fraud.** These scams are a type of advance fee scams, in which mail, fax, email, or phone communication is used to convince someone to part with money now in exchange for receiving larger amounts of money or assets later.

9. **Tax Fraud.** Tax fraud, according to investopedia (2020) occurs when an individual or a business entity willfully and intentionally falsifies information on a tax return to limit the amount of tax liability. Tax fraud essentially entails cheating on a tax obligation to avoid paying the entire tax obligation. Tax fraud can also be referred to as tax evasion. Tax fraud costs the government millions of dollars a year. Tax fraud can occur in any of the following: claiming of false deductions, claiming of personal expenses as business expenses, using false social security number and not reporting income. A business that engages in tax fraud may knowingly fail to file payroll tax reports, wittingly fail to report some of the cash payments made to employees, fail to report and pay any withheld payroll taxes.

### **Forensic Accounting**

Dhar and Sarkar (2010) define forensic accounting as the application of accounting concepts and techniques to legal problems. It demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings. Forensic accounting is the integration of accounting, auditing and investigative skills (Zysman, 2004). Degboro and Olofinsola (2007) note that forensic investigation is about the determination and establishment of fact in support of legal case. That is, to use forensic techniques to detect and investigate a crime is to expose all its attending features and identify the culprits. In the view of Howard and Sheetz (2006), forensic accounting is the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation (Okunbor and Obaretin, 2010). Forensic accounting is a discipline that has its own models and methodologies of investigative procedures that search for assurance, attestation and advisory perspective to produce legal evidence. It is concerned with the evidentiary nature of accounting data, and as a practical field concerned with accounting fraud and forensic auditing; compliance, due diligence and risk assessment; detection of financial misrepresentation and financial statement fraud (Skousen and Wright, 2008); tax evasion; bankruptcy and valuation studies; violation of accounting regulation (Dhar and Sarkar, 2010). Curtis (2008) argues that fraud can be subjected to forensic accounting, since fraud encompasses the acquisition of property or economic advantage by means of deception, through either a misrepresentation or concealment. Bhasin (2007) notes that the objectives of forensic accounting include: assessment of damages caused by an auditor's negligence, fact finding to see whether an embezzlement has taken place, in what amount, and whether criminal proceedings are to be initiated; collection of evidence in a criminal proceeding; and computation of asset values in a divorce proceedings. He argues that the primary orientation of forensic accounting is explanatory analysis (cause and effect) of

phenomenon- including discovery of deception (if any), and its effects-introduced into the accounting domain. He also noted that forensic accountants are trained to look beyond the numbers and deal with the business realities of situations. Analysis, interpretation, summarization and the presentation of complex financial business related issues are prominent features of the profession. He further reported that the activities of forensic accountants involve: investigating and analyzing financial evidence; developing computerized applications to assist in the analysis and presentation of financial evidence; communicating their findings in the form of reports, exhibits and collections of documents; and assisting in legal proceedings, including testifying in courts as an expert witness and preparing visual aids to support trial evidence.

### **Forensic Accounting and Fraud Detection**

Fraud is a legal term that refers to the intentional misrepresentation of the truth in order to manipulate or deceive a company or individual (Howard and Sheetz, 2006). David (2005), states that fraud is not a possibility but a probability. He also explains that fraud can be better prevented if decisions are made by a group and not an individual. To define fraud is as difficult as identifying it. There is no definite and invariable rule laid down as a general proposition in defining fraud as it includes surprise, trick, cunning and unfair ways by which another is cheated. Fraud is to create a misjudgment or maintain an existing misjudgment to induce somebody to make a contract. It involves enriching oneself intentionally by reducing the value/worth of an asset in secret. When companies undergo severe financial problems and end up in bankruptcy, fraud by senior management may be involved. Russel (1978 cited in Bello, 2001) remarks that the term fraud is generic and is used in various ways. Fraud assumes so many different degrees and forms that courts are compelled to context themselves with only few general rules for its discovery and defeat. Okafor (2004) also reported that fraud is a generic term and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual to get advantage over another in false representation. According to Anyanwu (1993), fraud is an act or course of deception, deliberately practiced to gain unlawful or unfair advantage; such deception directed to the detriment of another. Accounting fraud is an act of knowingly falsifying accounting records, such as sales or cost records, in order to boost the net income or sales figures; accounting fraud is illegal and subjects the company and the executives involved to civil lawsuits (Arokiasamy & Cristal, 2009). Company officials may resort to accounting fraud to reverse loss or to ensure that they meet earning expectations from shareholders or the public. Adeniji, (2004) summarize the types of fraud on the basis of methods of perpetration include the following but not exhaustive as the methods are devised day in-day out to include: defalcation, suppression, outright theft and embezzlement, tampering with reserves, insider abuses and forgeries, fraudulent substitutions, unauthorized, unauthorized lending, lending to ghost borrowers, kite flying



and cross firing, unofficial borrowing, impersonation, teeming and lading, fake payment, fraudulent use of the firms documents, fictitious accounts, false proceeds of collection, manipulation of vouchers, dry posting, over invoicing, inflation of statistical data, ledger accounts manipulation, fictitious contracts, duplication cheque books, computer fraud, misuse of suspense accounts, false declaration of cash shortages and so on. Detecting tax fraud has been a great concern to the government. This why they introduced the anti-graft agencies to help in the eradication of this social menace but their efforts seemed not to have yielded any benefit. Forensic accounting has been said to be one of the most effective ways of detecting tax fraud in the public sector.

### **The Public Sector**

Public sectors, according to Wikipedia (2020) include public goods and governmental services such as the military, law enforcement, infrastructure (public roads, bridges, tunnels, water supply , sewers , electrical grids, telecommunications, etc.), public transit , public education, along with health care and those working for the government itself, such as elected officials. The public sector might provide services that a non-payer cannot be excluded from (such as street lighting), services which benefit all of society rather than just the individual who uses the service. Public enterprises, or state-owned enterprises, are self-financing commercial enterprises that are under public ownership which provide various private goods and services for sale and usually operate on a commercial basis. Organizations that are not part of the public sector are either a part of the private sector or voluntary sector. The private sector is composed of the economic sectors that are intended to earn a profit for the owners of the enterprise. The voluntary, civic or social sector concerns a diverse array of non-profit organizations emphasizing civil society. The sector has been riddled with cases of tax fraud which tax evasion is inclusive.

## **THEORETICAL FRAMEWORK**

### **Benefit Received Theory**

This study was anchored on the Benefit Received Theory of taxation. This theory was propounded by Wicksell in 1896 and Lindahl in 1919. The theory centers on the efficacy of tax revenue in providing public services and supports government at all levels (federal, state and local) to generate revenue from a multiplicity of sources in order to sufficiently deliver public goods and services to the public. The theory adopts an exchange relationship between the tax-payers and the government in the sense that the governments collect taxes from both individuals and companies for the purpose of providing basic amenities such as water, housing, education, health care services, security, transportation and communication among others (Omodero & Dandago, 2019). The government has the obligation to provide basic facilities to the populace while the public is expected to respond by paying taxes that are commensurate with the benefits derived (Bhartia, 2009).

## **EMPIRICAL REVIEW**

Okoye and Gbegi (2013) studied forensic accounting on fraud detection and prevention in the public sector in Kogi State using survey research methods of 370 questionnaire and analysis of variance. Their result revealed that forensic accounting does significantly reduce the occurrence of fraudulent activities in the public sector. Dauda, Ombugadu and Aku (2016) conducted a study on forensic accounting: a preferred technique for modern fraud detection and prevention in the public sector of Nasarawa State. Their studies showed that forensic accounting is relevant in fraud detection and prevention in Nigeria public sector. Igweonyia (2016) examined forensic accounting on fraudulent practices in Nigeria public sector using questionnaire and chi-square for data analysis. The study revealed that forensic accounting significantly reduces the occurrence of fraud cases in the public sector. In an empirical study conducted by Akani and Ogbeide (2017) on forensic accounting and fraudulent practices in the Nigeria public sector. It was revealed that there is a significant relationship between forensic accounting and reduction of fraudulent practices in the Nigeria public sector. Sidharts and Fitriya (2015) studied forensic accounting and fraud prevention in Indonesia public sector. Their studies showed that the use of forensic accounting significantly reduces the occurrence of fraud cases in the public sector. Flowing from the objectives of the study and relying on the position of extant literature, the following research questions were formulated to ascertain the extent to which forensic accounting is applicable in the public sector of Anambra State and to determine the extent to which forensic accounting can detect fraud in the public sector of Anambra State.

## **METHODOLOGY**

The study adopted a theoretical research design. Research design is a plan of investigation that specifies the sources and types of information relevant to the research problem. Data for the research was collected through secondary sources. The research made use of content analysis which involves in-depth review of journals, relevant accounting standards, tax laws, periodicals, textbooks, ICAN study Materials, internet materials, ANAN study materials, newspapers, articles and other books on the subject matter.\

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The study examined forensic accounting and tax fraud detection in the Nigerian public sector. Fraudulent activities, including tax fraud have become a menace in the Nigerian economic development. Edwin (2007) hinted that tax fraud can also be referred to as tax evasion which simply refers to an intentional effort by people, corporate bodies, trust and other institutions to illicitly refuse to pay their tax and reporting true and fair value of their earnings by a means of evasion. Forensic accounting has been discovered to be a very strong mechanism in detecting fraud, particularly tax fraud in the public sector. In

conclusion, it is therefore adduced that forensic accounting reduces the occurrence of tax fraud in the public sector

## **Recommendations**

The Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and other related offenses Commission (ICPC) should encourage adequate training of their staff at all levels on the use of forensic accounting technique.

The public sector organization should be encouraged to embrace the use of forensic accounting technique especially in the current cutting-edge technology with its attendant high level of fraud.

Where there is a suspect of financial fraud, tax fraud include, proper forensic accounting mechanism should be put in place to gather all available evidence surrounding that case.

The National Universities Commission and other professional bodies of Accountancy should adopt forensic accounting in their syllabi for academic and professional examinations.

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# IMPACT OF EDUCATION TAX AND INVESTMENT IN HUMAN CAPITAL ON ECONOMIC GROWTH IN NIGERIA

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## Abstract

*This paper investigated the impact of education tax and investment in human capital on economic growth in Nigeria utilizing the Non-Linear Autoregressive Distributed Lag Model of cointegration covering the period of 25 years from 1995 to 2019. The findings reveal that education tax and investment in human capital have positive and significant effect on the growth of the Nigerian economy over the sampled period. The paper recommends that in order to boost the economy, Nigeria would need to, among other policy frameworks, provide a suitable environment for ensuring macro-economic stability through effective utilization of income from education tax that will encourage increased investment in human capital in the public sector. In addition to income from education tax, for effective and speedy economic growth and development in Nigeria, the government, beneficiaries (students/parents), employers of labor and other stakeholders in the society should share the responsibility for financing primary, secondary and tertiary education, so as to provide a solid foundation for human capital development. However, as revealed in this paper, the contribution of education tax and investment in human capital is most likely to be realized over a long-run period than in the short term.*

**Keywords:** Education Tax; Investment; Human capital; Economic growth

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## INTRODUCTION

Education is generally considered as a powerful tool in reducing poverty and enhancing economic growth. It plays a vital role in shaping the way in which the citizens learn to support the microeconomic demands of economic growth. Educational institutions prepare the citizens to be able to participate actively in all walks of life including economic activities (Lockheed, Jamison and Lan, 1980). Education is fundamental to development, and is regarded as the key vehicle through which the society can be developed. It does not only help to supply the needed human capital, which is a necessary condition for economic growth, it is also essential for poverty reduction and a means to promote equity, fairness and social justice (Okojie, 1995; Yesufu, 2000; Todaro *et al*, 2007).

The role of education in economic growth and development of an economy has been underscored in many studies. Education, as a key component of human capital formation

is recognized as being vital in increasing the productive capacity of people. Education, especially at the higher level, contributes directly to economic growth by making individual workers more productive resulting from the creation of knowledge and technological innovation (Larocque, 2008; Urhie 2014). Education in a broad sense is a process by which an individual acquires the many physical and social capabilities demanded by the society in which he/she is born into to function (Eduwen *et al*, 2017).

An investment in human capital is very beneficial in the society, both at the micro level as well as macro level and affects the system both directly and indirectly. Increase in individual's wage is a direct effect while additional positive externalities associated with education are an indirect effect (Dahlin 2005, Heckman and Klenow, 1997 and Michaelowa, 2000). Investment in education leads to the formation of human capital, comparable to physical and social capital, and that makes a significant contribution to economic growth (Dickens, Sawhill and Tebbs 2006; Loening, 2004). Education as an investment secures returns in the form of skilled manpower that is geared to the needs of development, both for accelerating economic development and for improving the quality of the society (Yogish, 2006).

In the case of Nigeria, a major trend in education is that investment on the education sector has not been encouraging. A simple comparison between the level of funding in only one UK University and that of the entire federal education sector can bring out the picture very clearly. From its 2019 annual report, the actual total expenditure of Imperial College London for 2018-19 stood at 1127 billion pounds (equivalent to N560 billion at official exchange rate). This is higher than the total figure of N490 billion released by the federal government to the whole federal education sector in Nigeria during the 2018-19 period. Therefore, the future direction of the return on investment in human capital in Nigeria is uncertain. This uncertainty may be attributed to the existence of macroeconomic disequilibrium in financial allocation and unsatisfactory performance of the country's economy (Risikat, 2004). The country has continued to be a mono-cultural economy, depending on oil, indicating that the export base is yet to be diversified (Risikat, 2009). There is, therefore, a need to examine the relationship between investment in education

and economic growth in Nigeria with inclusion of education tax as a key variable with a view to deriving implications for policy direction. This objective constitutes the key focus of this paper. As a concept, education tax (also referred to as tertiary education tax) is a tax which is chargeable on all companies registered in Nigeria on their assessable annual profit as their contribution to the tertiary education sector. The education tax law was promulgated as Education Tax Act No. 7 of 1993, which was later repealed and replaced by the Tertiary Education Trust Fund (TETFUND) Act of 2011. Under the provision of the Act, all registered companies in Nigeria are required to pay a tax of 2% of their assessable profit into the Fund. However, non-resident companies and unincorporated entities are exempted from payment of the tax. The distribution of the funds accruable to TETFUND is on the ratio of 2:1:1 between the universities, polytechnics, and colleges of education across the six geographical zones of the country. In specific terms, TETFUND is mandated to disburse any appropriated education tax funds for human capital development, and provision and maintenance of essential physical infrastructure for learning, teaching and research, as well as for procurement of teaching and research materials and equipment in tertiary institutions of learning.

## **LITERATURE REVIEW**

There is quite an appreciable volume of empirical studies on the impact of investment in education on Nigerian economic growth. Most of these studies, including Risikat (2009); Afzal *et al* (2010); Kabiru and Hussaini (2015); Ifionu and Nteegah (2013); and Omojimito (2010); have investigated the impact of investment in education on economic growth in Nigeria using regression analysis and ordinary least square techniques. Their findings have generally revealed positive correlation between investment in education and economic growth in Nigeria.

The study by Risikat (2009) examined the relationship between investment in education and economic growth in Nigeria using annual time series data from 1977 to 2007 and employing Johansen cointegration technique and error correction methodology. The empirical results revealed that there is a significant long-run relationship between



investment in education and economic growth. In his study, Yusuf (2014) explored the impact of investment in education on economic growth in Nigeria between 1975 and 2012. The empirical analysis revealed that investment in human capital, in form of capacity building through training and research have positive impact on economic growth in Nigeria. The study by Kabiru and Hussaini (2015) covering the period 1981 to 2013 has revealed that, among other factors and variables, both human capital and recurrent expenditures are significant and positively related to economic growth in Nigeria. Ifionu and Nteegah (2013) in their work covering the period 1981 to 2012 have also found out that investment in education in Nigeria has significant implications on the country's economic growth over the sample period of the study. Omojimate (2010) examines the impact of formal education on economic growth in Nigeria for the period 1980-2005 and found that there is cointegration between public expenditures on primary school enrolment and economic growth. From the international perspective, Afzal *et al* (2010) investigated the relationship between education, poverty and economic growth employing ARDL model for the period 1971 to 2009 in the case of Pakistan. The study revealed that the combined effect of physical and human capital on economic growth is positive and significant both in short run and in the long run. But the effect of education and human capital alone is positive and significant only in the long run.

## **METHODOLOGY**

The relationship between education tax and investment in human capital on economic growth is examined in this work using annual time series data for the period of 25 years, from 1995-2019. The data used is obtained from the World Development Indicators (WDI, 2019) and Statistical Bulletin (online data base, 2019). The study employed the non-linear Autoregressive Distributed Lag (Non-Linear ARDL) approach to cointegration technique developed by Pesaran *et al* (2001). It is a unification of autoregressive models and distributed lag models. In any ARDL model, a time series is a function of its lagged values and current and lagged values of one or more explanatory variables. This was used in order to check for the dynamic properties of the variables and derive the error correction model (ECM) of the ARDL specification.

## ***Model Specification***

The model for this study is anchored on the endogenous growth theory propounded by Romer, 1986 and Lucas 1988. In this model, total factor productivity (TFP) and other macroeconomic variables (factors) are considered to have impact on total output (GDP) through deployment of advanced and appropriate technology in the production process. It also has an impact on efficiency and human capital to improve the rate of growth in output.

In order to capture the relationship between education tax and investment in human capital on economic growth; by relying on previous studies such as Ayara (2003), Mankiw *et al* (1992), and Pritchett (2001), the following model is employed as follows:

$$\ln GDP_t = \beta_0 + \beta_1 \ln EDU_t + \beta_2 \ln EDUT_t + \varepsilon_t, \dots \dots \dots (1)$$

Where GDP (output) represents real GDP per capita as a proxy for economic growth, EDU represents education proxy by school enrollment and EDUT represent education tax proxy by expenditure on TETFund.

## ***Test for cointegration***

There are two stages in the estimation of the ARDL model. In the first stage of carrying out the task, the optimum lag lengths for model were selected based on Akaike Information Criterion (AIC) or the Schwarz Bayesian Criterion (SBC). This is crucial so as to be able to eliminate any endogeneity problems (Pesaran and Shin 1998). In the second stage, Pesaran, *et al.* (2001) computed critical t-values (lower and upper bounds) are used to test the validity of cointegration based on Narayan (2005) who suggested that when the sample size is smaller than 80 observations, for cointegration to exist the calculated F-statistics value based on ordinary least square (OLS) estimation must be above the upper critical values of Narayan and Narayan's table as it is applied in this study. In both cases cointegration is accepted when the corresponding critical values lie above the upper bounds.

## Method of estimation

### *Model to estimate the long-run equation*

Based on the bounds-testing approach proposed by Pesaran and Smith (1998), Pesaran *et al.* (2001) and Narayan (2005) any long-run relationship may be given by the equation as follows:

$$\Delta \ln GDP_t = \beta_0 + \sum_{i=0}^n \beta_{1i} \Delta \ln GDP_{t-i} + \sum_{i=0}^n \beta_{2i} \Delta \ln EDU_{t-i} + \sum_{i=0}^n \beta_{3i} \Delta \ln EDUT_{t-i} + \beta_1 \ln GDP_{t-1} + \beta_2 \ln EDU_{t-1} + \beta_3 \ln EDUT_{t-1} + \varepsilon_t \dots \dots \dots (2)$$

Where  $n$  represents the optimal lag length,  $t$  is time and  $\Delta$  refers to the first difference of variables.

### *Model to estimate the speed of adjustments*

By using the coefficient of this error correction model (ECM), the speed of the adjustment was calculated. This explains how much time the system will take to return to the long term equilibrium after a random shock and the expected sign will be negative to ensure the convergence. The error correction model (unrestricted) for the ARDL model is specified in the equation below:

$$\Delta \ln GDP_t = \pi_0 + \sum_{i=0}^n \pi_{1i} \Delta \ln GDP_{t-i} + \sum_{i=0}^n \pi_{2i} \Delta \ln EDU_{t-i} + \sum_{i=0}^n \pi_{3i} \Delta \ln EDUT_{t-i} + \gamma ECM + \varepsilon_t \dots \dots \dots (3)$$

Where the speed of adjustment will be  $\gamma$  and **ECM** is the residuals which were obtained through the application of the cointegration model. In addition, the coefficient will give the information about the long run relationship among the variables. On completion of the ARDL estimation process, diagnostic tests were be conducted to test, check and also to assess the reliability and also the efficiency of the estimates.

## RESULT AND DISCUSSION

The unit root test for all the variables were conducted to identify the order of cointegration of the variables by using the Augmented Dickey–Fuller (ADF) and Phillips–Perron test (PP) tests. The results of the unit root tests show that all the variables are stationary at first difference which indicates that all the series are, integrated at the same order; I (1).

**Table 1: The Bounds Test Result for the Model**

Test Statistic	Value	K
<b>F-statistic</b>	<b>10.68180</b>	2
<b>Critical Value Bounds</b>		
Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	<b>5.15</b>	<b>6.36</b>

**Note:** Based on Narayan Table Case III (Narayan, 2005)

<sup>a</sup> Denote the Model co-integrated F-statistics with their corresponding critical bond values, respectively.

The cointegration result presented in Table 1 shows that the model is cointegrated as the calculated F-statistics values (10.682) based on the optimum lags selected exceed the upper bound of the critical bounds table developed by Narayan (2005) at 1%. Therefore, the results are in agreement with the long run relationship between the variables in the model. This allows for the estimation of the short-run error correction model and the long run coefficients.

**Table 2: The estimated Long-Run and Short-Run Coefficients Based on Schwarz Bayesian Criterion for the Model**

Regressors	Coefficients	T-Ratio[Prob]
<b>The long-run results</b>		
$\ln\text{EDU}_t$	3.019	16.915[0.000]***
$\ln\text{EDUT}_t$	0.030	2.678[0.028]**
Constant	0.656	0.986[0.353]
<b>The short-run results</b>		
$\Delta\ln\text{EDU}_t$	-63.507	-1.587[0.151]
$\Delta\ln\text{EDUT}_t$	0.007	1.386[0.203]
ECM (-1)	-0.982	-5.058[0.001]***
Adjusted R <sup>2</sup>	0.952	

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**Note:** LRGDP = Dependent Variable: Lag lengths are 3, 4, 3 selected based on SBC

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**Note:** \*Significant at 10% level. \*\* Significant at 5% level. \*\*\*Significant at 1% level.

**Note:** ECM = Error Correction Model

$\Delta$  = difference operator

Table 2 presents the long-run and short-run equations for the Model. The long-run result discloses that education tax is positive and significant at 5% significance level. The coefficient suggests that a 1% increase in education tax will increase economic growth by 0.030%. The result indicates that in the long run education tax has a direct positive impact on human capital performance and economic growth in Nigeria. This finding confirmed that of Risikat (2009); Afzal *et al* (2010); Ifionu and Nteegah (2013); and Omojimate (2010). In the short-run; the direct impact of education tax in Nigeria is positive but insignificant. This suggests that education tax has no significant impact in human capital to stimulate economic growth in the short-run period. The long-run results in the table 2 also reveal that investment in education is positive and significant at 1% level. This strongly implies that investment in education stimulates and encourages human capital performance with an effective increase in long-run economic growth.

The Error Correction Model (ECM) with the coefficient (-0.982) which indicates that the speed of adjustment of the variables convergence from short-run to long-run equilibrium as 98.2%. This shows that in the event of any shock, the speed of adjustment is strongly high. The adjusted  $R^2$ , F-statistic, and the Durbin-Watson statistic indicate that the model is a good fit.

### ***Diagnostic Tests***

Test-Statistics	LM Version	F Version
<b>Serial Correlation</b>	CHSQ(2)= 8.321 [0.016]	F(2,6) 1.969[0.220]
<b>Heteroscedasticity</b>	CHSQ(11)= 4.667[0.987]	F(11,9) 0.234[0.987]

Like any other time-series analysis, diagnostic tests are imperative in assessing the validity, efficiency and consistency of the estimated model. The tests show that the model has passed all the diagnostic tests. The result is free from autocorrelation and is stable. The results of the heteroscedasticity show that the residual is constant over time.

## **CONCLUSION AND POLICY RECOMMENDATIONS**

The findings of the long-run relationship have revealed that education tax and investment in human capital has a direct positive impact on the growth of the Nigerian economy over the sampled period. This shows that in Nigeria, education tax and investment in human capital has strong economic potential to facilitate long-run economic growth. The Error Correction Model (ECM) for the model has confirmed the long-run relationship and indicated a high speed of adjustment of the variables convergence to equilibrium in the long run. Following from the above conclusion, the following recommendations are proffered to guide policy and decision making in order to boost the economy; Nigeria would need to, among other policy frameworks, provide a suitable environment for ensuring macro-economic stability that will encourage increase investment in education in the public sector; For effective and speedy economic growth and development in Nigeria, the government, beneficiaries (students/parents), employers of labor and other stakeholders in the society should share the responsibility for financing primary, secondary and tertiary education, as these levels provide solid foundation for human capital formation for any country. Overall, there is the need for the federal government to continue to fund the operations of TETFUND through effective and efficient collection of education tax by the Federal Inland Revenue Service.

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# IMPACT OF TAX INCENTIVES ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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## Abstract

*The study examined the impact of tax incentives on the growth of small and medium enterprises in Nigeria. Two research questions guided the study. Two hypotheses were formulated for the study. The study adopted survey research design. The population of the study comprised 1,340 registered small and medium scale business manager/accountants in Delta State. A sample of 350 respondents was selected using simple random sampling technique. The structured questionnaire was used as instrument for data collection. Data collected were analyzed using descriptive statistics of frequency distribution; mean and t-test statistical tool was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed that there was a significant correlation between taxation and SMEs' growth. The study recommends among other things that there should be a friendly tax policy for all start up businesses preferably a tax holiday.*

**Keywords:** Tax, incentives, growth, Small and Medium Enterprises.

## Introduction

Small and medium enterprises (SMEs) remain an important sub-sector in a nation's economy. The contribution of SMEs has been recognized as critical to the development of an economy as they possess great potentials for employment generation, improvement of local technology, output diversification, development of indigenous entrepreneurship and forward integration with large scale industries (CBN, 2018). The development of SMEs is therefore an essential element in the growth strategy of most economies and hold particularly significance for Nigeria. A major gap in Nigeria industrial development process in the past has been the absent of a strong small and medium enterprises sub-sector. The little progress recorded from the courageous effort of the first generation of indigenous industrialist were almost wiped out by the massive dislocated, traumatic development which took place under the structural adjustment program and government inability to effectively utilize its fiscal policy instrument towards their growth. The development of business is possible only under conditions of providing effective competition, creation of favorable climate and rational support for the state, and efficient operation of market

mechanisms (Gritsunova and Lotareva, 2015).

In a bid to stimulate growth of SMEs, a number of countries have used tax incentives, for both investors and listing firms, to promote activity on SME boards. Tax incentives for investors are the more common approach, particularly in advanced markets (Mintz and Chen, 2011). Taxation is a worldwide phenomenon that cuts across every organization and individual. The history of taxation in Nigeria began in 1914 after the amalgamation of the Southern and Northern Nigeria. The North had a very effective system of taxation because of their system of government. In the South, it was a different story especially with the Igbos who even rioted in protestation that they should not be taxed. With the famous crises that took place in 1930s, many countries' government, Nigeria inclusive were more aware of why taxes should be collected for the purpose of increasing their revenue (Ohaka, 2011). The necessity of tax triumphs because, it provides income for government. If this income is not available, government might not be able to execute key projects that cannot be implemented by individuals on their own (some of which includes road provision and health infrastructures). Consequently, individuals and organizations that generate more revenue are required to have increased tax and those with no income should also enjoy the application of tax revenues via the provision of benefits made available to everyone (Asiodu, 2003).

Tax payment is a voluntarily contribution imposed by the Government on personal income earners, companies, investors, exporters, importers etc. revenue realized from taxation is a major source of revenue to the Government of Nigeria, and as such is an important tool used in the development of Nigeria and her economy. A country's tax policies and systems are greatly related with business ventures in that country (Gugl and Zodrow, 2006). An economy that enacts favorable and progressive tax laws and policies will definitely breed successful and finance-healthy business organizations. Once businesses flourish, the economy flourishes as well, as there is no quicker way of stirring the affairs of an economy without the help of organizations that move services, goods, money and investments from those with surplus to those with deficit; those with marketable ideas/output to those who need these ideas and products. In essence, businesses and tax policies greatly depend on one another for survival. If one is greatly affected, the other

follows suite.

In Nigeria, there are various forms of tax such as personal income tax, companies income tax, capital gains tax, value added tax and petroleum profit tax to mention but a few. In view of promoting indigenous investment in Nigeria, tax incentives are put in place to encourage the growth of local manufacturing industries which will in turn reduce the amount of imported goods. Tax incentives include tax holidays, tax reduction, capital allowances, the right of tax payers to election and incentives on processing zone. The most commonly used incentive by the government is tax holiday, but this provision exempt firms from other tax liability, it also denies some firms certain tax deductions over the tax holiday period. Fiscal tax incentives in Nigeria have been in existence since, 1949 and they are still very much in existence in modern day governance (Ojochogwu and Ojeka, 2012). This is evident from the fact that from 2005 to date, there have been different technical institutions formed by the finance ministry to oversee and assess the tax incentives/structure in the country and make recommendation that will attract investments and promote development and growth in the country.

### **Statement of the Problem**

Despite the fact that the small and medium enterprises have been pivotal to economic development in Nigeria, yet the mortality rate of small and medium enterprises which make up 95% of the economy are very high. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), 80% of small businesses die within seven years of its establishment. Among the factors responsible for these untimely close-ups are tax related issues, ranging from taxations to enormous tax burdens etc. It is also observed that the objectives of the government to attaining the effective use of tax incentives remain an unrealized dream. Amongst the following are some of the genuine causes of these under achievement; fiscal indiscipline i.e. government inability to effectively implement its tax policies, government grants little or no tax incentives, incessant introduction of new levies e.g. signpost charge, vehicle particulars charge and high value added tax, change in system of government which result to change in tax agenda and multiple taxes on a particular business. According to a study conducted by Bateman

(2013), it was reported in a survey that 90% of business owners admitted that taxes were a huge constraints to their businesses, as they claim taxes are high and do not allow new businesses to cover up initial cost. It is therefore against this background that the study sought to ascertain the impact of tax incentives on the growth of small and medium enterprises in Nigeria.

### **Purpose of the Study**

The main purpose of the study was to determine the impact of tax incentives on the growth of small and medium enterprises in Nigeria. Specifically, the study sought to determine;

- v. the implications of tax policies on SMEs growth and the economy.
- vi. the best tax policy that will suit SMEs and encourage their growth in Nigeria.

### **Research Questions**

The following research questions were raised to guide the study.

1. What are the implications of tax policies on SMEs growth and the economy?
2. What are the best tax policies that will suit SMEs and encourage their growth in Nigeria?

### **Hypotheses**

The following hypotheses are formulated for the study:

1. There is no significant difference in the mean opinion scores of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria
2. There is no significant difference in the mean opinion scores of male and female respondents on the implications of tax policy on SMEs growth.

### **Literature Review**

#### **Concept of Small and Medium Enterprises**

Small and medium enterprises (SMEs) as a concept do not have a universal definition. The definition of SMEs varies from country to country and even within sectors in the country. However, metrics commonly used in defining SMEs include the number of employees, revenues, or fixed assets. The Federal Ministry of Commerce and Industry

(2015) defined SMEs as firms with a total investment (excluding cost of land but including capital) of up to 750,000 Naira, and paid employment of up to fifty persons. SMEs are based on the following criteria: small scale enterprises are businesses with ten to forty-nine people with an annual turnover of five to forty-nine million naira, while a medium scale enterprise has fifty to one hundred and ninety-nine employees with a year turnover of fifty to four hundred and ninety-nine million Naira. These definitions also differ with that of Khan and Dalu (2015) who opine that small and medium scale enterprises have long been catalysts for both industrial growth and economic growth of nation for both in developed and developing countries, and they play an important role for employment generation, facilitator of economic recovery and national development.

### **Role of SMES in Nigeria**

SMEs are believed to be the engine room for the development of any economy because they form the bulk of business activities in a growing economy like that of Nigeria. The benefits of SMEs cannot be over-emphasised and they include contributions to the economy in terms of output of goods and services, and creation of jobs at relatively low capital cost, especially in the fast growing service sector. It is a vehicle for the reduction of income disparities thus developing a pool of skilled or semi-skilled workers as a basis for the future industrial expansion; improves forward and backward linkages between economically socially and geographically diverse sectors of the economy; provides opportunities for developing and adapting appropriate technological approaches; offers an excellent breeding ground for entrepreneurial and managerial talent, the critical shortage of which is often a great handicap to economic development among others (Onuba, 2010).

SMEs have been fully recognised by government and development experts as the

- a) main engine of economic growth and a major factor in promoting private sector development and partnership. The development of SMEs is an essential element in the growth strategy of most economies and holds particular significance for Nigeria (Udechukwu, 2003).
- b) SMEs contribute to improved living standards, bring about substantial local capital formation and achieve high level of productivity and capability. SMEs are

recognised as the principal means of achieving equitable and sustainable industrial diversification and dispersal (Udechukwu, 2003). SMEs also serve as veritable means of mobilisation and utilisation of domestic

- c) savings as well as increased efficiency through cost reduction and greater flexibility. They have been very prominent in the manufacture of bakery products, leather manufactures, furniture, textiles and products required for the construction industry (Olorunshola, 2003).
- d) They also provide veritable means of large-scale employment, as they are usually labour intensive and can provide training grounds for entrepreneurs even as they generally rely more on the use of local materials (Anyanwu, 2003)

### **Tax Incentives**

Taxation may be defined as the demand made by the Government of a country for a compulsory payment of money by citizens of the country with the objectives of raising revenue to finance government expenditures, satisfy collective wants of the people and regulate economic and social policies. Simply put, taxation is a compulsory payment to the government backed up by the force of law and for which the government need not offer explanation or services (Ezejelue and Ihendinihu 2006). Tax incentives, according to Philip (2005), is a deliberate reduction in (or total elimination of) of tax liability granted by government in order to encourage particular economic units (e.g. corporate bodies to act in some desirable ways (e.g. invest more, produce more, employ more, save more, consume less, import less, pollute less and so on). Any tax is amenable to being modified to create a tax incentive. The reduction in tax liability which a tax incentive constitute can be achieved through reduction in tax rate, reduction in tax base, tax deferment or outright tax exemption (Kiabel, 2012).

Taxation is used to encourage investment and boost local industries among others. Consequently, priority sectors of the economy such as agriculture, mineral, oil and gas, export and manufacturing are given incentives in order to influence purchasing power and production costs both of which are crucial for the growth of industries (Kiabel, 2012). In recognition of the need to attract foreign investment into the country, diversifying and

enduring the expansion of the export of Nigeria as a means to speed up economic development and encouraging existing companies and potential firms to continue operation in Nigeria, various forms of tax incentives packages have been put in place in Nigeria. Below are some of them, relevant to this study.

### **Types of Tax Incentives**

Keen (2013) defines tax incentives as all measures and strategies which provide for more favourable tax treatment to a certain activities or sector, and he went on to describe the following to be typical tax incentives:

- xi.** Tax holidays: is defined as the temporal exemption of business investment from certain specified taxes, typically at least corporate income tax. Partial tax holidays offer the reduced obligations rather than full exemption.
- xii.** Special zones: are placed in geographically limited areas where qualified companies can locate and hence benefit from the exemption of various scopes of taxes or administrative requirements.
- xiii.** Investment tax credit: this is the deduction of some fraction of an investment from the tax liability
- xiv.** Investments allowance/Accelerated depreciation: is the deduction of some fraction of an investment from taxable profits (in addition to depreciation).
- xv.** Reduced tax rates/Preferential tax rates: are the reductions in a tax rate, specifically the corporate income tax rate.
- xvi.** Exemptions from various taxes: are the exemptions from certain taxes, most of the time those collected at the border such as tariffs, excises and VAT on imported inputs.
- xvii.** Financing incentives: are the reductions in tax rates for the funds" providers for example: the reduced withholding taxes on dividends.
- xviii.** Loss carried forward: when the business makes a loss, the loss can be carried forward to offset the future profits of the business.

### **Tax Incentives and Growth of Small and Medium Enterprises**

Countries that have tax incentives for SMEs claim that preferential tax treatment



creates a large number of jobs and enhances the level of entrepreneurship that is associated with flexibility, speed, risk taking and innovation (Mintz and Chen, 2011). Berger and Udell (2008) emphasize the fact that SMEs are key drivers of economic success, because they are job creators, sales generators and the source of tax revenue. These authors base their assertion on the facts that a large percentage of SMEs contribute to the various countries' gross domestic product, they employ a large percentage of the workforce and the high ratios of small businesses to large businesses in the countries concerned. According to Berger and Udell (2008), SMEs represent fertile ground for the development of large, profitable, taxpaying employers and SMEs experience high growth rates in comparison to large enterprises. However, tax policies that are aimed at promoting the economic growth of small businesses should be evaluated judiciously, because the inherent characteristics of small businesses can make a specific differentiated tax policy undesirable.

Studies undertaken in this regard have produced the following findings: the majority of SMEs have limited growth potential small businesses vary in terms of productivity, job growth, wages, innovation and export performance within the same industry subgroups. Small business also do not all follow the same growth pattern. Certain small businesses will remain small for most of their existence and it is for this reason that it is not obvious why a tax system should influence the growth process. Such intervention, to the extent that it does not act in a lump-sum way, influences marginal decisions and could lead to excessive risk taking and over investment (Heshmati, 2001).

## **Theoretical Framework**

### **Neo-classical theory**

Neo-classical economic theory argues that providing tax incentives to one group of investors rather than another violates one of the principal tenets of a good tax system, that of horizontal equity. This inequality distorts the price signals faced by potential investors and leads to an inefficient allocation of capital (Comanor, 1967). The justification most often given for special incentives is that there are market failures surrounding the decision to invest in certain sectors and locations, which justify government intervention.

Market failures result in either too much or too little investment in certain sectors or locations. The key market failures most often cited; Positive externalities not internalized in the project's rate of return are higher in certain sectors than in others. An example is research and development where investment yields a higher social than private rate of return because not all the technological knowledge can be effectively patented and as such there exists an exalted justification for subsidizing research and development investment (Kaplan, 2001).

Colmar (2005) points out that there are other purported benefits of tax incentives, such as symbolic signaling effects and the need to compensate for inadequacies in the investment regime elsewhere. Provision of investment incentives is in the form of either tax relief or cash grants. International experience shows that such incentives play only a minor role in investment decisions. Firms make investment decisions based on many factors including projections of future demand, certainty about future government policy, prevailing interest rates and moves by competitors. In general, they see incentives as 'nice to have' but not deal breaking. Yet incentives remain a popular policy for both developed and developing countries.

## **Empirical Review**

Twesige and Gasheja (2019) carried out a study titled "Effect of tax incentives on the growth of SMEs in Rwanda: A case study of SMEs in Nyarugenge district." Qualitative and quantitative research approach was adopted in this study. The population includes 49000 SMEs from agricultural, industrial, services and tourism sectors operating in Nyarugenge district. A sample of 136 SMEs was determined using the Silvin and Yemen's formula of sample size. Simple random and purposive sampling technique was used to select the sample. Data was analysed using descriptive statistics. A multiple regression analysis was used to explain between variables. The results from the study revealed that 75.7% of the respondents agreed that they know the tax laws, 78.7% agreed that they know the tax incentives that are available to SMEs. The results further revealed that wear and tear, loss carried forward and VAT refund as the most tax incentives are available to Rwandan SMEs as evidenced by 100%, 94.1% and 95.6% respectively. The

study indicated that there was a strong positive and significant relationship between tax incentives and the growth of small and medium enterprises in Rwanda as approved by coefficients of correlation which was equal to 88.8% of Rsquare. This meant that only 11.2% of the variation in the growth of SMEs was outside the tested variables. The study concluded that tax incentives are the key to the sustainable growth of SMEs. The government should design policies that specifically address issues related to the sustainable growth of SMEs.

Uwaoma and Ordu (2016) carried out a study titled “The Impact Of Tax Incentives On Economic Development In Nigeria (Evidence Of 2004 – 2014).” The population of this study includes 51 respondents drawn from taxpayers, management and members of staff of some selected manufacturing companies in the South-South geo-political zone of Nigeria and Federal Inland Revenue Services. Using probability method, a sample size of 45 respondents were used whilst Thirty (30) companies were studied. The classes of personnel included in the research were administrative managers, accounts managers, internal auditors, and marketing and production staff. Survey method including the use of questionnaire and interview was adopted, whilst correlation method of analysis was adopted. Twenty eight (28) correctly responded copies of questionnaire out of 30 administered were obtained for the analysis, Spearman’s Rank Correlation Coefficient (rho) statistical tool was used in testing the hypothesis using Statistical Package for Social Sciences software (SPSS). The findings reveal that sufficient tax incentives enhances industrial growth and economy whilst in conclusion, it was recommended among others that, government should waive certain taxes on corporate bodies to help them develop and mature especially at their early stage. Government should not focus on the revenue that may be lost at this point because in the long-run the benefit surpasses what is lost at the initial time.

Oluwaremi, Odelabu, Lawal and Obisesan (2016) carried out a study titled “Tax Incentives And The Growth Of Small And Medium Scale Enterprises In Developing Economy –The Nigerian Experience.” The study employed descriptive design, thus, primary data was collected on variables contributing to tax influence and their effect on the growth of SMEs. A sample of 100 respondents representing a percentage of targeted

population enterprises in the production sector of Osun State Industrial area was selected through Stratified and Simple Random Sampling techniques. Data collected through questionnaires, interviews and observations when necessary was analyzed using ordinary least square regression model to estimate the contribution of each variable to the growth effect of SMEs. The study found that there was a significant correlation between taxation and SMEs' growth. The study recommends that there should be a friendly tax policy for all start up businesses preferably a tax holiday, or an introduction of a growth limit which can be said to be a level stable enough to sustain tax payment

Ocheni (2015) carried out a study titled "Impact Analysis of Tax Policy and the Performance of Small and Medium Scale Enterprises in Nigerian Economy." Descriptive survey research design was adopted. The population for this study is comprised of sixty eight (68) SMEs currently operating in Kogi State and Abuja. They have 726 personnel comprised of fifty six (56) managers and 671 accountants. The sample for the study consisted of two hundred and fiftyeight (258) respondents, (20 managers and 238 accountants from the two states. Yaro Yamani formula for sampling technique was used to select the two hundred and fifty-eight (258) respondents, representing 36% of the population. Out the two hundred and fifty-eight (258) copies of the questionnaire were printed and distributed, sixty eight were not returned while One hundred and ninety (190) copies of the questionnaire were retrieved, representing a seventy four (74%) per cent return, out of which one hundred and forty six were wrongly filled giving the total of one hundred and forty four (144) copies of the valid questionnaire. Descriptive statistics was used to analyse the data collected and to obtain the mean assessment for each scale item. The research hypotheses for this study were tested using z-test statistics to establish  $p < 0.05$  significant differences. The analysis revealed that there is no significant difference in the mean opinion scores of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria. It was also revealed that there is no significant difference in the mean opinion scores of managers and accountants of the implications of tax policy on SMEs growth. The paper therefore recommended that the for Small and Medium Enterprises to get better equipped, have enough funds and survive in a competitive market, the rate of tax levied on the small business should be lower; The rate of tax

incentives and exemptions which serve as catalysts and bait for attracting investors should be highly increased by the three tiers of government in Nigeria; Government should promulgate a policy that will help to avoid illegal taxes, such as community levy, boys or youth levy and as well as association or union levy; Any policy that will push for enough funds and other activities that will lead to Small and Medium Enterprises growth is good for promulgation and there should be consistency in tax policy that will cushion the effects of factors that militate against the expansion of SMEs in relation to their ability to pay taxes by government.

## **Methodology**

This paper adopted a survey research design as a plan of action in the conduct of the study. The adoption of this design was informed by its efficient way of collecting information about the population of interest and ease of administration of research instrument. The population of the study consists of 1,340 (nine hundred and fifty (950) managers and three hundred and ninety (390) accountants) registered small and medium scale business manager/accountants in Delta State. A sample of 350 respondents was selected using simple random sampling technique. The structured questionnaire was used as instrument for data collection. The questionnaire was structured on a four point scale. The numerical value for the scale points include; Strongly Agreed = SA (4 points), Agreed = A (3 points), Disagreed = (2 points) and Strongly Disagreed = (1 point). 350 copies of the instruments were personally administered by the writer; the administration lasted for two weeks. The 350 copies administered were retrieved and used for data analysis. Data collected were analyzed using descriptive statistics of frequency distribution; mean and t-test statistical tool was used to test the hypotheses at 0.05 level of significance.

## **Presentation of Results**

This aspect deals with the analysis of data used in the study and discussion of the findings under Analysis of research questions; test of hypotheses and discussion of findings.

## Analysis of Research Questions

**Research Question 1:** What are the implications of tax policies on SMEs growth and the economy?

**Table 1:** Mean of Responses on the implications of tax policies on SMEs growth and the economy.

S/ N	STATEMENTS	$\bar{x}$	S.D	REMARK
1.	Double taxation, no professional tax consultancy, weak tax planning, high taxation cost, Low efficiency, high collection charges, are some of the factors militating against SME tax compliance	3.34	0.59	Agree
2.	Existing empirical evidence clearly indicates that small and medium sized businesses are affected disproportionately by these costs.	3.54	0.55	Agree
3.	A poorly executed tax system leads to low efficiency, high collection charges, waste of time for taxpayers and the staff, and the low amounts of received taxes as well as the deviation of optimum allocation of resources.	3.83	0.45	Agree
4.	It also increases the Government's tax revenue, since the simplified provisions for a micro enterprise historically reduce the size of the shadow economy and the number of non-complying registered taxpayers.	3.49	0.61	Agree
5.	Taxes and complex tax system put disproportionate pressure on smaller businesses.	3.47	0.78	Agree
<b>Grand Mean</b>		<b>3.53</b>	<b>0.60</b>	<b>Agree</b>

As shown in table 1, items with serial numbers 1-5 have their mean sets above the criterion mean value of 2.50 and are therefore, agreed upon by managers and accountants on the implications of tax policies on SMEs growth and the economy.

**Research Question 2:** What are the best tax policies that will suit SMEs and encourage their growth in Nigeria?

**Table 2:** Mean of Responses on the best tax policies that will suit SMEs and encourage their growth in Nigeria.

S/N	STATEMENTS	$\bar{x}$	S.D	REMARK
6.	The tax policy needs to be designed such that the tax rates are appropriate and rational, the exemptions are lower in amount and the tax collection organizations are more efficient.	3.49	0.61	Agree
7.	The tax burden of the indigent people should not be lighter and the fight against corruption and tax evasion should not be much more intense.	3.82	0.65	Agree
8.	Tax law should be simplified continuously, mainly for three reasons, namely to lower both compliance costs and administrative costs, to reduce uncertainty faced by taxpayers; and to improve the levels of voluntary compliance.	3.69	0.77	Agree
9.	Policy incentives such as tax rebate for SMEs that put effort on local sourcing of raw materials, serious in adding value to commodities for exports and other business ethics, should be employed by government.	3.85	0.40	Agree
10.	Tax policies can be designed in such a way that they do not only directly affect SMEs but also indirectly push for their growth.	3.97	0.21	Agree
<b>Grand Mean</b>		<b>3.76</b>	<b>0.53</b>	<b>Agree</b>

As shown in table 2, items with serial numbers 5-10 have their mean sets above the criterion mean of 2.50 and are therefore agreed upon by the managers and accountants on the best tax policy to suit Small and Medium Enterprises and encourage tax compliance in Nigeria.

### Test of Hypotheses

**Hypotheses 1:** There is no significant difference in the mean opinion scores of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria

**Table 3:** Analysis of t-test on the mean and standard deviation responses of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria

Respondents	N	$\bar{x}$	S <sup>2</sup>	Df	t.cal	t.crit	$\alpha$	Remark
Managers	200	1.35	0.71	348	0.142	1.966	0.05	<b>Retain Ho</b>
Accountants	150	1.34	0.60					

From the t-test table, since t-cal (0.142) < t-crit (1.966), we retain Ho. The null hypothesis is hereby retained that there is no significant difference in the mean opinion

scores of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria.

**Hypotheses 2:** There is no significant difference in the mean opinion scores of male and female respondents on the implications of tax policy on SMEs growth.

**Table 3:** Analysis of t-test on the mean and standard deviation responses of managers and accountants on the best tax policy that encourages tax compliance by SMEs in Nigeria

Respondents	N	$\bar{x}$	S <sup>2</sup>	Df	t.cal	t.crit	$\alpha$	Remark
Male	198	1.35	0.71	348	0.142	1.966	0.05	<b>Retain</b>
Female	152	1.34	0.60					<b>Ho</b>

From the t-test table, since t-cal (0.142) < t-crit (1.966), we retain Ho. The null hypothesis is hereby retained that there is no significant difference in the mean opinion scores of male and female respondents on the implications of tax policy on SMEs growth.

### Discussion of Findings

Research question 1 sought to determine the implications of tax policies on SMEs growth and the economy? Table one shows that items with serial numbers 1-5 have their mean sets above the criterion mean of 2.50 and are therefore agreed upon by the managers and accountants on the implications of tax policies on SMEs growth and the economy. Items with serial numbers In response to the research question posed above, and as queried on items 1-5 of the questionnaire, the implications of tax policies on SMEs growth and the economy include; double taxation, no professional tax consultancy, weak tax planning, high taxation cost, Low efficiency, high collection charges, are some of the factors militating against SME tax compliance; existing empirical evidence clearly indicates that small and medium sized businesses are affected disproportionately by these costs; a poorly executed tax system leads to low efficiency, high collection charges, waste of time for taxpayers and the staff, and the low amounts of received taxes as well as the deviation of optimum allocation of resources; increases the Government's tax revenue, since the simplified provisions for a micro enterprise historically reduce the size of the shadow



economy and the number of non-complying registered taxpayers; and taxes and complex tax system put disproportionate pressure on smaller businesses.

Research question 2 sought to determine the best tax policies that will suit SMEs and encourage their growth in Nigeria? Table 2 showed that items with serial numbers 5-10 have their mean sets above the criterion mean of 2.50 and are therefore agreed upon by the managers and accountants on the best tax policy to suit Small and Medium Enterprises and encourages their growth in Nigeria. In response to the research question posed above, and as queried on items 5-10 of the questionnaire, the best tax policy to suit Small and Medium Enterprises and encourages tax compliance in Nigeria was discovered.

## **Conclusion**

From the foregoing, the impact of tax incentives policy and the performance of small and medium scale enterprises in Nigerian economy cannot be overemphasized. In conclusion, SMEs is a sine qua non to the growth and development of the Nigerian economy. Also in conclusion a low tax rate policy is instrumental to the survival and growth of these small and medium enterprises. However, taxes for SMEs have been more harmful than beneficial as they increase running costs and slow down growth. The best tax incentive to suit SME and encourages tax compliance in Nigeria should be lower both compliance costs and administrative costs, to reduce uncertainty faced by taxpayers; and to improve the levels of voluntary compliance.

## **Recommendations**

Based on the findings of the study, the following recommendations were made:

Government should promulgate a policy that will help to avoid illegal taxes, such as community levy, boys or youth levy and as well as association or union levy.

The tax policy should be designed in a manner that it will encourage those who are potential tax payers, voluntary compliance and ultimately leads to expansion of existing business interests of the SMEs in Nigeria.

To provide stimuli on paying profit tax by decreasing the profit tax rate down to 5% for small enterprises that maintain or increase the number of their employees if the accrued

employees' salaries are not lower than the average salaries for respective branches.

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# **TAX AVOIDANCE AND FINANCIAL PERFORMANCE OF LISTED OIL MARKETING COMPANIES IN NIGERIA**

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## **Abstract**

*This study examined the effect of earnings management on the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. The study employed correlation research design in a sample of nine (9) companies for a period of eight years (2012-2019). Secondary data from the financial statement of the sample companies was used. General Least Squares (GLS) regression technique of data analysis was used in the analysis, after controlling for firm size. The study reveals that tax avoidance has negative insignificant effect on financial performance of listed oil marketing companies in Nigeria. The study further reveals that earnings management positively and significantly moderates the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. In line with the findings, the study recommends that government policy should be directed towards strengthening these factors in order to stir up company financial performance.*

**Keywords:** *Earnings management, financial performance, Moderating effect, Tax avoidance.*

## **1. Introduction**

Tax is the most important source of income to the government of every developed and developing economy. It is presumed to be the means of support of any government, because taxes provide revenue to fund activities, like health facilities, education, roads, electricity, security and employment. Notwithstanding the noticeable benefits of taxes, corporate tax avoidance is considered a major drawback that threatens the economy of Nigeria and other nations of human race.

However, corporate tax avoidance is a tax planning strategy that can be used by management to pay a low amount of tax per naira of reported pre-tax accounting income (Higgins, Omer & Phillips. 2015) The notion of tax avoidance can be determined as any

effort by businesses to minimize the amount of tax that must be paid to the government (Abdullah, Furqan, Parwati & Asmanurhidayani 2019). Resultant upon these conducts, several billions of naira accruable from tax is lost to tax avoiders every year, therefore denying government extra revenue that could be used to complete projects, social amenities and infrastructural expansion. The issues of tax avoidance have been a problematic that called the attention of governments, practitioners and academics to find the factors that determine corporate tax avoidance. For this reason, tax avoidance has attracted the interest of researchers (Vieira, 2013; Kraft, 2014, Bambang, Yudha & Abim, 2017; Intan, Siti & Anita, 2018; Junaidu, & Saidu, 2018 Ferchichi & Dabboussi, 2019).

Nevertheless, infirms that engage in tax avoidance there is a connection between the owners as the principal with the manager as agent. Bestowing to Minnick and Noga (2010), owners always expect high profitability and increase the firm performance, so the owners want the tax paid to be minimized, whereas the manager as the tax planner also has an aim to the wealth owned by the company. Moreover, Jensen and Meckling (1976) and Desai and Dharmapala (2006); Chen, Noor & Mazni (2018) settles that tax avoidance does not improve financial performance of a company because tax avoidance activities is one among the mechanisms that offer room for self-interest managers to divert rent from owners to themselves to satisfy their individual self-interest. Besides, the agency costs related to tax avoidance activities, (additional compliance costs, and non-tax costs) might overshadow the tax benefits, therefore, reduces firm performance.

However, the effects of tax avoidance on financial performance is still an open question in Nigeria context due to debatable results from previous study (Nwaobia, Kwarbai, & Ogundajo, 2016; Zhang, Cheong & Cheokb, 2016). On this basis, some studies suggested that the contradictions may point to the likelihood that some important variable of earnings management was ignored. Based on this suggestion, the present study introduces earnings management as a moderating variable in the model. Earnings management refers to a strategy of producing accounting earnings, which is achieved through managerial discretion over accounting choices. (Phillips, Pincus & Rego, 2003). That is signifies that earnings management is a manager's effort to increase or decrease earnings, including income smoothing in agreement with the wishes of managers. Earnings management

practices can also opportunistic or economically efficient (Fields, Lys & Vincent 2001, Scott 2003).

However, considering the importance of earnings management to managers, this can influence tax avoidance practices. This is because of the flexibility in accounting treatment, managers have an incentive to reduce the accounting earnings for financial reporting objectives and to lower reported earnings for tax reporting purposes. Badertscher, Phillips and Rego (2013) discovered that the firms carry out earnings management to avoid taxes. Besides, when companies faced bad business performance; they have strong tax avoidance motivation in order to survive. Therefore, financial performance holds a greater influence on tax avoidance motivation. Through this avenue, tax avoidance may likely influence financial performance through earnings management interaction of listed oil marketing companies in Nigeria. The importance of oil marketing companies to the Nigerian economy as evidenced in the large volume of trade in shares on the floor of the Nigerian Stock Exchange, implies that these companies deserved to be studied in isolation for better understanding of the direct and indirect effect of tax avoidance and financial performance. Building on the explanation above, this proposed study aims to fill the literature gap by examining the relationship between tax avoidance and financial performance with earnings management as the moderator for the above mentioned relationships.

The remainder of the study is as follows. The second section provides the study theoretical framework and relevant literature on tax avoidance and financial performance and literature on the moderating effect of earnings management on tax avoidance and financial performance and develops our research hypothesis. Section presents the research methodology. Result and discussion were discussed in section four. The final section of this study closes with our conclusion and recommendation.

## **2. Literature Review**

### **Tax Avoidance and Financial Performance**

Corporate tax avoidance is a significant plan for a company. Is one way to circumvent taxes legitimately that does not go against tax systems (Suandy, 2008). Tax avoidance is not a criminal activity but looks like something negative since the company is trying to reduce

the amount of tax payable in order to increase financial performance. Profitability is an important indicator of corporate financial performance. Regularly changing of company financial performance displays that the company has a risk in giving dividends to stockholders, so as to increase the confidence of the market manager will attempt to sustain profitability in order to remain reliable and stable (Tsuroyya & Astika, 2017). Financial performance is measured using Return on Assets (ROA). ROA is a performance indicator that is used to indicate the company's ability to manage a profit based on assets that are used. The more efficient company in the use and management of assets, the greater the chance it will be gaining corporate profits, so the ROA has pushed the incentive for managers in performing actions to create profit. As for one of this motivation is the motivation of the existence of the bonus that will be given to managers, therefore the manager will try everything possible to adjust its performance for the sake of getting an additional bonus.

However, studies on tax avoidance and financial performance have produced inconsistent results. Mosota (2014) studied the relationship between tax avoidance and firm performance of companies listed at the Nairobi Securities Exchange (NSE) for the period of 2013 using regression technique of data analysis. The results show that tax avoidance positively impacts on the financial performance of the companies. Nwaobia, Kwarbai and Ogundajo, (2016) studied the effect of tax planning on firm value of listed consumer goods firms in Nigeria for the period of 2010 to 2014. Data were drawn from the financial reports of the sampled firms and analyzed using regression technique of data analysis. Findings shows that tax planning has positive significant effect on firm performance.

Zhang, Cheong and Rajah (2016) studied the impact of corporate tax avoidance on firms' financial performance for the period 2004-2012. Structural equation modeling (SEM) was used as technique of data analysis. The study finds significant positive indirect relationships between tax avoidance and market performance. Chen Yee, Sharoja and Mazni, (2018) studied the connection between tax avoidance and firm performance of Malaysian Public Listed Companies (PLCs) for the period of 2014. The study uses cross-sectional and regression was used as a method of data analysis. The outcome shows that tax avoidance negatively and significantly affects firm performance through Tobin Q.

Junaidu and Saidu (2018) studied the effect of company income tax on the financial performance of listed consumer goods companies in Nigeria from 2006-2016. Data for the study was collected from the annual reports and accounts of the companies and regression analysis was used as a technique for data analysis. The study finds that there is an insignificant negative relationship between corporate tax and financial performance using return on assets as a measure.

Using data from the annual reports and financial statements of firms listed on the Ghana Stock Exchange (GSE), Naiping, Nancy, Augustine and Mandella (2019) examined the relationship between tax avoidance and financial performance for the period of 2009 to 2018. Ordinary Least Square regression was employed as technique of analysis. Findings show a negative relationship between tax avoidance and financial performance. Based on the mixed result in the prior studies, hypothesis one proposed from this study is:

**H<sub>01</sub>:** Tax avoidance has no significant effect on financial performance of listed oil marketing companies in Nigeria

### **Tax Avoidance and Financial Performance Moderated by Earnings Management**

Earnings management refers to the technique of managers of the company to undertake some executive actions on company's performance variables, which are reflected in the company financial reports. The practice of earnings management in the firms aims at giving the impression of smooth yearly earnings by showing high profit for the current accounting period at the expense of future earnings or to lower the current earnings in order to report high earnings in the future (Ronen & Yaari, 2008). Previous research has closely related earnings management with tax avoidance (Desai & Dharmapala, 2005; Ahmad & Amrie, 2018). Particularly, it has been argued that tax avoidance has corresponding techniques with earnings management, such that management who are tasked to avoid taxes can concurrently use those avoidance techniques to manipulate earnings to derive some private benefit (Desai & Dharmapala, 2009; 2007; 2005). Moreover, tax avoidance is the transfer of value from the government to investors (Desai & Dharmapala, 2005). It is attributed to be value valuable to investors. On the other hand, earnings management can be observed as a transfer of value from investors to manager. This is because diverted funds could have been used for profitable investments or paid out as dividends (Amiram et al., 2013). The



magnitude of earnings management problematic and its influence on financial performance is highly caused by lack of financial reporting transparency among the firms. This due to the fact that most organizations use accrual accounting methods which is the components of earnings, that are not reflected in the current cash flows and which the firm managers have discretion in reporting it (Chiraz & Anis 2013). Besides that, the level of profit has also been argued to have an influence on the manipulation of accounting accruals because managers may manage earnings to increase their bonus rewards. Moreover, low profitability ratio is usually related to higher earnings management because managers will not like to present a financial statement that show their poor performances, therefore, the need to manipulate financial statement to avoid reporting poor managerial efficiency. On the other hand, sustained poor performance can limit opportunistic management of earnings (De Angelo, 1994).

Earnings management has intervening variable can either increases or reduces corporate tax avoidance. Shiwei and Siyu (2012) studied the relationship between earnings management and tax avoidance of listed Chinese companies. This study use the data of Chinese A share non-financial listed companies from annual reports during 2004-2006. Using regression analysis, the study reveals that earnings management positively and significantly influences tax avoidance. Sally, Yorke and Cletus (2016) studied the consequences of earnings management and corporate tax avoidance on firm performance. Using a sample of non-financial firms listed on the Ghana Stock Exchange over a period of ten years (2003– 2012). Panel regression technique was used to analysed the data and findings shows that earnings management and tax avoidance negatively and insignificantly affect firm performance.

Sasiska, Didik and Luk (2018) studied the moderating effect of earnings management on the relation with corporate characteristics on tax avoidance. Using selected 49 manufacturing companies listed on the Indonesia Stock Exchange for the period of 2012-2016. The result of the panel data regression shows that earnings management moderates the effects of the profitability and tax avoidance. Ahmad and Amrie (2018) studied the effects of tax avoidance, Accrual Earning Management, Real Earning Management, and Capital Intensity to Equity Costs on manufacturing company listed on the Indonesia Stock

Exchange for the period of 2017. This investigation was a quantitative research with secondary data. The study used multiple regression as technique of analysis. The study fails to establish any relationship between tax avoidance and earnings management.

Lawe (2019) examined the indirect effect of earnings management on Profitability and tax avoidance on Manufacturing Companies Listed on Indonesia Stock Exchange for the period 2013 – 2017. The sample used as many as 45 manufacturing companies listed on the Indonesia stock exchange. Multiple regression was used as technique of data analysis. The result indicates that earning management does not mediate the relationship between profitability and tax avoidance.

### **Agency Theory**

The theory that triggers the moderating effect of earnings management on the relationship between tax avoidance and financial performance is the agency theory. Agency theory proposed by Jensen and Meckling (1976), points out an agency connection between the owners and managers. In this association, the managements act as agents for the owners, who are considered to be the principals. Managers are employed and are granted the appropriate authority for productive goals (Chen & Chu, 2015). Managers as agents owe a responsibility to owners, to maximize profit and value for owners as best as they can (Christensen & Murphy, 2004; Campbell, 2017). That is, a responsibility to employ their best efforts to earning a return on the investments of the owners and make best use of their wealth. Nevertheless, the separation of ownership and control brings into question the managers' incentives to take actions in the best interest of owners. Specifically, given that managers are interested by self-interest, are rational actors, they may have individual goals that compete with those of owners (Mohd, 2005; Sally, Yorke & Cletus, 2016). Therefore, there is good reason to consider that the manager will not always act in the best interests of the principal (Jensen & Meckling, 1994).

Agency theory is an applicable theory in this study because of the fact that managers are in charge for taking tax decisions, disagreement of interest can lead them into taking such decisions that reflect their personal benefits. This is possible because tax avoidance practices required managing of earnings to ensure tax advantages (Desai & Dharmapala, 2009) whereas managers engaging in tax avoidance practices are solely motivated by their

motivations to reduce the firm's tax liability. In view of this, tax avoidance has direct effect on increasing financial performance. Thus, companies with high performance will tend to commit tax avoidance practices to reduce their tax liabilities (Kraft, 2014). Moreover, one of the techniques used to smooth accounting earnings is to conduct earnings management. Which indirectly influence tax avoidance practice and firm financial performance.

### 3 Methodology

The study adopts correlational research which forms part of causal research design. The population of the study consists of the ten (10) oil marketing companies in the Nigerian stock exchange as at 31 December, 2019 which is not delisted as at 31 December, 2019.

**Table 3.1: List of Corporations**

<b>S/No</b>	<b>Name of Company</b>
<b>1</b>	Forte Oil Plc
<b>2</b>	MRS Oil Nigeria Plc
<b>3</b>	Total Nigeria Plc
<b>4</b>	Mobil Oil Nigeria Plc
<b>5</b>	Conoil Plc
<b>6</b>	Afroil Plc
<b>7</b>	Oando Plc
<b>8</b>	Eterna Oil & Gas Plc
<b>9</b>	Japaul Oil & Maritime Services Plc 2
<b>10</b>	Beco Petroleum Products Plc

Source: Authors Compilation from NSE Factbook

The number of firms was reduced to a working population of nine (9). Afroil Plc was excluded from the study population because it was delisted in 2014. Therefore, the entire working population of nine (9) oil marketing companies was used as the study sample considering the fact that the data required for the study is readily available from the published financial reports of the companies, and the NSE factbook for the relevant years. The data collected for this study is obtained absolutely from the secondary source. The data used for this study is extracted from the financial statements of the sampled oil marketing companies in Nigeria for the period of 2012 to 2019.

General least square (GLS) multiple regression analyses are employed to analyze the panel data based on random effect model using STATA 15. The random effect is arrived at from the result of Durbin-Wu- Hausman test which made it possible to make a choice between

the fixed effects model and random effects model.

### Model Specification

The following model was estimated:

$$ROA_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 ETR * EM_{it} + \beta_3 FS_{it} + \epsilon_{it}$$

Where;

ROA = Return on Asset

ETR= Effective Tax Rate

ETR\*EM= effective tax rate interacted with earnings management

FS= Firm size

$\beta_1 - \beta_3$  = coefficients of the study model

Where i denotes firm and t is for time and

$\epsilon$  is error term

Table 2: Study Variables and their Measurement

Variable Acronym	Variable Name	Measurement
Dependent variable		
ROA	Return on Asset	Net income divided by total asset
Independent variable		
ETR	Effective tax rate	Tax expenses divided by pre-tax income (Salaudeen and Ejeh, 2018)
Moderator variable		
EM	Earnings management	Performance Matched Discretionary Accruals by Kothari (2005)
EM* ETR	Interaction between Earnings management and effective tax rate	Earnings management multiple by effective tax rate
Control Variable		
FS	Firm size	Natural Log of Total assets (Salaudeen & Ejeh, 2018)

## 4. Results and Discussions

The sample descriptive was first presented in Table 1 where the mean, standard deviation, minimum, and maximum of the data for the variables used in the study were described.

Table 1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	72	0.3408805	0.198774	0.001486	0.76986
ETR	72	0.3087244	0.0920759	0.1089986	0.5491446
EM*ETR	72	0.0175962	0.0342511	-0.0950753	0.154328
FS	72	7.15645	0.9618533	4.00199	8.126416

Source: Computed from the Annual Report and Account using Stata 15 Output

The table one reveals that the sampled listed oil marketing companies in the study have an average performance of 0.3408805 in terms of Return on asset (ROA) with the standard deviation of 0.198774. The mean value of 0.3408805 suggests that on average, the studied companies realize about 34% from utilization of their assets. This is with a standard deviation of about 19.8 implying low rate of variability of the returns realized on assets (ROA) by the firms. The minimum and maximum values of ROA are .001486 (1%) and 0.76986 (77%) respectively.

Table .1 also shows the mean of effective tax rate (ETR) of the sample oil marketing companies during the period of the study is 0.3087244 with standard deviation of 0.0920759. This implies that the average effective tax rate of the sampled companies is 30% with the lower standard deviation of 9%. Which agreeing to the statutory tax rate for listed companies (30%), point to the uniformity between companies' tax level and tax policies. The minimum and maximum values of ETR are 0.1089986 (11% and 0.5491446 (55%) respectively. The moderating variable free earnings management (EM) has a mean of 0.0175962 with a standard deviation of 0.0342511. This implies that when earnings management interacted with tax planning it reduces the ETR to 2%. The dispersion of a standard deviation from the mean indicates the extent of variability of ETR of the oil marketing companies in Nigeria. It also has a minimum and maximum value of -0.0950% and 0.154328% respectively. Control variable (FS) also shows that the average firm size (of the sample companies during the period of the study is 7.15645 with standard deviation of 0.9618533. The minimum and maximum values of FS are 4.00199 and 8.126416 respectively.

**Table 2: Correlation Matrix**

Variable	ROA	ETR	EM*ETR	FS
ROA	1.0000			
ETR	-0.2675	1.0000		
EM*ETR	0.1436	0.2025	1.0000	
FS	0.4511	0.2047	-0.1315	1.0000

Source: STATA OUTPUT, 2015

The correlation matrix indicates that financial performance (ROA) have inverse relationship with tax avoidance of listed oil marketing companies in Nigeria evidenced from the coefficient of -0.2675, implying that effective tax rate decreased financial

performance. Other variables such as the moderating variable of earnings management interacted with tax avoidance have positive relationship with financial performance via ROA (0.1436). Also, the control variable firm size has a positive relationship with the financial performance (0.4511). It signifies that an increase in the firm size lead to a rise in financial performance.

**Table 3: Multicollinearity test**

Variable	VIF	1/VIF
ETR	1.11	0.904533
EM*ETR	1.08	0.927788
FS	1.08	0.926891
Mean VIF	1.09	

The result from multicollinearity test shows that the VIF is less than 10 while the 1/VIF is above 0.1. Therefore, this signifies the absence of multicollinearity and the regression model is well fitted.

**Table 4: Breusch Pagan/ Cook – Weisberg Test for Heteroscedasticity**

Ho: Constant variance

Variable: Fitted value of dllp

chi2(1) = 0.14

Prob > chi2 = 0.7035

The result from the above test indicates the chi – square of 0.14 and the probability of 0.7035. The result signifies that the null hypothesis is insignificant at 5% level of significant therefore the null hypothesis is accepted. This indicates the absence of heteroscedasticity.

**Table 5: Hausman Test**

	fe (b)	Re (B)	Difference (b-B)
ETR	-.1257754	-.2276385	.1018631
EM*ETR	.5238006	.6095706	-.08577
FS	-.0105224	-.0385213	.0279988

Source: Computed from the Annual Report and Account using Stata Software

Ho: differences in coefficients not systematics Chi2 7.06

Probability > chi2 = 0.0701

the result from Hausman specification test shows a chi2 of 7.06 and p value of 0.8049.

The p value with 0.0701 shows insignificant difference in the estimated coefficient of the two models which violates the assumption of fixed effect approach. Furthermore, since the result favours random effect, there is need to further conduct a test for panel effect of the

data using Breusch and Pagan Lagrangian multipliers test for random effect and OLS

**Table 6: Breush and Pegan Langrangian Multiplier Test**

	Var	Sd=sqrt(var)
ROA	.0395111	.198774
E	.0205904	.1434935
U	.0110197	.1049746

chibar2(01) = 13.55

Prob > chibar2 = 0.0001

From table 7, the Lagrangian multiplier test with chi2 of 13.55 and P value of 0.0001 signifies that random effect model is the most suitable model for this study. The study therefore concludes that the generalized least square regression of random effect is most appropriate technique of analysis.

**Table 8: Generalized Least Square Regression of Random Effect**

Variable	Coef.	Std. Err.	z	P> z
ETR	-.2276385	.2067298	-1.10	0.271
EM*ETR	.2311021	.0650841	3.55	0.001
FS	.5584842	.2108703	2.65	0.010
R-Square	0.3679			
Wald chi2(3)	111.56			0.0000

From the regression result presented in table 8, the R2 which is the multiple co-efficient of determination gives the percentage or proportion of total variation in the dependent variable (ROA) which is jointly explained by the independent, moderating and control variables to be approximately 37%. This signifies that 37% of total variation in financial performance of listed oil marketing companies in Nigeria is explained by changes in ETR, EM\*ETR and FS.

The cumulative result hold sway as the Wald Chi2 has a high value of 111.56 which is significant at 5%. This means that the model can be well fitted with the variables selected. Table 8 indicates that effective tax rate (ETR) has an insignificant negative effect on the financial performance of oilmarketing companies in Nigeria, from the coefficient of -.2276385 with t-value of -1.10, which is statistically insignificant at 5%level of significance (p-value of 0.271). This result suggests that, the higher the level of effective tax rate, the lower financial performance,it is statistically insignificant at 5% level. Based on this, the study fails to rejects the null hypothesis one (H01) which states that, tax avoidance has no significant effect of financial performance of listed oil marketing

companies in Nigeria. This implies that corporate tax avoidance does not interpret financial performance of listed oil marketing companies in Nigeria. This is consistent with Chen Yee, Sharoja and Mazni, (2018); Junaidu and Saidu (2018); Naiping, Nancy, Augustine and Mandella (2019) who found negative relationship between tax avoidance and financial performance.

The moderation effect of earnings management on the relationship between tax avoidance and financial performance is tested and the result from table 8 on the interaction between earnings management and tax avoidance (EM\*ETR) shows a positive coefficient of variation of 0.2311021 with t value of 3.55 and the p value of 0.001 which is significant at 5% level of significance. The findings reveal a positive and significant moderating role on the relationship between earnings management and tax avoidance. The study therefore rejects the null hypothesis two which stated that earnings management does not significantly moderate the relationship between tax avoidance and financial performance of listed oil marketing companies in Nigeria. The finding supports those of Shiwei and Siyu (2012); Sasiska, Didik and Luk (2018) but contradicted those of Ahmad and Amrie (2018) and also supported agency theory.

The regression result shows that firm size has a positive coefficient of .5584842 and a z-value of 2.65 with a p-value of 0.010. Hence, as firm size of the studied firms increases, their profitability also increases. This is to the extent that a one point increase in assets of the firm will lead to 55% increase in financial performance. Thus, the p-value of 0.010 which is significant at 5% signifies that FS strongly drives financial performance of listed oil marketing firms in Nigeria.

## **5. Conclusion and Recommendation**

The study examined the moderating effect of earnings management on the relationship between tax avoidance and financial performance in the context of oil marketing companies in Nigeria. The results reveal that tax avoidance negatively and insignificantly affect the financial performance of listed oil marketing companies in Nigeria. The study therefore concludes that tax avoidance does not determine the financial performance. That is tax avoidance practice is not merely a transfer of wealth from government to the shareholders of company as tax avoidance practices decreases possibility of managerial



rent extraction from shareholders of sampled oil marketing companies in Nigeria.

The indirect effect of tax avoidance and financial performance through earnings management indicated a positive significant relationship. The study concludes that managers whose bonuses are tied to firm performance will use flexibility in accounting methods and choice to decrease the company tax liabilities. This also implies that tax burden increases managerial motivations to engage in earnings management practices. In line with the findings and conclusion, the study recommends that government policy should be directed towards strengthening these factors in order to stir up company financial performance.

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# IMPACT OF TAX EDUCATION ON TAX COMPLIANCE IN NIGERIA

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## **Abstract**

*Tax education is a means of educating tax payers on the whole taxation process and the reason they have to pay tax while the ability of a taxpayer and the intention to follow all tax laws as well as tax procedures and processes of taxation is tax compliance. The objectives of the study was to ascertain the extent to which tax education impacts on tax compliance in Nigeria. The survey design was used in this study. The study is on the evidence from FIRS (Rivers State), Rivers State Board of Internal Revenue (RSBIR), tax consultants and taxpayers. The simple random sampling technique was employed to select the study respondents. The study also employed the questionnaire as the instrument for data collection. Data generated on the study variables through the five-likert scale questionnaires were analyzed on the SPSS platform using Pearson product moment correlation coefficient (PPMC) statistical tool. The result of the analysis showed a p-value of 0.000 and a coefficient determination of 0.799 which is an indication of significant relationship between the study variables and a very strong positive impact of tax education on tax compliance in Nigeria. The study therefore recommended that government at all levels in Nigeria through its tax agencies should engage in aggressive tax education to bring about tax knowledge on taxpayers and potential taxpayers which will increase tax compliance; resulting to increase in tax revenue. The study then concluded that the need for tax governance cannot be overemphasized as it is a means of creating tax knowledge and tax awareness to taxpayers to enhance tax revenue.*

**Key words:** Tax, taxpayers, tax education, tax compliance, Nigeria

## **INTRODUCTION**

Tax compliance increases tax revenue. For taxpayers to comply they must have adequate and sufficient knowledge and awareness of the tax laws, rules as well as the procedures involved. Knowledge and awareness can be achieved through tax education. Tax revenues are the most steady and consistent revenue contributor to the total revenue of any government. The generated revenues are used by the government to ensure that they

provide the basic amenities needed by the citizens. Collection of tax revenues correctly can assist in stabilizing an economy as it ensures less government dependence on borrowing. Edori, Edori and Idatoru (2017) posit that the system of taxation in Nigeria is designed as an income generation tool. To them, the Nigerian tax laws are very complex in nature that even those that are educated sometimes find it difficult to understand it. Leyira, Chukwuma and Asian (2012) postulates that as a result of the nature of the tax laws in Nigeria, that is very complex, understanding it by normal tax players is difficult and even officials that are learned sometimes find it hard to interpret it as a result of the tax laws nature of complexity. Many scholars and institutions have acknowledged tax education importance as well as how it is related with tax compliance. These scholars and institutions also lamented at the same time that tax education has been insufficient as it regards to tax payers information on tax obligations (Mbilla, Abiire, Atindaara & Ayimpoya, 2020). Newman and Nokhu (2018), a factor that is essential that could have influence on tax compliance is tax knowledge. Specific knowledge on taxation is needed to enable owners of small business to comply and also willingness to pay tax may increase (Kamleitner, Karunka & Kirchler, 2012).

Atungba (2001), generally, very insignificant tax information are available in the domain of the public. He further postulated that evidence that is overwhelming shows that both tax education and tax information are lacking but it can be improved using tax education. Nwanna and Richards (2010), “the lack of basic understanding of taxes is unwarranted, long overdue and importantly could be costing tax payers hundreds of millions of dollars”. Lack of elementary tax education and dearth of planning can be traced to tax payers, in their numerous numbers, inability to take various credit advantages, deductions and loopholes that are legal and to their advantages.

A major problem in Nigeria today as it regards to taxation is lack of adequate information, knowledge and understanding of the tax laws and tax legislations. In both the formal and the informal sectors, many are ignorant of the tax administration system; filling and payment process hence the need for effective, painstaking and thorough education in Nigeria.

Tax education is expected to enable taxpayers understand the laws and the procedures of

tax and create a positive attitude of tax compliance (Normala, 2007). Tax compliance is a vital issue for tax revenue authorities globally (Hassan, Nawawi & Salin, 2016) since the higher the number of compliance, the higher the revenue.

Palil (2011) study showed very close relationship between tax knowledge and ability of taxpayers to understand tax laws and legislations and compliance ability. Campbell (2008) study shows that tax education impact insignificantly on individual's behavioural change. It is the study's opinion that the study will lead to a situation where the government and its tax authorities will channel their efforts to tax education as it will subsequently lead to increased tax compliance instead of mobilizing efforts for tax enforcement. So, the study interest is on the impact of tax education on tax compliance in Nigeria.

### **Aim and Objectives of the Study**

The main aim of the study is to investigate the relationship between tax education and tax compliance in Nigeria. Other specific objective is as follows:

- To ascertain the extent to which tax education impacts on tax compliance in Nigeria

### **Research Questions**

- To what extent does tax education impact on tax compliance in Nigeria?

### **Hypotheses**

**Ho:** Tax education does not significantly impact on tax compliance in Nigeria

## **LITERATURE REVIEW**

### **Theoretical Review**

Allingham and Sandmo (1972) developed the primary theory of tax compliance. It was originally declared as individual that has income tax obligation declared. The theory's assumption is "that taxpayers are utility maximizes in decisions of tax reporting and compliance where tax evasion is seen as worthwhile if the benefits of it outweighs the financial costs (Mikailu & Nwidobie, 2017).

Allingham and Sandmo (1972) proposed a macroeconomic income tax evasion model (hereafter the A-S model). Relying on the model, taxpayer decisions can be written thus (Das-Gupta, 2014).

$$\text{Max } E(U) = (1-p) U(Y_N) + p U(Y_c)$$

$$Y_N = Y - TXY$$

$$Y_C = Y - TXY (1 - \pi) - (1+x) tY$$

Where;

$Y$  = represents income to declare to the tax authorities to maximize her expected utility of income.

$T(Y)$  = represents income tax function

$\pi$  = represents the penalty rate on detected but unpaid taxes.

$P$  = represents the probability of tax audits and detection.

$X$  = represents the fraction of income reported voluntarily to the tax authorities (compliance level).

## **Conceptual Review**

### **Tax Education**

Tax as defined by the Institute of Chartered Accountants Ghana (2011) as cited by Mbilla, Abirre, Atinolaana and Ayimpoya (2020) is a charge that is financial or other levy that is imposed on legal entity or person by the state. It is a levy that is compulsory and it is imposed by the government, through its tax authority, on her citizens in order to obtain revenue required for the finance of its activities.

If any country wants to expand her tax net and ensure voluntary and willingness to pay taxes by taxpayers, then tax education must not be neglected. Tax education is a means of educating tax payers on the total taxation process and the reason they have to pay tax (Aksnes, 2011). It is a method of educating the people about the whole process of taxation and why they should pay tax (Olowookere & Fasina, 2013). In which ever form, Mbilla, Abirre, Atinolaana and Ayimpoya (2020) tax education is crucial “and influences revenue mobilization in any nation”. Tax payers need adequate tax education on various taxes and processes to be literate on tax issues. Accordingly, Machogu and Amayi (2013) believe that education programme for tax payers remains a method to improve taxpayers’ service delivery. Kira (2017); Feldman, Katuscak and Kawano (2016) and Tanui (2016) shows taxpayers a times have limited understanding on the working of the tax payers a times have limited understanding on the working of the tax system.

Misra (2004) opined that the threefold taxpayer’s education as knowledge impartation in terms of compliance as well as tax laws; changing of the attitude of taxpayers as it regards to taxation; and voluntary compliance by taxpayers leading to increase in collection of taxes.



Tax education has its benefits. In the view of Tanui (2016) and Kira (2017), they clearly states that, tax education is attracting and also increasing attention among authorities (revenue authorities) in accordance with more current approaches to the administration of taxes that is on voluntary compliance and orientation of customers.

Nwanna and Richards (2010) categorized the advantages of taxpayers into advantages to taxpayers and to the government. They believe that both indirect and direct advantages of tax education are many. Financially, tax refunds can be claimed by taxpayers and also make savings through avoidance of possible penalties. Again, it can increase the number of taxpayers and tax law abiding citizens hence, increased compliance. Also taxpayers will acquire the needed tax knowledge and awareness hence, positioning them for better understanding.

To the government, tax education will drag more people into the tax net hence, increased compliance which will result to higher tax revenue. The government will then have more revenue that can be used in discharging her duties to the citizens.

### **Tax Compliance**

As taxes are old likewise are tax compliance questions and it will continue to exist as a discovery area as long as there is the existence of taxation. Government policy makers and tax authorities are increasingly agitating and showing great concern on how to increase compliance and increase the tax net. Tax compliance according to Marti (2010) cited by Mbilla, Abirre, Atinolaana and Ayimpoya (2020) is a mind blogging term to characterize. Compliance refers to fulfilling all tax obligations as required by the tax laws (Gitaru, 2017). Kirchler (2007), tax compliance is a term neutral in describing the willingness of taxpayers to willingly and to honestly pay taxes. Devos (2008) defined tax compliance as capability and intention of taxpayers in following the laws and guidelines of taxation. According to Adekoya (2019), Barbuta-Misu (2011) looks at tax compliance from the perspective of economics and defined as taxpayer's choice to pay his tax obligation or not by evading tax. Literatures on tax compliance most often have focused on just two factors. They are deterrence and tax morale (ICTD, 2018). While deterrence has to do with tax audits, sanctions, penalties, etc.; tax morale among others has to do with peer effects and fiscal responsibility reciprocity.

In classifying tax compliance, the Organization for Economic Co-operative and Development (OECD) (2009) classified it into administrative compliance and scientific (technical) compliance. Administrative compliance has to do with different tax administration and management matters compliance which includes deadline, procedures, filling of tax returns, etc., while the technical (scientific) has to do with conforming to the various tax rules, laws and regulations of the responsible tax authority and the adoption of the right accounting principles and the treatment to match the procedure of taxation (Hassan, Nawawi & Salin, 2016).

Three forms of tax compliance were identified by McBarnett (2003). They are committed, capitulated and creative compliance. He went further to suggest that reluctant or enforced compliance still remains compliance. OECD (2008) distinguished between voluntary (committed) and enforced (capitulated) compliances. To the OECD, looking at the context of tax administrative, capitulated compliance has associated cost which often is a very significant one. Committed compliance has to do with the taxpayers willingness in abiding by the tax laws and without any complain pays tax as at when due. In capitulated compliance, taxpayer is hesitant in discharging his/her obligations in respect of taxation. The creative compliance as explained by Alabede, Ariffin and Idris (2011) has to do with taxpayers' affairs organization in reducing the overall taxes through income redefining and expenditure deductible within the context of the law.

Sanders, Reckers and Iyer (2008) study shows that educational communication as it relates to "legal sanction awareness can help to improve tax compliance".

### **Relationship between Tax Education and Tax Compliance**

In striking a balance between government's revenue maximization by ensuring that tax compliance are enhanced and the desires of taxpayers to maximize profit and minimize costs, the government have to come up with methods and strategies to ensure that tax procedures are simplified and one of such method is tax education.

Berhane (2011), tax compliance is influence by tax education. Tax education helps taxpayers to meet their obligation (tax) to their government, which means that tax education is primarily for the encouragement of taxpayers' voluntary compliance (Gitaru, 2017). Tax education will produce the needed knowledge of tax by taxpayers which will

subsequently lead to compliance by the taxpayers as their perceptions and attitudes will change.

Tax information was stressed by Kirchler, Hoelzl and Wahl (2008). To them individual taxpayer, tax information with tax compliance are positively related. It is commonly believed that with adequate tax education many potential taxpayers in the informal sector will be roped into the tax net and it will also encourage taxpayers involved in tax evasion and tax avoidance to desist from it. Pilil (2010) and Richardson (2006) agreed that the needed knowledge of tax is vital in determining tax compliance is increasingly clear. Gitaru (2017) in his study came to the conclusion that “tax compliance could be influenced by educating taxpayers of their sole responsibilities to pay tax and thus their intention would be to comply.”

### **Tax Authority and Tax Education**

Though there are no competitors against tax authorities, tax education programmes are necessary for tax revenue generation growth (Nwidobie & Oyedekun 2018). Tax education of taxpayers on the taxpayers’ fiscal obligation is global tax authority’s administrative duty that is of utmost importance. They have the sole responsibility of educating taxpayers and potential taxpayers.

Mascagni and Santoro (2018) listed initiatives in Africa that can be tagged tax education as follows; Training. It is done on the taxpayers practicalities. This includes tax rate, deadlines, the nature and the characteristics of the various taxes;

Informing taxpayers through initiatives on paying tax importance. This includes the taxpayers role in public service funding; and discussion and information promotion around accountability as well as fairness, in respect of participation of greater citizens in the “debates around tax and budgeting.”

Tax authorities in Nigeria should design ways to improve tax compliance through tax education. They may involve the ministry of education, and tax consultants. Doing this will bring the knowledge of tax to the teeming Nigerian youths and hence could reduce the rate of tax non-compliance in the future.

An interview conducted by Mascagni and Santoro (2018) shows how relevance tax education is in the schools as it was stressed by revenue authorities officers interviewed.

According to them, all the revenue authority officials agreed that proactive focus on youths is needed in building tax culture of compliance that is solid.

Tax education can be improved through national taxpayers' day and annual campaigns; tax education in schools, tax edutainment; tax training and seminars; and mobile tax unity, etc.

### **Empirical Review**

Hassan, Nawawi and Salin (2016) looking at Malaysia experience on improving tax compliance via tax education used randomly selected sixty respondents as sample from the population of the study. Analysis shows that information on tax education is wisely used by taxpayers.

Mukhlis, Utomo and Soesetio (2015) on taxation education role on knowledge of taxation and the effect on tax fairness and also tax compliance used the Handcraft SMEs businessman located in the District/City in the province of East Java, Indosia as unit of analysis. The questionnaire was the instrument used for data collection while structural equation modelling (partial least square) was used for analysis. The result among others found that tax education is significant and positively impact on tax knowledge and tax knowledge positively and significantly impact on tax compliance.

Wong and Lo (2015) probed to have an answer on the question "can education improve tax compliance?" Using two hundred and five students taking tax course in Hong Kong. The result suggests that compliance in tax sales will significantly improved among undergraduate students if exposed to tax education generally. And both income tax and sales tax compliance would have also improved if post graduate students have taken technical tax course.

Mbilla, Abiire, Atindaana and Ayimpoya (2020) based on their study in Ghana on tax education and tax compliance. The study covers North Ghana using both exploratory and explanatory qualitative methodology and employing the questionnaire to gather data. The study shows that adequate tax education enhances tax compliances.

Gitaru (2017) empirically studies "the effect of taxpayer education on tax compliance in Kenya (a case study of SMES in Nairobi central business District)". Used taxpayer print media, electronic taxpayer education and stakeholder engagement on tax compliance. Analysis based on the respondents showed that all three taxpayer education method

influences SMES tax compliance.

Olowookere and Fasina (2013). “Taxpayers Education; A key strategy in achieving voluntary compliance in Lagos State, Nigeria” was empirically studied by them. The study adopted survey research and a simple random method was used in sampling 250 taxpayers in Lagos State. Using questionnaire (tax compliance appraisal) to gather data used the variance (ANOVA) for hypothesis testing. It was discovered that programme of tax education with focus on taxpayers enlightenment on tax evasion opportunities socio-economic implications and accountability and fair treatment of tax proceeds have influence that is significant on voluntary compliance of taxpayers in Lagos State.

Mikailu and Nwodobie (2017) study on “Taxpayers education and voluntary tax compliance study: implications for tax policy and administration in Nigeria”, centered on ten (10) federal and twenty (20) state tax agencies in Lagos and Ogun States, Thirty two (32) corporate taxpayers and hundred and twenty-five (125) individual taxpayers used the questionnaire and both the Z-test and Chi-square statistics as data collection instrument and method of data analysis respectively. The study finds out that there is improvement in Nigeria’s tax education though it is yet to affect tax compliance positively. Also, the Phi coefficient shows further that the level of association between taxpayers’ education and the level of compliance to tax obligations was not significant.

Nwodobie and Oyedokun (2018) empirically studied tax education channel effectiveness in Nigeria. Corporate and individual taxpayers formed the respondents that were interviewed using the questionnaire. Using marketing metrics found that the channel most effective for Nigeria for educating taxpayers is direct education.

Adekoya (2019) study “taxpayers’ education and tax compliance in Lagos State: A cross sectional survey was conducted on 400 individual taxpayers in Lagos State. Both simple and linear regression and the multiple regressions were used in the regression models estimation. The result showed positive significant effect of taxpayer education and tax compliance.

## **METHODOLOGY**

The survey design was used in this study. The target population of the study is FIRS, Rivers State Board of Internal Revenue (RSBIR), tax consultants and taxpayers. The simple

random sampling technique was employed to select the study respondents from the target population. The study also employed the questionnaire as the instrument for data collection. The questionnaires were subjected to both validity test and reliability test. The reliability test using the Crombach alpha showed 0.81 which is above the accepted 0.70, signifying the reliability of the instrument.

The collected questionnaires were edited to ensure consistency. Then it was subjected to analysis using the PPMC as the method of data analysis under the platform of SPSS.

### Presentation of Data/Data Analysis

**Table 1.** Questionnaire Analysis

Description	No. of Questionnaires	(%)
Questionnaires issued	156	100
Questionnaires Retrieved	151	96.8
Questionnaires not Retrieved	5	3.2
Questionnaires usable	151	100

Looking at the analysis of the questionnaire in table 1 above, one hundred and fifty six questionnaires were successfully distributed. Out of which one hundred and fifty one was retrieved, five was not retrieved representing 96.80% and 3.20% respectively. Out of the 151 retrieved all were usable representing 100% usable returned questionnaires.

**Ho:** Tax education does not significantly impact on tax compliance in Nigeria  
Correlation

		TaxEdu	TaxCom
TaxEdu	Pearson Correlation	1	.799**
	Sig. (2-tailed)		.000
	N	151	151
TaxCom	Pearson Correlation	.799**	1
	Sig. (2-tailed)	.000	
	N	151	151

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation result shows relationship between tax education and tax compliance in Nigeria. The 0.799 coefficient of determination indicates a very strong impact of tax education and tax compliance in Nigeria. The p value is 0.000 indicates significant relationship between study variables. Again, the 0.799 coefficient of determination is an indication of a very strong positive impact of the predator variable (tax education) on the criterion variable (tax compliance) which means increase in tax education will led to increase in tax compliance in Nigeria.

### **Discussion of findings**

The study result indicated that tax education positively and strongly affects tax compliance. In other words, 80% of the variation in terms of tax compliance witnessed was accounted for by the impact of tax education and awareness provide. The study is in line with the past studies of Miklis et al (2015) as well as Mbilla, et al (2020) whose studies from various jurisdictions indicated that tax education affects tax compliance.

### **CONCLUSION AND RECOMMENDATION**

The study was conducted on the impact of tax education on tax compliance. The need for tax compliance cannot be overemphasized as tax revenue remains the most consistent revenue contributor to any government. The study relied on primary data and find that though the tax education has not been effective used in Nigeria; it has a very strong positive impact on tax compliance. This calls for the urgent need to employ tax education strategy, especially in the informal sector, to create awareness as well as tax knowledge among taxpayers to increase the numbers that will be brought into the tax web. Again, taxpayers will acquire the needed tax knowledge and awareness hence, positioning them for better understanding.

The study therefore recommends that government at all levels in Nigeria through the tax agencies or agents employ aggressive, thorough and effective tax education strategy to bring about tax knowledge on taxpayers and potential taxpayers which will increase compliance and the result will be increased tax revenue.

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# TAX EVASION AND TAX AVOIDANCE IN NIGERIA: A BY PRODUCT OF ECONOMIC INJUSTICE

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## Abstract

*Taxation is a veritable mechanism for raising revenue for government expenditure programmes and a tool for moderating a nation's economic activities. Though there are number of reasons for the act of evasion and avoidance of tax in Nigeria but the chief among them is the attitude of people as induced by inability of Government to use the tax revenue for judicious purposes and ways which commensurate with the taxes paid. The objective of this paper is to review the concept of tax invasion, avoidance and economic injustice in Nigeria. This paper made use of exploratory research method by review past literature on tax avoidance and tax evasion. The paper concluded among other things that to effectively address tax evasion and avoidance, increase in the provision of public goods and a significant reallocation of public expenditures are therefore necessary. The paper recommended that there should be tax administrative mechanism that can checkmate tax offenders and minimize corruption; reduce evasion and avoidance tax as well as improving the management of tax revenue.*

**Key words:** Tax Evasion, Tax Avoidance, Taxation, Government Expenditure, Tax Payer.

## 1.1 Introduction

Tax evasion and avoidance has long been a subject of concern in the Nigerian tax system as the attitude is argued to have adverse effects on government's socio-economic and political programs. Government's revenue through taxation and expenditure are designed to counter economic cycles in order to achieve lower unemployment, a low or no inflation, sustained economic growth as many countries of the world depend mainly on taxation for generating required income meant to meet their financial needs (Kusi, 1998). To support this, Pfister (2009) explained that tax provides a predictable and stable flow of revenue to finance developmental objective of government. Worlu and Emeka (2012) assert that tax revenue utilization is a basis for supporting developmental activities in less developed

economies but collecting revenue has been a difficult matter primarily due to various form of confrontation such as tax evasion and corruption exercises. Taxes, according to Yahaya and Yusuf (2020) are compulsory contribution from the individuals and corporations to the government purse towards developments, provision of infrastructural facilities for the wellbeing of its citizens and governance.

According to (Saidu, 2014), tax is used as an instrument of fiscal policy by the government to encourage certain sectors or areas of the economy that are essential for economic development. However, the issue of tax avoidance and evasion have become an obstacle towards the achievement fiscal objectives in Nigeria for ages. Nigeria case is not an exemption among other developing nations; Martens (2007), elucidated a general fiscal state of the developing countries and opined that up till now the mobilization of domestic resources and the strengthening of fiscal policies for the purposes of poverty eradication, social and income redistribution have been facing several internal and external obstacles as ineffective tax systems fail to reach some wealthy individuals all of which comes hand in hand with a weak or even corrupt public administration.

In the opinion of Olabisi (2010), no one likes to pay taxes despite the fact that tax payment is inevitable, hence individuals and companies want to reduce their tax liabilities legally, by tax avoidance or illegally by tax evasion.

According to Adegbe (2016), tax evading has become the favorite crime of the Nigerians, so popular that it makes armed robbery seem like minority interest, so widespread that there now exist a cash economy of vast proportions over which the taxman has no control and which is growing at several times the rate of the national economy. No doubt, tax evasion and avoidance had robbed the Nigerian government of substantial tax revenue he opined. Consequently the assumed goals of collecting tax revenue by the government could not be fully achieved (Oyebolu, 2018).

## **1.2 Statement of the problem**

In Nigeria the contribution of tax revenue has not been encouraging, corruption, evasion, avoidance and tax haven indicators are strongly associated with low revenue (Attila, Chambas, and Combes, 2008). Following the increasing cases of tax non-compliance, especially tax evasion and its consequences on the capacity of government to raise public revenue, great amount of attentions have been paid to the issue of tax compliance globally by public policy makers and researchers (Alabede, Ariffin & Md Idris, 2011). Tax revenue mobilization as a source of financing developmental activities in less developed economies (Nigeria inclusive) has been a difficult issue primarily because of various forms of resistance, such as evasion, avoidance and corrupt practices attending to it (Worlu & Nkoro, 2012). In another dimension, lack of efficient ways of collecting tax poses challenge to tax revenue collection, as efficient and effective tax administration use to

results in increased revenue yield, but appear not to be possible in Nigeria because of the problem of evasion and avoidance which are by-products of the loop holes found in the tax laws (Chigbu, Akujuobi, & Appah, 2012). To buttress this point Afuberoh, and Okoye (2014) asserts that revenue derived from taxes has been very low and no physical development actually took place over the years hence the poor feel no impact of tax. With all the bottlenecks, the revenue generated from tax at all levels of government in Nigeria are not judiciously utilised, the country is still ranked among the economically less advanced and the majority of the population still wallow in poverty, while many live below (\$1) one US Dollar per day creating a wide gap between the rich and poor (Chigbu & Njoku, 2015). Despite the various reforms and policies issued by the federal government of Nigeria with the aim of improving tax revenue generation, Nigeria has continued to experience unmitigated delinquency through widespread tax evasion and avoidance (Nwaorgu, Herbert & Onyilo, 2016).

Galolo (2018) affirmed that evasion of income tax has been a serious problem in Nigeria. However, this study will review the concept of taxation in Nigeria by tending towards the dimension of how and why we have high level of tax evasion and avoidance in Nigeria.

### **1.3 Objective of the Study**

The objective of the paper is to review past literature to actually deal with the concept of tax evasion and avoidance and the issue of economic injustice in Nigeria.

### **1.4 Methodology**

This paper adopts an exploratory research method by reviewing the literature from past scholars with the aim of describing the problem of Tax evasion and avoidance and economic injustice in Nigerian.

## **Review of Related Literature**

### **Introduction**

In attempt to review the relevant literature, this paper is divided into the conceptual, theoretical and empirical framework.

## **2.1 Conceptual Framework**

### **2.1.1 Concept of Taxation**

Chigbu, Akujuobi, and Appah, (2012) explained that taxes are levied on individuals, groups, business or corporate bodies, by constituted authorities for funds used by state in the maintenance of peace, security, economic growth and development and social engineering for the benefit of the citizenry.

Tax has been defined as a compulsory transfer or payment of money occasionally of goods and services from the private individuals, institutions or groups to raise revenue to finance

government expenditures. To Anyafo (1996), that taxes are imposed to regulate the production of certain goods and services, protection of infant industries, control business and commerce, curb inflation, reduce income inequalities among others.

It may be levied upon wealth or income, or in the form of surcharge price (Anyanwu, 1997). Tax is a fee that is charged or levied on a, income, product or activity by a government (Worlu & Nkoro, 2012).

### **2.1.2 Purpose of Taxation**

**Tax plays a vital role in every country for redistribution of wealth from corporations and rich individuals as well as funding vital public services and tackling the problem of poverty.** In line with this Osemeke, Nzekwu and Okere (2020) opined that it is the government responsibility to provide basic amenities and to also create an enabling environment for individual and companies.

All the revenue realised by the government are normally shared between the three tiers of government Central (Federal), State and Local in an agreed ratio. The revenue realised from taxation are supposed to be used to perform the various functions of government, among which are enforcement of law and order, protection of properties and economic infrastructure (such as roads, electricity, potable water, affordable houses) and employment opportunity.

The general welfare to the public are in form of; healthcare- delivery, education system, public transportation, pensions, gratuity and environmental management (Adedokun, Ajayi & Oyesiji, 2015).

Taxation is also used to promote other objectives like equity, close the gap between the rich and the poor and to address social and economic concerns (Chigbu et al,2015). Taxation is also acknowledged as a very essential instrument for National Development and growth in many societies (Gurama, Mansor & Pantamee, 2015).

### **2.1.3 Tax administration in Nigeria.**

Nigeria operates a three-tier structure of government with certain fiscal responsibilities and power delineated to each level, as a result, tax administration in Nigeria is basically a function of the three tiers of government. Each tier has a machinery to ensure the effective collection of taxes within its jurisdiction (Somorin, 2016).

### **2.1.4 Types of Taxes**

Tax can be classified based on its incidence into Direct and Indirect taxes. A direct tax is tax on income that is borne directly by the tax payers; it is levied directly on the tax payer. Which means that the person who bears the burden of the tax is the person assessed (Galolo, 2018). Examples of direct tax are personal income tax, companies' income tax, capital gain tax and petroleum profit tax. While indirect tax are taxes initially suffered by the taxpayer

but whose ultimate burden is borne by the final consumer of the goods and services; excise duties, customs duties, stamp duties and value added tax. This category of tax are borne by a person other than the one from whom the tax is collected (Soyode & Kajola, 2006; Adedokun, Ajayi & Oyesiji, 2015).

### **2.1.5 Forms of Tax**

A tax can be progressive when the rate remains the same as the tax base increases therefore the amount paid is proportional to tax base, for a progressive tax; the percentage increases as the tax base increases making the richer to pay more. The regressive tax however, the percentage of the tax rate decreases as tax base increases. One of the many disadvantages of a progressive tax according to Soyode and Kajola, (2006) is that it might lead to tax evasion and tax avoidance because people who are liable to pay higher tax might falsify account and submit to avoid tax.

### **2.1.6 Principle of a Good Tax System**

A good tax system must employ the principles of equity, economy, certainty, convenience, simplicity, ability to pay, benefit principle and neutrality. Principle of equity according to Jhingan (2004), the principle state that every taxpayer should pay the tax in proportion to his or her income. The rich should pay more than someone with lesser income.

Principle of economy says that every tax should satisfy the principle of economy in two ways. First, it should be economical for the state to collect it; second, it should be economical to the taxpayer. It means that he should have sufficient money left with him after paying the tax. A very heavy tax on incomes will discourage saving and investment and thus adversely induce evasion. Anyanwu, (1997), argues that this principle of taxation requires that taxes should not be imposed if their cost of collection would be excess.

### **2.1.7 Concept of tax avoidance**

Tax avoidance is legal (Galolo, 2018). It takes place within the legal context of the tax system, individuals or firms take advantage of the tax code and exploit loopholes engaged in activities that are legal but run counter to the purpose of the tax law with the sole purpose to reduce tax liabilities (Chiumya, 2006).

Tax avoidance is not illegal since the taxpayer probably using the tax laws to limit the tax liability under the same laws. Avoidance of tax could be when a tax payer engage in Seeking professional advice; reducing one's income by submitting claims for expenses in earning the income, taking additional life assurance policies. We can then explain tax avoidance to be ways of being sensible and knowing the interpretation of the law and taking its advantage. With tax Avoidance the tax payer utilizing existing tax laws to defers his present tax obligations in order to maximize his economic position. Galolo (2018) described tax avoidance as a practice that benefits the tax payers even at the expense of the

state. An example for tax avoidance is strategic tax planning where financial affairs are arranged in such order as to minimize tax liabilities. While the law regards tax avoidance as a legitimate game of wisdom, tax evasion is seen as immoral and illegal act.

### **2.1.8 Concept of tax evasion**

According to Akinyomi and Okpala (2013), though tax evasion and tax avoidance often appear together but they do not have the same conceptual meaning, the efforts of tax payers; both individual and companies directed towards illegal reduction of tax liabilities are referred to as tax evasion. Tax evasion is accomplished by deliberate act of omission or commission which constitutes criminal acts under the tax laws. Tax evasion therefore is an outright dishonest action whereby the taxpayer endeavors to reduce his tax liability through the use of illegal means. By this act the tax payers outrightly decline the payment of taxes. The act is criminal and illegal in the eyes of the law (Akinyomi, 2013). This also impacts negatively on government revenue as it involves failure to pay tax, failure to submit returns; omission or misstatement of items from returns; understating or under reporting of income (Adebisi & Gbogi, 2013); documenting fictitious transactions in the tax return; overstating expenses. Tax evasion is a sort of dishonest reduction of tax liabilities, intentional distortion or concealment of facts with the intention to avoid the payment of tax or to reduce the amount of tax payable (Nangih and Nkemakola, 2018). Tax Evasion refers to illegal practices to escape from taxation, the taxable income, profits liable to tax or other taxable activities are concealed, the amount and the source of income are misrepresented, or tax reducing factors such as deductions, exemptions or credits are deliberately overstated.

### **2.1.9 Reasons for evasion and avoidance**

Gurama, Mansor and Pantamee, (2015) opined that the reasons while people evade tax seems to be unanimously universal as it cut across all nations. Generally those reasons could be divided into two categories; The first category comprise of factors that negatively affect taxpayers' compliance with tax legislation. Issue like; Low tax morale, low quality of the service in return for taxes, tax system and perception of fairness, low transparency and accountability of public institutions, high level of corruption, lack of rule of law and weak fiscal jurisdiction and lack of rule of law and weak fiscal jurisdiction.

The second category contains reasons for the low ability of tax administration to enforce tax liabilities. Weakness in tax administration system, weak enforcement of tax laws, weak capacity in detecting and prosecuting inappropriate tax practices, weak capacity in detecting and prosecuting inappropriate tax practice.

There are so many other ways by which people evade or avoid tax but the most common form of tax evasion in Nigeria is through the failure of the tax payer to render tax returns



to the relevant tax authority because of the weakness in the tax administrative system which also resulted to low compliance level.

The Chartered Institute of Taxation of Nigeria (2010), also confirm that the administration of income tax in Nigeria is characterised by low compliance level despite the nation's human and natural endowment as well as economic potentiality by recording one of the lowest tax compliance level in Africa.

According to ITC (2010), developing countries are confronted with social, political and administrative difficulties in establishing a sound public finance system as a result they are vulnerable to tax evasion and avoidance activities of individual taxpayers and corporations. Tax systems in many developing countries are characterized by tax structures not being in line with international standards, by lack of tax policy management, low compliance levels (OECD, 2008). Nwaolisa and Kasie(2012), advised that when a system of taxation is to be created, a nation must make choices regarding the distribution of the tax burden, in terms of who pay taxes, how much to pay and how to spend the tax collected.

### **2.1.10 Concept of Economic justice**

The level at which tax avoidance and evasion have hamper developmental efforts of government has been an important area of research in the past decades. In Nigeria, the economy seems to have grown without the creation of adequate opportunities for the teeming population. Many of the nation's resources are not evenly distributed resulting in persistent inequities across all regions. This dashes the hope of taxpayers to enjoy social amenities while the infrastructure which the taxpayers are thought to enjoy is in a horrible condition.

The failure of government to provide these resources leads to an increase in poverty and aggravated social inequalities (Martens, 2007). Ojo (2008) explained taxation as a concept and the science of imposing tax on citizens. He stressed further that as a compulsory levy is generally considered as a civic duty to be observed by every citizen. Be that it may, the government is not immune against the observation of their obligations under the tax laws. To whom much is given much is also expected. The imposition of taxation according to Afubero and Okoye (2014) is expected to yield income which should be utilized in the provision of amenities in form of social security and creates conditions for the economic wellbeing of the society. Drawing from the idea of Gurama, Mansor and Pantamee (2015), it is possible for tax payers not to expect something measurable for their contribution but they must have enjoy some value of living in a reasonably healthy, educated, prosperous and safe society.

Where a government collect taxes and cannot provide the necessary resources to finance key development tasks, it might be seen as an act of social injustice.

Where the developments are not effectively carried out or not available for the benefit of ordinary citizen, the citizen might design other means of survival which could be so costly

to the extent that their income are drained and tax payers will thereafter attempt to ease their tax burden. In recent research conducted by Osemeke, Nzekwu and Okere (2020) on some small business owners are not willing to pay tax, the findings shows that inability of successive government regimes to provide basic amenities for the population have forced some traders to embark on philanthropic act of paying for repairing of some community roads. Even though this takes away the burden from government, the cost remains a big concern as it wipes away the profit made by business owner. Consequently, some small business owners have resisted paying tax. The research further revealed that many parents also complained about the difficulty of bringing their children to school due to bad condition of the roads.

Evidences from past researches revealed some factors that may be responsible for those attitude of tax payers' invasion or avoidance of tax in Nigeria which could be specifically due to the advent of high level of tax and economic injustice.

- Absence of a 'Quid Pro Quo' 'something which can be readily exchanged for another'. Quid pro quo in this context means direct or specific benefit for tax paid Ironkwe and Nnaji (2017). An average tax payer expects something of value in return from the government for taxes they paid (Adebisi and Gbegi, 2013). However, the level of social services and public infrastructure enjoyed is not a function of how much tax you pay hence people would still avoid paying if they can.

- Inequitable Distribution of amenities unfair distribution of amenities and other infrastructures. For high level of tax justice to subsist, the tax system should generate sufficient revenue and ensuring the fair redistribution of such revenue while focusing on rebalancing inequalities. Nwaolisa and Kasie (2012), informed that the general opinion amongst scholars is that Nigeria's fiscal regime is characterized by needless complex, distortions and inequitable taxation laws. Akintoye and Tashie (2013) stressed that the willingness to pay tax is a crucial factor that should not be ignored by the government and advised that the government should focus and improve on those factors. Therefore, for Nigeria tax system to reduce the level of tax dodging; Galolo (2018) suggests that as a good tax system is expected to have a desirable effect on the economy, on the same vein it is believed that Nigerian tax system should have equity.

- Lack of transparency as regards the utilisation of tax revenue for social services and visible developmental projects. Akinyomi et al (2013), posit that lack of transparency and accountability as to the use of public funds contributes to public distrust with respect to both the tax system and the government.

- Misuse, Mismanagement and diversion of revenue Collections. People pay tax as a way of contribution or pooling of resources towards the achievement of some developmental

projects that might not be possible for citizen to accomplish on their individual capacity. Therefore, Gurama, Mansor and Pantamee (2015) assert that it could be a conditional believe that the disbursement of such tax (contribution) will be in turn useful to the entire public.

#### 2.1.11 Penalty for tax avoidance and tax evasion

A tax evader may be charged for criminal offences with punishment ranging from fines, penalties and at times imprisonment being levied on the offender.

To improve on the collection of tax and to mitigate against the activities of invaders of the follow measures can be applied;

- Effective utilization of money realized from tax.
- A complete overhaul of the Nigeria Tax system is necessary.
- Tax education machinery must be set in motion for continuous education.
- Tax clearance certificate presentation of business transaction with government agency.
- Monetary penalties and criminal sanctions to be drastically increased.

#### 2.1.12 Measures of Preventing Tax Avoidance and Tax Evasion in Developing Countries

In order to curb tax evasion and avoidance and tackle the problem of tax injustice; developing counties are advised to embark on the measure adapted from (Martens, 2007).

i. Development of efficient and just tax systems: One the basic requirement for strengthening public revenues is an efficient tax system. Taxation should be based on all the principles of good tax and rich individuals. From the pre-independence government, the Nigerian tax system is basically structured as a tool for revenue collection (Nwaolisa & Kasie, 2012).

Strengthen tax authorities and tax administration. In Nigeria tax authorities still needs to be developed and strengthened.

Tax compliance as part of corporate accountability; Compliance to tax rules must be seen as corporate accountability issue.

Combating and preventing corruption and bribery.

To curb the embezzlement of public funds and reduce revenue losses due to fraud, corruption and bribery, government should strengthen international tax cooperation or treaty (double taxation arrangement).

Improved information exchange between tax authorities located at home and in the territories of other countries, cooperation with international bodies could also be encouraged.

## **2.2 Theoretical Framework**

According to Chigbu, Akujuobi, and Appah, ( 2012), a taxation theory can be derived on the assumption that there is no relationship between taxes paid and benefits received from government activities, some are based and linked with tax liability and government activities and while some are based on the principle of ability to pay.

### **2.2.1 Socio-political theory**

The theory advocates that social and political objectives should be the deciding factors in choosing taxes. It is an individualist approach to a problem and suggests that economic problem should be looked at in its social and political context and appropriate solution thereof. The society in total is more than the individual members. Accordingly, a tax system should not be designed in such as to serve individual member but for the whole society. So a welfare approach should be use when adopting tax policy. The theory favours the use of taxation for reducing income inequalities.

### **2.2.2 Benefit received theory**

This theory centred on the assumption existence of an exchange or contractual relationship between tax-payers and the state. If people do not receive benefits commensurate with their tax burden, then perhaps the expenditure should not be undertaken at all (Ironkwe & Nnaji, 2017). The state provides certain goods and services to the members of the society and they in turn contribute to the cost supplies in proportion to the benefits received. It is a quid pro quo approach; there is no place for equitable distribution of income and wealth. Instead, the benefits received are taken to represent the basis for distributing the tax burden in a specific manner. This theory overlooks the possible use of the tax policy to bring about economic growth or economic stabilization.

### **2.2.3 Ability to pay theory**

This approach considers tax liability as a true form-compulsory payment to the state without quid pro quo. The problem with the theory is that it does not assume any commercial relationship between the government and the citizens. According to this theory, a citizen is to pay taxes just because he can and his relative share in the total tax burden is to be determined by his relative paying capacity. The ability to pay principle often considered the basic criterion of justice taxation (Ironkwe & Nnaji, 2017).

This theory is socially supported because of its conformity with the ideas and concepts of justice and equity.

The basic tenet of this theory is that the burden of taxation should be shared by the members of society on the principles of justice and equity and the principles advocate the tax burden is apportioned according to their relative ability to pay (Chigbu, Akujuobi, and Appah, 2012).

## 2.3 Empirical Framework

Olabisi (2010) carried out a research on **an assessment of tax evasion and tax avoidance in Lagos State**. The study examined the causes and effect of tax evasion and tax avoidance in Lagos state and proffering solution to the problem of these tax irregularities. Statistical Package for Social sciences (SPSS) was employed in analyzing the questionnaire and chi-square was used to test the hypotheses. The study revealed that the tax administration is very inefficient and ineffective, and that there is no adequate information on the taxpayers in the state hence, some people can hide from their tax liabilities Lagos State. It was also discovered that there is a significant relationship between tax evasion and tax avoidance and the revenue of Government and the tax rate.

Alabede, Ariffin and Md Idris (2011), carried out a research on individual taxpayers' attitude and compliance behaviour in Nigeria, the findings of their research suggests that for a developing country like Nigeria the attitude towards tax evasion may be influenced by other factors as corruption, lack of public accountability, religion and economic situation . The result of the study also indicates that taxpayer's attitude towards tax evasion is positively related to compliance behaviour. This suggests why tax evasion remains the greatest challenge confronting tax administration in Nigeria, as confirmed in the (Nzotta, 2007; Sani, 2005).

Adegbe and Fakile (2011), conducted a research based on the company income tax and Nigeria economic development relationship. The regression analysis concluded that there is a significant relationship between company income tax and Nigerian economic development. And that tax evasion and avoidance are major hindrances to revenue generation.

Akinyomi et al (2013), conducted research on the factors that are influencing tax evasion and tax avoidance in Nigeria. The study adopts a survey research design. The results of the analysis revealed that the low quality of the service in return for tax does significantly influence tax avoidance and evasion in Nigeria. Furthermore, tax system and perception of fairness, low transparency and accountability of public institutions, and high level of corruption do significantly influence tax avoidance and evasion in Nigeria.

Saidu and Umar (2014), carried out an empirical study and found out that there is a significant positive relationship between the perception of self-employed individuals on why they evade tax and the poor performance of government, the respondents agreed that it is ethically good to pay tax but further argued that, mismanagement of public fund, corruption and malpractices resulted in their actions and persistent tax evading attitude.

Osemeke et al (2020) carried a research on the challenges affecting tax collection in Nigerian informal economy in Anambra State using documentary analysis and semi-structured interviews with 35 respondents across different industries in the State. The study found that lack of provision of amenities and infrastructural development are among the reasons why many traders and employees do not pay tax in Anambra State, Nigeria as they have to bear the burden for the provision of such amenities themselves.

Yahaya et al (2020), carried out research on Impact of Company Characteristics on Aggressive Tax Avoidance in Nigerian Listed Insurance Companies. The study adopted ex-post facto research design, and data were drawn from the audited annual reports of twenty (20) randomly listed insurance companies between 2010 and 2018. The study concluded that company characteristics influences aggressive tax avoidance of insurance companies in Nigeria. And that firm' size and leverage have a positive impact on aggressive tax avoidance in Nigerian listed insurance companies while firm' profitability and Age have a negative effect on aggressive tax avoidance.

### **3.0 Conclusion**

Tax evasion and avoidance has long been a subject of concern in the Nigerian tax system as the attitude is argued to have an adverse effect on government's socio-economic and political programs. Tax revenues can be fully realised in any economy if government can come up with programmes that will have benefit to common people and impact on their welfare. To address a tax evasion and avoidance, drastic increase in public revenues and a significant reallocation in public expenditures are therefore necessary.

### **4.0 Recommendation**

Governments are advised to use tax revenue in solving problems of welfare of the citizens as this will result into more generation of tax revenue and reduce tax evasion and avoidance. The government should endeavour to incorporate the interest of the tax payer in its fiscal policy, so that the tax payer will not feel short changed, as this will eventually change their attitude towards avoidance of tax.

Also government should enact new fiscal laws and legislations and strengthen the existing ones in line with macro -economic objectives. They should ensure that the oil, gas and mining sectors, be required to disclose information about taxes, royalties, fees and other transactions with governments and public sector entities in all of the countries in which they operate. They should put in place tax administrative mechanism which will checkmate tax offenders in order to minimize corruption; evasion and tax avoidance and improve on the management of tax revenue.

The adoption of fair and efficient tax systems contribute to good governance and accountability of the state and government should endeavour to ensure efficient performance of the tax system.

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# TAX ADMINISTRATION IN DEVELOPING COUNTRIES

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## **Abstract**

*The aim of this study is to evaluate tax administration in developing countries using selected countries in West Africa. This study becomes pertinent as a result of various trade agreements signed by the Presidents and Heads of State of these countries guaranteeing easy cross-borders trading. The methodology employed involved the review of extant literature relating to the subject under study using purposive sampling of developing countries in West Africa which include Nigeria, Republic of Benin, Togo, Ghana, Cote d'Ivoire and Senegal. Findings revealed that there are differences in tax administration systems between the selected countries. The paper therefore recommends that, all cross-border businessmen and the citizens of every country should deliberately keep themselves updated on the tax regime operating in the country they are staying, trading or intend to trade so that they will not fall on the negative side of the tax laws.*

**Keywords:** Developing countries, tax administration, trade agreements, tax laws, tax regime,

## **INTRODUCTION**

A tax is a compulsory financial charge or other type of levy imposed upon a taxpayer (an individual or legal entity) by a government in order to fund government spending and various public expenditures. Various scholars have defined tax as reflecting as a compulsory levy imposed by a public authority on income, consumption and production of goods and services (Ishola, 2011; Abiahu & Amahalu, 2017). Petit and Jalles (2018) opined that taxes are particular sum of money demanded by a government for its support or for specific facilities or services, levied upon incomes, property, sales, etc. It is a burdensome charge obligation, duty or demand. On the other hand, taxation is the process of levying and collecting tax from taxable individuals and entities. To achieve this, nations develop

administration models to effectively manage the imposition, collection and accountability of tax revenue and generations.

The main aim of this study will focus on assessing tax administrations in developing countries using selected countries in West Africa. Specifically, the study will aim at:

- a. Ascertaining the tax administration system in place.
- b. Identifying the various organs of tax administrations and their functions
- c. Assess the types of taxes collectible.
- d. Evaluate the effectiveness and efficiency of the tax administrations
- e. Identify the challenges/problems of tax administration.
- f. Identify factors that may improve effectiveness and efficiency of tax administration

## **CONCEPTUAL FRAMEWORK**

### **Tax administration**

The main tasks of tax administration centers on the implementation and enforcement of tax legislations and regulations (Allink & Kommer, 2000). These activities include identification and registration of tax payers, processing of tax returns and third-party information, examination of the completeness and correctness of tax returns, assessments of tax obligations, collection of taxes and provision of services to tax payers. It means the administration, management, conduct, direction and supervision of the execution and application of the internal revenue laws or related statutes. Furthermore, it involves the collection of all tax revenues due in a fair and efficient way with limited costs for tax payers and tax administration itself. Therefore, a good tax administration system needs to ensure that tax payers comply with the tax rules and regulations.

Functionally, tax administrators compute taxes levied, assess tax returns and ensure that taxes are paid promptly. They inspect account books and accounting systems for accuracy and completeness using accepted accounting procedures. They organize and maintain financial records, assess financial operations and make best-practices recommendations to management. Tax administration operates in societies that are rapidly changing and have to fulfill increasing demands and growing expectations from their stakeholders (Petit & Jalles, 2018).

### **Effective and efficient tax administration**

Tax administration is effective when it achieves a high level of voluntary tax compliance and efficient when tax administration's costs are low in relation to the collected revenue. That is, it minimizes the cost of complying with the tax code by reducing its administrative burden, through minimizing any distortions in the economy caused by tax. Tax administration is very important to any government as it is the machinery responsible for implementing tax laws and other tax related matters in relation to levying, assessing, collecting and remitting tax revenue. Effective tax administration can also be seen in areas where tax professionals apply their professional knowledge and negotiation skills in tax related matters (Allink & Kommer, 2000).

### **Tax administration in Nigeria**

Tax administration in Nigeria is vested in her three tiers of government and is carried out

through their tax organs (Ishola, 2011). The organs of tax administration in Nigeria are the various tax authorities in the three tiers of government in Nigeria responsible for the assessment of tax, collection and accounting for sum collected to the relevant authority. They can sue and be sued in their official name and also sanction tax defaulters. The tax organs include: The Federal Inland Revenue Service, the Joint Tax Board, State Board of Internal Revenue, Local Government Revenue Committee and the Joint State Revenue Committee (Bassey, 2013a; Ishola, 2011; Zubairu, 2012).

**The Federal Inland Revenue Service** – The Federal Inland Revenue Service (FIRS) Establishment Act 2007 as amended established the Service to be responsible for the administration of personal taxation of persons employed in the Nigerian Army, the Nigerian Navy, the Nigerian Air Force, the Nigerian Police Force, officers of the Nigerian Foreign Service, every resident of the Federal Capital Territory Abuja and a person resident outside Nigeria who derives income or profit from Nigeria. The Service also responsible for the assessment and collection of company income taxes; petroleum profit taxes due from all oil prospecting companies; Capita Gain Tax due from all companies and corporations, education tax, value added tax, among others (Bassey, 2013b; Ishola, 2011).

**Duties of the Federal Inland Revenue Service**– The functions of the Service according to Ishola (2011) and Zubairu (2012), include:

- i. The administration and management of the Companies Income Tax and Value Added tax.
- ii. The assessment and collection of tax in its jurisdiction.
- iii. Accounting for all amounts so collected in a manner prescribed by the Minister of Finance.
- iv. Specifying the form of returns, claims, statement and notices to be made or given.
- v. Instituting legal action in court to recover any tax payable and any penalties due.
- vi. Advising the Federal government through the minister of finance on tax matters including amendments to tax laws.
- vii. Issuing directives or guidelines on the interpretation of the provision of the companies' income tax act and other tax laws.

**Identification of types of taxes collectible by the FIRS** – The following taxes are collectible by the Federal government through the FIRS:

- i. Companies' income tax and Petroleum profit tax, Value Added tax and Education tax.
- ii. Withholding tax on companies and residents/non-residents individual of the Federal Capital territory Abuja.
- iii. Capital gain tax on residents of the Federal Capital territory, corporate bodies and non-resident individuals.

- iv. Stamp duties on corporate bodies and residents of the Federal Capital Territory.
- v. Personal income tax in respect of: Members of the Nigerian Army, the Nigerian Navy, the Nigerian Air Force, the Nigerian Police Force, officers of the Nigerian Foreign Service, every resident of the Federal Capital Territory Abuja and a person resident outside Nigeria who derives income or profit from Nigeria.

### **The Joint Tax Board (JTB)**

The JTB was created by Sec. 86 of the Personal Income Tax Act. Cap. P8 LFN, 2004 (PITA). It is the body responsible for the administration of taxation of incomes of persons other than corporate bodies and also to look into any area of conflict of interest between different tax authorities, by providing the necessary machinery for reconciliation. It is known as the apex unifying tax board in the country (Bassey, 2013a; Ishola, 2011; Oriakhi, 2012; [Osemeke, 2010](#); Zubairu, 2012).

### **Duties and powers of the Joint tax board**

- i. To exercise the powers or duties conferred on it by PITA and other Acts.
- ii. To ensure the harmonization and uniformity of the Nigerian Tax system and practice.
- iii. To advise the federal government on request in respect of:
  - Double taxation arrangements concluded or under consideration with another country.
  - Rates of capital allowances and other taxation matters having effect throughout Nigeria and
  - Proposed amendments to tax laws.
- iv. To look into any disagreements between states in relation to their matters.
- v. To consider and approve, even on a continuous basis, application in respect of Nigeria Pensions, retirement benefits schemes and all matters related thereto.

### **State Board of Internal Revenue**

This is an established tax organ of a state with an operating arm known as State Internal Revenue Service. Personal income tax is paid to the Board of Internal Revenue of the State where an individual is resident. Other duties and powers according to Soyode & Kajola (2006) are shown below.

- a. Ensuring the effectiveness and optimum collection of all taxes and penalties due to the government under the relevant laws.
- b. Doing such things as may be deemed necessary and expedient for the assessment and collection of the taxes and shall account for all amounts so collected in a manner to be prescribed by the commissioner.
- c. Making recommendations where appropriate, to the Joint tax board on tax policy, tax legislation, tax treaties and exemption as may be required from time to time.

- d. Generally controlling the management of the service on matters of policy, subject to the provisions of the law setting up the service
- e. Appointing, promoting, transferring and imposing discipline on employees of the state service. The state board shall be autonomous in the day-to-day running of the technical, professional and administrative affairs of the state service. The state board may by notice in the gazette or in writing, authorize any person to perform or exercise on behalf of the state board any function, duty or power conferred on the state board and receive notice or other documents to be given or deliver to it or in consequence of this Act or any subsidiary legislation made under it, etc.

**Identification of taxes collectible by the SBIR** – The State board is empowered to assess and collect the following categories of taxes and levies on behalf of the State government:

- i. Personal income tax in respect of PAYE and direct taxation.
- ii. Withholding and capital gain tax for individuals only.
- iii. Stamp duties on instruments executed by individuals.
- iv. Pools, betting, lotteries, gaming, casino and Road taxes
- v. Naming of street registration fees in the state capital.
- vi. Business premises registration fees in respect of urban and rural areas.
- vii. Development levies on individuals only.
- viii. Right of occupancy fees on lands owned by the state government in urban areas.
- ix. Market taxes and levies where state finance is involved.

### **Local Government Revenue Committee**

This is a body responsible for the collection of taxes at the local government level. Its duties and powers according to Ishola (2011), Osemeke (2010), Zubairu (2012) and Oriakhi (2010) include:

- i. Responsible for the assessment and collection of all taxes, fines and rates under its jurisdiction.
- ii. Shall account for all monies so collected in a manner to be prescribed by the chairman of the local government.
- iii. Shall be autonomous of the local government treasury department.
- iv. Shall be responsible for the day-to-day administration of the department which forms its operational arm.

**Identification of taxes collectible by the local government revenue committee** – This committee is empowered to assess and collect the following categories of taxes and levies on behalf of the local government:

- i. Shops, kiosk, tenement rates and on and off liquor license fees.
- ii. Slaughter slab, marriage, birth and death registration fees.
- iii. Naming of street registration fees excluding streets in the state capital.
- iv. Right of occupancy fees on lands in the rural areas.

- v. Market taxes and levies excluding any market where state finance is involved.
- vi. Motor park levies and domestic animal license fees
- vii. Bicycle, truck, canoe, wheel barrow and cart fees other than mechanically propelled truck and cattle tax payable by cattle farmers only.
- viii. Merriment and road closure levy and signboard advertisements permit fees.
- ix. Radio and television license fees (other than radio and television transmitters).
- x. Vehicle radio license fees and wrong parking charges.
- xi. Public convenience, sewage and refuse disposal fees, etc.

### **The Joint State Revenue Committee**

The Joint State Revenue Committee for each state of the federation was established by Sec. 92 of PITA and its functions and powers include:

- i. To implement the decisions of the JTB.
- ii. To advise the JTB, the State and the Local governments on revenue matters.
- iii. To harmonize tax administration in the states.
- iv. To enlighten members of the public generally on state and local government revenue matters and to carry out any other function as may be assigned to it by the JTB.

### **Effectiveness and efficiency of tax administration in Nigeria**

Research findings revealed that tax administration in Nigeria is neither effective nor efficient. This is because, revenue generated in the country from taxation is low to meet its objectives due to low level of enlightenment of tax payers and the incidents of tax evasion and avoidance, coupled with infrastructural decay, corruption and poor information technology implementation (Stephen, 2018; Zubairu, 2012; Soyode & Kajola, 2006; Osemeke, 2010).

### **Tax administration in Republic of Benin**

Tax administration in Republic of Benin is supervised by the Benin Revenue Authority (BRA). Corporate tax in Benin is imposed at a standard rate of 30%. However, companies in the industrial sector are subject to a lower rate of 25%. All legal entities must register for tax with the general tax office and file annual returns within four months following the end of the fiscal year. However, a varying corporate tax rate of between 35% - 45% is applicable to all companies engaged in oil and gas exploration and in the production and sale of hydrocarbons.

An individual who has tax domicile in Benin is normally subject to taxation on worldwide income, while individuals not domicile in the country are taxed only on Benin-source income. Value added tax is levied at a standard rate of 18% and companies must register for VAT and file returns by the 10<sup>th</sup> day of the following month. Banking institutions and insurance companies are exempted from VAT. Companies in the industrial sector may enjoy exemption from income tax for five years. Companies established in industrial free zones may also enjoy a 10-year exemption from income tax. A 15% withholding tax is applicable on dividends and interests paid to both resident and non-resident companies.

Withholding tax on royalties is applicable at the rate of 12% on royalties paid to non-resident companies and 30% on royalties paid to resident companies. A 12% withholding tax is applicable on technical services fees paid to non-resident companies and a reduced rate of 5% to resident companies.

Other taxes include: 15% withholding tax on profits remitted abroad by foreign entities, 12% withholding tax on profits paid to non-resident companies, 5% withholding tax on capital gains from disposal of bonds. Other taxes are 4% payroll tax, 6% real property tax, 8% transfer tax levied on the transfer of property, 15.4% monthly security contribution applicable on employees' gross salaries. The country has so far entered into four double tax treaties with France, Norway, Kuwait, together with the eight countries of the West African Economic and Monetary Union (WAEMU)- Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Togo. Residence is not defined in the tax laws, but it includes companies registered in Benin, permanent establishments and branches of non-resident.

Basis of taxation: Resident corporations are taxable on Benin-source profits and also foreign-source dividends, interest, royalties and capital gains, but not foreign-source industrial and commercial profits. Non-resident corporations are subject to tax only on Benin-source income.

Taxable income: Income is taxed under four schedules: industrial and commercial profits, noncommercial profits, income from moveable capital and rental income. Deductions normally are allowed for expenses incurred in generating the income. Management fees may be deducted if they are reasonable for the services rendered. Moreover, dividends received from domestic companies are not included in taxable income when determining corporate income tax liability.

### **Effectiveness and efficiency of tax administration in Republic of Benin**

Effectiveness and efficiency of tax administration in Republic of Benin is yet to be totally achieved. Benin tax legislation does not provide a precise definition of the notion of permanent establishment of foreign companies; there are some articles in the General Tax Code (CGI) to link the application of certain taxes to permanent establishments of foreign companies (Ameh, 2019; Gupta, 2018).

### **Tax Administration in Ghana**

Tax administration in Ghana is enforced by the Ghana Revenue Authority (GRA). The Ghana Revenue Authority (GRA) is the Ghana administration charged with the task of assessing, collecting and accounting for tax revenue in Ghana. The core mandate of the Authority is to ensure maximum compliance with relevant laws in order to ensure a sustainable revenue stream for government as well as the controlled and safe flow of goods across the country's borders. ("Ghana Revenue Authority", n.d.). The GRA has the mandate to integrate the management of domestic tax and customs duties as well as modernize domestic tax and customs operations through the review of processes and procedures in revenue administration with information communication technology (ICT) as the backbone.

The GRA is coordinated by a Governing Board comprising of nine board members under the supervision of the Minister of Finance. The Chairman of the Board as well as the Chief



Executive Officer of the Authority called the Commissioner-General are appointed by the President of the Republic of Ghana. The Authority has three main divisions, namely Customs Division (CD) Domestic Tax Revenue Division (DTRD) and Support Services Division (SSD) which are all headed by Commissioners.

Functions: The GRA has been charged to perform amongst others, the following functions as enacted by Act 791:

- i. Assess and collect taxes, interest and penalties on taxes due to the state with optimum efficiency;
- ii. Pay the amounts collected into the Consolidated Fund
- iii. Promote tax compliance and tax education;
- iv. Combat tax fraud and evasion and co-operate to that effect with other competent law enforcement agencies and revenue agencies in other countries;
- v. Advise District Assemblies on the assessment and collection of their revenue;
- vi. Prepare and publish reports and statistics related to its revenue collection;
- vii. Make recommendations to the Minister on revenue collection policy

Popular tax legislations apart from Act 791 include: Revenue Administration Act, 2016 (Act 915); Income Tax Act, 2015 (Act 896) and regulations; Value Added Tax, 2013 (870) and regulations; Transfer Pricing Regulations, 2012 (L.I.2188); Tax Amnesty Act, 2017 (Act 955); Taxation (use of fiscal electronic device), 2018 (Act 966).

### **Effectiveness and efficiency of tax administration in Ghana**

Ghana tax administration is also a work in progress. The administration is still considering introducing certain provisions like: voluntary disclosures, tax dispute resolutions, independent tax appeals board, etc. Ghana is still grasping with low compliance with tax laws and payments which is highly influence by the institution responsible for tax administration, despite the series of tax reforms that have taken place since the commencement of the fourth Republic in 1992 (“Ghana Revenue Authority”, n.d.; Opoku & Tanaka, 2020).

### **Tax administration in Togo**

Tax administration in Togo is controlled by the Togolese Tax Authority (TTA) through a semi- autonomous revenue authority, integrating tax and customs department in Office Togolais des Recettes (OTR), where all registered entities must register for tax and file annual returns by 31<sup>st</sup> March following the end of the fiscal year. Togo has to date signed only two double tax treaties with France and Tunisia. From 1<sup>st</sup> January, 2019 the government of Togo reduced standard corporate income tax from 28% to 27% for all Togo tax resident companies. In addition to 27% corporate income tax, branches of foreign companies are also subject to 13% withholding tax on overseas remittance of branch profits. Value added tax is levied at 18%. Companies engaged in services such as financial insurance, medical and transport services are vat exempt. Capital gain received from the sale of bonds or shares in tax resident companies is subject to 3% to 5% withholding tax respectively (Langford & Ohlenburg, 2016).

## **Effectiveness and efficiency of tax administration in Togo**

Togo has narrow tax base and poor collection capacity. This is because public investment in Togo is low, though this has grown over overtime. The broadening of the tax base and the improvement of the capacity are crucial for increasing the domestic resources needed to ensure her budget credibility (Abdella & Clifford, 2010).

## **Tax administration in Côte d'Ivoire**

In Côte d'Ivoire, tax administration is carried out by the Côte d'Ivoire Revenue Authority (CRA). It focuses more on compliance with tax and revenue regulations. For consistency of tax returns, the tax administration focuses on the filing of records such as: annual financial statements, annual salary statements, annual fees statements and records of provisions, tax losses and amortization carried forward. Corporate taxation administration in Côte d'Ivoire is required by law to have 31 December fiscal year-end. The deadline for filing is 30 June for companies subject to audit requirements and 30 May for other entities. Taxpayers with a turnover between XOF 5 million (CFA Franc) and XOF 50 million are taxed under the 'synthetic' tax regime and are required to produce electronic and paper financial statements. The simplified real taxation scheme applies to tax payers with turnover ranging from XOF 50 million to XOF 150 million. Under the simplified real taxation scheme, annual financial statements have a lighter presentation. The 'real' taxation scheme applies to taxpayers with a turnover above XOF 150 million. Companies under the real taxation scheme are allowed to submit tax returns electronically and perform tax payments via wire transfer. Financial statements are filed annually according to local generally accepted accounting principles (GAAP). Payment of company income tax is made in three installments in April, June and September following the end of the fiscal year; depending on the sector of activity and taxpayer's office. Many types of tax audits are available to the tax administration, which may request any accounting-related documents for the purpose of tax audit. The most common is the general tax audit of the tax payer's situation, which covers the statute of limitation period. It is carried out with a notice of at least five days before the beginning of the audit. A primary assessment is issued at the end of the tax audit in which the tax payer has 30 days to agree or challenge the assessment and a definitive assessment is then issued within a maximum period of three months following the primary tax assessment notification date. The definitive tax assessment has to be issued within a maximum of two months for tax payers with annual turnover up to XOF 500 million. The tax administration is entitled to release tax assessment electronically. Further challenge of the definitive tax assessment is possible before the head of the tax administration and the court (Coulibaly & Gandhi, 2018; Gupta, 2007; Gupta, & Tareq, 2008).

Individual tax administration period is the calendar year. Employers must calculate and withhold taxes due to employees and they must file monthly returns for both employee tax and the employer's payroll tax. Adjustment declarations are filed annually by 30 June for companies subject to audit requirements and 30 May for the others. Employees are not required to file and pay the payroll tax when their employers' is not in the country. A husband and wife are taxed separately. The husband's salary is taxed with regard to the relevant deductions for dependents. Employed women are also taxed with regards to the same deductions for dependents as their husbands. Husband and wife, however may wish

to file jointly, among others. Taxes including withholding taxes are remitted by the entities registered with the tax administration by 10<sup>th</sup> day of each month for the preceding month for industrial, mining and oil companies. The 15<sup>th</sup> day of each month for sales companies and 20<sup>th</sup> day of each month for service providers. For entities registered with other tax offices, the deadline is 15<sup>th</sup> day of each month. For very small taxpayer, the filing and payment is due by the 10<sup>th</sup> day of each month ([Gasper & Abebe, 2017](#)).

### **Effective and efficient tax administration in Côte d'Ivoire**

Taxation in Côte d'Ivoire is still a work in progress. One of the areas is her inability to increase her capacity of tax income. Although, the amount of duties collected rose steadily in recent years, the tax-to-GDP ratio has remained relatively low. As at 2019, Côte d'Ivoire came a modest 175<sup>th</sup> place out of 190 economies for tax paying segment. This clearly implies that, the tax system still faces a number of issues, explaining the relatively depressed rate of tax collection. There are not enough companies, particularly small and medium-sized enterprises that are officially registered and paying taxes. The tax burden is low because it relies on a very reduced fiscal base. The IMF and the World Bank have been calling on the Ivorian government to improve its collection of VAT. While a new investment code was ratified in August 2018, it is yet to be implemented, among others (Petit & Jalles, 2018; Langford & Ohlenburg, 2016).

### **Tax administration in Senegal**

Tax administration is carried out in Senegal by Senegal Revenue Authority (SRA) also known as the National Revenue Authority. The taxable period of Senegal is the calendar year. Companies must file CIT returns, tax payment returns, financial statements and other documents by 30 April of the year following the tax year. Companies will also file other monthly tax returns such as: VAT, payroll, taxes, WHT, etc. CIT must be paid in two installments by 15 February and 30 April. The outstanding balance payment amount of tax due must be paid by 15 June. For the first financial year of a newly incorporated company, no installment is due, the new company pays the whole CIT before 15 June of the following year. Enforcement actions for late/non-payment of taxes in Senegal include: 5% interest of delay on the amount due plus an additional 0.5% duty per month of delay, sealing of business premises, confiscation of goods and assets, public auction of goods and assets, third party recovery litigation/court action, prevention from travelling, prevention from clearing goods through the ports, non-issuance of tax clearance certificate to facilitate business, imprisonment, etc. Quarterly payment of corporate income tax and trade/profit tax is encouraged in Senegal (Coulibaly & Gandhi, 2018).

Tax audit process: The tax authority may request information, clarifications or justification from the tax payer, who has 20 days to answer to those requests. The tax authority may also implement an inspection of the accounting documents at the premises of the tax payer or any place the taxpayer would consider more appropriate for material reasons upon a specific request (Gupta, 2018; Gupta & Tareq, 2008; [Issoufou, Diop & Acharuz, 2018](#); Niang, 2018).

### **Effective and efficient tax administration in Senegal**

Tax administration in Senegal is not yet effective or efficient. Because the tax

administration is mainly concentrated in Dakar, which decreases the efficiency of tax collection in other regions of the country. Though the GDP of Senegal has grown over the year, it is yet to fully realize her tax potentials due to poor policy design and compliance with taxes. Senegal is estimated to be losing 10% of her GDP in tax revenue each year. A large proportion of the revenue loss stems from weak VAT collections in addition to tax concessions to private entities including multinational companies. These has grown and continue to drain the exchequer. These concessions constitute a high proportion (40%) of current tax collections (Langford & Ohlenburg, 2016; Muller, 2018; Petit & Jalles, 2018).

### **Challenges, problems and shocks of tax administration in developing countries**

From a dynamic perspective, tax administration in developing countries is faced with series of internal and external shocks and challenges. According to [Keen & Ben \(2010\)](#), Muller (2018), Orviska & Hunady (2014) [and Ishola \(2011\)](#), these include:

- i. Economic slow-down and Economic restructuring
- ii. Development of electronic commerce and internet currency
- iii. Organizational innovation and High tax evasion
- iv. Low tax collection effectiveness and extensive VAT gap
- v. Taxes are imposed only on few large public companies, because most other companies do not render accurate accounts.

### **Identified factors that may likely improve effectiveness and efficiency of tax administration in developing countries**

The following factors were suggested by Ishola (2011), [Jalles and Mulas-Granado \(2018\)](#):

- i. Honest and competent staff: Tax officials must be honest and dedicated to duty. They must also possess sufficient technical and administrative competence to be able to practice the tax laws as may be modify from time to time.
- ii. Accounting records: For a tax system to succeed, proper accounting records of companies, businessmen, professionals and other self- employed people which the tax authority can relied upon, must be honestly prepared.
- iii. Literacy: There should be mass literacy on tax administration among the people, because it is much easier for educated people who can read and understand the tax laws to cooperate fully in reaching consensus with the tax authority on tax liability.
- iv. There should be proper tax audit or tax inspection
- v. There should be a simplify tax system and curb exemptions. A simplify tax system with a limited number of rates is critical to fostering tax payer compliance.
- vi. There should be proper management, governance and human resource mobilization towards taxation.
- vii. Establishment of large taxpayer offices. This will allows a country to focus tax compliance efforts on the biggest taxpayers.

- viii. Smart use of information management system. Successful revenue mobilization hinges on managing information and leveraging the power of big data to improve compliance and fight corruption.
- ix. Equalize tax rates between ordinary income and capital gains income, instead of taxing capital gains at a lower rate as it occurs many developing countries.
- x. Political will: The authorities must be firm, sincere and honest to ensure that everybody pays tax irrespective of social status.
- xi. Voluntary compliance: The populace should be encouraged to voluntarily pay tax rather than being forced to do so.

## **THEORETICAL FRAMEWORK**

### **Benefit Principle**

The **benefit principle** as already known is concept in the theory of taxation from public finance literature. The principle opines that taxes are paid for public-goods expenditures on a politically-revealed willingness to pay for benefits received (Neill, 1999). Thus, taxes should be paid based on the benefits enjoyed by the tax payer. The principle is related to the function of pricing in the allocation of private goods and services to competing users. (Neumark, McLure & Cox 2020). It is used for assessing the efficacy and effectiveness of the tax system and to appraise fiscal policy framework of the government.

Under the benefit theory, tax levels are automatically determined, because taxpayers pay proportionately for the benefits they receive from government. In other words, the individuals who benefit the most from public services should pay higher taxes. The advantage of the benefit theory is its direct correlation between revenue and expenditure in a budget.

### **Ability to Pay Principle**

There are several theories of taxation in public economic. According to Adam Smith (1776) (Google Books, 2015) the amounts of tax individuals pay should bear some relationship to their abilities to pay. He went further to say that, good taxes should meet four major criteria, viz. proportionate to incomes or abilities to pay, certain rather than arbitrary, payable at times and ways convenient to tax payers and cheap to administer and collect.

Ability to pay is an economic principle that states that the payment of taxes by individuals should be based on the level of burden such tax will create in relation to the wealth accumulated by the individual or organization. The principle suggests the real amount of tax chargeable and paid by an individual or organization is not the only factor to be considered in taxation. That tax authorities on determining tax to be paid should also consider the ability of such individual or organization to pay (Neill, 1999).

The Ability to pay theory treats government revenue and expenditures separately. Taxes are based on taxpayers' ability to pay; there is no *quid pro quo*. Taxes paid are seen as a sacrifice by tax payers. Though this theory was most popular and enjoyed wide acceptance, many economist are not unanimous as to what should be the exact measure of a person

ability to pay. The may view point advanced in this regard include: property ownership, tax on the basis of expenditure and income as a basis. Income was later chosen as the best basis of measuring a man's ability to pay. These were later construed into three conditions:

- Equal sacrifice - Here the total loss of utility as a result of taxation should be equal for all taxpayers. That is, the rich will be taxed more heavily than the poor.
- Equal proportional sacrifice - The proportional loss of utility as a result of taxation should be equal for all taxpayers.
- Equal marginal sacrifice – Here the instantaneous loss of utility as a result of taxation should be equal for all taxpayers. This will therefore entail the least aggregate sacrifice. (economicsconcepts.com).

### **Coat of Service Principle**

The cost of service theory opined that government should charge her citizens by taxation the actual cost of services rendered to them as it will satisfy the idea of equity and justice in taxation. However, this theory was seriously criticized since many government services cannot be quantified individually. For example, how can we measure the cost of police services, armed forces, the judiciary, road, drainage systems, etc, to different individuals?

The present study is anchored on ability to pay theory, because it is the most equitable principle of taxation, in that citizens of a country should pay taxes to the government in accordance with their ability to pay. It is reasonable and just that taxes should be levied on the basis of the taxable capacity of the individual. This will bring about an effective and efficient tax administration.

### **METHODOLOGY**

The population of the study includes all West Africa countries which are sixteen in all. Out of these, six countries which constitute 38% of the population were purposively selected to form the sample of the study. These include: Nigeria, Republic of Benin, Togo, Ghana, Cote d'Ivoire and Senegal. The sample was specially selected in order to review the tax administration in place in both English and Francophone countries in West Africa based on availability of published data on the tax administration systems in the sampled countries.

### **CONCLUSIONS AND POLICY RECOMMENDATIONS**

From the review carried out, it was discovered that all West Africa countries carry out one tax administration system or the other. These tax systems are not quite effective or efficient and there are various factors responsible for this. These factors are identified to include organizational innovation, high tax evasion, economic slow-down, economic restructuring, among others. One major impediment on the administrations is the existence of few available tax bases, particularly at lower levels of government. Informal sector competition with formal sector which is relatively high in the developing countries is another constraint to effective tax administration in the west African sub region. Also, cost of tax collection (administration cost/total tax receipts) in these countries is very high when compared with countries in developed economies. These factors have contributed to the low level of effectiveness in the tax administrations the developing economies.

From the above conclusions, the paper recommends that:

- a. Developing Countries especially in West Africa should embark on aggressive enlightenment campaigns of citizens on the significance of paying taxes.
- b. Tax administrators should be trained continually to enhance effective tax administration and improve the effectiveness and efficiency of tax administration.
- c. Investment in Information Technology should be intensified to drive more revenue collection for the authorities.
- d. Greater mobilization of revenue through more efficient administration systems should be vigorously pursued
- e. Developing effective policies to combat shadow economy and tax evasion. Such policies will include punitive penalties for tax evasion, targeted and frequent tax audits, narrowing loopholes in tax laws and regulations, naming and shaming of tax evaders and controlling corruption.

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# BOARD CHARACTERISTICS AND ENVIRONMENTAL DISCLOSURES OF LISTED COMPANIES IN NIGERIA

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## ABSTRACT

*This paper investigated the influence of board characteristics on the level of environmental disclosure of quoted companies in Nigeria during a period of ten years (2009 – 2018). The study used secondary data obtained from the financial reports of the sampled consumer goods companies and multiple regression was employed for the purpose of data analysis. The results indicated that board characteristics (size, independence, meeting, ownership, environmental committee, diversity) are positively related to the level of environmental disclosure of sampled corporations. On the basis of the results obtained, the study concluded that a well-structured and designed board would result in proper disclosure of environmental information in the annual reports of listed companies. Therefore, we recommend amongst others that corporations should pay more attention and be more interested in increasing the level of environmental disclosure practices in their annual reports; especially in light of the growing interest in the social responsibilities of modern corporations so as to achieve the objectives of green accounting.*

**Keywords:** Board Characteristics, Environmental Disclosure, Nigeria

## INTRODUCTION

The call for corporate environmental disclosures (ENVDs) of industrial and manufacturing activities of business entities in the annual reports have assumed serious dimensions in the 21st century. According to Votsi et al. (2017), this clarion call is to provide a sustainable environment that will be conducive to the human and business entities to operate effectively and efficiently. This is because several stakeholders such as customers, governments and regulatory bodies, non-governmental organizations, local communities, investors, financial agencies and institutions, employees and society as a whole have paid great interest to the environmental effects of manufacturing entities due to the emissions of greenhouse gases, carbon footprint, and their disposal of toxic wastes (Ofoegbu et al., 2018; Akbas, 2016). Rabi (2019) noted that the negative environmental effects of economic growth and development has become an issue of public interest which has led to increase in the demand for environmental disclosure (ENVD) for companies, considering that ENVD provides relevant information to stakeholders and to reflect the environmental performance of business entities and concerns about various environmental issues (Andrikopoulos & Kriklani, 2013; Post et al., 2014).

An increasing number of corporate entities globally have started to disclose environmental information, making ENVD an essential aspect of accounting information systems (Da Silva Monteiro & Aibar-Guzman, 2010). Therefore, it is not surprising that ENVD has attracted attention from researchers. However, despite the increasing body of knowledge on ENVDs, most of the prior studies have examined possible determinants of ENVD, especially investigating on corporate characteristics, such as financial performance, size, age, industry, reputation, market acceptance or country (Michelon & Parbonetti 2012). On the other hand, it is possible to argue that there have been relatively few attempts to investigate the relationship between corporate governance structure and ENVD, especially in the context of emerging economies (Khan et al., 2013).

However, corporate governance mechanisms, particularly board characteristics, could be a significant motivation of ENVDs, since corporate disclosure policies are basically determined by the board of directors (Cormier et al., 2015). Numerous studies have investigated the relationship between board characteristics and ENVD in different industries and accounting jurisdictions (Baboukardos, 2017; Ienciu, 2012; Rabi, 2019). The evidence provided by these studies is mixed, suggesting that the evidence on the relationship between board attributes and ENVDs is largely inconclusive. The differences in results may be partly explained by differences in environmental-violation intensity of firms, differences in the level of environmental awareness and ENVD requirements across countries, and differences in research methodology. The inconclusive evidence on the relationship between board attributes and ENVD justifies the need to investigate the relationship further. This study examines the relationship by introducing more dimensions of board attributes and analyzing the effect of these characteristics on the extent of ENVDs in Nigeria. Therefore, the major objective of this paper is to extend prior studies on ENVD by investigating the relationship between board characteristics and the level of ENVDs of consumer goods listed on the Nigeria Stock Exchange, using a wide range of board attributes. Specifically, this paper empirically investigates the relationship between:

1. board size (BSZE) and environmental disclosure (ENVD) of listed manufacturing companies in Nigeria.
2. board independence (BIND) and ENVD of the sampled firms.
3. board ownership structure (BOWN) and ENVD of the sampled firms
4. board meeting frequency (BMET) and ENVD of the sampled firms
5. environmental committee (EVCN) and ENVD of the sampled firms
6. gender diversity (GEDV) and ENVD of the sampled firms

This study hypothesizes that there is no relationship between board attributes and ENVD level of consumer goods firms in Nigeria

## **LITERATURE REVIEW**

This section of the study examines the review of prior literature. The section consists of the conceptual framework, theoretical framework and empirical review of prior studies on board characteristics and level of ENVDs.

## Conceptual Review

**Board Characteristics:** The board of directors is responsible for reviewing the performance of the company and ensuring good management practices. Hence, the board of directors in any given company consists of several characteristics such as board size, board independence, board meetings, environmental committee, gender diversity, age and audit committee independence.

**Board Size:** The number of people in a board may affect the disclosure policies and level of transparency of the entity. Thus board size (BSZE) may be an important mechanism for achieving good corporate governance. Prior studies have showed inconsistent outcomes about the relationship between the board size and the level of environmental disclosures (ENVDs). While some studies indicate a positive relationship between BSZE and ENVD (Mahmood et al., 2018; Bahajar & Al-Hajili, 2017; Khelif, 2015; Andrikopoulos & Krikilani, 2013), others showed negative or insignificant relationship (Cheng & Courtenay, 2006; Uwuigbe & Ajayi, 2011).

**Board Independence:** How independent a board is will most likely affect its level of effectiveness. Generally, the board of directors consists of a mixture of dependent and independent members. The independent members are expected to represent the interest of shareholders as they are not under the control of management (Sharif & Rashid, 2014). Accordingly, it is expected that the strength of independence will be associated with better governance and transparency, and hence, more extensive disclosures. Prior studies provide inconsistent evidence on the relationship between BIND and ENVD. While some studies (e.g. Bajahar & Al-Hajili, 2017) found a positive relationship between BIND and ENVD, others failed to record such relationship (Mahmood et al., 2018; Trieksani & Djajadikerta, 2016).

**Board Ownership:** Shareholders are expected to increase their oversight of the actions and activities of management to reduce agency conflicts. Hence, expanding ENVD can be a substitute for direct control of management. Prior studies (Bajahar & Al-Hajili, 2017; Rabi, 2019) have shown a positive relationship between high ownership concentration and level of environmental disclosure. Juhmani (2013) investigated ownership structure and voluntary disclosure of Bahraini listed company and the results showed a significant negative relationship between block holder ownership and voluntary disclosures, but no relationship between managerial ownership and governmental ownership with voluntary disclosure.

**Board Meetings:** The various activities of the board are measured by the board meeting frequently (BMET) and this is a significant variable of board operations, which helps to reduce agency problems. Ntim and Osei (2011) investigated BMET and corporate performance of 169 listed companies in South Africa and found a positive association. Also Osazuwa et al. (2016) studied the association between board characteristics and ENVD and documented a negative relationship.

**Environmental Committee:** The environmental committee is saddled with the

responsibility of examining the natural capital (Council on Social Work Education, 2015). Hummel & Schlick, (2016) reported that this committee will be proactive and not reactive in handling environmental issues and assists companies gain environmental legitimacy and firm value (Plumlee, Brown, Hayes, & Marshall, 2015) as well as benefit the shareholders (Griffin & Sun, 2013). Dixon-Fowler et al., (2017) found a positive relationship between environmental committees and environmental performance. Peters and Romi (2013) reported a positive association between the environmental committee and ENVD.

**Gender Diversity:** There is an increasing trend towards gender balance, following relentless and increasing campaigns for more female representation in corporate boards. Boards' gender diversity is a significant dimension of board characteristics because women and men are traditionally, culturally, and socially different. According to Hofstede (2016), the classification of national culture, masculinity shows a preference in society for achievement, heroism, assertiveness and material rewards for success; while femininity stands for a preference for cooperation, modesty, caring for the weak and quality of life. Liao et al. (2014) stated that gender diversity of corporate boards has been considered an important dimension of corporate governance that can influence the level of ENVD. They noted that women have a different function from men in society; female directors on the board may take a different approach to environmental issues. Rupley et al. (2012) reported a positive relationship between the proportion of women directors on the board and the quality of ENVD. Also, Fernandez-Feijoo et al. (2014) as well as BenAmar and McIlkenny (2015) found a positive relationship between GEDV and ENVD. However, Akbas (2016) failed to find such relationship.

**Environmental Disclosure:** Reporting entities sometimes disclose information on their environmental performance in published annual reports or separate environmental/sustainability reports. In Nigeria, disclosures in annual reports are often stated as part of Directors' Report in a section on environmental management, sustainability report or health/safety. The highest polluters in Nigeria are oil producing firms. Some of these firms prepare separate sustainability report where they disclose environmental performance. In their annual reports, they recognize environmental liabilities and provisions for environmental restoration in accordance with accounting standards (Chukwu et al., 2020a; Chukwu et al., 2020b). ENVD may be expressed in qualitative statements, quantitative facts, financial reports or footnotes. Rabi (2019) reported that ENVD provide several advantages to users of financial statements. This is to rationalize decision making and benefit from the effective and efficient use of resources, hence improving the welfare of the national economy in general. The ENVD may be based on the Global Reporting Initiatives (GRI) standard, especially when the disclosures are in a separate sustainability report.

### **Theoretical Framework**

The theoretical bases adopted for this study are the legitimacy and stakeholder theories.

**Legitimacy Theory:** This theory is built on the concept of organisational legitimacy that originated from the notion of a social contract, in which the entity uses the resources

provided by society, and in exchange conducts its operation in a manner that coincides with the expectations and norms of the society. Legitimacy theory is perceived as a possible reason for the recent rapid increase in ENVD as corporate entities strive to be greenish in their operations (Braam et al., 2016; Bhattacharyya, 2014; Chen and Robert, 2010; Prasad et al., 2016)). The theory has shown that business's continuity depends heavily on the support and backing of society achieved by increasing the level of society's awareness of the legitimacy of such actions that can be achieved by companies through the disclosure of sustainability practices, which can be seen as a supplemental mechanism used by corporations to strengthen relationships with stakeholders (Faisal et al., 2012). Ingley (2008) stated that the social and environmental implications of a firm's economic activity have led to a significant increase in the demands placed on companies in relation to the sustainability of their behaviour and the information which they provide. Literature suggests that the idea behind corporate social and environmental reporting behaviour is to gain legitimacy or societal acceptance (Tilling & Tilt, 2010).

**Stakeholder Theory:** This theory was embedded in the management discipline as far back as 1970 and was gradually developed by Freeman (1984) by adding corporate accountability to a broad range of stakeholders. Depoers et al. (2016) and Liao et al. (2015) stated that stakeholder theory is considered as an explainable theory for corporate environmental accounting. This theory involves the recognition and identification of the association existing between the entity's behaviour and its effect on its stakeholders. Stakeholder analysis identifies the various societal interest groups to whom a manufacturing entity might be considered accountable, and therefore to whom an adequate disclosure of its activities would be deemed necessary. Trireksani and Djajadikerta, (2016) noted that stakeholder theory is important in the context of this current study because the role of directors (board characteristics) is to ensure that efforts and resources are spent towards the best interest of the entity and its shareholders while ensuring that the interests of other stakeholders are not affected (Andrikopoulos & Kriklani, 2013; Post et al., 2014).

### **Empirical Review**

A good number of studies have provided empirical evidence on the relationship between the level of board characteristics and ENVD. Mostly board characteristics are used as an independent variable and ENVD as a dependent variable. Disclosure theories suggest a relationship between board characteristics and disclosure; however empirical research offers mixed results (Wang & Hussainey, 2013).

Rabi (2019) investigated board characteristics and ENVD of sixty three industrial companies listed on the Amman Stock Exchange in Jordan for the period of 2014-2017. The study found a positive relationship between the board size, the board ownership, the firm size and the level of ENVDs in Jordan.

King'Ore and Naibei (2019) analysed the relationship between board characteristics (board independence and qualifications) and environmental sustainability disclosures of 65 companies listed on Nairobi Securities for the period 2013 to 2017. Pearson's correlation, Ordinary Least Square regression model and ENVD Index was used in the analysis. The

results showed that board independence and board qualifications had a positive and significant effect on environmental sustainability disclosure.

Alotaibi et al. (2019) studied the impact of the board's characteristics on the level of disclosing the sustainability practices in Jordan during the period from 2008 to 2018. The investigation used multiple linear regression and the result revealed that there is a significant relationship between board size, board independence and board compensation on the sustainability disclosure of banks in Jordan.

Joshi and Hyderabad (2019) investigated the how board characteristics are associated with corporate social responsibility (CSR) disclosures in India for the period 2011 – 2017. The findings of their study revealed a positive and significant relationship between size of the board, size of CSR committee and frequency of CSR committee meetings and CSR disclosure and an insignificant relationship between independent directors, non-executive chairman, women on board and CSR committee independence with the level of CSR disclosures.

Ofoegbu et al. (2018) examined corporate board characteristics and ENVD of listed companies in South Africa and Nigeria. The data were obtained from annual reports of 303 firms selected from South Africa (213) and Nigeria (90) was investigated using descriptive, multivariate, and regression model. The result showed a positive and significant relationship between board independence and ENVD in Nigeria. South African environmentally sensitive firms undertake ENVDs, while a number of Nigerian e environmentally polluting firms do not disclose their environmental performance.

## **METHODOLOGY**

**Population and Sample:** The population of this study is made up of the twenty firms listed as consumer goods firms on the Nigerian Stock Exchange (NSE). A sample of fifteen (15) companies was drawn from this population on the basis of firms listed on the NSE before 2009. Data were collected from the annual reports of the firms for a 10 year period from 2009 to 2018. The ex post facto research design was used in the study.

**Dependent Variable:** The level of environmental disclosure (ENVD) is the dependent variable of the study. The corporate annual reports of sampled companies for the years 2009 to 2018 were analyzed through content analysis in order to ascertain the level of the ENVD of Nigerian firms. This study used a thirty-five (35) item checklist to examine ENVD. The number (1) was given for each item disclosed and the number (0) for each item not disclosed. Then the number of items disclosed by the entity was divided by the sum of the total items to reach the level of disclosure for each entity.

**Independent Variables:** The independent variables in this study consists of the following board characteristics: board size, board independence, board meetings, environmental committee, gender diversity, and audit committee independence

**Control Variable:** Control variables are those dimensions that are used due to their

relationship with the dependent variables. These variables are considerable in the results' interpretation of any given investigation and they provide better picture of the association between independent and dependent variables. Jizi et al. (2014) stated that to avoid model misspecification and control other factors that may have an influence on dependent variable, some corporate board characteristics are included as control variables in this study. Several prior studies document that corporate size may influence the level of ENVD (Rabi, 2019; Alotaibi et al., 2018; Akbas, 2016).

**Table 1: Explanation of Variables**

Variable	Symbol	Measurement	Source
<b>Dependent Variable</b>			
Level of Environmental Disclosure	ENVD	1 = Environmental Information Disclosed & 0 = Not Disclosed	Rabi, (2019)
<b>Independent Variables</b>			
Board Size	BSZE	Total number of directors on the board	Mahmood et al. (2018)
Board Independence	BIND	The percentage of independent directors of the total number of directors' on the board of a company.	Akbas, (2016)
Board Ownership	BOWN	Percentage of shares owned by members of the Board of Directors to the total number of shares at the end of the year.	Matta (2017)
Board Meeting	BMET	The total number of the meeting held by the board of the firm	Osazuwa et al. (2016)
Gender Diversity	GEDV	The percentage of female directors of the total number of directors on the board of a company	Akbas, (2016)
Environmental Committee	EVCN	Dummy variable 1 = firm has an environmental committee, 0 = Otherwise	Dixon-Fowler et al. (2017)
<b>Control Variable</b>			
Corporate Size	COSZ	The natural logarithm of total assets at the end of the fiscal year	Odoemelam & Okafor, (2018)

**Source:** Several Authors

**Model of the Study:** The model for this study is stated below:

$$ENVD_{it} = \beta_0 + \beta_1 BSZE_{it} + \beta_2 BIND_{it} + \beta_3 BOWN_{it} + \beta_4 BMET_{it} + \beta_5 GEDV_{it} + \beta_6 EVCN_{it} + \beta_7 COSZ_{it} + \varepsilon$$

Where:  $\beta_0$  = intercept

$\varepsilon$ : random error term

The apriori signs are  $\beta_1 > 0$ ,  $\beta_2 > 0$ ,  $\beta_3 > 0$ ,  $\beta_4 > 0$ ,  $\beta_5 > 0$ ,  $\beta_6 > 0$ ,  $\beta_7 > 0$ .



## RESULTS AND DISCUSSIONS

This section of the paper presents the results and discussions of findings of the study.

Table 2: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	6.929189	Probability	0.121336
Obs*R-squared	13.34731	Probability	0.101264

Source: e-view output

Table 2 shows the Breusch – Godfrey Serial Correlation LM test for the presence of auto correlation. The result revealed that the probability values of 0.12 (12%) and 0.10 (10%) is greater than the critical value of 0.05 (5%). This implies that there is no evidence for the presence of serial correlation.

Table 3: White Heteroskedasticity Test:

F-statistic	0.942165	Probability	0.496821
Obs*R-squared	9.519861	Probability	0.483577

Source: e-view output

Table 3 shows the White Heteroskedasticity test for the presence of heteroskedasticity. The econometric result revealed that the probability values of 0.496 (50%) and 0.483 (48%) are considerably in excess of 0.05 (5%). Therefore, there is no evidence for the presence of heteroskedasticity in the model.

Table 4: Ramsey RESET Test:

F-statistic	0.067894	Probability	0.794795
Log likelihood ratio	0.071133	Probability	0.789695

Source: e-view output

Table 4 shows the Ramsey RESET test for misspecification. The econometric result suggested that the probability values of 0.794 (79%) and 0.789 (79%) are in excess of the critical value of 0.05 (5%). Therefore, it can be seen that there is no apparent non-linearity in the regression equation.

Table 5: Augmented Dickey-Fuller Unit Root Test

Variable	ADF	1%	5%	Test for Unit root
Level of Environmental Disclosure	-3.816986	-3.4755	-2.8810	I(0)
Board Size	-3.759500	-3.4755	-2.8810	I(0)
Board Independence	-4.792773	-3.4755	-2.8810	I(0)
Board Ownership	-3.105035	-3.4755	-2.8810	I(0)
Board Meeting	-3.57909	-3.4755	-2.8810	I(0)
Gender Diversity	-4.90439	-3.4755	-2.8810	I(0)
Environmental Committee	-4.02349	-3.4755	-2.8810	I(0)
Corporate Size	-4.23459	-3.4755	-2.8810	I(0)

Source: e-view output

Table 5 shows the Augmented Dickey-Fuller unit root test for stationarity of the variables. The result revealed that the variables are stationary at I(0). Therefore, ordinary least square can be applied in the analysis of data when data is stationary at I(0) (Asterious & Hall, 2018).

**Table 6: Multiple Regression**

Dependent Variable: ENVD

Method: Least Squares

Sample (adjusted): 2009 2018

Included observations: 148 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.393119	0.989719	2.417979	0.0298
BSIZE	1.018850	0.008131	2.320129	0.0035
BIND	0.175768	0.068563	2.563585	0.0225
BOWN	0.044113	0.022848	1.930691	0.0740
BMET	0.014304	0.031192	0.458589	0.6536
GEDV	0.008077	0.044390	0.181944	0.8582
EVCN	0.107622	0.048271	2.229537	0.0450
COSZ	0.250210	0.123010	2.034062	0.0312
R-squared	0.533296	Mean dependent var		3.793326
Adjusted R-squared	0.426441	S.D. dependent var		0.110052
S.E. of regression	0.044941	Akaike info criterion		-3.089167
Sum squared resid	0.028276	Schwarz criterion		-2.121461
Log likelihood	77.60501	Hannan-Quinn criter.		-2.751412
F-statistic	9.327801	Durbin-Watson stat		2.216152
Prob(F-statistic)	0.000050			

Source: E-views

Table 6 shows board characteristics and level of ENVDs in the annual reports of consumer goods companies quoted on the Nigerian Stock Exchange for the period 2009 to 2018. Board characteristics for the study was measured using board size, board independence, board ownership, board meetings, gender diversity, environmental committee, and the control variable was the corporate size.

The result suggested that board size with a p-value of 0.0035 is less than the critical value 0.05. Hence, there is a significant relationship between board size and level of ENVD of the sampled companies. This result is consistent with the study of Mahmood et al. 2018; Bahajar & Al-Hajili, 2017; Khelif et al. 2015, which document a positive relationship between board size and the level of ENVDs. The finding supports the assertion that increased number of members may contribute to the monitoring effectiveness of the board and have a positive effect on the level of ENVD since bigger boards lead to diversity in terms of expertise, including finance and environmental awareness.

Board independence with a p-value of 0.0225 is less than the critical value of 0.05. Therefore, there is a positive and significant relationship between board independence and

the level of ENVD of sampled companies. The result confirmed to the work of Bajahar and Al-Hajili (2017) that board independence correlates with level of ENVDs. On the other hand, this finding disagrees with the study of Trieksani and Djajadikerta (2016) possibly because of differences in research context.

Board ownership with a p-value of 0.0740 is greater than the critical value of 0.05. Hence, there is a positive and insignificant relationship between board ownership and the level of ENVD of sampled companies. This result agrees with the evidence from the literature that ownership level and level of ENVD are positively associated (Rabi, 2019; Bajahar & Al-Hajili, 2017).

Board meeting with a p-value of 0.6536 is greater than the critical value of 0.05. Therefore there is a positive and insignificant relationship between board meeting and level of ENVDs. This finding is possibly because the board meetings are unable to address issues of ENVDs due to poor environmental sensitivity of the members or the desire to attend meetings to obtain entitlements rather than contribute to firm value. It has been documented in another Nigerian study that the frequency of audit committee meetings was negatively related to timeliness of financial reporting in Nigeria (Chukwu & Nwabochi, 2019).

Gender diversity with a p-value of 0.8582 is greater than the critical value of 0.05. Hence there is a positive but insignificant association between gender diversity and level of corporate ENVD of sampled companies. The findings of the study agrees with that of Liao et al. (2014), Fernandez-Feijoo et al. (2014), and Ben-Amar and McIlkenny (2015) that found a positive association between the level of ENVD and the number of women members on the firm board. The insignificant relationship between gender diversity and ENVD is possibly because of low environmental awareness of the women on the board.

Environmental committee with a p-value of 0.0450 is greater than the critical value 0.05. This result shows a positive and insignificant association with the level of ENVDs of the sampled companies. The study agrees with the work of Dixon-Fowler et al. (2017) and Ofoegbu et al. (2018) who found a positive relationship between environmental committees and environmental performance. The presence of environmental committees is expected to enhance ENVD as such committee will draw attention to the environmental issues of an entity.

For the control variable, corporate size with a p-value of 0.0312 is less than the critical value 0.05. This shows that corporate size is positive and statistically associated with the level of ENVD of sampled firms. This is in agreement with the findings of (Rabi, 2019; Alotaibi et al., 2019) that showed a positive relationship between firm size and level of ENVDs. This is possibly because bigger firms have the financial capacity to engage in more extensive disclosures.

## **SUMMARY OF FINDINGS AND CONCLUSION**

This study attempts to investigate board characteristics and the level of ENVD of consumer goods companies quoted on the Nigerian Stock Exchange for the period 2009 to 2018. The

empirical study investigated the association between board size, board independence, board ownership, board meetings, gender diversity, environmental committee and corporate size with the level of ENVDs of sampled listed companies in Nigeria for the period under review. Therefore, based on the review of literature and previous empirical studies, seven hypotheses were formulated. The results showed that:

1. there is a significant relationship between board size and level of ENVD of the sampled companies.
2. there is a positive and significant relationship between board independence and the level of ENVD of sampled companies.
3. there is a positive and insignificant relationship between board independence and level of ENVD of sampled companies.
4. there is a positive but insignificant association between board ownership and level of corporate ENVD of sampled companies.
5. there is a positive and insignificant relationship between board meeting and level of ENVDs.
6. there is a positive but insignificant association between gender diversity and level of corporate ENVD of sampled companies.
7. there is a positive but insignificant association between environmental committee and level of corporate ENVD of sampled companies.

Therefore, the paper concludes that a well-structured and designed corporate board would result in proper disclosure of environmental information in the annual reports of listed companies.

### **Recommendations**

The following recommendations are provided for an effective and efficient environmental disclosure:

1. Corporations listed on the Nigerian Stock Exchange should pay more attention and be more interested in increasing the level of ENVDs in their annual reports, especially in light of the growing interest in the social responsibilities of modern corporates;
2. The study also recommends that regulatory authorities should expand the scope of environmental (social) disclosures so as to compel corporations to publish additional information in their related annual reports;
3. The relevant accounting bodies such as Financial Reporting Council of Nigeria (FRCN) should provide relevant local accounting standards on the ENVDs of corporate operations as it affects the environment.

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# CORPORATE GOVERNANCE MECHANISM AND TAX AGGRESSIVENESS OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

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## Abstract

*This study investigated the effect of corporate governance mechanism on tax aggressiveness of listed consumer firms in Nigeria for the period 2015 to 2019. The study employed ex-post facto research design and analysed data obtained from the published annual reports and financial statements of twenty-two firms for the sample period. The dependent variable, tax aggressiveness, was measured using effective tax rate, while the independent variable, corporate governance, consisted of board independence, board size, ownership structure, audit committee size and audit quality. Profitability and firm size were introduced as control variables. The data obtained from the annual reports were analysed with descriptive statistics, correlational analysis and multiple regression analysis. The findings of the study revealed a negative but significant relationship between board independence and effective tax rate. Each of the other corporate governance variables had insignificant relationship with effective tax rate. Hence, this paper concludes that certain corporate governance variables negatively impact the level of tax aggressiveness of listed companies in Nigeria. The paper recommended amongst others that companies in Nigeria should ensure that the composition of corporate boards consist of a good mix of professional accountants, tax experts, business strategists and legal experts that would bring their wealth of experience and training to positively affect important decisions regarding tax minimization in terms of aggressiveness.*

**Keywords:** Corporate governance, tax aggressiveness, board independence and size, audit committee, audit quality

## Introduction

Taxes are the main source of generating revenue globally. Taxes are compulsory payments made by citizens of any given community to the government subject to the jurisdiction of the society for the purpose of generating revenue to facilitate economic growth, economic stabilization, income redistribution, promoting fairness and equity, fiscal responsibility and accountability, as well as for the provision of national goods and services (Omesì & Appah, 2020a; Omesì & Appah, 2020b). The payment of taxes generally assists economic planners

to engage activities that contribute to the growth and development of any given economy. However, taxpayers perceive the payment of taxes as burden hence seek to minimize the burden of corporate income tax by using the loophole of the various tax provisions. How aggressively a firm pursues tax minimization may depend on its sense of corporate citizenship and its corporate governance attributes. Prior studies have documented that corporate governance (CGOV) mechanisms affects tax aggressiveness and tax decisions generally (Abraham, 2011; Aburajah et al., 2019; Mahenthiran & Kasipillai, 2012; Landry et al., 2013). Good CGOV is generally associated with accountability, responsibility, and mechanisms deployed by the company to ensure good corporate behavior as well as protect stakeholders' interest, including the payment of various forms of taxes (Waluyo, 2017). The application of corporate governance mechanisms to tax issues may be borne out of the need for effective and efficient tax management practice that will help in actualizing shareholders' interest and the need to maintain the reputation of a responsible corporate citizen in a business entity while being cautious of sliding into the trap of tax evasion. (Ogbeide & Obaretin, 2018).

There are several studies on the relationship between corporate governance (CGOV) mechanism and tax aggressiveness (TAG). These studies have yielded mixed evidence, suggesting that the results so far are inconclusive (Yuniarsih, 2018; Zhu et al., 2019; Igbinoia & Ekwueme, 2018; Ogbeide & Obaretin, 2018; Aburajah et al., 2019; Chytis et al., 2019; Oyeleke et al., 2016; Ilaboya et al., 2016). Prior studies have documented a wide range of findings, including the evidence that board size does not influence tax avoidance (Lanis & Richardson, 2011); the association between the size of the board and tax avoidance is not significant (Aliani & Zarai, 2012); ownership concentration positively influence tax avoidance (Boussaidi & Hamed, 2015); the association between ownership structure, board characteristics and tax avoidance in China is significant (Yin, 2015); the association between managerial ownership and tax avoidance is negative (Boussaidi & Hamed, 2015); gender diversity does not significantly affect tax avoidance (Aliani & Zarai, 2012). Not much research effort has been expended in examining the effect of CGOV on tax avoidance in developing countries in Africa. To expand evidence on the relationship between CGOV and TAG, this study examined the relationship based on firms in Nigeria, and using a number of CGOV variables board size, ownership concentration, audit size and audit quality. Using evidence from firms in consumer goods sector in Nigeria, the study seeks to:

1. investigate the effect of board independence on TAG
2. determine the effect of board size on TAG
3. ascertain the effect of board ownership on TAG
4. investigate the effect of audit committee size on TAG
5. determine the effect of audit quality on TAG
6. ascertain the effect of firm size and profitability on the relationship between CGOV and TAG

## **Conceptual Review**

*Corporate Governance Mechanism:* CGOV mechanism is a monitoring mechanism that harmonizes various interests of management and shareholders and in so doing minimizes

conflict of interests between the parties (Yuniarsih, 2018). Ogbeide and Obaretin (2018) maintain that the significance of CGOV mechanisms affects every level of corporate management including the reduction of tax liability. Hasibuan and Khomsiyah (2019) stated that the implementation of good CGOV encourages the management to manage the corporation more efficiently and implement policies that are suitable for the corporations' interests. Mais and Patminigih (2017) stated that the measurement of good CGOV in a corporation can be proxied with several indicators such as ownership structure, board independence, board size, audit committee and audit quality.

***Board Independence:*** This is the proportion of members of the board who are non-executive directors. Van Der Pilos (2017) conducted a study of the proportion of the independent directors and tax avoidance in the U.K. The results of the study revealed that when there are more independent directors on the board it reduces the level of tax avoidance. Aburajah et al. (2019) carried out a study on CGOV and TAG in Jordan. Their study revealed a negative association between board independence and TAG. Ogbeide and Obaretin (2018) studied of TAG in Nigeria and found that board independence negatively and significantly affects TAG.

***Board Size:*** This is the number of individuals that constitute the board of directors of a company. The number of individuals that makes up the board of directors influences the advisory capacity of the board as well as its monitoring effectiveness. Lanis and Richardson (2011) suggested that the size of the board has a significant impact on tax avoidance. Mahenthiran and Kasipilai (2012) examined board composition and corporate tax avoidance and found a significant but negative partial association between board composition and corporate tax avoidance among Malaysian listed firms. Aliani and Zarai (2012) found no significant association between the size of the board and tax avoidance. Their investigation suggested that the number of directors does not affect the strategies for tax avoidance. On the contrary, Ogbeide and Obaretin (2018) found board size negatively and significantly affects TAG.

***Audit Committee:*** According to Aldamen et al. (2012) the audit committee is a key monitoring mechanism, both in respect of shareholders' and for other stakeholders' interests. This is a committee put in place by and responsible to the board of directors to perform duties and responsibilities of the board of directors. The committee is chaired by an independent director. Pratama et al. (2017) investigated CGOV mechanisms and tax avoidance in Indonesia and the findings suggested that the independence of the audit committee does not influence tax avoidance.

***Audit Quality:*** Audit quality is an important indicator in reducing conflicts of interest between management and shareholders (Chytis et al., 2016), and a measure of how the board controls the activities of managers and prevents accounting manipulation and potentially fraudulent activities (DeAngelo & Masulis, 1980 in Chytis et al., 2019). Audit quality is measured by reference to the Big Four accounting firms. The audit conducted by these firms is regarded as more reliable in showing the actual value of the company and can control the company tax avoidance. External auditors are usually required to provide

an independent opinion in the annual reports of companies, and evaluate whether their client's adopt aggressive tax positions that may fall within the gray area and could be identified by the tax authority (Gallemore et al., 2014). Companies engage in higher levels of tax avoidance when their external auditor is a tax expert (McGuire et al., 2012).

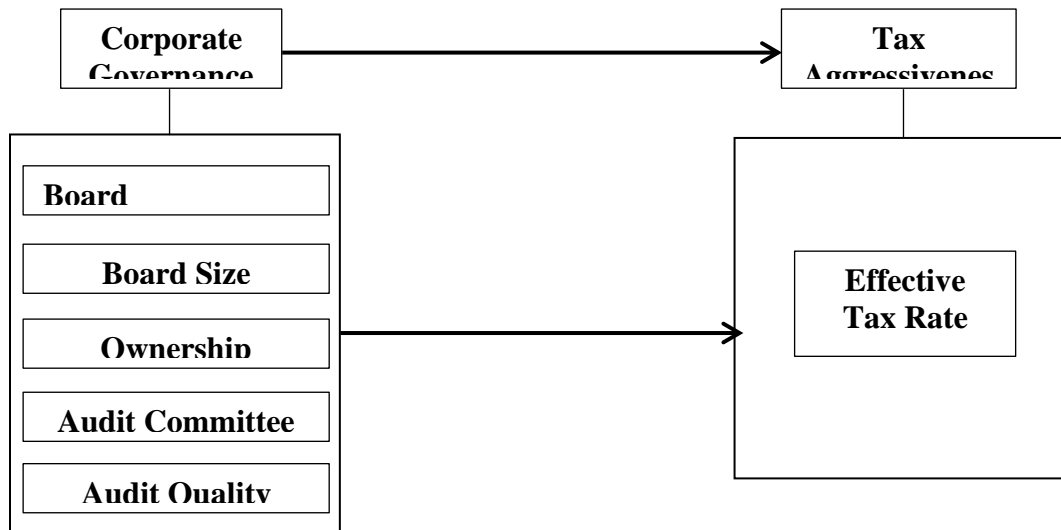
*Ownership Structure:* This refers to the number of individuals with sizeable number of shares in a company (block shareholding), the level of managerial shareholding as well as the ownership of shares by other corporate bodies (institutional shareholding). Fadhilah (2014) stated that institutional ownership is the proportion of share ownership by the founding institution of the company, and it is measured by the percentage of total shares owned by the investor of the internal institution (Mais & Patminongih, 2017).

*Tax Aggressiveness:* Corporate tax aggressiveness involves the conscious effort by business entity at reducing its tax obligations by adopting strategies which could either be legal or illegal (Brian-Lee et al., 2015). The legality of a firm's tax reduction decision or strategy is determined by the judicial interpretation of the relevant tax code as there is no clear cut distinction (Hanlon & Heitzman, 2010). Yuniarsih (2018) stated that TAG is one of the efforts to minimize tax liability. It is often done by corporate entities using prevailing tax regulations.

*Profitability and Corporate Tax Aggressiveness:* Profitability of corporations influences the level of TAG and is often measured by return on assets (ROA). Rego and Wilson (2012), McGuire et al., (2012), and Gaertner (2013) found a positive and significant relationship between profitability and tax avoidance, while other studies such as Boone et al. (2013), Edwards et al. (2013) and Taylor and Richardson (2013) found a negative association between corporate profitability and tax avoidance.

*Firm size and corporate tax aggressiveness:* The size of a company influences TAG. This is because bigger companies will have a lower cash effective tax rate compared to smaller companies, and more economic and political power, and are able to reduce corporate tax liabilities (Salawu & Adedeji, 2017). The size of a company is sometimes measured by the natural logarithms of total assets (Lanis & Richardson, 2012).

Fig. 1: Conceptual Framework on Corporate Governance and Tax Aggressiveness



### Theoretical Framework:

This study is anchored on agency theory. This theory is credited to the works of Jensen and Meckling (1976) and Fama and Jensen (1983). The agency problem arises in a situation where the principal (owners, shareholders) employs the agent (board/management) to undertake number duties on behalf of the owners for a reward (Izedonmi, 2016). The agency theory is the application of game theory to the explanation of the circumstances in which a person (the agent) acts on behalf of the principal for the advancement of the principal's objectives (Olugbenga et al., 2014). The conflicts between the different interests may result in agency cost. Bundala (2012) suggests that agency costs consist of three dimensions, namely: the monitoring expenditure of the principal, the bonding expenditure by the agent, and the residual loss. Olugbenga et al. (2014) stated that the monitoring cost is the cost incurred by the principal to monitor the behaviour of the agent. Adeyemi et al. (2019) stated that this behaviour can be monitored through budget restrictions, compensation policies and operating rules. Bundala (2012) noted that the bonding cost explains the circumstances where the principal pays the agent to guarantee that harmful actions would not be taken to harm the principal. Adeyemi et al. (2019) further suggest that bonding cost increases where the principal pays a premium to the agent to establish a legal obligation from which the principal can be compensated for any harmful actions of the agent. The residual loss represents the difference between the agent and principals actions if the principal takes the action. Olugbenga et al. (2014) stated that residual loss is as a result of divergence in between the principal and agent interests. Agency theory explains the relationship between tax and CGOV. Desai and Dharmapala (2009) noted that the TAG increases agency fee. Yuniarsih (2018) observed that CGOV is important because the preparation of corporate tax report is not easy. Therefore, corporations with high fees reveal that the management has failed in business activities which necessitate tax avoidance (Yuniarsih, 2018). Hanlon and Heitzman (2010) state that agency theory explains the

association between on tax matters and governance structures in corporate entities. Desai and Dharmapala (2006) argued that tax avoidance influences agency costs. Similarly, Armstrong, Blouin, Jagolinzer, and Larcker (2015) in their study observed that shareholder preferences regarding TAG and how CGOV attributes can affect TAG in either direction.

### **Empirical Review**

A number of related studies have provided evidence on the relationship between CGOV attributes and tax reduction strategies in different jurisdictions. Yuniarsih (2018) carried out an investigation on the effect of accounting conservatism and corporate governance mechanism on tax avoidance in Indonesia. The study employed ex post facto research design, and used data from the published financial statements of sampled manufacturing companies listed on the Indonesian Stock Exchange for the period 2014 to 2016. The investigation employed random sampling technique for the purpose of sampling technique. The data obtained from the annual reports were analysed using descriptive and inferential statistics. The inferential statistics was guided by multiple regression analysis. The result obtained from the hypotheses testing revealed that accounting conservatism does not influence tax avoidance, managerial ownership negatively affects tax avoidance, institutional ownership does not affect tax avoidance and audit quality also does not affect tax avoidance in Indonesia listed manufacturing companies.

Zhu et al. (2019) investigated the corporate tax avoidance and firm performance in Ghana. The study utilized ex post facto and correlational research design. The data for the study was collected from the annual financial statements of the companies listed on the Ghanaian Stock Exchange for the period under review. The independent variable was corporate tax avoidance and the dependent variable was return on assets. The study controlled for size, inventory intensity, capital intensity and board independence. The study adopted purposive sampling technique and the data obtained were analysed using descriptive and inferential statistics. The inferential statistics was guided by standard ordinary least square regression model. The result obtained from the hypotheses test revealed that a negative association between corporate tax avoidance and return on assets.

Igbिनovia and Ekwueme (2018) examined corporate tax avoidance and shareholders returns in Nigeria using ex post facto research design and a population consisting of all non-financial companies quoted on the Nigerian Stock Exchange, for the period 2010 to 2016. The study employed convenience sampling technique with a sample of fifty four non-financial companies as sample size and data from the annual financial statement of sampled companies. The dependent variable was stock returns while the independent and control variables consists of corporate tax avoidance, liquidity, profitability, expected growth, and capital intensity. The data obtained from the annual financial statements were analysed with descriptive and inferential statistics. The inferential statistics was guided by pooled ordinary least square regression analysis and the result showed that corporate tax avoidance positively and significantly affects shareholders return of listed non-financial companies in Nigeria. Also, the study revealed that the improvement of liquidity, profitability, expected growth and capital intensity of sampled companies when tax avoidance behaviour is properly monitored.

Ogbeide and Obaretin (2018) studied CGOV and TAG of quoted non-financial companies in Nigeria for the period 2012 to 2016. The study utilized longitudinal and causal effect research designs. The study employed secondary sources of data collection from the annual reports of eighty-five sampled companies from the total population of one hundred and sixteen. The dependent variable was TAG measured with effective tax rate and the independent variables was CGOV that was measured with board size, board independence, ownership concentration, and board gender diversity. The data obtained from the secondary sources were analysed using descriptive and inferential statistics. The result from the statistical tests suggests that CGOV significantly affects TAG. Their study specifically revealed that ownership concentration and managerial ownership positively and significantly affects effective tax rate while board size showed negatively and significantly on effective tax rate. Also, board gender diversity and board independence showed a negative and significant effect on effective tax rate of quoted non-financial companies in Nigeria for the period under review.

Waluyo (2017) carried out a study of good CGOV on tax avoidance in Indonesia, using quantitative research design and data from banks quoted on the Indonesia Stock Exchange. The dependent variable tax avoidance was proxied as effective tax rate while CGOV attributes included audit committee, independent directors, institutional ownership, and audit quality. The data collected from the annual reports were analysed using descriptive and inferential statistics. The inferential statistics was tested with ordinary least square model. The results revealed that independent directors and corporate performance negatively affects tax avoidance while audit committee, audit quality and size positively influence tax avoidance.

Aburajah et al. (2019) carried out a study on board of directors' characteristics and TAG in Jordan. The study employed correlational research design and data from all listed companies in Jordan. The dependent variable, TAG, was proxied by effective tax rate, while the independent variables consisted of board composition, board independence and CEO duality with size and return on assets as control variables. The data collected from the secondary data was analysed using descriptive and inferential statistics and the results suggest that board composition and board independence showed a negative association with TAG while board duality revealed a positive association with tax avoidance. The control variables of return on assets and firm size showed a positive association with tax avoidance.

Mappadang (2019) investigated CGOV mechanism on tax avoidance and firm value of listed companies in Indonesia Stock Exchange for the period 2013 to 2016. The study adopted ex post facto and correlational research design, and used data collected from the published annual reports of the listed companies. The population consisted of all manufacturing companies, a sample size of eighty seven companies was selected purposively. The independent variable was measured by independent commissioners, institutional ownership, and the board of commissioners while the dependent variable was tax avoidance and firm value. The data collected from the annual reports was analysed with

descriptive and inferential statistics and the result revealed that CGOV positively and significantly affects firm value while it shows a negative and significant association with tax avoidance.

Chytis et al. (2019) investigated tax avoidance, company characteristics and CGOV in Greece, using ex post facto research design and data collected from the annual reports of listed companies in Greece for the period 2011 to 2015. The population of the study comprised of all listed company and the sample consisted of fifty six companies quoted on the Athens Stock Exchange. The independent variable consisted of board independence, audit quality, concentration of ownership with financial variables such as capital employed, leverage, liquidity and company size while the dependent variable was effective tax rate. The secondary data of the study was analysed with descriptive and inferential techniques. The inferential statistics employed random effect method. The results revealed that cash effective tax rate positively and significantly influence company size and a significant negative association with capital employed. The study therefore showed no significant association between CGOV and tax avoidance.

Hasibuan and Khomsujah (2019) carried out a study of corporate social responsibility, CGOV and TAG in Indonesia. The study employed ex post facto and correlational research designs and a population comprised of all companies quoted on the Indonesia stock exchange for the period 2014 to 2017. The study employed purposive sampling technique with a sample size of two hundred and four. The data for this study was secondary data obtained from the annual reports and financial statements of sampled companies. The dependent variables was TAG measured with effective tax rate while the independent variable consisted of corporate social responsibility and CGOV with several control variables such as company size, leverage, and returns on assets. The secondary data was analysed with descriptive and inferential statistics and the results obtained from the regression model showed that corporate social responsibility positively influences TAG and CGOV does not influence TAG. Also CGOV has no influence on the moderation of corporate social responsibility and TAG.

## **Methodology**

This study employed ex-post facto and correlational research design. The population of the study consisted of the twenty-eight consumer goods companies listed on the Nigerian Stock Exchange (including consumer goods firms listed in the Premium Board and other sectors). The period of the study is five years, 2015 to 2019. This study used convenience sampling technique in selecting sample due to availability and completeness of data for the period under review. The sample size of twenty two (22) companies was determined using Taro Yamen's formula. The data for this study was sourced from the published annual reports and financial statements of sampled companies for the period under review. The dependent variable for this study is corporate TAG and the independent variable consists of board size, board independence, ownership structure, audit committee and audit quality while the control variables consists of profitability and firm size. The model for this study was developed using multiple regression analysis. Multiple regression analysis shows the variation in the value of the dependent variable on the basis of the variation in the



independent and control variables. The assumption is that the dependent variable is a linear function of the independent variables. This study employed descriptive, correlational and multiple regression analysis for the purpose of data analysis. The multiple regression with an error term ( $\epsilon$ ) is shown below:

$$ETR_{it} = \alpha + \beta_1 BOZ_{it} + \beta_2 BOI_{it} + \beta_3 AUC_{it} + \beta_4 AUQ_{it} + \beta_5 OWS_{it} + \beta_6 ROA_{it} + \beta_7 SIZ_{it} + \epsilon$$

**Table 1: Measurement of Variables**

Variables	Type of Variable	Symbol	Measurement	Sources
Effective Tax Rate	Dependent	ETR	Total tax cash expense divided by pretax income expressed as a percentage	Hasibuan and Khomsujah (2019); Ogbeide and Obaretin (2018); Chytis, Tasios, Georgopoulos and Hortia (2019); Aburajah, Maali, Jaradat & Alsharairi (2019)
Board Size	Independent	BOZ	Total number of directors on the board	Hasibuan and Khomsujah (2019); Chytis, Tasios, Georgopoulos and Hortia (2019)
Board Independence	Independent	BOI	% of independent directors on the board	Ogbeide and Obaretin (2018); Aburajah, Maali, Jaradat & Alsharairi (2019); Chytis, Tasios, Georgopoulos and Hortia (2019); Zhu, Mbroh, Monney and Bonsu (2019)
Audit Committee	Independent	AUC	Number of audit committee members in the company.	Tandean & Winnie (2016); Pratama, Zaitul and Darmayanti (2017)
Audit Quality	Independent	AUQ	If big four 1, if not 0	Salawu & Adedeji (2017); Tandean & Winnie (2016);
Ownership Structure	Independent	OWS	Cumulative percentage of shares own by major shareholders who own more than 5% of voting rights	Salawu & Adedeji (2017)
Profitability	Control	ROA	Operating profit divided by total assets	Salawu & Adedeji (2017); Hasibuan and Khomsujah (2019)
Size	Control	SIZ	Log of total assets	Salawu & Adedeji (2017); Hasibuan and Khomsujah (2019); Zhu, Mbroh, Monney and Bonsu (2019)

**Source:** Compiled from several authors (2020)

## Results and Discussions

**Table 2: Descriptive Statistics of Variables**

Variables	Observation	Mean	Minimum	Maximum	Standard Deviation
ETR	110	27.34	16.45	33.18	12.47
BOI	110	5.28	4.12	10.82	3.45
BOZ	110	4.28	6.12	12.45	5.38
OWS	110	64.53	56.24	95.23	6.71
AUC	110	5.12	4.52	6.04	2.34
AUQ	110	1.64	0.38	1.54	0.41
ROA	110	45.23	53.12	73.53	23.74
SIZ	110	74.12	57.64	85.34	36.48

**Source:** Eview computation (2020)

Table 2 shows the descriptive statistics. The table reveals that ETR is 27.34%. This figure is below corporate income tax rate of 30%. This suggests that the sampled consumer goods firms were very tax aggressive in the period under review. The result suggests that the sampled firms may have employed tax experts and consultants to reduce their tax liability, increase profit and maximize shareholders wealth. This result is consistent with Koanantachai (2013) which reported 13.98% for ETR in Thailand; Ying (2011) recorded 22.7% ETR in China; Ribeiro (2015) in a study reported 24.5% for ETR, Boussaid and Hamed (2015) found 12.37% in Tunisia for the period 2006 to 2012. In Nigeria, Oyeleke et al. (2016) reported 12.10% for the period 2012 to 2014 in the financial sector. Contrary to expectation, Ilaboya et al (2016) reported 29.88% in Nigeria in the period 2008 to 2014. Board independence reveals a mean, minimum, maximum and standard deviation of 5.28, 4.12, 10.82 and 3.45, respectively.

**Table 3: Correlation Analysis**

Variable	ETR	BOI	BOZ	OWS	AUC	AUQ	ROA	SIZ
ETR	1							
BOI	-.024	1						
BOZ	-.019	.121	1					
OWS	.047	.421	.174	1				
AUC	-.015	.148	.452	.148	1			
AUQ	.063	.207	.275	.130	.081	1		
ROA	.042	.177	.405	.091	.219	.205	1	
SIZ	.032	.134	.127	.158	.183	.176	.285	1

**Source:** Eview computation (2020)

The correlation matrix in Table 3 shows the extent of the relationship between variables. The result shows that board size, independence and audit committee are negatively correlated with effective tax rate (TAG) ( $r = -0.024$ ,  $r = -0.019$ ,  $r = -0.015$ ). This suggests that the independence, size of the board and audit committee in the firm contribute to the reduction of tax expense. Also the findings reveal that ownership structure, audit quality,

return on assets and firm size are positively correlated with effective tax rate (TAG) ( $r = 0.047$ ,  $r = 0.063$ ,  $r = 0.042$  and  $r = 0.032$ ). Therefore, this study argues that a properly remunerated board of directors and managers may pursue the interest of shareholders and hence minimize the tax expense (effective tax rate).

**Table 4: Multiple Regression**

Dependent Variable: ETR

Method: Least Squares

Sample (adjusted): 2015 2019

Included observations: 104 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.533119	0.871659	2.906089	0.0298
BOI	-0.018850	0.008131	-2.320129	0.0035
BOZ	-0.175768	0.068563	-2.563585	0.0225
OWS	0.044113	0.022848	1.930691	0.0740
AUC	-0.164304	0.231192	-0.710682	0.6536
AUQ	0.832077	0.454390	1.831196	0.5682
ROA	0.653222	0.238271	2.741501	0.0380
SIZ	0.850210	0.318415	2.670132	0.0374
R-squared	0.429644	Mean dependent var	3.793326	
Adjusted R-squared	0.401756	S.D. dependent var	0.110052	
S.E. of regression	0.044941	Akaike info criterion	-3.089167	
Sum squared resid	0.028276	Schwarz criterion	-2.121461	
Log likelihood	77.60501	Hannan-Quinn criter.	-2.751412	
F-statistic	7.567008	Durbin-Watson stat	2.216152	
Prob(F-statistic)	0.000050			

*Source: Author's computation using e-views, 2020*

Table 4 shows the multiple regression results between effective tax rate (proxy for tax aggressiveness) and CGOV mechanism (board independence, board size, ownership structure, audit committee size and audit quality) with the control variables of profitability and firm size. The results of the regression analysis revealed a negative and significant relationship between board independence and effective tax rate; a negative and significant relationship between board size and effective tax rate; a positive and insignificant relationship between ownership structure and effective tax rate; a negative and insignificant relationship between audit committee and effective tax rate; positive and insignificant relationship between audit quality and effective tax rate; positive and significant relationship between return and assets (ROA) and firm size with effective tax rate. The  $R^2$  (coefficient of determination) of 0.429644 and adjusted  $R^2$  of 0.401756 shows that the variables combined determines about 43% and 40% of effective tax rate and CGOV mechanism with control variables. The F-statistics and its probability shows that the regression equation is well formulated explaining that the relationship between the

variables combined are statistically significant ( $F\text{-stat} = 7.567008$ ;  $F\text{-prob.} = 0.000050$ ).

The result of the first hypothesis of the study showed that there is a negative but significant relationship between board independence and effective tax rate. The findings of this study agree with Aburajah et al. (2019) and Ogbeide and Obaretin (2018). The outcome of this study negates the findings of Zemzem and Flouhi (2013) and Ying (2011). Murni et al. (2016) noted that board independence is less response in evaluating TAG in firms that negates their obligation to government in terms of tax. They further stated that the number of independent directors will not influence the reduction in earnings of management, which gives managers the privilege to perform activities of earnings manipulation and will benefit the firm in terms of taxation. This is as a result of the difficulty of coordination among independent directors that inhibit the process of monitoring should be the responsibility of the board of directors (Murni et al., 2016). The findings in this study means that the presence of independent directors in the board minimizes the agency problem and hence moderates corporate TAG practices. Yeung (2010) stated that the increase in the independence of board members leads to a reduction in the actual tax rate and has shown that good CGOV elements lead to a strict tax policy.

The result of the second hypothesis of the study revealed that there is a negative but insignificant relationship between board size and effective tax rate. The finding is in tandem with Ogbeide and Obaretin (2018); Aburajah et al. (2019); Aliani and Zarai (2012), who found a non-significant relationship between the size of the board and TAG. They found that the number of directors does not influence the strategies to minimize tax expenses. However, the findings negate Lanis and Richardson (2011) who documented that the size of the board has a significant effect on TAG.

The result of the third hypothesis suggested a positive but insignificant relationship between ownership structure and effective tax rate. This finding is in agreement with Ogbeide and Obaretin (2018) and Aburajah et al. (2019) who reported that ownership concentration affects TAG.

The result of the fourth hypothesis revealed a negative and insignificant relationship between audit committee size and effective tax rate. The result is in tandem with the findings of Mais and Patminigih (2017) that audit committee does not significantly influence tax avoidance. The result disagrees with that of Waluyo (2017) that audit committee influences effective tax rate. This result indicates that the audit committee members are not able to improve supervision on management as a result of the authority of the audit committee that is still limited by the board of directors to enable the audit committee to assist management in TAG.

The findings of the fifth hypothesis showed a positive and insignificant relationship between audit quality and effective tax rate. The result is in tandem with Waluyo (2017), Mais and Patminigih (2017) who reported that audit quality influences effective tax rate. Also Jaya et al. (2013) failed to find any significant effect of quality of external auditors on tax avoidance. The results of this study also disagrees with Rahmi Fadilah (2014) which provided evidence that audit quality has no significant effect on tax avoidance.

The result of the sixth hypothesis showed a positive and significant relationship between return on assets and firm size on effective tax rate. This result is consistent with the findings

of Waluyo (2017), but inconsistent with Zhu et al. (2019) and Chytis et al. (2019). The differences in the evidence provided by the current study and prior studies, and even among prior studies, may be explained by differences in tax regimes and tax payers' behaviour in different tax jurisdictions, and differences in the sense of corporate responsibility across economic sectors.

### **Conclusion and Recommendations**

This study investigated the relationship between CGOV mechanisms and TAG of consumer goods firms listed on the Nigerian Stock Exchange for the period 2015 to 2019. The study employed a sample of twenty-two firms and regression model to investigate the effect of board independence, board size, ownership structure, audit committee size, audit quality, return on assets and firm size on the TAG of the sampled firms for the period under review. The empirical analysis revealed that there is a negative but significant relationship between board independence and effective tax rate; there is a negative but insignificant relationship between board size and effective tax rate; positive but insignificant relationship between ownership structure and effective tax rate; a negative and insignificant relationship between audit committee size and effective tax rate; positive and insignificant relationship between audit quality and effective tax rate and positive and significant relationship between return on assets and firm size on effective tax rate. Hence, this paper concludes that certain CGOV mechanisms influence the level of TAG of listed companies in Nigeria. On the basis of the conclusion, the paper recommended as follows: investors should consider the level of tax aggressive practice in evaluating the level of risk of their investees; government should formulate appropriate tax regulations in order to reduce the tax loopholes in the Nigerian tax system; companies listed in Nigeria should ensure that the composition of corporate boards consist of optimal mix of professional accountants, tax experts, business strategists and legal experts that would bring their wealth of experience and training to positively affect important decision making regarding tax minimization in terms of aggressiveness.

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# EXPLORING THE POTENTIAL OF ADR IN TAX DISPUTE RESOLUTION

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## Abstract

*Alternative dispute resolution (ADR) is a nascent adjudicative mechanism. Its preference to litigation is premised on lots of advantages which includes saving time, cost effectiveness and mutual relationship of the disputants. Notwithstanding the seeming advantages of ADR as projected by the protagonists, ADR has not been fully explored in the resolution of tax dispute. The challenge lies in the legal framework regulating the practice of ADR and the dynamic nature of tax dispute being a matter of public concern. Tax dispute is not always a controversial dispute where facts are so much in issue. The Tax authority knows his right to collect tax while tax payer knows his obligation to collect tax. What is usually in issue is assessment which does not necessary require full blown litigation; what is usually required is mutual understanding of tax parties positions and differences; and the genuineness of parties to shift ground. This can be achieved through ADR process. It is on this ground that this paper evaluated the legal and theoretical potentials of the ADR process in the resolution of tax disputes. The paper adopted a doctrinal approach. Accordingly, text books, journal articles, statutes, case laws were reviewed to propagate a profound and persuasive social-legal theory that justifies the potentials of ADR applicability to tax disputes. However, the paper does not apply to the resolution of every type of tax dispute. Jurisdictional tax disputes are beyond the scope of ADR while administrative tax disputes are suitable for the ADR process. ADR in tax is most suitable as an in-house administrative mechanism. The paper found that the applicability of ADR to tax dispute will reduce the cost and delay associated with litigation. The ADR process would require the involvement of tax experts as mediators, negotiators or conciliators who would look into the matter and advice the parties accordingly.*

**Keywords:** Alternative dispute resolution (ADR), litigation, tax dispute, tax dispute resolution,

## 1.0 Introduction

The term “Alternative Dispute Resolution” (ADR), is used generally to describe the methods and procedures used in resolving disputes either as alternatives to the conventional dispute resolution mechanism of the court or in some cases supplementary to such

mechanisms.<sup>1</sup>

The *Black's Law Dictionary* defined alternative dispute resolution as “*procedure for settling a dispute by means other than litigation.*”<sup>2</sup> According to Ware, *ADR can be defined as encompassing all legally permitted processes of dispute resolution other than litigation.*<sup>3</sup> ADR seems nascent to the conventional court system hence the name “alternative”. But it was an ancient set of dispute resolution mechanism. It was a friendly process where parties were made to shake hand or hug each other when a dispute is resolved. It was also very quick as there was no conventional procedure for admissibility of evidence. The process was not technical. Many of the techniques that are regarded as ADR today have roots in different respective localities.<sup>4</sup> Time came when the society became more industrialised and the wave of revolution did not spare the judiciary system. A more rigid dispute resolution system was introduced: the court system, fundamentally different from the traditional ADR, possessing rigid rules and procedure. But litigation has failed to serve the justice of the society. The common complaint now is that litigation is too confrontational, too expensive, too time consuming and sometimes too complex.<sup>5</sup> The increased complexity of litigation and the concomitant dissatisfaction with the legal outcomes amongst disputants has led to the rediscovery of ADR as an alternative to litigation.

ADR is really making wave in other areas of law. Commercial law is the most affected. Business partners desire quick resolution of their disputes; the delay associated with litigation hampers the growth of every business. The court system has also embraced ADR. Most States judiciary have established Multi-door Court Houses, which is an in-house ADR out-fit where the courts refers litigants to the option of all available ADR methods that will enable them resolve their matters pending court. It is only when the reference fails that the court goes on with the matters. The trend of quick resolution of dispute is cutting across every area of law; but, the place of Tax law in this ADR revolution is unexploited.

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<sup>1</sup>N.Adulenkor, “Alternative Method of Dispute Resolution” available at <https://nigerianlawclass.wordpress.com/author/adulenkor/> ( accessed on 8<sup>th</sup> December, 2017).

<sup>2</sup> B.A. Garner (ed) (2009) *Black's Law Dictionary*, (St. Paul, MN : West),P. 91.

<sup>3</sup> S.J Ware , *Alternative Dispute Resolution*, (Harlow: Pearson,2008) P. 5 – 6.

<sup>4</sup> The traditional societies across the globe have featured varieties of ADR process like Negotiation, Mediation and Arbitration. ADR therefore is not an imported concept to African Jurisprudence. It has existed in our indigenous societies and rudimentary to our customary jurisprudence.<sup>4</sup> Anyone used to village setting knows of the role played by the village head or the council of elders when a dispute arises or complaint is made. Many families have also made efforts to have their disputes resolved through mediation of the head of the family, the village priests and close family friends.

<sup>5</sup>See N. Adulenk, *Alternative Methods of Dispute Resolution* available at <https://nigerianlawclass.wordpress.com/2014/12/08/alternative-methods-of-dispute-resolution/> (accessed on 8 December, 2019).

This paper explores the potentials of ADR in resolving tax dispute. It is a theoretical investigation that is anchored on law and practice; and seeks to advocate and promote the use of ADR in tax dispute.<sup>6</sup> Tax is the life line of every society. Where tax administration is marred with incessant litigation, tax administration will be inefficient and revenue generation will be poor. A good tax resolution mechanism must be timorous and cost effective. There is need to explore ADR in the resolution of tax disputes; the advantages are enormous.<sup>7</sup> ADR is a suitable process for the resolution of tax dispute; it saves time, it saves cost and it's very most convenient.

## **2.0 Litigation and Alternative Dispute Resolution**

Litigation is the current method of resolving dispute through an established court system where a judge, an arbiter, is legally empowered to adjudicate over certain matters. The Court system is usually rigid as both the relationship between the judge and the litigants is governed by a defined set of rules and principles. There are various courts in Nigeria. In hierarchy, it ranges from Supreme Court to Magistrate Court. Cases can start from Magistrate court and terminate at the Supreme court spanning through a lengthy period of time. Most times, litigants become frustrated by the delay in the litigation of cases in various courts. The reason for the delay is numerous. Technicalities account for some while floodgate of cases has its own share. An issue of jurisdiction can be contested up to Supreme Court, while the substantive issues is stayed, after which the jurisdiction maybe upheld and trial ordered at the lower court. This can take 3- 5 years. Judges are also saddled with so many cases which account for lengthy litigation since everyone has to join the queue while the judge writes in long hand.

In the tax system, the process seems more technical than the other areas of law. Tax requires special expertise and skills. The expertise required in tax practice is huge that when compounded with the technicality of court system , it will certainly affect tax dispute resolution. Most tax payers would like to leverage on the technicalities to evade or delay tax payment. For instance, where tax assessment is contested, status quo will be maintained

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<sup>6</sup> This paper does not apply to the resolution of every type of tax dispute. Jurisdictional tax dispute is beyond the scope of ADR while administrative tax dispute is suitable for ADR process. ADR in tax is most suitable as an in-house administrative mechanism. See NB Amadi: 'Distilling the Contour of ADR Applicability to Tax Dispute in Nigeria' *Journal of Taxation and Economic Development of Chartered Institute of Taxation (CITN)*, Vol. 18, Issue 2, Sept., 2019.

<sup>7</sup> Odinkonigbo and Ezeuko, advocate for the need for Nigeria to make a paradigm shift from its current adversarial approach to the global trend of adopting ADR in the resolution of tax dispute. See JJ Odinkonigbo and JJ Ezeuko 'Does Nigeria Follow the Contemporary Global Trend In Tax Dispute Resolution Strategy?', *Nigerian Juridical Review*, Vol 12, 2014.

pending the determination of the suit. If every tax payer challenges his/ her assessment in court, revenue generation will be grounded.

ADR could provide a quicker and better platform for the resolution of tax dispute. The law has recognised the importance of ADR. Sections 19(d) of the 1999 Constitution of the Federal Republic of Nigeria<sup>8</sup> provides for the settlement of disputes by Arbitration, Mediation, Conciliation, Negotiation and Adjudication. This is in recognition of the crucial role arbitration and other forms of ADR now play in the resolution of various types of disputes. The constitutional status accorded arbitration and other forms of ADR for the settlement of disputes is a complementary role to the judicial powers conferred on the Courts by the Constitution.

The practice of ADR has gained tremendous awareness. It has become a developed profession with the induction of practitioners by different institutions like Chartered Institute of Arbitrators, and Institute of Chartered Mediators and Conciliators to practice ADR as a full profession.<sup>9</sup>

Multi-Door Court Houses have also been established in other jurisdictions in Nigeria.<sup>10</sup> The idea is to provide a system where court users would have another option to dispute resolution other than the conventional litigation process. A Multi- Door Court usually has its own set of rules to guide whichever ADR process that is selected.

There are various ways a matter can come before Multi Door Court. It could be via a judge who refers an existing case he or she considers suitable for ADR. A party or both parties can apply directly to the Multi Door Court for the resolution of their dispute, with or without having first commenced court action.

Litigation which has been the principal method of resolving commercial disputes is now being complemented by other methods of dispute resolution owing to the exigencies of commercial transactions. Many countries in the world now apply alternative methods of dispute resolution. In the United States for example, Frank Sander, developed the concept of multi-door courthouses- a bundle of alternative systems of dispute resolution options which parties can resort to.<sup>11</sup> This has been replicated in Nigeria

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<sup>8</sup> The provision is made under the foreign policy objective which is unenforceable; it has however recognised the importance of ADR in resolving dispute.

<sup>9</sup> See <http://www.ciarb.org/> and <http://icmcng.org/>.

<sup>10</sup> Lagos, Kano, Abuja, Akwa Ibom, Enugu Judiciary have established Multi Door Court House.

<sup>11</sup> F E. Sander first articulated the multi-door courthouse concept in April 1976 at a conference convened by Chief Justice Warren Burger to address the problems faced by judges in the administration of justice. See Address by F. E Sander at the National Conference on the Causes of Dissatisfaction with the Administration of Justice (Apr. 7-9, 1976), reprinted in Sander, *Varieties of Dispute Processing*, 70 F.R.D. 111 (1976).

by the establishment of the Lagos Multi-door court House and other Multi-door Courthouses.<sup>12</sup>

### **The Legal Framework for the Practice of ADR in Nigeria**

The practice of Alternative Dispute Resolution in Nigeria has been recognised by the Nigerian Constitution. Section 19(d) of the 1999 Constitution states:

*...Respect for international law and treaty obligation as well as the seeking of settlement of international disputes by negotiation, mediation, conciliation, arbitration and adjudication”.*

Section 254C (3)<sup>13</sup> also states that:

*“The National Industrial court may establish an Alternative Dispute Resolution Centre within the court premises on matters which jurisdiction is conferred on the court by this Constitution or any Act or Law”*

ADR also has the blessings of The Arbitration and Conciliation Act.<sup>14</sup>

The Act provides that:

*Every arbitration agreement shall be in writing contained (a) in a document signed by the parties; or (b) in an exchange of letters, telex, telegrams or other means of communication which provide a record of the arbitration agreement; or (c) in an exchange of points of claim and of defence in which the existence of an arbitration agreement is alleged by one party and denied by another.*<sup>15</sup>

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Judges and attorneys from around the country attended the Pound Conference and discussed many issues previously discussed by Dean Roscoe Pound of Harvard Law School in his 1906 address, The Causes of Popular Dissatisfaction with the Administration of Justice. Dean Pound's address originally was published in 29 A.B.A. REP. 395 (1906); see also 35 F.R.D. 273 (1964) (full text); 57 A.B.A. J. 348 (1971) (abridged version) 'For more on Frank Sander concept on multi door, see Hernandez-Crespo, Mariana D.,'' A Dialogue between Professors Frank Sander and Mariana Hernandez Crespo Exploring the Evolution of the Multi-Door Courthouse (Part One)'' (2008). Available at SSRN: <https://ssrn.com/abstract=1265221> (accessed on 20 February,2018).See also Gladys Kessler & Linda J. Finkelstein, The Evolution of a Multi-Door Courthouse, 37 Cath. U. L. Rev. 577 (1988) Available at: <http://scholarship.law.edu/lawreview/vol37/iss3/2> (accessed on 20 February,2018).

<sup>12</sup> See Order 3 Rule 2 & 8 of Lagos State (Civil Procedure Rule)2012 and there are similar provisions in the High Court Rules of Enugu, Port Harcourt, Kano and Abuja etc.

<sup>13</sup> The 1999 Constitution (Amended).

<sup>14</sup> Cap A. 18 LFN, 2004. The preamble of the Act provides thus: An Act to provide a unified legal frame work for the fair and efficient settlement of commercial disputes by arbitration and conciliation; and to make applicable the Convention on the Recognition and Enforcement of Arbitral Awards (New York Convention) to any award made in Nigeria or in any contracting State arising out of international commercial arbitration.

<sup>15</sup> See section 1(1) *supra*.

The Act also provides for Conciliation. It states that:

*Notwithstanding the other provisions of this Act, the parties to any agreement may seek amicable settlement of any dispute in relation to the agreement by conciliation under the provisions of this part of this Act.*

Order 19 of Federal High Court (civil procedure) Rules of Nigeria is also supportive of ADR interventions in arbitral proceedings.<sup>16</sup> The Government of Nigeria has also entered into some international agreements and treaties in respect of ADR. These include:

- New York Convention (Recognition and Enforcement of Foreign Arbitral Award) 1958
- International Centre for Settlement of Investment Dispute (ICSID) (Washington Convention) 1966

There have also been court decisions as regard arbitration awards. In the case of *Kano State Urban Development Board V. Fanz Construction Co.*<sup>17</sup> the Court held that the respondent is bound to pay the award made by an arbitration panel. Similar decision was made in *LSDPC V. Adold/Stan Ltd.*<sup>18</sup> Furthermore, Supreme Court, in the case of *Ohiaeri vs. Akabueze*,<sup>19</sup> held as follows: *Parties that voluntary submit themselves to the decision of the arbitrators who are either the chiefs or elders of their community are bound by such decision.*<sup>20</sup>

### **3.0 Types of ADR**

#### **3.1 Negotiation.**

According to *Chambers English Dictionary*, Negotiation means “to bargain, to confer for

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<sup>16</sup> The Lagos State judiciary has taken a giant stride towards curbing the menace of long delays associated with litigation. This has been achieved by the issuance of Lagos State (Civil Procedure) Rule, 2012. This provides that before a matter is accepted for filing, Counsel must indicate, through a prescribed form, that attempts have been made to settle the dispute through ADR process. See Order 3 Rule 2 & 8. The Rule further provide that process shall upon acceptance for filing by the registry be screened for suitability of ADR and referred to the Lagos Multi Door Court House or other appropriate ADR institutions or Practitioners. See Order 3 Rule 3.

<sup>17</sup> (1990) 4 NWLR (Pt N7) P.1.

<sup>18</sup> (1994) 7 NWLR (Pt 358) P. 545. See also Raz Pal Gaz. V FCDA (2001) 10 NWLR (pt7222) 559 where the court held that the award of the arbitral panel is equivalent to the judgement of a court. For more expository on arbitral awards see generally GC Nwakoby, *The Law and Practice of Commercial Arbitration in Nigeria*, (2<sup>nd</sup> ed.) (Enugu:Snaap Press Nigeria Ltd, 2004) p.19.

<sup>19</sup> (1992) 2NWLR (Pt221) P.1 at 7 Paras 12.

<sup>20</sup> See also *Eke vs. Okwaranyia* (2001) 12 NWLR (PT 726) P.181 at 184. For where arbitration was used to settle disputes relating to land, see *Larbi v Kwasi* (1952) 13 WACA 76, see also *Okpuruwu v Okpokam* (1988) 4 NWLR (pt 90) where the Court has held that arbitration is not alien to customary jurisprudence.



the purpose of mutual agreement or to arrange for by agreement’’.<sup>21</sup> Negotiation is one of the most common processes in the world. People negotiate almost constantly, from the three year old children “sharing” their toys, to neighbours discussing the erection of a dividing fence, to a consumer returning goods to a department store, to multi-national corporations discussing trade obligations.<sup>22</sup> It is a process whereby parties to a dispute attempt to settle that dispute on their own and without the assistance or intervention of a third party. Parties may either be represented by professional negotiators or conduct the negotiation themselves.

Negotiation therefore, is a communication with a view to reaching agreement.<sup>23</sup> It is the process we use to acquire our need especially when someone is in possession of what we want.<sup>24</sup> Negotiation is usually the first ADR process adopted in dispute resolution. It is the basic form of ADR which occurs when a disputant engages in talk and consultation with another with a view of getting a fair bargain.

Negotiation is a prelude; and as such an indispensable ADR step. It is a fundamental key to all consensual ADR process which is the most satisfactory method of dispute resolution.<sup>25</sup> Negotiation involves only the parties to a dispute. When a dispute arises between two or parties, and they decide to settle it among themselves without involving a third party. This process of settlement without a third party is a negotiation process.<sup>26</sup>

Negotiation can be informal when two or more persons initiate and work through their own negotiation privately and in an unstructured manner. The parties exchange useful information, give and take concessions and finally agree at some terms of settlement acceptable and satisfactory to both of them.

In commercial disputes and other disputes of complex nature e.g. community-based, international trade, disputes, international agreements, labour related conflicts, the negotiations are structured, often requiring the intervention of a third party or parties facilitating the negotiation or even doing it on behalf of the party or parties who must have given the negotiator authority to settle on their behalf. This is regarded as formal negotiation.<sup>27</sup>

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<sup>21</sup> *Chambers English Dictionary*, 7<sup>th</sup> ed., (Edinbur, W8R Chambers,1990) p. 961.

<sup>22</sup> N. Adulenkor , “Alternative Methods of Dispute Resolution”, *op cit* p. 23.

<sup>23</sup> K N. Nwogu, ‘Critical Issues in Negotiation,’ *Negotiation and Dispute Resolution Journal*’ Vol. 1, No.1,2014, p. 25.

<sup>24</sup> Olufemi Abifarin, “Resolving Domestic Violence through Alternative Dispute Resolution in Nigeria”, *University of Ilorin Law Journal*, Vol.6, 2010, p. 10.

<sup>25</sup> See J. O Orojo and M.A Ajomo, *Law and Practice of Arbitration and Conciliation in Nigeria*, (Lagos: Mbeyi and Associate Ltd, 1999) at 4.

<sup>26</sup> See Obi Okoye, *Law in Practice in Nigeria*, (Enugu: Snap Press) p. 325

<sup>27</sup> For more on formal and informal negotiation, see N Adulenkor , “Alternative Methods of Dispute Resolution” *op cit*.

### 3.2 Mediation

Mediation is a process whereby parties are assisted in their negotiations by a neutral third party (mediator) to identify the issues in dispute, generate options around these issues, and consider alternatives and to attempt to reach agreement that will meet the underlying needs and interests of both or all parties to the dispute.

A neutral person called a "mediator" helps the parties try to reach a mutually acceptable resolution of the dispute. The mediator does not decide the case, but helps the parties communicate so they can try to settle the dispute themselves. Mediation may be particularly useful when family members, neighbours, or business partners have a dispute. Mediation may be inappropriate if a party has a significant advantage in power or control over the other.

Mediators do not make decisions about who is right or wrong or what the best outcome should be. A key advantage to mediation is that the parties have significant control over the end result. Decision-making power stays in the parties' hands, and is not passed on to a judge or arbitrator. Instead, a mediator helps bring the parties together by establishing a framework for the negotiation within which all parties agree to participate.

The mediator has no determinative power (i.e cannot make a decision for the parties) and most commonly, mediators do not offer substantive advice during the mediation. The mediator however controls the process of the mediation, that is the steps and stages of the meeting, and the parties themselves reach any agreement that is made.<sup>28</sup>

Mediation is voluntary and non-binding unless and until an agreement is reached, then the agreement becomes an enforceable contract. Until there is an agreement the parties are free to walk away from the mediation anytime, as entering the process itself does not compel the parties to settle.<sup>29</sup>

Mediation is a private process, conducted in private, without prejudice and with absolute confidentiality. The results are rarely made public, although they may be publicised if both parties agree. The source of authority of the voluntary mediation is the agreement (written or oral) of the parties to use the process, the choice of mediators, the venue, etc.

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<sup>28</sup> See Genevieve A. Chornenki; Christine E. Hart, *Bypass Court: a Dispute Resolution Handbook*, (Toronto and Vancouver: Butterworth's Canada Ltd., 1996) p. 131.

<sup>29</sup> *Ibid*

Mediation is a rapidly growing ADR technique. It consists of assisted negotiations in which the disputants agree to enlist the help of a neutral intermediary, whose job it is to facilitate a voluntary, mutually acceptable settlement. A mediator's primary function is to identify issues, explore possible bases for agreement, discuss the consequences of reaching impasse, and encourage each party to accommodate the interests of other parties through negotiation.

Unlike arbitrators, mediators lack the power to impose a decision on the parties if they fail to reach an agreement on their own. Mediation is sometimes referred to as conciliation, or conciliated negotiation. However, the terms are not necessarily interchangeable. Conciliation focuses more on the early stages of negotiation, such as opening the channels of communication, bringing the disputants together, and identifying points of mutual agreement. Mediation focuses more on the later stages of negotiation, exploring weaknesses in each party's position, investigating areas where the parties disagree but might be inclined to compromise, and suggesting possible mutually agreeable outcomes.

### **3.3 Conciliation**

Conciliation is a voluntary proceeding, where the parties involved are free to agree and attempt to resolve their dispute by conciliation.<sup>30</sup> The process is flexible, allowing parties to define the time, structure and content of the conciliation proceedings. These proceedings are rarely public. They are interest-based, as the conciliator will when proposing a settlement, not only take into account the parties' legal positions, but also their; commercial, financial and or personal interests.<sup>31</sup>

Conciliators are usually recognized experts in the field of the dispute and are empowered to suggest or give advice on likely settlement terms. It is not uncommon for the third party conciliator to be very persuasive and to recommend strongly certain outcomes that they believe are suitable. Conciliators have no determinative powers.

Conciliation is less formal than arbitration. This process does not require an existence of any prior agreement. Any party can request the other party to appoint a conciliator. One conciliator is preferred but two or three are also allowed. In case of multiple conciliators, all must act jointly. If a party rejects an offer to conciliate, there can be no conciliation.

Parties may submit statements to the conciliator describing the general nature of the dispute and the points at issue. Each party sends a copy of the statement to the other. The conciliator

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<sup>30</sup> See H. Brown & A. Marriott, *ADR Principles and Practice*, 2nd edn., (London: Sweet & Maxwell, 1999)p.31

<sup>31</sup> *Ibid.*

may request further details, may ask to meet the parties, or communicate with the parties orally or in writing. Parties may even submit suggestions for the settlement of the dispute to the conciliator.<sup>32</sup> When it appears to the conciliator that elements of settlement exist, he may draw up the terms of settlement and send it to the parties for their acceptance. If both the parties sign the settlement document, it shall be final and binding on both.

Conciliation as a type of ADR in Nigeria is governed by law. It derives its force from Sections 37 – 42 and section 55 of the Arbitration and Conciliation Act<sup>33</sup>. The following disputes can be settled by conciliation. It provides that:

The main difference between conciliation and mediation proceedings is that, at some point during the conciliation, the conciliator will be asked by the parties to provide them with a non-binding settlement proposal. A mediator, by contrast, will in most cases and as a matter of principle, refrains from making such a proposal.

### **3.4 Arbitration**

Arbitration is the process of referring a dispute to an impartial intermediary chosen by the parties who agree in advance to abide by the arbitrator's award that is issued after a hearing at which all parties have the opportunity to be heard. Arbitration resembles traditional civil litigation in that a neutral intermediary hears the disputants' arguments and imposes a final and binding decision that is enforceable by the courts. In arbitration, a neutral person called an "arbitrator" hears arguments and evidence from each side and then decides the outcome of the dispute. Arbitration is less formal than a trial, and the rules of evidence are often relaxed.

Arbitration can be classified into private and judicial arbitration.

Private arbitration is the most common form of ADR. Sometimes referred to as contractual arbitration, private arbitration is the product of an agreement to arbitrate drafted by the parties who enter a relationship anticipating that disputes will arise, but who mutually desire to keep any such disputes out of the courts.<sup>34</sup> Private arbitration agreements typically identify the person who will serve as arbitrator. The arbitrator need not be a judge or government official. Instead, the arbitrator can be a private person whom the parties feel will have sufficient knowledge, experience, and equanimity to resolve a dispute in a reasonable manner.

A private arbitrator's power is derived completely from the arbitration agreement, which may also limit the issues the arbitrator has authority to resolve.

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<sup>32</sup> *Ibid.*

<sup>33</sup> Cap A 18, LFN, 2004.

<sup>34</sup> Jay Folberg; Joshua Rosenberg; Robert Barrett, "Use of ADR in California Courts: Findings & Proposals", *San Francisco: University of San Francisco Law Review*, 1992, v. 26.

Judicial arbitration, sometimes called court-annexed arbitration, is a non-binding form of arbitration, which means that any party dissatisfied with the arbitrator's decision may choose to go to trial rather than accept the decision. Because judicial arbitration is mandatory but non-binding, it often serves as a means of facilitating negotiation between the parties to a dispute. The Courts are frequently backlogged with hundreds of lawsuits, applying nonbinding arbitration for certain disputes the parties will see the value of a negotiated settlement where both parties compromise their positions, since their positions would likely be compromised even in the court.

#### **4.0 Conventional Tax Dispute Resolution Process**

Tax disputes are conflicts or controversies between taxpayers and tax authorities on the interpretation and application of tax laws. Tax disputes usually arise when taxpayers and tax authorities disagree on the administration of tax laws usually with respect to tax assessments and liability.<sup>35</sup> Tax disputes are essentially legal disputes; it is “the extent to that tax disputes relate to contentions over rights and liabilities concerning taxation, they are essentially real legal disputes.”<sup>36</sup>

Tax collection in Nigeria typically follows a self-assessment system<sup>37</sup>. Self-assessment is a situation where taxpayers compute their tax liability and submit the computation to the tax authorities. The tax authority, on the other hand, audits the assessment submitted by the tax payers to ensure its compliance with the relevant tax laws. Where the tax authority disagrees with the taxpayers' self-assessment, the tax authority issues additional assessment.<sup>38</sup>

A taxpayer that receives a notice of additional assessment may accept or object to it. If the taxpayer objects, a dispute arises. A taxpayer that is aggrieved by the assessment of a Relevant Tax Authority (RTA) may file notice of objection to the assessment issued by the RTA. The RTA will then amend or refuse to amend the assessment. Where the RTA refuses to amend the assessment, the RTA will issue a Notice of Refusal to Amend (“NORA”).<sup>39</sup> Upon receiving the NORA, and within 30 days, the taxpayer may file an appeal with the Nigerian Tax Appeal Tribunal (NTAT) under section 59 the Nigerian Federal Inland Revenue Establishment Act (FIRSEA) No. 13 of 2007, Section 11 of the Fifth Schedule to the FIRSEA and Paragraph 5 of the Tax Appeal Tribunals (Establishment) Order of November 25<sup>th</sup>, 2009 (TAT Order).

The process above shows that Nigeria is yet to join the trend in the use of ADR in tax dispute

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<sup>35</sup> Lagos Chamber of Commerce International Arbitration Centre (LACIAC) Newsletter, 2<sup>nd</sup> edition, available at [www.laciad.org](http://www.laciad.org) accessed on 2<sup>nd</sup> May, 2020.

<sup>36</sup> Bidemi Daniel “ Tax Disputes Resolutions: The options and Precedents” *available at* [www.slidesshare.net](http://www.slidesshare.net) , assessed on 13 February, 2020

<sup>37</sup> Section 41 PITA, section 53 CITA

<sup>38</sup> Section 56 of PITA and section 50 of CITA

<sup>39</sup> Section 69(5) of CITA

resolution. Both the FIRS and different States' Board of Internal Revenue in Nigeria are not statutorily mandated to explore the use of ADR in the settlement of tax disputes. It is evident that no form of ADR is formally explored by Nigerian Tax authorities in resolving tax dispute.<sup>40</sup> Tax dispute can be efficiently resolved through the ADR process. In the view of Odinkonigbo and Ezeuko,<sup>41</sup> there is need for Nigeria to make a paradigm shift from its current adversarial approach to the global trend of adopting ADR in the resolution of tax dispute.

## 5.0 Benefit of ADR in Tax Disputes

### 5.1 Speed

Expeditious determination of cases remains one of the attributes of ADR which is unlikely to be available in the courtroom.<sup>42</sup> In Nigeria particularly, litigation is extremely time consuming. It has become a culture that cases must last several years in the courts before they are determined. Even when a case has lasted up to ten years in the court and the judge handling the matter is retired, the case has to start de novo. Ogungbe<sup>43</sup> rightly noted that; some cases have been pending in our courts for more than ten years as a result of certain constraints like retirement or transfer of judges handling the cases which have been opened and evidence had been taken. Such cases have to start de novo. The devastation, frustration, and economic stress which litigants undergo are better imagined than experienced<sup>44</sup> The celebrated case of *Ariori and others v. Elemo and others*,<sup>45</sup> for instance, was first instituted in the Court in the month of October, 1960 thereby coinciding with the month and year Nigeria got its independence and took 23 years to reach the Supreme Court which nevertheless remitted it to the trial court for a retrial de novo. Other cases like *Atanda v. Ajani*<sup>46</sup> took 10 years to reach the apex court which ordered a trial de novo. Oyesola and Kola noted that parties are discouraged from litigation due to unnecessary delays and the consequent overstay of their cases in the courts.<sup>47</sup> They opined that sometimes, for

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<sup>40</sup> There is however another form of dispute that operates at the jurisdictional level which is not susceptible to ADR.

<sup>41</sup> JJ Odinkonigbo and JJ Ezeuko 'Does Nigeria Follow the Contemporary Global Trend In Tax Dispute Resolution Strategy?', *Nigerian Juridical Review op cit.*

<sup>42</sup> J Nwazi, (2017) 'Assessing the Efficacy of Alternative Dispute Resolution (ADR) in the Settlement of Environmental Disputes in the Niger Delta Region of Nigeria,' Vol. 9(3), pp. 26-41, *Journal of Law and Conflict Resolution* available at <http://www.academicjournals.org/JLCR>

<sup>43</sup> MO Ogungbe (2003). Arbitration & Mediation: when is either best suited for dispute resolution? Nigerian Law: Contemporary Issues, Essays in honour of Sir. G. O. Igbinedion. P 319.

<sup>44</sup> Tropill AT (1991). Alternative dispute resolution in a contemporary South African context, cited in Joseph Nwazi, (2017) Assessing the Efficacy of Alternative Dispute Resolution (ADR) in the Settlement of Environmental Disputes in the Niger Delta Region of Nigeria, Vol. 9(3), pp. 26-41, available at <http://www.academicjournals.org/JLCR>.

<sup>45</sup> (1983)1 SC NLR 1.

<sup>46</sup> (1989) 3 NWLR pt. 511 at 103

<sup>47</sup> A Oyesola, OO Kola (2014), 'Industrial conflict resolution using court connected alternative dispute

undisclosed reasons, case files are alleged lost, while transfer of officers handling certain cases may result in the cases being lost sight of or even neglected.<sup>48</sup> The problems of delay are consequent upon certain factors such as lawyer's inordinate frequent requests and letters for adjournment of cases<sup>49</sup> coupled with administrative incapacities, including lack of modern facilities.<sup>50</sup>

Most tax cases are also caught in the net of delayed litigation. In the case of *Joseph Rezcallah & Sons Ltd V FBIR*,<sup>51</sup> the validity of Best of judgment (BOJ) where a taxpayer has not delivered a return was contested up to Supreme Court within 15 years. In *FBIR v Blue Pelican Casino Co. Ltd*,<sup>52</sup> the Supreme Court, within 8 years, held that an assessment which has not been objected to within the time prescribed by law shall be deemed final and conclusive. Such delay in tax adjudication is antithetical to the efficiency of tax administration.

ADR will quicken the speed of tax dispute resolution. Where ADR mechanism, like mediation, is employed in resolving tax disputes, issues of assessment and other technicalities bedevilling litigation will be controlled. A tax dispute is sui generis and would require the technical impute of an expert for better understanding and easy resolution.

It is understandable that most tax dispute arises from the time of assessment,<sup>53</sup> every tax payer knows his obligation to pay tax and every taxman knows about his duty to collect tax, what is usually in issue is the amount payable which usually start from the assessment stage. Every tax man wants to collect more tax while the taxpayer want to pay less tax. If a tax mediator is engaged at the time of assessment, it would certainly reduce the dispute associated with assessment. The mediator would help both the taxman and taxpayer understand the geniuness of their liabilities without the later feeling over assessed and the former feeling that he had under assessed . Where the parties are satisfied with the outcome of a mediated process, there will be no dispute that will result in litigation.

The mediation time will certainly be less than the period of litigation. The mediation time

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resolution,' *Mediterranean Journal of Social Science* available at <https://www.mcser.org/journal/index.php/mjss/article/view/3620>, assessed on 24th June, 2020

<sup>48</sup> *Ibid*

<sup>49</sup> The case of *Wakino v. Ade John* (1999)9 NWLR pt.619 p.403, for instance, took 11 years in the High Court alone due to series of adjournments.

<sup>50</sup> Human Rights Watch (1999). The price of oil: corporate responsibility & human rights violations in Nigeria's oil producing communities. P 15 available at <https://www.hrw.org/reports/1999/nigeria/> assessed on 24<sup>th</sup> June, 2020

<sup>51</sup> (1962)1 ANLR1

<sup>52</sup> 2FRCR(1976)10

<sup>53</sup> There are however other categories of tax dispute, for more on this, see NB Amadi: 'Distilling the Contour of ADR Applicability to Tax Dispute in Nigeria' *Journal of Taxation and Economic Development of Chartered Institute of Taxation (CITN)*,

should not last more than 3 meetings. If there are unresolved issues after mediation<sup>54</sup>, the services of arbitral panel could complement the work of the mediator. The panellists must be experts with special skill in tax matters. Unlike the conventional litigation where the Judge may not be skilled in tax matters; and also saddled with more cases in other domains of law. The panellists may not be more than three. It will be important that the confidence of the taxpayer and tax authority is guaranteed in the process to avoid unnecessary appeals. Where, however, the appeal became inevitable, the arbitral award will be considered by the court for timely determination. ADR will certainly speed the rate of tax adjudication in Nigeria.

## **5.2 Cost effectiveness**

No doubt, ADR mechanism is less expensive than litigation. This is an invaluable advantage especially today that the cost of litigation in Nigeria has soared to the extent that many litigants can no longer pursue their cases. Many poor people cannot access the formal legal system because they cannot afford to pay the registration and representation fees necessary to prosecute cases in the courts. Payment of legal fees is probably the largest barrier to formal dispute resolutions for many people in developing countries and in particular by the poor in Nigeria.<sup>55</sup>

The cost of litigating a tax dispute is a concern to the taxpayer and tax authority. It has been established that there been delays in tax litigation which last up to 8 to 10 years. Within this period, fees are paid in different categories: professional fees, filing fees, transport fees etc. Both the taxman and the taxpayer is caught in this. Most times, the cost of these fees equate the difference in the litigated tax sum. Where the cost of tax litigation is high, the tax system is inefficient.

The cost is more when the service of an expert is required to establish a particular case. By virtue of section 36(6) of the 1999 Constitution, it is only a lawyer that has the right of audience in Court. Where the lawyer is not an expert in tax matter, the service of an expert, like Tax accountant and Chartered tax practitioner, could be hired for professional advice, aggregating the cost of the tax dispute. Most tax professionals are expensive like lawyers. The engagement of both services would amount to double cost jeopardy for the tax authority.

But where the ADR process is employed, the tax professional could be engaged alone

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<sup>54</sup> Its most likely that the parties will be satisfied if the mediator is a tax expert. In America, research has shown that 90% of matters that goes to mediation is resolved. See Internal Revenue Manual § 8.6.1.2.3, available at <http://www.irs.gov/irm/index.html> (last visited Sept. 23, 2003).

<sup>55</sup>A Oyesola and OO Kola (2014), 'Industrial conflict resolution using court connected alternative dispute resolution,' *Mediterranean Journal of Social Science op cit*.



without a lawyer. The tax professional could save cost by aiding the resolution of the tax dispute at the early stage. This will save the tax authority and tax authority more cost.

### **5.3 Jurisdictional convenience**

With the ADR dispensation, the jurisdictional problems of litigation which usually frustrates litigants are tackled. Access to justice is impaired where the courts are located far from the homes of those who need them. Today, about 80% of tax cases in Nigerian courts are lost particularly on appeal for want of courts jurisdiction and other technical issues.

Jurisdictional issue is a fundamental problem of tax dispute resolution. The introduction of Tax Appeal Tribunal (TAT) has been lashed with lots of jurisdictional controversies *viz a vis* the powers of the Federal High Court.<sup>56</sup>

In ADR, there is no jurisdictional issue as parties willingly submit to the jurisdiction of an ADR process. The consent of the parties to the jurisdiction shows that they are most likely to accept the outcome of the process.

There is however a concern that parties would prefer to approach the court directly instead of wasting time in the ADR and later proceed to court. This position however may be controverted where there is a review of tax adjudication rules that will see parties mandatorily submit to the ADR before going to court; and the outcome of the ADR process could be pleaded in court if the matter eventually gets to the court. The ADR process could serve as case management that will trim and streamline the fundamental issues of litigation.<sup>57</sup> The litigation judge will be expected to evaluate the merit or otherwise of the ADR process and pronounce on it. It will also assist the court in resolving most frivolities.

## **6.0 The Practice of ADR in Tax**

### **6.1 Negotiating Tax Dispute**

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<sup>56</sup> See section 251 of the 1999 Constitution.

<sup>57</sup> Order 25 Rule 2(c) of the High Court of Lagos State (Civil Procedure) Rules 2004 provides that pre-trial Conference should be explored before a matter goes into full hearing for the purpose of promoting amicable settlement of the case or adoption of Alternative Dispute Resolution. Order 17 of the High Court of the Federal Capital Territory, Abuja Civil Procedure Rules 2004 provides that: “A judge with the consent of the parties may encourage settlement of any matter(s) before it, by either arbitration, conciliation, mediation or *any other lawfully recognized method of dispute resolution*”. For more on this, see Edwin Obimma Ezike, Developing a Statutory Framework for ADR in Nigeria, *The Nigerian Juridical Review* Vol. 10, page 248.

The Nigerian tax authorities (FIRS)<sup>58</sup> can embrace the value of resolving taxpayer disputes without litigation. The FIRS can set up an Appeal office where a tax payer can contest tax assessment and negotiate the payment. The appeal office will be designed to be an impartial forum in which a taxpayer can try to settle the dispute. A taxpayer can initiate the appeal process by filing a protest letter. An Appeal officer then considers the merits of the case and the time and cost of the appeal. An Appeal conference will be scheduled so that the Appeal officer and the taxpayer can attempt to review the assessment and arrive at a mutually acceptable settlement. The Appeal process is designed to be neutral and has the purpose of affecting decisions regarding the settlement of taxpayer disputes. After reviewing the facts and evidence, and upon considering the hazards of litigation, the Appeal officer determines a fair position for the tax authority. The model will be designed for an Appeal officer to review the assessment with an open mind enter the negotiations with open mind and genuine interest in working out a mutually acceptable assessment based on the income of the taxpayer. The primary focus of the Appeal process will be negotiation, i.e, the taxpayer and Appeals officer will try to settle the dispute through persuasion regarding the merits of their respective positions. The use of negotiation by Appeal will result in mutual resolution of the dispute in terms that will be accepted to both parties. Most frivolities arising out of assessment can easily be resolved at the appeal office. Evident in America has shown that between eighty-five and ninety percent of the cases that reach IRS Appeal office result in settlement.<sup>59</sup>

## 6.2 Mediating Tax Disputes

Mediation can be thought of as "negotiation plus." That is, it will take the principles of negotiation and add a third party to facilitate an agreement. The mediator is essentially a third party through whom the parties can engage in negotiation.<sup>60</sup> Experience over time has shown that Parties may be willing to settle to settle their differences in tax matters but pride will not allow one to approach the other. A mediator can be engaged to initiate the contact. Where tax authority engages mediator, most non-compliance notice could be resolved by without litigation.

What happens is that most times, when notice is served, the taxpayer may neglect to act on it, treating it with outmost levity. And where the tax authority notice the levity, it will proceed to court enforcement. But where an accredited tax mediator is engaged, he would visit the defaulter on whom notice is served to sensitise his mind on the consequences of

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<sup>58</sup> This will be used interchangeably between FIRS and State Internal Revenue Service

<sup>59</sup> Gregory P Mathew, Using Negotiation, Mediation, and Arbitration to Resolve IRS-Taxpayer Disputes, available at [https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR\\_V19N2\\_0709.pdf](https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR_V19N2_0709.pdf)

<sup>60</sup> See Sharon Katz-Pearlman & Jonathan S. Adelson, *IRS Restructuring and Transfer Pricing Enforcement*, 20 Tax Notes Int'l 2617, 2626 (2000).

the service and pushed for a meeting with the tax authority to resolve the impasses. On the other hand, the notice maybe taken to a legal practitioner who will advise the defaulter not to negotiate settlement with the tax authority but to push the matter to court, the lawyer incites the mind of the tax payer that the notice is defective; and that an action in court will ward off the tax authority whom he shall describe as “Touts”. Of course, the lawyer is in business and would want to make money. But an accredited mediator will open the mind of the defaulter to cost and time of litigation and make the person see need to resolve the assessment by any of the applicable ADR methods.

The success of mediation, then, depends on the presence of open communication and trust among the participants. More open communication can be accomplished when the confidentiality of the mediation session is guaranteed. For example, when parties are confident that the information they disclose cannot be used against them in a subsequent legal action, they will be more likely to engage in full disclosure. Likewise, a greater degree of trust results when the parties are confident that the mediator is impartial. The importance of the mediator’s impartiality centres on the fact that one of the mediator's roles is to evaluate the merits of the claims of each party and to engage the parties in discussion and compromise.<sup>61</sup> Ultimately, parties will be less willing to fully disclose information and wholly accept the mediator's evaluation of their claim if they have the impression that the mediator is partial to the other side. Therefore, with the preservation of confidentiality and impartiality, information can be freely shared among the mediation participants, which, in turn, will allow the mediator to gain an accurate understanding of the claims.<sup>62</sup> It will therefore be imperative to engage an independent accredited mediator who must be impartial. The mediator who must be skilled in tax matters must treat the information he comes across in the course in the course of his work with utmost confidentiality. Furthermore, because it is nonbinding, the taxpayer has little to lose in the event that an acceptable settlement is not reached, litigation can still be pursued. Mediation only help both parties to seriously examine their positions and claims and ensures that a neutral third party will examine the merits of each side's claims, providing an untainted perspective in the dispute.<sup>63</sup> It helps each side see how their dispute may play out in the Tribunal/Court and both parties will be able to consider the strength of their case in the light of the expert’s view. Mediation is the most preferred and recommended ADR process for tax disputes.

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<sup>61</sup> See J S Ware, (2001), *Alternative dispute resolution*, 4.13 cited in Gregory P Mathew, *Using Negotiation, Mediation, and Arbitration to Resolve IRS-Taxpayer Disputes*, available at [https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR\\_V19N2\\_0709.pdf](https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR_V19N2_0709.pdf)

<sup>62</sup> See P A Mostovoi, *Tax Mediation: Is It Just a Test?*, 13 *Tax Notes Int'l*. 1871, 1875 (1996).

<sup>63</sup> See G P Mathew, *Using Negotiation, Mediation, and Arbitration to Resolve IRS-Taxpayer Disputes*, available at [https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR\\_V19N2\\_0709.pdf](https://kb.osu.edu/bitstream/handle/1811/77168/OSJDR_V19N2_0709.pdf)

### **6.3 Arbitrating Tax Disputes**

It is proposed that arbitration can also be used for the resolution of tax disputes. Arbitration should be made available both while a case is still under the jurisdiction of tax authority and after it has gone to the tribunal or Court unlike negotiation where attempt is made to resolve tax dispute through an Appeal Office, an in-house administrative mechanism, before it gets to the Tribunal. If both negotiation and mediation have failed during Appeal, the taxpayer may request arbitration for the issue. Arbitration is a more formal dispute resolution process that involves a third party arbitrator with settlement authority.<sup>64</sup> That is, once the parties have submitted their case to arbitration, the decision of the arbitrator is binding. Arbitration provides two primary benefits over litigation: relaxed rules of evidence and a relaxed adversarial setting. These factors are particularly advantageous for taxpayers who do not have legal representation because less legal expertise is required. However, the characteristics of arbitration limit its availability and attractiveness and make mediation a more likely preference for many taxpayers in resolving tax dispute.

### **6.0 Conclusion**

The practice of ADR in tax dispute in different forms and styles without legal and institutional back up makes it prone to abuse. ADR should be formally adopted as the internal administrative mechanism of FIRS and States Internal Revenue Service. This would see the tax authorities establish Appeal Offices for ADR process where attempt will be made to resolve every tax dispute without necessarily going to the Tax Appeal Tribunal or court. Accredited tax mediators should be engaged to facilitate discussions between tax payers and tax authorities when disputes arise. This would certainly save time, cost and would be most convenient for tax parties. Since every tax dispute starts from the assessment stage, the ADR expert would start early to engage the taxpayer in order to have a streamlined assessment that would be free of dispute and controversies. There is need for a Legal Framework for the practice of ADR in tax issues and disputes. A legal framework here is meant to be a set of laws or rules of law that is used as an anchorage for the effective operation of the ADR process. There would be need to tinker with relevant provisions of the law which provides that where FIRS issues notice of refusal to amend, an appeal shall be filed at Tax Appeal Tribunal.<sup>65</sup> The proposed law will mandate the tax authority to set up a tax appeal office where taxpayers can settle their issues, and where accredited mediators or arbitrators can be used if negotiation had failed. These options should be mandatorily explored before appeal can be filed at Tax Appeal Tribunal or court. The findings of the tax negotiator or mediator as the case may be would be part of the process which will guide the Tax Appeal Commissioners in the quick resolution of tax dispute. The process will save time and cost and would be most convenient for tax parties.

# TAX INCENTIVES AND FIRM VALUE IN NIGERIA

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## **Abstract**

*This study investigated the relationship between tax incentives and firm value of listed manufacturing companies in Nigeria. It also looked at whether firm value is influenced by tax holidays, capital allowance, research and development and investment allowance. Corporate annual reports and website of listed manufacturing companies in Nigeria for the periods 2015 to 2019 were utilized as the main sources of secondary data. In testing the research hypotheses, the study adopted the use of panel least square regression method in analyzing the data collected. The findings revealed that there is a significant positive relationship between tax holidays, capital allowance, research and development, investment allowance and firm value. The study recommended that the listed manufacturing companies and policy maker in Nigeria should pay closer attention to the tax incentives so as to enhance the firm value and economic growth.*

**Keywords:** Firm value, Manufacturing companies, Research and development, Tax, Tax incentives.

## **1.0 Introduction**

In the recent years, the adverse impact of government fiscal policy on economic development and revenue sustainability has become a matter of public concern globally (Ohaka & Ironkwe, 2014; Nwaobi, Kwarbia & Ogundayo, 2016). This concern emerges mainly from the threat occasioned by the negative effect of fiscal policy on revenue sustainability. Various steps (such as: economic reforms and fiscal policy reforms) have been put forward towards ensuring the sustainability of government revenue through the protection of industries from liquidation, high rate of tax, high inflation rate, double and multiple taxation issues, as a result of the consideration for economic growth and

development. Thus, the public concern for the relationship between corporate organisations and the government revenue has led to the emergence of tax incentive strategy (Uwuigbe, Uwuigbe, Adeyemo & Anowai, 2016; Patrick, 2018).

In view of this growing concern, corporate entities have been seeking ways of getting returns from their tax payments in the form of tax incentives to compensate for the economic challenges as well as to encourage new investment and in turns enhances the value of the firm (Nwaobi, Kwarbia & Ajibade, 2015). This has, therefore, increase research on tax incentives (Ayman& Omar, 2016; Siyanbola, Adedeji, Adegbie & Rahaman, 2017). However, Olabisi (2009) argued that tax incentives do not always serve the interest of the corporate organisations because companies consider their own interest when carrying out their fiduciary functions. Nevertheless, differences in firm value have been looked at in relation to company's performance (like total asset, earning per share, return on asset, return on capital employed) in Nigeria (Nwaobi, Kwarbia & Ogundayo, 2016), while few studies have investigated tax incentives in Nigeria in terms of tax holidays, capital allowance, research and development incentive, loss relief, investment allowance and other form of incentives despite increasing emphasis on the value of firm (Oriakhi & Osemwengle, 2013; Brodzka, 2013).

In the light of the above, tax incentive is a determinant factor that impacts on the firms value (Patrick, 2018). As a result, firm value can be considered as an essential part of shareholders' wealth maximization. According to Waliuddin, Razali, Ghazali, Lunyai and Tan-Hwang (2018), the increase in firm value for achieving wealth maximization objective of a firm is in conformance with investors' expectation. Therefore, the need to understand the tax incentives is required in order to improve the performance of corporate organisations.

However, with the growing need for tax incentives and firm value, research on tax incentives and firm value has been dominated by studies carried out in developed countries (Gasti, Gadzo & Kpotorgbi, 2013; Nickson, 2016; Amendola, Boccia, Mele & Sensini, 2018; Allessandra, Manella, Gianluca & Luca, 2018; Daniel, 2018). The same is not true

of developing countries (like Nigeria) where most studies concentrated only on tax incentives and did not focus on the impact of tax incentives on firm value (Ohaka & Agundu, 2012; Oriahki & Osemwengle, 2013; Uwaume & Ordu, 2016; Uwuigbe *et al.*, 2016). In addition, there have been various studies in developed and other developing countries investigating whether tax incentives have significant impact on firm value. However, the findings are inconsistent and mixed (Olatodun, 2008; Ohaka, 2011; Onyango, 2015; Uwuigbe *et al.*, 2016; Patrick, 2018).

Furthermore, most prior studies in Nigeria are yet to focus on some specific forms of tax incentives for the manufacturing sectors (like tax holidays, capital allowance, research and development and investment allowance) influencing firm value that are found significant in developed and other developing countries (Ayman & Omar, 2016; Amendola *et al.*, 2018; Patrick, 2018). Hence, a gap exists as a result of mixed result in the prior studies on tax incentive.

To enhance the value of the firm, this study basically investigated the relationship between tax incentives and firm value of Nigerian listed manufacturing companies. To accomplish this, the study restricted its tax incentives to tax holidays, capital allowance, research and development and investment allowance. In addition, firm value will be measured by the use of Tobin's Q.

## **2.0 Literature Review**

### **2.1 Conceptual Review**

#### **Tax Incentives and Firm Value**

The current crises in the global economy market as a result of Covid-19 epidemic and the extent of high corporate liquidation, high rate of unemployment, employee retrenchment, high rate of tax evasion, high inflation rate, double and multiple taxation issues in the Nigerian economy generally have raised doubts about the existence of tax incentives in Nigeria. Hence, a claim that the focus should now be more on improving the fiscal policy measure particularly to boost investor's insight and influence taxpayer behaviour (United

Nation, 2018). Therefore, tax incentives have the ability to increase shareholder's wealth, boost investor confidence and can be considered as one of the essential parts of good corporate governance (Ohaka & Ironkwe, 2014).

Consequently, tax incentives and firm value need to be converged to improve shareholder's wealth maximization objective. This situation has also been traced to the recognition that good corporate governance demands consideration of the impact an entity has on the wider stakeholders (Efobi, Tanankem & Beecroft, 2016). This has led to a considerable debate in recent times the desire for tax incentives with countries around the world drawing up guidelines to strengthen tax incentives (NIPC, 2017; UNCTAD, 2018). Tax incentive is used to promote economic growth and development of the countries. The Nigeria investment promotion council (NIPC) has detailed prescriptions for individual and companies on tax incentives issues. The objective of tax incentives is to ensure sustainable and competitive business environment (Orikhi & Osemovengue, 2013).

The definition of tax incentive has been discussed in previous studies (Nwaobia, Kwarbia & Ajibade, 2015; Ayman & Omar, 2016; Siyanbola *et al.*, 2017). The United Nations Conference on Trade and Development (UNCTD) in 2019 gave a definition that is in support with the suggestions of Uwuigbe *et al.*, (2016) and Alessandra *et al.*, (2018) 'as any monetary benefit attached to specific companies or business categories by a government of any nation, so as to motivate investment in certain economic sectors'. As a result, tax incentives is seen to influence the firm value (Patrick, 2018), which in turn has a significant impact on investors' wealth (Waliuddin, Razali, Ghazali, Lunyai, & Josephine, 2018).

Firm value, therefore, is the total worth of the business in form of the business assets which ultimately belongs to the shareholders. The profit maximizing objectives of the firm is directly linked to the enhancement of firm value and consequently, the shareholders' wealth. As a result of this, firm value is directly related to operating performance. Firms with higher cash flows and profits will attract more investors who will be willing to pay



higher stock prices thereby enhancing the firm value. Firm value is generally taken to mean an economic measure reflecting the market value of a whole business or summation of claims to all contributors to the assets of the firms (Nwaobia, Kwarbai&Ogundayo, 2016). According to Combs, Crook and Shook (2015), firm value represent the past and future performance of a firm as well as the long term interest of investor (shareholders and other stakeholders). As a result, tax incentives such as tax holidays, capital allowance, research and development and investment allowance have been found to influence firm value (Onyago, 2015; Tirimba, Muturi & Sifinjo, 2016; John, 2017; Patrick, 2018; ). In this study, therefore, the tax incentive variables to be examined are: tax holidays, capital allowance, research and development and investment allowance.

## **2.2 Theoretical Framework**

### **Neo-Classical Theory**

The study is hinged on neo-classical theory as a basic motive to maximize firm value by meeting stakeholders' expectations concerning wealth maximization objective through sound competitive tax incentives. In addition, the theory has been generally employed in social management literature as providing strong justification for tax incentives and firm value (Barbour, 2005). This is due to the fact that stakeholders are powerful over company's resources and they are interested in investing their financial resources in sustainable and competitive business environment (Kaphan & Norton, 2001). Furthermore, neo-classical theory provides means of dealing with tax equality among various investors with multiple objectives. Managing these objectives necessitates the use of tax benefit available, particularly tax incentives, by managers to communicate with stakeholders (Patrick, 2018).

Conclusively, neo-classical theory regards tax incentives as a means of mitigating stakeholders' inadequacies in the investment regime elsewhere in order to gain support and approval for the organization's continued existence (Boadway & Shah, 2015). However, Dunning (2008) concluded that eclectic paradigm theory was inadequate to fully explain firm value as it provides limited information. Hence, neo-classical theory was adopted as it provided a useful framework to evaluate tax incentives and firm value among listed

manufacturing companies in Nigeria.

## **2.3 Empirical Review**

### **Tax Holidays and Firm Value**

Pioneer status incentives are the principal forms of tax incentives which can influence the firm's value. Companies with high profit exempted during tax holiday will have highly profitable profit and are favourably disposed to use part of the profits to re-invest in capital projects than firms without tax holidays arrangement. The findings of some prior studies show pioneer status relief as a major incentive determinant of the firm's value (Orikihi & Osemovengue, 2013; Uwaoma & Ordu, 2016).

Extant studies revealed a significant positive relationship between tax holidays and firm value of companies (Chukumerije & Akinyomi, 2011; Ohaka, 2011; Uwaume & Ordu, 2016; Uwuigbe *et al.*, 2016; Akinyomi, 2016). On contrary, some studies found tax holidays to be an insignificant explanatory variable (Kwuwuni, 2008; Irina & Svetiana 2015; John 2017) while others found it significant but in negative association with firms value (Tirimba, Muturi & Sifunjo, 2016). Ohaka and Agundu (2012) found a conflicting result. The author point out that tax holidays did not associate with firm value. A related study of tax incentive of tax incentive and firm value by Mayende (2013) and Rohaya, Nor' Azem and Bardel (2010) hypothesized that tax holidays have a significant negative relation with firm value. Therefore, the existence of tax holidays is being considered as a determinant of firm value.

### **Capital Allowance and Firm Value**

The central issue often discussed is whether capital allowance of tax incentives can be a significant factor in determining firm value. Capital allowance can be identified as a relief granted in lieu of financial accounting depreciation and it can thus be described as 'tax depreciation' (Uwaoma & Ordu, 2016). Capital allowance is a relief granted to every taxpayer that has incurred Capital Qualifying Capital Expenditure (QCE) during the year of assessment for the purpose of trade or business (i.e. those assets used in generating profit). Capital allowance is the same for companies as far as they are in one trade or the

other (Kiable, 2012; Agundu & Ohaka, 2013). Olaleye, Memba and Riro (2015); Nwanyanwu (2018) also argue that company with higher capital allowance benefit may increase its firm value. Therefore, company having a capital allowance incentive scheme may be more likely to disclose more tax saving from tax incentives (Patrick, 2018).

A significant positive relationship between capital allowance and firm value has been consistently found by prior studies such as (Olaleye et al., 2015; Onyango, 2015; John, 2017; Nwanyanwu, 2018; Patrick, 2018). However, Olatundun (2008); Ohaka (2011), and Hedia *et al.*, (2011) found an insignificant relationship between capital allowance incentive and firm value using panel regression analysis.

### **Research and Development Incentive and Firm Value**

In the course of this study, limited studies were found to have been undertaken to investigate the relationship between research and development incentive and firm value. Research and development which take form of basic research, applied research or experimental development comprises ‘creative work undertaken on a systematic basis in order to increase the employee stock of knowledge and the use of this stock of knowledge to devise new applications’ (OECD, 2014). Long-term economic growth and shareholders wealth maximization is driven by the accumulation of research and development and human capital which prevent the marginal return to physical capital from falling below profitable levels (Goodridge *et al.*, 2015). Prior studies affirms that research and development increases productivity, innovation, comparative business advantage and in all increase profitability which will enhance firm value (Bronzini & Iachini, 2014; Goodridge *et al.*, 2015).

Empirically, the study by Antoire *et al.*, (2016) showed a positive relationship between research and development incentive and firm value of leading global firms. Similarly, the study by Irina and Svetiana (2015) showed a significant positive relationship between research and development incentives and firm performance in Russia listed companies. As a result, companies with higher investment in research and development disclose more profit than firm with low research and development (Gokhberg, Kitova & Rud, 2014). This

is evidence that research and development incentives significantly influence the firms' value. Moreover, research conducted by Becker (2015) and Agrawal, Rosell and Simcoe (2014) showed a significant positive relationship between research and development credit and firm value of small firms in Canada. However, a study by Einio (2014) revealed a significant negative relationship between research and development incentives and company performance. In addition, Tanko, Tanayama and Toivanen (2017) and Rao (2014) found no relationship between research and development incentives and firm value.

### **Investment Allowance and Firm Value**

Investment allowances is also a form of tax incentive are deductions from taxable income based on some percentages of new investment. Investment allowance is used by governments to encourage investment in physical asset such as machinery, equipment and industrial buildings used for business intending purpose (Barton & Harcourt, 2011). This major aim of investment allowance was promotes investors to investment in capital-intensive project (Waris *et al.*, 2009).

Prior empirical studies on the relationship between investment allowance and firm value exhibited a significant positive relationship among the two variables (Uwaume & Ordu, 2016; Munugo, Akanbi & Robinson, 2017; Nwanyanwu, 2018). On contrary, some studies found insignificant relationship between investment allowance and firm value using panel regression analysis (Ohaka & Dangogo, 2015; Elias & Zilveti, 2016).

### **3.0 Methodology**

This study adopted the use of the secondary method of data collection from the annual reports and corporate website of listed manufacturing companies in Nigeria. This is as a result of the fact that annual reports are audited, mostly consistent, reliable and regular medium to communicate with stakeholders. The population of this study consists of 40 manufacturing companies (made up of 25 consumable goods manufacturer and 15 industrial goods manufacturer) (see appendix) listed on the Nigerian Stock Exchange as at 31<sup>st</sup> December, 2019. The choice of the listed manufacturing companies arises because of

their positive impact on the economy. In addition, the manufacturing companies are the target of the study because of the availability of information and accessibility to annual reports and corporate websites due to their regulatory and disclosure (Patrick, 2018). The period 2015 to 2019 were utilized due to heightened interest and increase tax incentives awareness noticed in these periods.

To achieve this purpose, a purposive sampling technique was adopted. Furthermore, a panel least square regression analysis was used. The choice of a panel least square regression analysis is preferred because the method is most commonly used for analyzing the impact of tax incentive on firm value. In addition, it helps to account for individual heterogeneity of sample manufacturing firms.

### 3.1 Model Specification

For the purpose of measuring the relationship between tax incentives and firm value an econometric model adapted from the study of Patrick, (2018) is hereby expressed clearly in equations 1 and 2 respectively.

$$FVL = f([THI, CAI, RDI, IAI]) \dots \dots \dots Eq. (1)$$

Equation (1) is expressed explicitly as:

$$FVL = \beta_{0it} + \beta_1 THI_{it} + \beta_2 CAI_{it} + \beta_3 RDI_{it} + \beta_4 IAI_{it} + \mu_{it} \dots \dots \dots Eq. (2)$$

Where:  $FVL$  = Firm Value (measured by Tobin's Q).

$THI$  = Tax Holidays Incentive (measured by dichotomous variable of '1' if firm qualifying assets above N150,000 and '0' if otherwise ).

$CAI$  = Capital Investment Incentives (measured by the natural logarithm of capital allowance received).

$RDI$  = Research and Development Incentive (measured by the natural logarithm of total research and development received).

$IAI$  = Investment Allowance Incentives (measured by the natural logarithm of total investment allowance incentives received).

$\beta_0$  = Intercept of the regression line, regarded as constant

$\beta_{1-4}$  = Coefficient or slope of the regression line or independent variables

$\mu$  = Error term that represents other independent variables that affect the model but not captured.

' $t$ ' = year or period and  $i$  = manufacturing company

The model specified above captured firm value (FVA) as dependent variable, while tax incentives (THI, CAI, RDI, IAI) as independent variables. This study employs Tobin's Q to measure firm value.

#### **4.0 Data Analysis and Discussion of Findings**

Table 4.1 reveals the descriptive statistics of the impact of tax incentives on firms' value in Nigerian listed manufacturing companies for the period between 2015 and 2019. The mean scores of the data displayed the level of consistency as they fall between the minimum and maximum scores. Therefore, the firm value of Nigerian listed manufacturing companies for the periods investigated stood at a mean value of 2.363. The standard deviation measuring the spread of the distribution stood at a value of 13.655 while the Jarque-Bera statistics stood at 205022.3 with a p-value of 0.00. The skewness and kurtosis statistics of the variables were normally distributed as they are close to zero skewness and kurtosis of  $\pm 3$  respectively, except the skewness of firm value and tax holidays incentive; and kurtosis of firm value and tax holidays incentive. Thus, the variables exhibited normality.

Furthermore, the results of the correlation matrix between the variables are as shown in table (2). Table (2) presents a correlation coefficient( $r$ ) result among the variables. The significant relationship is identified at a confidence level of 95%. Results indicate a significant positive relationship between firm value and each of the tax incentives determinants. The Pearson correlation matrix shows a positive relationship between Firm Values (FVL) and Tax Holidays Incentive (THI), Capital Allowance Incentive (CAI), Research and Development Incentive (RDI) and Investment Allowance Incentive (IAI). Hence, most of these results are in conformity with the hypotheses with regard to the relationship between firm value and each of the tax incentives. Hence, there is no problem

about correlation as the correlation coefficients were less than 0.8 the limit correlation percentage commonly suggested by prior studies after which multicollinearity is likely to exist (Gujarati, 2003). These findings suggest that there is no problem about correlation of either the independent variables to each other.

**Table 1: Result of Descriptive Statistics of the variables**

	<b>FVL</b>	<b>THI</b>	<b>CAI</b>	<b>RDI</b>	<b>IAI</b>
<b>Mean</b>	2.363081	0.994949	6.217273	5.278333	6.651010
<b>Median</b>	0.420000	1.000000	5.925000	4.925000	6.935000
<b>Maximum</b>	183.6700	1.000000	9.450000	8.450000	9.330000
<b>Minimum</b>	0.000000	0.000000	0.050000	1.850000	0.090000
<b>Std. Dev.</b>	13.65583	0.071067	1.537223	1.466323	1.565504
<b>Skewness</b>	12.05215	-13.96442	-0.108198	0.193564	-0.842212
<b>Kurtosis</b>	158.7889	196.0051	3.103939	3.084121	3.372907
<b>Jarque-Bera</b>	205022.3	313755.6	0.475453	8.156793	27.14322
<b>Probability</b>	0.000000	0.000000	0.008848	0.016935	0.000001
<b>Sum</b>	467.8900	197.0000	1231.020	1045.110	1316.900
<b>Sum Sq. Dev.</b>	36736.92	0.994949	465.5215	423.5702	482.8082
<b>Observations</b>	200	200	200	200	200

**Source:** Authors' Computation from E-view 9.5

**Table 2: Correlation matrix between the variables**

	<b>FVL</b>	<b>THI</b>	<b>CAI</b>	<b>RDI</b>	<b>IAI</b>
<b>FVL</b>	1.000000				
<b>THI</b>	0.008123	1.000000			
<b>CAI</b>	0.113703	0.017065	1.000000		
<b>RDI</b>	0.117152	0.020865	0.455739	1.000000	
<b>IAI</b>	0.056197	0.005065	0.007359	-0.010202	1.000000

**Source:** Authors' Computation from E-view 9.5

**Table 3: Panel Least Square Regression result for the hypotheses**

Dependent Variable: FVL

Method: Panel Least Squares

Date: 07/10/19 Time: 21:28

Sample: 2014 20195

Periods included: 5

Cross-sections included: 40

Total panel (balanced) observations: 200

Variable	Coefficient	Std. Error	t-Statistic	Prob.
THI	1.038627	13.71702	0.075718	0.0397
CAI	0.079349	2.158526	0.036761	0.0007
RDI	1.015917	2.263120	0.448901	0.0340
IAI	0.499100	0.623614	0.800334	0.0245
C	7.845503	14.76304	0.531429	0.0457
R-squared	0.737055	Mean dependent var	2.363081	
Adjusted R-squared	0.573317	S.D. dependent var	13.65583	
S.E. of regression	13.67847	Akaike info criterion	8.094451	
Sum squared resid	36110.38	Schwarz criterion	8.177488	
Log likelihood	-796.3506	Hannan-Quinn criter.	8.128061	
F-statistic	0.837163	Durbin-Watson stat	1.984772	
Prob(F-statistic)	0.003081			

**Source:** Authors' Computation from E-view 9.5

Table (3) shows the results of the regression model used for the four hypotheses. A review of the regression analysis results of hypothesis one ( $H_1$ ) shows that there is a significant positive relationship between tax holidays incentive and firm value. This is evident in the t-statistics (0.075), and p-values (0.039) respectively that is lower than 5% significant level. Hence, we accept the alternate hypothesis and reject the null hypothesis. This indicates that manufacturing companies with tax holidays incentive having more firm value. The result of this is consistent with the studies carried out by Uwaume and Ordu (2016); Uwuigbe *et al.*, (2016); Akinyomi (2016) on relationship between tax holidays and firm value. However, the result contradicts the work of Ohaka and Agundu (2012) and Tirimba *et al.*, (2016) where tax holidays has insignificant relationship with the firm value.

However, findings from the second hypothesis ( $H_2$ ) show that there is a significant positive relationship between capital allowance and firm value. This is also evident in the t-statistics



(0.036) and p-values (0.000) respectively that are lower than 5% significant level. Hence, we reject the null hypothesis and accept the alternate hypothesis. The results, therefore, indicate that there is a positive relationship between capital allowance and firm value in Nigerian manufacturing companies. The result basically implies that the capital allowance has positive influence on the firm value. These findings are in conformance with the existing research results of Olaleye *et al.*, (2015) and John (2017) where capital allowance has a significant positive relationship with the firm value. However, the results are not consistent with the studies carried out by Ohaka (2011) and Hedia *et al.*, (2011), where capital allowance has an insignificant relationship with the firm value.

Similarly, findings from the third hypothesis ( $H_3$ ) show that the p-value of (0.034) is lower than the test of significance at 5%. This indicates a significant positive relationship between research and development and firm value. This is evident in the p-value of (0.034) and t-value of (0.448). Based on this result, we, therefore, reject the null hypothesis ( $H_3$ ) and accept the alternate hypothesis. This outcome suggests clearly that despite the low awareness of research and development the firm value is still increase. The finding is consistent with existing research results of Irina and Svetiana (2015) and Antoine *et al.*, (2016) where research and development has a significant relationship with firm value. In contrast, the result contradicts the work of Einio (2014) and Tanko *et al.*, (2016), where research and development has an insignificant relationship with the firm value.

Finally, findings from the fourth hypothesis ( $H_4$ ) show that there is a positive significant relationship between investment allowance and firm value. This is also evident in the t-statistics (0.036) and p-values (0.007) respectively that are lower than 5% significant level. Hence, we reject the null hypothesis and accept the alternate hypothesis. The results, therefore, indicate that there is a positive relationship between investment allowance and firm value in Nigerian manufacturing companies. The result basically implies that the investment allowance has positive influence on the firm value. These findings are in conformance with the existing research results of Munugo *et al.*, (2017) and Nwanyanwu (2018). However, the results are not consistent with the studies carried out by Ohaka and

Dangogo (2015) and Elias and Zilveti (2016), where investment allowance has an insignificant relationship with the firm value.

## **5 Conclusion and Recommendation**

This study basically examines the relationship between tax incentives and firm value in annual reports and corporate website of listed manufacturing companies in Nigeria. It also looks at whether firm value is influenced by tax holidays, capital allowance, research and development and investment allowance. The study uses four hypotheses in testing the influence of tax incentives on firm value. The results from our test show a significant positive relationship between tax holidays, capital allowance, research and development, investment allowance and firm value. Hence, the study concludes that corporate governance has improved firm value as the overall firm value among the listed manufacturing companies in Nigeria is very low at average firm value of 23.6%.

On the basis of the foregoing, the study hereby recommends that policy makers should adopt strategic or targeted incentive scheme that targets specific industry or a strategic tax incentive that add value or contribute positively to the firm value and economy growth through expansion of various sectors. The design, implementation and administration of the incentive scheme will assist policy maker to avoid revenue loss, cutting down on imports and in other hand promote locally manufacture products. Through this, the government will be able curb smuggling, entry of contraband goods and also promote the economic growth.

However, this study does have its own limitations and, therefore, the conclusions need to be interpreted with caution, as it would serve as an opportunity for further investigation in this area of research. As a result, the study is limited to a period of observation of five years data from the Nigerian stock exchange market, Nigeria investment promotion commission annual report, corporate annual tax report and Federal Inland Revenue Service report. Also, the study only captured a segment of listed manufacturing sector, leaving all other sectors in the Nigerian listed and unlisted firms. In addition, only four tax incentive variables are covered in this study. Hence, future study can investigate other variables that are not included in the study such as reduced tax rate, tax free dividends, loss reliefs and tax treaties.

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## Appendix

### Population and Sample Size of the Study

#### **S/N LISTED MANUFACTURING FIRMS ON NIGERIA STOCK EXCHANGE AS AT 31<sup>ST</sup> DECEMBER 2019**

##### **Consumer Goods**

- 1 7-Up Bottling Company Plc.
- 2 Cardbury Nigeria Plc.
- 3 Champion Breweries Plc.
- 4 Dangote Flour Mills Plc.
- 5 Dangote Sugar Refinery plc.
- 6 DN Tyre & Rubber Plc.
- 7 Flour Mills Nigeria Plc.
- 8 Golden Guinea Breweries Plc.
- 9 Guinness Nigeria Plc.
- 10 Honeywell Flour Mill Plc.
- 11 Tiger Branded Consumer Goods
- 12 Northern Nigeria Flour Mill Plc.
- 13 International Breweries Plc.
- 14 Mc Nichols Plc.
- 15 Multi-Trex Integrated Foods Plc.
- 16 N Nig. Flourmills Plc.
- 17 Nascon Allied Industries Plc.
- 18 Nestle Nigeria Plc.
- 19 Nigeria Breweries Plc.
- 20 Nigeria Enamelware Plc.
- 21 P Z Cussons Nigeria Plc.
- 22 U T C Nigeria Plc.
- 23 Unilever Nigeria Plc.
- 24 Union DiconSalt Plc.
- 25 Vitafoam Nigeria Plc.

### **Industrial Goods**

- 26 African Paints Nigeria Plc.
- 27 AshakaCem. Plc.
- 28 Austin Laz& Company Plc.
- 29 Avon Crownsaps& Containers
- 30 Berger Paints Plc.
- 31 Beta Glass Co. Plc.
- 32 Cap Plc.
- 33 Cement Co. Of North Nigeria Plc.
- 34 Cutix Plc.
- 35 Dangote Cement Plc.
- 36 First Aluminium Nigeria Plc.
- 37 Lafarge Africa Plc.
- 38 Meyer Plc.
- 39 Paints and Coatings Manufactures Plc.
- 40 Portland Paints & Products Nigeria Plc.

# THE IMPACT OF IFRS ADOPTION ON ACCOUNTING AND TAXATION: ISSUES AND CHALLENGES IN NIGERIA

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## **ABSTRACT**

*The International Financial Reporting Standards (IFRS) are now used almost in every country as the reporting standard and the advantage of using IFRS is for global comparability of financial reports. International financial reporting standard (IFRS) has a lot of impact as it were; this paper tends to look at these impacts on accounting and taxation. This paper also looks at IFRS and quality accounting information, issues and challenges on taxation and accounting, theoretical framework and review of related studies. The study recommends that tax payers whose businesses involve leasing of property and equipment should endeavour to prepare to file their 2020 tax returns as it has become imperative that they consider the tax consequences of the implementation of IFRS 16. This is to reduce potential tax risk and areas of disagreement with the tax authority which may arise from the adoption of new standard.*

**Key words:** IFRS Adoption, Accounting, Taxation, Challenges and Issues

## **Introduction**

The preparation of financial statement by corporate organization must follow certain rules, principles and guidelines before the introduction of IFRS. The rules are stated in the Company and Allied Matter Act (CAMA) 1990. The act prescribes some format and content of what must be included in the company's financial statements, disclosure requirements and auditing. It requires that financial Statement of Accounting Standards (SAS) issued from time to time by the Nigerian Accounting Standard Board (NASB) and audit carried out in accordance with generally accepted auditing guidelines and standards. The NASB Act No 22 of 2003 formerly created the NASB and established for it an inspectorate unit. The NASB came into being on September 9, 1982. The International Financial Reporting Standards (IFRS) started with the formation of the International Accounting Standards Committee (IASC) in 1973 as a result of an agreement by professional accountancy bodies of major countries (United Kingdom and Ireland, United States, Australia, Canada, France, Germany, Japan, The Netherlands and Mexico) to develop a set of accounting principles across the globe. In its early days, the IASC were aimed at promoting best practices in the preparation of financial statements while permitting different treatments for a given transactions and events (Gina, Adege, & Kingsley, 2016).



Aghator and Adeyemi (2009) stated that with the dawn of globalization and increasing demand for transparent, comparable financial information in the markets, the IASC was restructured in the year 2001 by creating the International Accounting Standards Board (IASB), among other changes. The IASB is responsible for developing, in the public interest, single set of high quality comprehensive and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements and other financial reporting to help participants in the various capital markets of the world and other users of the information to make economic decisions. Consequently the IASB has since inception issued a number of IFRS and interpretations. In pursuance of its objectives, the IASB cooperates with national accounting standards in the world. IFRS are developed through an international due process that involves accountants, financial analysts and other users of financial statements, the business community, stock exchanges, regulatory and legal authorities, academia and other interested individuals and organizations from around the world. Aghator and Adeyemi (2009) opined that International Financial Reporting Standards (IFRS) refers to a series of accounting pronouncements published by the International Accounting Standards Board to help prepares of financial statements, throughout the world, produce and present high quality, transparent and comparable financial information. International Financial Reporting Standards (IFRS) is now used almost in every country as the reporting standard and the advantage of using IFRS is for global comparability of financial report.

Currently, In Nigeria, the responsibility of tax administration lies on the federal state, and local governments. The Nigeria tax system is designed as a means of income generation and it is based on the 1948 tax laws of the British during the Pre-independence government legacy (Edori, Edori & Idatoru, 2017). However the Nigeria tax system has not been left without reforms. The reforms are aimed at making the main laws simple and preventing out dated provisions of the tax laws. Though several improvements have been made to reposition the Nigerian tax system, the system is still facing numerous challenges.

#### ○ **Statement of Research Problem**

The purpose and requirement of IFRS in accounting and taxation are not always the same. Accounting involves the preparation of information for the purposes of control and decision making and may require interpretation as well as simply recording factual information. The main purpose of taxation is usually to raise revenue but it is also used as an instrument of government economic and social policy. For a tax system to operate successfully within the law, it requires a degree of certainty that may not always be appropriate for financing and commercial accounting. Furthermore there may be alternative methods of preparing accounts that are equally acceptable in terms of accounting standards but the choice of which might not be acceptable for taxation purpose (Simon, 2007). As a matter of fact and obligation, every individual, whether resident or non-resident in Nigeria, persons in paid employment or businesses, or persons who derive their income from Nigeria, as well as companies that operate in Nigeria, are all liable to pay tax. Failure to deduct and remit tax or failure to pay taxes of any kind as the case may be attracts punitive fines and penalties. Like other countries, the main function of the Nigerian tax system is to generate revenue for the running of the Nigerian tax system is to

generate revenue for the running of the government at all levels and provide infrastructure to the public. Effective tax drive is achieved through an efficient tax administration and tax system reforms. These elements also create a tax culture, reduced incidences of corruption and tax evasion.

The connection between tax and accounting is a complex one with many dimensions. It is a very dynamic area. One explanation for this is changes within accounting and the most important change has been the adoption of International Financial Reporting Standards (IFRS) as the mandatory standard for consolidated accounts in Nigerian companies (Fakile, Faboyede & Nwobu, 2013). However, this creates a challenge for tax laws and the need to revisit the impact of IFRS adoption on accounting and taxation in Nigeria.

### ○ Objectives of the Study

The international financial reporting standard (IFRS) has lot of impact as it were, the specific objectives of this study includes:

- i. To determine the impact of IFRS adoption on accounting and taxation.
- ii. To examine the issues and challenges of taxation and IFRS adoption.

## **2.0 Literature Review**

### **2.1 Conceptual Review**

### **2.2 International Financial Reporting Standards**

In everyday usage, the term International Financial Reporting Standards (IFRSs) has both a narrow and a broad meaning (IASPLUS). Narrowly, IFRS refers to the new numbered series of pronouncements that the IASB is issuing as distinct from the International Accounting Standards (IASs) series issued by its predecessor. More broadly, IFRSs refers to the entire body of International Accounting Standards Board (IASB) pronouncements, including standards and interpretations approved by the IASB and IASs and the Standards Interpretations Committee (SIC) (now replaced with International Financial Reporting Interpretations Committee (IFRIC)) Interpretation approved by the predecessor International Accounting Standards Committee. Paragraph 7 of IAS 1 on presentation of financial statements defines IFRSs as comprising: International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations and SIC Interpretations. The definition of IFRS was amended after the name changes introduced by the revised IFRS Foundation Constitution in 2010 (Oyedokun, 2017). According to Gill (2007), IFRS is intended to be a more principles based set of standards rather than the rules based approach of U.S GAAP. IFRS focuses more on the business or economic purpose of a transaction and the underlying rights and obligations instead of providing prescriptive rules. According to Hermann (2006), the ongoing convergence project is the result of an agreement between the FASB and IASB to make financial reporting standards consistent and make financial reporting statements more transparent to respond the complexities of the growing global market.

### **2.3 IFRS Adoption and Quality of Accounting Information**

The fundamental economic function of accounting standards is to provide

agreement about how important commercial transactions are to be implemented (Ball 2001). Ensuring disclosure quality of financial information is also mandatory for reducing information asymmetry and solving agency problem in corporate sector, existing literatures document improvement in accounting quality following voluntary IFRS adoption (Barth, Landsman & Lang, 2006; Gassen & Sellhorn 2006; Hung & Subramanyam, 2007; Barth, Landsman & Lang, 2008) to reduce information asymmetry between managers and shareholders and it can be evidenced by proper assets and earnings management, lower cost of capital and high forecasting capability by the investors about firm's earnings.

Barth, Landsman and Lang (2006) suggests that accounting quality could be improved with elimination of alternative accounting methods that are less reflective of firms performance and are used by managers to manage earnings. They compare earnings management for firms that voluntarily switch to IFRS with firms that use domestic accounting standards. They find that after IFRS adoption, firms have higher variance of changes in cash flows, lower frequency of small positive net income and higher frequency of large losses. Barth et al., (2006; 2008) also found that an international sample of firms that voluntarily adopted IFRS up to 2003 exhibits lower levels of earnings management and more timely loss recognition than a matched sample of firms using local GAAP. As an extension of these findings, Daske, Leuz and Verdi (2007) focus on the heterogeneity in the consequences of voluntary IFRS adoption and find that on average capital markets respond modestly to voluntary IFRS reporting.

Overall, the evidence on the association between voluntary IFRS adoption and accounting quality is mixed although papers applying more recent data generally find relatively better accounting quality among the firms that adopt IFRS (Christensen & Nikolaev, 2008). A common feature of these studies is that, much of the previous studies on IFRS compliance relates to voluntary adopters, which by definition suffer from selection bias (Asbaugh, 2001). This raises the question as to whether we can attribute the improved quality to the application of IFRS. That is, does the application of IFRS have an incremental effect on accounting quality, or is the observed quality improvement a result of other changes implemented simultaneously by the adopting firms?. In a study, Daske et al. (2007) examine the capital market effects of mandatory IFRS adoption. They find evidence that is consistent with reduced information in association with mandatory IFRS adoption. They argue that the effect could be driven by network effects rather than accounting quality improvements. However, the evidence to support whether or not accounting quality is significantly improved by the elimination of alternate accounting methods are mixed (Samuel, 2013). Studies applying more recent data find better accounting quality among firms who adopt IFRS (Samuel, 2013). Most early research was done among voluntary adopters, which suffer from selection bias, so this raises a question as to whether one can attribute the accounting quality to IFRS or is it a result of a number of factors implemented by the adopting firms (Samuel, 2013).

## **2.4 Impact of IFRS Adoption on Taxation**

The impact of international financial reporting standards on corporate taxes and tax policy is an important debate (Hail, Leuz & Wysocki, 2010). How relevant IFRS is from a tax perspective depends on three things; assuming no changes is undertaken in tax legislation in a country. First, to what extent is financial accounting connected to tax

accounting in specific country. Second, if a country chooses to use the “Full IFRS” option for annual accounts of companies. Third, to what extent national accounting standard setters take IFRS into consideration when setting standards for national Generally Accepted Accounting Practice (GAAP) and what choices of accounting principles companies can make within national GAAP. In countries where there is no connection between financial accounting and tax accounting, there should be no impact of IFRS on tax accounting there are number of alternative outcomes. If full IFRS is mandatory for annual accounts, it will affect the tax accounting in connected areas. If the company has an option to either apply Full IFRS or national GAAP the effect depends on the choice of the company and whether tax law recognizes IFRS depend on the degree at which national GAAP incorporates IFRS accounting principles. According to Nevius (2008), How will IFRS affect tax practitioners? Converting financial statements to one reporting standard to another will have implications beyond just book accounting, it will also be important for tax preparers to understand the differences between the old book reporting method and the IFRS reporting method ensure proper treatment. Thus for items that currently are treated the same for book and tax purposes as a result of the implementation of new standards companies will have to determine how to continue using the historical method (Abedana, 2008).

There are some key areas that will cause conflict with companies applying IFRS with tax laws. International Financial Reporting Standards differs from United States Generally Accepted Accounting Principles in areas such as revenue recognition, leases, asset impairments, classification and measurements of financial instruments, hedging activities and stock based compensation (Hai, Leuz & Wysock, 2010). One conflict that may arise is the timing of income and expense recognition for tax purposes, because under IFRS profits are recognized on a realized basis and for tax on an accrual basis (Denning, 2004). The amounts and transactions are recorded at historical cost under IFRS and tax rules usually follow the actual cost with IFRS implementation, a new accounting standard, will be impacted to taxation. This impact will be more obvious for multinational corporation as they will face tax impact of IFRS implementation will also create an commonly used as reporting standard, in some country tax authority still required corporation to prepare financial report based on national GAAP for taxation purpose. According to Eberhartinger and Klostermann, (2007), usage of IFRS financial report for tax calculation will simply reporting process and minimize compliance cost. Although usage of IFRS as tax base will increase ETR (Effective Tax Rates) in some specific industry (Haverals, 2007).

## **2.5 Purpose of Accounting and Taxation**

The primary goal of accounting is to provide useful information to management, shareholders, creditors and others properly interested. The major responsibility of the accountant is to provide these parties from being misled. The primary goal of the tax income tax system, in contrast, is the equitable collection of revenue, the major responsibility of the Internal Revenue Service is to protect, maintain and expand sources of revenue for public finance. Consistently with its corollary that possible errors in measurement should be in the direction of understatement rather than overstatement of net income and net assets. In view of the Treasury’s markedly different goals and

responsibilities, understatement of income is not destined to be its guiding light. Given this diversity, even contrariety of objectives, any presumptive equivalency between tax and financial accounting would be unacceptable (Samuel, 2013). So while it is true that some taxation measures might be to improve economic decision-making, others are implemented for very different reasons. Therefore there might be modifications in income before arriving at the appropriate tax figure for taxation purpose (Samuel, 2013). Taxation is imposed by specific rules and companies are required to pay taxes to the extent the law requires them do so. (Denning, 2004). The form of the transaction is more important for taxation than for accounting. Compared to IFRS an accounting principle based approach, which follows a substance over form view (Denning, 2004). Therefore, the differing viewpoints from commercial accounting will generate conflict about interpretations.

Different ideological stream says that taxation issues summarizes the following directions: ensuring steady revenue to the state budget, reallocation of resources by distributing income, efficiency the fiscal device, social policy (James & Nobes, 2002). While accounting issues include useful and relevant information provided to stakeholders, in order to shape the managerial and decision making process. The accounting and tax principles are included in the different goals set for financial accounting (Freedman, 1993) and tax accounting, so each principle once stated towards a goal (James & Nobes, 2002). The relationship between accounting and taxation is best represented to the level of connection between them. It is true that the introduction of IFRS for listed companies was done due to capital market and accounting information users' needs but not for tax influence or needs.

## **2.6 Issues and Challenges in the Adoption of IFRS**

The dire need to create a comparable, understandable, consistent and transparent financial system to provide relevant cross-border information has led to bring about a practical shape to the international Financial reporting Standards to give unique and common dialect of sharing imperative financial knowledge at the global level. One-size-fits-all-standards are just a myth, which paves the way for many gauntlets for SMEs and Industries (Ahmad, Admad & Anuddin, 2019). The system is encountering several challenges which as pull factors to succinct the successful implementation of the accounting system like most of the International Financial Reporting Standards are inconsistent with the International Accounting Standards Board (Gina, Adegehe & Kingsley, 2016). The gulf between the acceptance of worldwide adoption of the system by multinational companies and government across the nations and the lack of Fruitful execution to meet the global level of transparent financial system had resulted in various versions not serving the true purpose at ball; grabbing the attention of practitioners and researchers emphasizing on the various barriers hindering the successful implementation of the system (Cairns, 2001). According to Ahmad, Ahmad and Anuddin (2019), challenges to the implementation of IFRS is categorized into four (4) i.e challenges relating to technological infrastructure, individual, financial constraints and supportive environment.

The technological Infrastructure category explained the Technical Complexities. Due to the lack of adequate infrastructure, the problems regarding the access to the facilities to prepare for the work, inconsistency of existing scenario in the nation and global dynamic

development, lack of professional spirit on the part of preparers of financial statements, lack of training and knowledge on the part of concerned thespians to mutter ample knowledge, inadequate supply of technical professionals and inability to draw the fair value of the accounting system.

The challenges at the individual level have depicted the lack of expertise on the part of individuals engaged, the work is done on the unethical grounds, the impact of peers, colleagues, family members, spouses, work environment and society, inadequate readiness on the part of individuals to cope up with the changing environment due to constant transformations, language problems to pair at the global level, lack of sentence about the international scenarios, and negative perceptions for the unique system.

The financial constraints explains the instable economic situations, complex tax practices, lack of organization of the financial market, the problem of relaxation on the part of SMEs to comply with the international scenario and provisions, additional expenses and operational cost to train the concerned stakeholders to use the system precisely, bringing in the additional resources, increase in cost to establish a far accounting system and the problem of shuffling between the accounting system.

Another category of challenges names supportive Environment has been added as most significant segment, which directs and remodels the other categories. These unique barriers have direct bearing on the multiple barriers which includes: political environment, upheavals in the social system, influence of Trade relations at international level, role of multinational companies, prevalence of some corrupt practices and lack of transparent system, lack of awareness on the part of social beings about the significance of the system and cultural practices which are entirely distinctive (Ahmad, Ahmad & Anuddin, 2019).

## **2.7 Issues and Challenges in Taxation**

The adoption of the international Financial Reporting standards in Nigeria has led to some unforeseen tax issues that have significant cash flow implications for companies if not properly managed. One tax issue is the impact of asset revaluation and fair valuation on minimum tax computation. Companies in Nigeria have embraced the international Financial Reporting Standards (IFRS) for financial reporting, after the Federal Executive Council approved the roadmap for IFRS adoption in July 2010. This study discusses some of the challenges tax payers now face as a result of the adoption of revaluation and fair valuation models as the basis for subsequent recognition of property, plant and equipment (PPE) and investment property in the Financial Statements (Kenneth & Tobi, 2019).

The value of an asset will typically change from its historical cost with time, use, demand and other factors. This means that the cost of an asset may subsequently decrease or increase. With the advent of the standards, companies can now choose to recognize such changes in the historical cost of their assets through a concept known as fair valuation or revaluation. They can also continue to recognize such assets at their historical cost value. Such valuations however will not have any cash implication in the financial of a company. However, the net assets position of a company, which is the excess of a company's asset over its liabilities, will increase or decrease with the corresponding increase or decrease in the asset position arising from the valuation. This occurrence has serious implications on the minimum tax position of a company, as the net asset value is one of the parameters used in determining minimum tax. A company may find itself paying significantly more

taxes, simply because of a revaluation of its assets, which is notional.

The minimum tax provision in the Nigerian companies Income Tax Act (CITA) Act, Cap. C21, laws of the federation of Nigeria (LFN), 2004 (as amended by CIT Act, 2007) provides the legal basis for the imposition of taxes on the income of companies in Nigeria, other than those involved in the exploration and production of petroleum, is one of a series of anti-tax avoidance provisions in the Nigerian tax laws. It combines several parameters (including net assets) to define the minimum tax payable by a company. by the provision, companies with no taxable profit or taxable profit less than minimum tax and which do not meet the exemption criteria, are required to pay income tax based on the minimum tax computed. Notwithstanding, any other provisions in this Act where in any year of assessment the ascertainment of total assessable profits from all sources of a company results in a loss or where a company's ascertained total profits results in no tax payable or tax payable which is less than the minimum tax, there shall be levied and paid by the company the minimum tax as prescribed by section 33 (2).

Unfortunately, the CITA has not been updated to reflect the accounting changes introduced by the IFRS. Hence, the CITA does not specifically provide guidelines on how revaluations and fair valuations of assets should be treated for tax purposes. However, inference can be drawn from the second schedule to the CITA which provides the basis of how capital allowances can be claimed on qualifying assets. Based on paragraph 1 of this schedule, capital allowances are to be claimed on qualifying assets. Based on paragraph 1 of this schedule, capital allowances are to be claimed on qualifying expenditure. Qualifying expenditure, incurred on qualifying assets. This implies that capital allowances should only be claimed on the historical cost of assets (i.e actual expenditure incurred) and not on the revalued amounts of assets. From the above, it is evident that the CITA supports the historical cost model as the basis for valuing assets for tax purposes, and so fair valuation and revaluation should be disregarded for tax purposes. However, the Federal Inland Revenue Service (IFRS) has, overtime, required companies to pay minimum tax based on the revalued amount of net assets as presented in the financial statements. The reason is due largely to the fact that revaluations and fair valuations will usually result in a higher net assets value, thereby resulting in a higher minimum tax liability. The IFRS position is based on the conflicting provisions contained in one of the FIRS clarification circulars. The FIRS position is based on the conflicting provisions contained in one of the FIRS clarification circulars.

The situation in which companies pay minimum tax based on the revalued net assets value is contrary to the provisions of the CITA, which disregard revaluations and fair valuations for asset valuation. In addition, the FIRS position on minimum tax amounts to double standards. While on the one hand, the FIRS supports the view that capital allowances are to be computed on the historical cost of assets and that revaluation an fair value measurements are to be disregarded for tax purposes, on the other hand, the FIRS is advocating that taxpayers pay minimum tax based on the revalued amount of net assets. This is self-contradictory and negates the doctrine of tax equity and fairness which the Nigerian National Tax Policy advocates. Moreover, it must be emphasized that positions taken by the FIRS in its circulars cannot take precedence over the clear provisions of the CITA.

## **2.8 Theoretical Review**

The underpinning theory of the study is discussed in this section. The accounting information content can be evaluated based on the positive approach of accounting theory or information perspective. The positive approach views it from management's behavior towards existing accounting practices. The positive approach sees accounting information as an economic commodity that can be efficiently utilized by the holder to solve the financial problem of selecting or deciding among choices of investment or budgetary planning (Dumitru, 2011). However, we narrowed our underpinning theory for this study to be stakeholder's theory.

### **2.8.1 Stakeholder Theory**

Among other factors stated that constant demand by stakeholders for quality information and more necessary disclosures is a factor that facilitated the adoption of IFRS. On the other hand, stakeholder theory is one of the theories that explain the existence of accounting lobbying (Hoffmann & Zulch, 2014). The stakeholder theory perspective takes cognizance of the environment of the firm, including customers, suppliers, employees and other segments of the society. These stakeholders of the enterprise and lobbying decisions of these individuals are determined by the stakeholders who possess power, urgency, and legitimacy (Ahmad, 2015). Akisik (2013) opined that that accounting regulation has a high degree of effect on economic growth, even after controlling for some macroeconomic and socioeconomic variables. Accounting plays an essential role of capturing higher quality information about the economic activities of entities and report back in a way that improves stakeholder's financial decision in any given economy (Hope, Thomas & Vyas, 2017).

## **2.9 Review of Related Studies**

Adejoh and Hasnah (2014) examined the adoption of international financial reporting standards in Nigeria: Concepts and Issues. This study is based on data obtained from survey and literature in the context of worldwide convergence, compliance and adoption process of IFRS. There is high compliance in adoption particularly by financial institutions and other corporate bodies with little hitches.

Herath and Melvin (2017) investigated the impact of IFRS adoption on corporate income taxation: a review of literature. The purpose of this study is to examine the effect on corporate taxation based on the ongoing convergence project of the International Financial Report Standards. In particular this research will examine IFRS effects on United States companies, based on the differences aligned in United States Generally Accepted Accounting Principles. The study concluded that corporate income tax is one of the most important taxes in acquiring government revenue.

Ahmad, Ahmad and Anuddin (2019) investigated on the barriers in adoption of IFRS in developed and developing Economies: TIFs framework. The study adopted in depth review of literature pertaining to the various barriers impeding the effective execution of International Financial Reports Standards for understanding and managing the business affairs keeping a parity between the national and global accounting aspects. The findings show that majority of the articles only acknowledged briefing of such challenges.

Ngoc, Oanh and Huy (2020) examined on the estimation of benefits and difficulties



when applying IFRS in Vietnam: from business perspective. The study was conducted through the survey of 119 directors and accountants to estimate the benefit and difficulties of applying IFRS in Vietnam. By regression analysis, the forecast results showed that all factors significantly affect IFRS adoption in Vietnam.

### 3. Conclusion and Recommendation

The global business environment, diversified financial opportunities, perpetuation of multinational companies, international economic trade, bilateral business relationships have laid the foundation stone for the adoption of a transparent, common, comparable and integrated accounting system serving the financial exigencies of investors in global economy as well as keep vigilance over the financial aspect throughout the world. This study reviewed the impact of IFRS adoption on accounting and taxation with the aim to ascertain the issue and challenges inherent in the accounting and taxation system. From the study, findings shows that all is not well with the accounting and taxation system because of the numerous issues and challenges it is faced with. Based on the findings, we recommend that creator of International Financial Report Standards i.e International Accounting Standards Board must pay heed to the aspects related to effective implementation along with the updating and enhancing the entire accounting system. Also, tax payers whose businesses involve leasing of property and equipment should endeavor to prepare to file their 2020 tax returns as it has become imperative that they consider the tax consequences of the implementation of IFRS 16. This is to reduce potential tax risk and areas of disagreement with the tax authority which may rise from the adoption of new standards.

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# **LIMITING THE RISKS OF FAILURE IN FINANCIAL INSTITUTIONS: EVIDENCE FROM THE NIGERIAN DEPOSIT MONEY BANKS**

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## **ABSTRACT**

*Limiting the risks of failure in the financial institutions has occupied a central place in literature, given that limiting risks is vital to performance, growth, and sustainability, particularly for deposit money banks. This paper seeks to use certain risks metrics of deposit money banks in assessing whether these risks have effects on the performance of financial institutions. A total of six (6) publicly listed deposit money banks were sampled from the Nigerian Stock Exchange during the period 2010-2019. The Ordinary Least Square, Fixed and Random Effects estimation techniques were employed. Findings revealed that while the risks of non-performing loans significantly affects the performance of deposit money banks, risks of loan loss provisions and bad debts were insignificant; the reason being that loan loss provisions and bad debts are accounting estimates on which basis are computed from risk of non-performing loans. Besides, we found the risk of non-performing loans to be the most fundamental risks that can be used to limit financial institutions failures in Nigeria. To limit risks of failure in the Nigerian financial institutions, risk of non-performing loans should be placed on close check by management, and other regulatory agencies of banks.*

**Keywords:** Risk; Financial institution; Deposit money banks; Non-performing loans; Loan-loss provisions

**JEL Classification:** G21, G29, G32

## **1. INTRODUCTION**

In recent times, limiting the risks of failure in financial institutions has been an issue that has occupied a central place and a topic for hot debate among financial institutions, stakeholders, governments and researchers alike. Financial institutions according to Altunbas, Manganelli, and Marques-Ibanez (2011); Jesko and Sophie (2018) aimed at capping the risk taken by their trading divisions via providing limited risk capitals or setting risk limits in order to augment growth, performance or sustainability.

Financial institutions, particularly deposit money banks (DMBs) are keen in dealing with risks that may lead to failure (insolvency). One subsector of the financial institution challenged with high risk is the banking subsector. DMBs are volatile because of the high level of risky assets traded by them coupled with continuing deregulation and liberalization of the sector; hence being able to limit the risks of failure have unattainable (Adebisi, 2014; and Beasley, Clune & Dana, 2015). There are several risks in the banking subsector namely credit, market, interest rates, operational, liquidity, strategic risks among others, which are

critical to DMBs growth, performance or sustainability

Prominent among these forms of risks, as opined by Oderinde (2011); Nnanna (2012) include credit risks which take the form of non-performing loans, loan losses, bad debts. However, this study focused on one aspect of risk - credit risk, which in the view of Dorfman (2007), is a major problem facing DMBs. Noteworthy is the fact that studies (see Abdelgalil, 2014; Guo & Mande, 2012; Adebisi, 2014; Beasley, et al, 2015; and Jesko & Sophie, 2018) on risk have yielded conflicting findings due to methodological bottleneck in assessing how risk can be managed to limit financial institutions failures in Nigeria, the world over.

Up to now, the main part of scientific investigations of the subject of research, that is risk in financial institutions, has focused on adequate modeling of risk measurement. Questions about risks controlling such as limiting the risks of failure in financial institutions, particularly in developing countries like Nigeria seems to have been inadequately examined in literature. In light of this, this paper seeks to contribute to knowledge on limiting risk of failure of financial institution in Nigeria. Consequently, to achieve this, the paper is divided as follows: first, literature review, second, research methods, third, results, fourth, discussions, and lastly, conclusion and recommendations.

## **2. LITERATURE REVIEW**

### **2.1 Risks Defined**

In literature, there is no consensus on a single definition of risk. Usually, risk is envisaged as the likelihood of a loss or a hazard. In the views of Guo and Mande (2012), risk is a latent negative effect an entity may derive from a given process in progress. There are certain vital elements in the conceptualization of risk; likelihood of an event happening with impact posing a loss or a hazard. In the business environment, there are several risks such as credit, market, operational among others (Dorfman, 2007). In financial institution, particularly deposit money banks (DMBs), one of the fundamental risks affecting its operation is credit risk; perhaps, one of the reasons for failure of most of the financial institutions (DMBs) in the past and present.

In this paper, emphasis is on credit risk of DMBs and limiting credit risks to reduce failures of financial institutions in Nigeria. Given the above, credit risk is defined as the potential that DMBs counterparties may fail to meet their obligations in line with their contractual terms. Credit risk according to Liebenberg and Hoyt (2013), is the exposure to opportunity costs or actual loss due to default or other failure to perform by debtors with which DMBs engage in business with.

DMBs are faced with numerous risks and their inability to limit these risks has led to their collapse. Some of the risks DMBs are struggling to limit encompassed but not limited to non-performing loans and surmounting debts, leading to high loan-loss provisions and debt ratios. Ultimately, the aim of limiting risks or credit risks is to lessen DMBs failures and make the more viable than ever before.

## 2.2 Risks of Deposit Money Banks of the Study

Limiting the risks of failure in financial institutions has been an issue that has occupied a central place and a heated debate among management of financial institution, stakeholders, government and researchers alike. This paper explores three vital risks DMBs are compelled to limit in order to avert failure – the risks of non-performing loans, loan loss provisions and bad debts; these risks are used to measure risks of financial institutions and are extensively discussed:

### 2.2.1 Risk of Non-Performing Loans

In the Nigerian banking subsector, the risk of non-performing loans is cogitated as one of the major risk associated with DMBs failures. Mwagi (2012) finds an inverse link between non-performing loans and DMBs performance. The study established that higher level of non-performing loans lead to lower performance of DMBs while lower levels of non-performing loans lead to higher DMBs performance. Similarly, Muniappan (2012) shows that non-performing loans affects DMBs growth and that this effect is as a result of DMBs not being able to maintain their overhead costs on such loans despite that the loans are not yielding any viable returns.

Godlewski (2014) claims that high non-performing loans have a negative effect on DMBs performance. Likewise, Garcia-Marco and Robles-Fernandez (2017) observed that higher levels of equity-to-asset ratio are followed by greater risk in subsequent period. Additionally, Greendox and Grossover (2010) found that non-performing loans have negative effects on DMBs sustainability. Interestingly, Borio (2012) found that in periods of economic recession and pandemics, non-performing loans increase since corporations and households be unable to repay loans obtained from financial institutions.

In fact, during economic boom period, corporations and households demand for more loans and easily pay their debts but in economic recession era, corporations experience liquidation problems and find it cumbersome to pay bills such as staff salaries, rents. Thus, the inability of corporations and households to meet with loan obligations, keeps financial institutions at a high level of risks, and hence resulting in DMBs failure. In light of the above, we therefore hypothesized that:

***H<sub>01</sub>: The risk of non-performing loans has no significant effects on financial institutions performance.***

### 2.2.2 Risk of Loan Loss Provisions

In the financial sector, the risk of loan-loss provision is a key dynamic usually considered by DMBs since it influences performance, sustainability or growth. To ascertain the effect on DMBs performance, sustainability or growth, it is vital to evaluate and assess the overall fluctuation of risks of loan-loss provision on the overall health of DMBs. Prior studies (see Muhammad, 2014; Sauders & Schumacher, 2012; and Louzi, Vouldis & Melaxas, 2010) have shown that there is a mixed effect of the risk of loan loss provision on DMBs performance or sustainability.

Louzi, et al (2010) found that risk of loan loss provision affects DMBs viability, performance and sustainability negatively, thus has compelled financial institutions to become unviable to service debts, particularly when such debts are floating rate loans. Similarly, Sauders and Schumacher (2012) found that the risk of loan loss provisions have a positive effect on financial institutions performance, sustainability or growth.

Contrarily, Muhammad (2014) showed that risk of loan loss provision has significant effect on financial institutions performance, sustainability or growth. Following the conflicting results in extant literature, the risk of loan-loss provision was employed as a metric of limiting credits failures in financial institutions. In light of the above, we therefore hypothesized that:

***Ho2: The risk of loan loss provision has no significant effects on financial institutions performance.***

### **2.2.3 Risk of Bad Debts**

Financial institutions are not different from other business whose primary motive of existence is to make profit. This is actually the key motive of why financial institutions use its funds to generate additional revenues. In specifics, profits increases when DMBs grant loans that both interests and capitals are collectable as at the date of maturity. Moreover, when there is proper means of vetting borrowers' funds, it will definitely limit the risks of failures of DMBs, since bad debt would reduce as well. On the other hand, when borrowed funds are not recovered efficiently, it leads to cases of bad debt which most times have adverse effect on DMBs growth, performance or sustainability.

Prior studies (Mwagi, 2012; and Muhammad, 2014) have shown that there is an association between the risk of debt and DMBs performance, growth or sustainability. These studies indicated that the risk of bad debt have been on the increase due to inefficient management of loans granted to corporations and households; hence the to limit the risks of bad debts for DMBs. Interestingly, there are scanty empirical studies that have validated the link between risk of bad debts and financial institutions performance, growth or sustainability, particularly in Nigeria. In light of the above, we thus hypothesized that:

***Ho3: The risk of bad debt has no significant effects on financial institutions performance.***

### **2.3 Financial Institutions Performance Measure of the Study**

In this paper, financial institutions performance was assessed using performance measure. In this regards, financial institution performance was assessed using the equity-to-asset ratios of DMBs. Prior studies (Louzi, et al, 2010; Mwagi, 2012; and Muhammad, 2014) have shown that financial institutions performance metric of equity-to-asset ratios is significantly affected by risks of non-performing loans, loan loss provision and bad debts.

Relatedly, the study by Mwagi (2012) found an inverse link between financial institution performance metric of equity-to-asset and the risks of non-performing loans. In addition,

Muhammad (2014) showed that the risk of loan loss provision has a significant effect on financial institution metric of equity-to-asset ratios of DMBs. In view of the submissions of Louzi, et al (2010), Mwagi (2012), and Muhammad (2014), equity-to-asset ratio was used as a metric for assessing financial institutions performance or growth.

## **2.4 Theoretical Framework**

The theoretical framework of this paper is anchored on the Enterprise Risk Management (ERM) theory propounded by Edward R. Freeman (1999). The underlying philosophy of ERM is that risks bring two (2) main advantages to corporation at the micro and macro levels. At macro level, risk is advantageous to corporations on the long run, as it enhances competitive advantage. This becomes possible since risk enables corporations transfer its core risks (e.g. financial risks) to borrowers

By reducing the exposure to these non-core risks, financial institutions can take up more core-risks (that is, business risks which DMBs has competitive advantage in bearing). In other words, financial institutions do business in order to take strategic and business risks; hence by increasing the ability to bear more business risk, financial institutions can create competitive advantage in long run. This in the views of Nocco and Stulz (2006), can guide financial institutions in achieving increased performance or growth that can aid profit maximization goal.

At the micro level, the benefits of risk stem from the fact that financial institutions can carefully allocate capital-based risk on a risk-return tradeoff analysis. In this regards, financial institutions ensures that all material risks are 'owned' and risk-return tradeoffs carefully evaluated. In summary, the relevance of the ERM theory to this current study is that financial institutions can enhance their performance or growth via a careful risk-return tradeoff on capitals, pursuing strategic and business plans and exploiting business risks, which may lead to improved competitive advantage.

## **2.5 Prior Studies**

Quite a number of studies have shown that the risk of failure in financial institutions has deepened due to increased numbers of risk of non-performing loans, loan-loss provisions and bad debts, particularly for DMBs. Moreover, while extant literature showed mixed results of the nexus between risks of financial institutions and performance, growth or sustainability, there is scanty researches on limiting the risks of failure in financial institutions with evidence from Nigerian deposit money banks; the few studies in this area are time bound, hence a gap in literature.

Jesko and Sophie (2018) examined company risk and sustainability of bank using regression tool and findings revealed that promising ways for maneuvering in a smart zone between being too passive and being too pro-active in relation to sustainable innovation is via risk management. Thus, company risk significantly affects bank sustainability in Canada. In Romania, Mirela (2017) investigated risk and sustainable development of banks using descriptive analysis and findings indicated that risk management contributed significantly to sustainable development among Romanian banks.



Cariboni, et al(2016) demonstrated that contingent liabilities linked with effort to limits the adverse externalities stemming from failures in European financial institution is substantially lessening due to new regulation. Moreover, stressing that the implied drifting of losses from taxpayers to bank creditors is desirable.

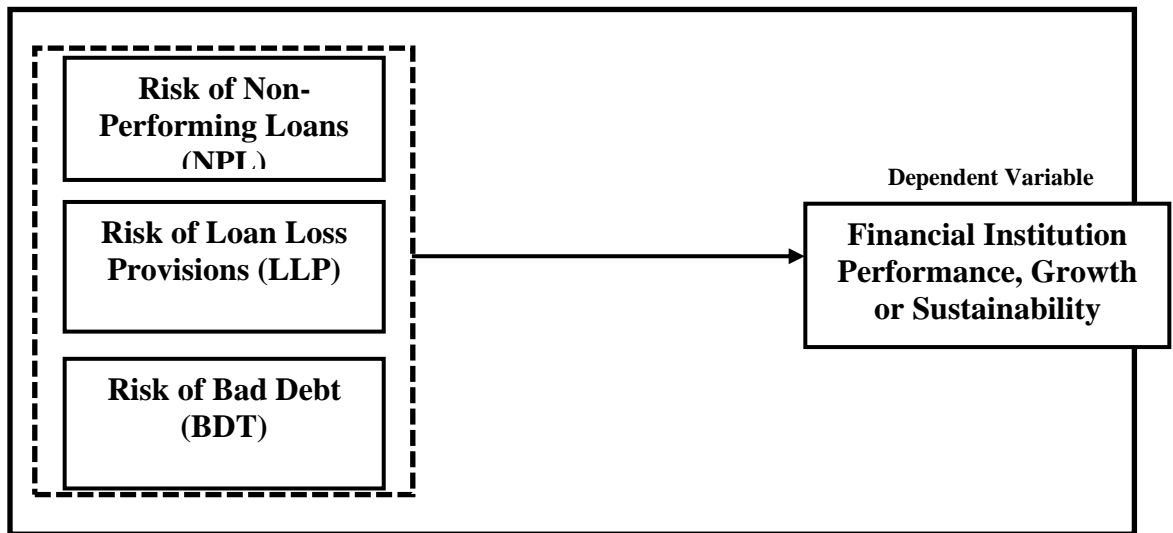
Wenling and Whidbee (2013) examined bank structure and failure during the financial crisis using Logit regression. The results indicated that established financial institutions were more probable to fail, based on whether a financial institution received bailout fund or had a fairly large amount of risk of non-performing loans with less income diversity.

Adeusi, Akeke, Adebisi and Oladunjoye (2013) assessed the association between risk practice and bank financial performance in Nigeria using a panel of secondary data for 10 banks and for 4 years and reported an inverse relationship between financial performance of banks and doubt loans, capital asset ratio was found to be positive and significant. Similarly, it suggests that the higher the managed funds by banks, the higher the performance. The study concludes a significant relationship between banks performance and risk management.

Onaolapo (2012), while analyzing credit risk in Nigeria banking subsector from 2004 through 2009 provides some further insight into credit risk as profit enhancing mechanism. The study used regression analysis and found that there is a minimal causation between deposit exposure and bank's performance.

Kolapo, Ayeni and Ojo (2012) using panel data regression for the period 2000 to 2010 found that the effect of credit risk on bank's performance measured by return on asset of banks is cross-sectionally invariant. The study concludes that the nature and managerial pattern of individual financial institutions do not determine the impact. Muhammed, Shahid, Munir and Ahad (2012) employed descriptive and regression techniques to study the nexus between credit risk and banks performance in Nigeria from 2004 to 2008. They found that credit risk management has a significant impact on profitability of Nigerian banks.

In Nigeria, Kargi (2011) examined the link between credit risk and bank performance during the period 2004 to 2008 via regression analysis. The study found a significant link between banks performance and credit risk. The study also found that loans and advances and non-performing loans are major variables that determine asset quality of a bank. Altunbas, Manganelli and Marques-Ibanez (2011) exploited the 2007-2009 financial crises to assess how risk relates to bank business model. The regression results showed that institutions with greater risk had fewer capitals with greater dependence on short-term markets funding



*Source: Conceptualized by the Researcher, 2020*

### 3. RESEARCH METHODS

This study adopts the ex-post facto design since it seeks to establish factors associated with certain occurrence by analyzing past events of already existing conditions. The population of study is the total number of deposit money banks (DMBs) in Nigeria. The total numbers of DMBs listed on the Nigerian Stock Exchange (NSE) as of 31st December, 2018 is twenty-two (22). Given the population of study, a sample of six (6) DMBs was selected namely Access Bank, Fidelity Bank, Guaranty Trust Bank, Sterling Bank, United Bank for Africa, and Zenith Bank via the purposive sampling technique. The choice of selected banks is connected with the fact that they provided complete dataset for the time-frame considered for investigation.

Secondary data were used comprising of risk measures of non-performing loan, loan-loss provisions, bad debts while equity-to-asset ratio as proxy for DMBs performance. These data were obtained from the annual reports and accounts of the selected banks during the period 2010-2019. The model is specified based on the submissions of Abdelgalil (2014); Guo and Mande (2012); Adebisi (2014); and Beasley, et al (2015). The method of analysis is Ordinary Least Square (OLS) estimation technique and the linear OLS model is estimated as:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu t \quad \text{eq. 1}$$

Where  $\alpha$ ,  $\beta$ , and  $\mu$  are constants. In order to estimate equations (1) we can translate this into equations (2-4) as below:

$$EQTAR_{it} = \beta_0 + \beta_1 NPLR_{it} + \varepsilon_t \quad \text{eq.2}$$

$$EQTAR_{it} = \beta_0 + \beta_2 LLPCR_{it} + \varepsilon_t \quad \text{eq.3}$$

$$EQTAR_{it} = \beta_0 + \beta_3 DBR_{it} + \varepsilon_t \quad \text{eq.4}$$

Where: EQTAR = Equity-to-asset ratio of banks; NPLR = non-performing loan ratio (non-performing loans to-total loans); LLPCR = loan-loss provisions coverage ratio (loan loss provision to-total loans); DBR = Debts ratio (bad debt to-total loans);  $\varepsilon$ = error term (variables not captured in the model);  $it$ = time period;  $\beta_0, \beta_1, \beta_2$ = regression coefficients.

The data was analyzed using descriptive (i.e. mean, standard deviation, minimum, maximum values, normality and correlation) and inferential (i.e. regression, fixed and random effect) statistical techniques. To validate the hypotheses of the study, the fixed and random effects analysis was employed and analysis carried out via STATA 13.0 version.

## 4. RESULTS

### 4.1 Descriptive Statistics

The descriptive analysis revealed that the average of the variables of the publicly listed DMBs studied are around 14.13(EQTAR), 5.87 (NPLR), -3.05 (LLPCR) and 1.41 (DBR) with the highest score of 30.37 (NPLR). Moreover, the lowest score is zero (0); this is expected since DBR is computed on the basis ratio. Impliedly, the average EQTAR is about 14.1%, NPLR 5.9%, LLPCR-3.1% and DBR, 1.4%. In fact, the standard deviation values indicated that the sampled DMBsin Nigeria are not too dispersed from each other and that most likely the study variables are not constant over time. The detailed results are presented in Table 1.

Table 1: Summary of Descriptive Analysis

Variable	Minimum	Maximum	Mean	Std Deviation
EQTAR	8.53	24.26	14.13	4.01
NPLR	.21	30.37	5.87	6.62
LLPCR	-16.08	0.13	-3.05	3.37
DBR	0	11.48	1.41	2.13

Source: Researcher's Computation, via STATA 13.0

### 4.2 Correlation Statistics

The correlation matrix of summarized variables among publicly listed DMBs in Nigeria

revealed that nNPLR and LLPCR positively correlates with EQTAR except DBR. Again, no two (2) pairs of explanatory variables are perfectly correlated because none of the correlation coefficients exceeded 0.8 as recommended by Gujarati (2003). This implies the absence of multi-colinearity among pairs of the explanatory variables of the study. The detailed results are presented in Table 2.

**Table 2: Correlation Matrix**

Variable	EQTAR	NPLR	LLPCR	DBR
EQTAR	1.0000			
NPLR	0.2544	1.0000		
LLPCR	0.0346	-.6475	1.0000	
DBR	-.0439	0.3927	-0.4605	1.000

Source: Researcher's Computation, via STATA 13.0

### 4.3 Ordinary Least Square (OLS), Fixed (FE) and Random Effect (RE) Statistics

The OLS analysis revealed that NPLR is highly significant at 1% level in explaining EQTAR, indicating that NPLR has a larger beta coefficient in absolute terms than LLPCR and DBIR. Impliedly, the risk of non-performing loans is the most fundamental dynamic for limiting risks of failure of deposit money banks (DMBs). Using OLS and RE results, coefficients of NPLR are .29827 and .27093 respectively, indicating that when publicly listed DMBs is faced with the risk of non-performing loans, it will lead to approximately 27.1% change in DMBs performance.

Similar results were obtained for other variables using both OLS, FE and RE. The t-test results confirm that NPLR is significant in explaining the variation in DMBs performance. Nevertheless,  $R^2$  is 0.1400 for OLS, which is higher than FE and RE; impliedly, DMBs risks explain about 14% variation in performance. The f-ratio is 3.58 (p-value=0.0183<0.05) which is significant, providing evidence to support the proposition that there is a link between risks of DMBs and performance. The detailed results are presented in Table 3.

**Table 3: OLS, Fixed and Random Effects Results**

Estimator	OLS (Obs.=70)		FE (Obs.=70)		RE (Obs. =70)	
Variable	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.
<b>NPLR</b>	.29827*	0.002	.21499*	0.047	.27093*	0.004
	(3.25)		(2.93)		(2.90)	
<b>LLPCR</b>	.36854	0.052	.30890	0.120	.34257	0.064
	(1.97)		(1.58)		(1.85)	

<b>DBR</b>	<b>-0.17849</b>	<b>0.469</b>	<b>-0.1656</b>	<b>0.556</b>	<b>-0.18511</b>	<b>-0.457</b>
	<b>(-0.73)</b>		<b>(-0.59)</b>		<b>(-0.74)</b>	
<b>R-Squared</b>	<b>.1400</b>					
<b>R-Sq. Adj.</b>	<b>.1009</b>					
<b>F-ratio</b>	<b>3.58</b>					
<b>Prob. F.</b>	<b>.0183</b>					
<b>R-Sq. (within)</b>			<b>0.0797</b>		<b>0.0784</b>	
<b>R-Sq. (between)</b>			<b>0.4043</b>		<b>0.4168</b>	
<b>R-Sq. (overall)</b>			<b>0.1358</b>		<b>0.1397</b>	

*Source: Researcher's Computation, via STATA 13.0*

*\*significant at 1% level \*\* 5% level; Items in parentheses are t-ratios; t-test in parentheses, bold face;*

## 5. DISCUSSIONS

Limiting risks of failure in the financial institutions has occupied a central place in finance literature in Nigeria, the world over, given that limiting risks is vital to performance, growth, and sustainability, particularly for deposit money banks (DMBs). The task of management therefore is to put in place mechanisms aimed at curtailing risks that could limit DMBs failure. In fact, questions about risks controlling such as limiting the risks of failure in financial institutions in Nigeria seems not to have been examined in literature. Quite a number of studies have shown that risks significantly affect DMBs performance, growth or sustainability (Jesko & Sophie, 2018; Cariboni, et al, 2016; Wenling & Whidbee, 2013; and Altunbas, et al, 2011) however, whether this is the case for DMBs in Nigeria, has not been deeply researched.

A dissimilar model other than those employed in prior studies was adopted - Ordinary Least Square (OLS), Fixed (FE) and Random effects (RE). Given the OLS, FE and RE results, hypothesis 1 is accepted while hypotheses 2 and 3 are rejected. The probability values for OLS, FE and RE (NPLR) are significant, indicating that the risk of non-performing loans has significant effects on financial institutions performance. Contrarily, the probability values for OLS, FE and RE (LLPCR&DBR) are insignificant, implying that risks of loan loss provision and bad debts have insignificant effects on financial institutions performance.

These results are expected since the basis of loan loss provisions and bad debts are based on whether DMBs incur non-performing loans. Impliedly, the risk of non-performing loans is the most vital metric for limiting risks of failure of financial institutions in Nigeria. This result in part corroborates with prior studies of Wenling and Whidbee (2013); and Kargi (2011) that the risk of non-performing loan significantly affect financial institutions performance, growth or sustainability.

## 6. CONCLUSION AND RECOMMENDATIONS

This study seeks to (1) use certain risks (credit risks) metrics of deposit money banks (DMBs) in investigating limiting risks of failure of financial institutions in Nigeria; and (2) ascertain the effect of these risks on the performance of financial institutions (DMBs). A total of six (6) publicly listed DMBs on the Nigerian Stock Exchange (NSE) were sampled during the period 2010-2019. Findings showed that while the risks of non-performing loans significantly affects the performance of DMBs, risks of loan loss provisions and bad debts were not significant; the reason being that loan loss provisions and bad debts are accounting estimates on which basis are computed from the risk of non-performing loans.

Moreover, we found the risk of non-performing loans to be the most fundamental risks that can be used to limit financial institutions failures in Nigeria. To further limit risks of failure in the Nigerian financial institutions, risk of non-performing loans should be place on close check by management, and other regulatory agencies of deposit money banks. As a matter of fact, a full implementation of the proposed mechanisms of the Central Bank of Nigeria to recover all funds via customers' accounts should be implemented to repay loans of customers who may have money in other bank accounts. Moreover, deposit money banks should ensure that they do not grant further loans to defaulters in the future and more importantly, their credit worthiness must be assessed.

This study contributes to the body of knowledge by filling a gap in literature on limiting risks of failure in financial institutions and further affirms that risk of non-performing loans is the most fundamental dynamics that can be most efficiently employed by management in limiting the risks of failure of financial institutions like deposit money banks.

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## APPENDIX

Period	Company	EQUITY TO ASSET	NON-PERFORMING LOANS TO LOANS	LOAN LOSS PROVISION TO LOAN	BAD DEBT TO LOANS
2010	Access Bank	8.64	0.71	-9.44	0.00
2011	Access Bank	16.44	0.21	-0.59	1.03
2012	Access Bank	24.26	21.02	-4.01	1.00
2013	Access Bank	21.79	8.77	-1.05	0.90
2014	Access Bank	12.10	1.80	-1.57	5.38
2015	Access Bank	13.82	2.17	-1.79	3.27
2016	Access Bank	13.32	2.87	-0.78	2.55
2017	Access Bank	13.18	2.27	-1.05	0.58
2018	Access Bank	14.19	1.79	-1.04	0.08
2019	Access Bank	13.05	2.18	-1.21	0.81
2010	First Bank Holding	9.18	3.08	-0.92	3.21
2011	First Bank Holding	23.28	1.59	-1.31	0.88
2012	First Bank Holding	14.32	8.72	-1.80	0.26
2013	First Bank Holding	14.78	8.10	-1.89	1.96
2014	First Bank Holding	12.89	2.69	-3.03	4.57
2015	First Bank Holding	13.77	1.41	-0.81	0.65
2016	First Bank Holding	12.19	1.83	-1.15	1.08
2017	First Bank Holding	12.04	2.41	-1.19	0.00
2018	First Bank Holding	13.89	18.61	-6.57	0.94
2019	First Bank Holding	12.30	27.39	-10.85	2.55
2010	Guaranty Trust Bank	10.27	2.08	-0.64	0.85
2011	Guaranty Trust Bank	18.91	1.87	-1.14	0.34
2012	Guaranty Trust Bank	18.03	12.57	-5.91	2.11
2013	Guaranty Trust Bank	18.30	7.24	-1.75	0.03
2014	Guaranty Trust Bank	14.81	3.25	-2.76	0.10
2015	Guaranty Trust Bank	16.17	3.44	-0.09	0.01
2016	Guaranty Trust Bank	15.56	3.37	-0.29	0.00
2017	Guaranty Trust Bank	15.89	3.06	-0.56	0.00
2018	Guaranty Trust Bank	16.38	3.04	-0.90	0.01



2019	<b>Guaranty Trust Bank</b>	16.20	3.80	-4.11	0.00
2010	<b>Sterling Bank</b>	21.74	30.57	-7.71	6.82
2011	<b>Sterling Bank</b>	14.40	9.77	-4.68	5.10
2012	<b>Sterling Bank</b>	12.07	23.61	-16.08	2.08
2013	<b>Sterling Bank</b>	11.28	11.54	-1.58	0.39
2014	<b>Sterling Bank</b>	8.85	5.08	-3.51	2.51
2015	<b>Sterling Bank</b>	8.74	3.06	0.13	1.01
2016	<b>Sterling Bank</b>	9.85	1.32	-2.00	1.04
2017	<b>Sterling Bank</b>	10.27	2.10	-1.57	0.87
2018	<b>Sterling Bank</b>	11.95	4.51	-2.41	0.64
2019	<b>Sterling Bank</b>	10.27	1.73	-2.50	3.84
2010	<b>United Bank For Africa</b>	16.40	4.58	-1.16	0.00
2011	<b>United Bank For Africa</b>	13.09	3.75	-0.61	0.74
2012	<b>United Bank For Africa</b>	13.72	8.43	-6.26	0.00
2013	<b>United Bank For Africa</b>	12.48	4.21	-2.90	0.07
2014	<b>United Bank For Africa</b>	8.53	2.80	-2.93	0.42
2015	<b>United Bank For Africa</b>	9.25	2.04	-0.69	0.85
2016	<b>United Bank For Africa</b>	8.90	1.25	-1.39	0.82
2017	<b>United Bank For Africa</b>	9.61	1.65	-0.30	0.07
2018	<b>United Bank For Africa</b>	12.08	0.65	-0.49	0.07
2019	<b>United Bank For Africa</b>	12.79	1.45	-1.84	0.50
2010	<b>Zenith Bank</b>	11.97	1.40	-0.64	0.00
2011	<b>Zenith Bank</b>	19.40	2.13	-1.41	0.00
2012	<b>Zenith Bank</b>	20.35	6.93	-5.71	0.00
2013	<b>Zenith Bank</b>	23.59	6.21	-0.61	0.00
2014	<b>Zenith Bank</b>	20.26	2.47	-1.85	0.00
2015	<b>Zenith Bank</b>	21.47	1.46	-0.92	1.06
2016	<b>Zenith Bank</b>	19.18	1.11	-0.88	0.68
2017	<b>Zenith Bank</b>	14.72	0.58	-11.18	0.36
2018	<b>Zenith Bank</b>	14.83	2.26	-0.79	0.02
2019	<b>Zenith Bank</b>	14.86	3.12	-1.41	0.40

# **SIGNALING EFFECT OF AUDIT FIRM MECHANISM ON AUDITOR SWITCHING: EVIDENCE FROM QUOTED COMPANIES IN NIGERIA**

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## **ABSTRACT**

*This study examined the signal effect of audit firm mechanisms on auditor switching in Nigeria. The aim of the study was to examine the effect of audit litigation, audit tenure, audit fee, audit firm size and audit delay on auditor switching. The population for the study consists of the one-hundred and seventy (170) quoted companies in the Nigerian Stock Exchange (NSE). The companies for the population have the responsibility to publish their financial statements for seven consecutive years for the period 2012- 2018. Secondary data used for the study was collected from the sampled quoted non-financial companies in the Nigerian Stock Exchange for the period of 2012 to 2018. Binary regression technique was used to test the formulated hypotheses. The results showed that audit litigation exerts a positive and an insignificant effect on auditor's switching, audit tenure exerts a negative effect and a significant effect on auditor's switching, audit fee exerts a positive and an insignificant effect on auditor's switching, audit firm size exerts a positive and an insignificant effect on auditor's switching and audit delay exerts a negative and an insignificant effect on auditor's switching across the binary models. The study recommended that management of quoted non-financial companies should consider the level of audit risk in the area of auditor's switching with the aim to improve audit quality and auditor independence and also shareholders of non-financial quoted companies should consider the effect of auditor's tenure before selection and engagement of auditor.*

**Keywords:** Audit Delay, Audit Fee, Audit Litigation, Audit Tenure and Auditor's Switching

## **1. INTRODUCTION**

Auditor switching has been a major issue in research to be addressed in order to improve audit quality for decades (Choi, Lim & Mali, 2017). Auditor switching occurs where the relationship that exist between auditor and client is no longer existing (Kasih & Puspitasari,

2017). Randal, Mark, Alvin and Amir (2009), stated that auditor's switching is management decision to change the services of an auditor for better audit service quality or for reducing cost". Therefore, auditor's switching is seen as the change of auditor by the client in carrying audit assignment. "The contractual arrangement between the auditor and auditee is based on audit engagement which proceeds with a risk assessment and formulation of an audit plan delineating the scope and objectives of the audit, (Byrnes, Al-Awadhi, Gullvist, Brown-Liburd, Teeter, Warren, Jr., & Vasarhelyi, 2012). Enofe, Mgbame and Abadua (2013), stated that audit auditor switching is necessary to overcome the problem of familiarity of the audit firm with the management of the organization and also the doctrine of professionalism and independence of the auditor can be easily impair. Meanwhile, the presence of auditor switching creates room for the company to engage fresh hands in examining the financial statement of the client company.

Auditing is necessary to ensure that financial transparency gives investors, depositors, creditors and shareholders with credible assurances that corporate managers do not engage in fraudulent activities or reporting (Akhor, Akrawah & Okunrobo, 2018). Fairchild (2008) stated that audits add credibility to the financial information by providing an independent verification of financial reports. Goldman and Barlev (1994), argued that audit services render to a client company may create a situation in which the client's dependence on the auditor's report increases because these services enhance the auditor's uniqueness and reputation. Audit is playing an important role in developing and enhancing the global economy and business firms (Husam, Rana & Abdulhadi, 2013). Auditors based their opinion on the true and fair view of the financial statements. Therefore, the presence of audit committee in company enables the auditors to improve on their skills so as to increase the probability to rely more on the auditor's report and audited financial statements which are more relevant, unbiased and accurate for the decision makers. Meanwhile, there are some argument from scholars and researchers that the quality of audit increases when a newly appointed auditor with fresh and skeptical minds evaluates the financial statements (Choi, Lim & Mali, 2017; Imegi & Oladutire, 2018). Furthermore, assigning the same personnel or audit firm on the same audit client over a long period of time is viewed to impair audit independence because of self-interest and familiarity threat (Eilifsen, Messsier, Glover and Prawit, 2010).

Audit tenure is seen as the agreed period of engagement between the auditor and client (Hartadi, 2009). In relation to auditor switching, the issue of audit fee is also an issue of concerns. Audit fee is the fee paid to the auditors which reflect the cost of the effort or work done by the auditor (Choi, 2009). Thus, when audit firm is been rotated, the incoming or new auditors are coming with their own charge and this charge in form of fees are going to indirectly affect the quality of the audit. Audit delay is the difference between fiscal year-end of the company and the audit report date which is normally reported in days. More

importantly, auditor switching guarantees the company freshness and pinpointing internal control problems that may have been over looked by previous auditors may be look upon by engaging new audit firm.

The inherent of problem of auditor's switching is buttressed by Adams and Davis (1994) that disagreement about content of financial reports, auditor opinion and audit fees influence the tendency of auditor to switch. Again, auditor switching might be influence by audit firm mechanisms such as audit committee existence, audit competition, audit litigation, audit fee, audit tenure, audit firm size and audit delay. Prior studies conducted in developing and developed countries on the area of auditor switching were the work of Hussein (2015); Mazri, Smith and Ismail (2012), Suyono, Feng and Riswan (2013); Nyakuwanika (2014); Kasih and Puspitasari (2017). However, little or no studies have undertaken in Nigeria on the area of auditor's switching with emphases on audit firm mechanisms (audit litigation, audit fee, audit tenure, audit firm size and audit delay) (knowledge gap). This study also serves as a comprehensive reference for developing countries like Nigeria and added to the body of knowledge on the audit firm mechanism significant factors of auditor switching.

### **Research Objectives**

The broad objective of the study is to examine the signaling effect of audit firm mechanisms on auditor's switching. Therefore, the specific objective is to:

- (i) examine the effect of audit litigation on auditor switching in Nigeria.
- (ii) investigate the effect of audit tenure on auditor switching in Nigeria.
- (iii) determine the effect of audit fees on auditor switching in Nigeria.
- (iv) assess the effect of audit firm size on auditor switching in Nigeria.
- (v) ascertain the effect of audit delay on auditor switching in Nigeria.

### **Research Hypotheses**

Based on the research objectives and questions, the hypotheses were formulated in a null form:

H<sub>01</sub>: Audit litigation has no significant effect on auditor switching in Nigeria.

H<sub>02</sub>: Audit tenure has no significant effect on auditor switching in Nigeria.

H<sub>03</sub>: Audit fee has no significant effect on auditor switching in Nigeria.

H<sub>04</sub>: Audit firm size has no significant effect on auditor switching in Nigeria.

H<sub>05</sub>: Audit delay has no significant effect on auditor switching in Nigeria.

## **2. REVIEW OF RELATED LITERATURE**

### **Concept of Auditor Switching**

Auditor switching is define as the resignation and dismissal of audit firm from carrying audit assignment from the client firm (Turner, Williams & Weirich, 2005). Therefore, auditor switching is the movement of auditor from one client firm to another either by resignation or dismissal by the recommendation of the audit committees. The rate of auditor's switching is mainly due to lack of audit independence. The independence of the auditor is very keen in the determination of the amount of money paid in the audit engagement. However, the mental attitude and physical appearance of the auditor can be uninfluenced by others in judgment and decision (Louwers, Ramsay, Sinason & Strawser (2007). Mazri Smith and Ismail (2012), argued that auditor switching has been negatively impacted on the client firm as well as the audit firm". Meanwhile, auditors' switching make auditor to lose their clients while the clients may incur more costs based on the recruitment of auditor. Binti, Zaki and Bambang (2016:539), "stated that auditors who are considered to have low performance by his supervisor witness a high level of audit firm turnover due to auditor's switching behaviour". Akhor, Akrawah and Okunrobo (2018) are of the view that auditors based their opinion on the true and fair view of the financial statements.

Auditor switching is normally caused by the dissatisfaction of audit opinion by the management of a company. However, auditor switching may affect the market share price of the company receiving the audit opinion and decrease management compensation (Chow & Rice, 1982). Teck-Heang and Ali (2008), added that auditors are expected not only to enhance the credibility of the financial statement, but also to provide value-added services. In other words, given the behaviour of the auditor many stakeholders expect that auditors guarantee that audited financial statements were completely accurate and that the auditor has performed one hundred percent check for auditees whose financial statements received an unqualified audit report (Asher, 2011). Auditor switching can be upward switching, that is moving from non-big four auditor to big four auditor and downward switching which means moving from non-big four auditor to big four auditor) (Lin & Liu, 2009; Cassell, Giroux, Myers & Omer, 2012).

Mandatory audit firm switching is viewed by the Sarbanes - Oxley (SOX) Act 2012 as the imposition of a limit on the period of years during which an accounting firm may be the auditor of record (Imegi & Oladutire, 2018). Mandatory audit firm rotation imposes periodical breaks to audit engagements and is intended to avoid excessively long relationships between the auditor and the client. In the view of Cameran, Negri and Pettinicchio (2015), the European Union (E.U) has finally come out with mandatory rotation for audit firm in addition to the already existing audit partner rotation rules. Qawqzeh, Endut, Rashid, Johari, Hamid and Rasit (2018) were of the view that mandatory

audit firm rotation reduces audit quality and its will lead to additional costs for switching audit firms. Onwuchekwa, Erah and Izedonmi (2012:70), “added that audit firm is mandated to switch after a number of years irrespective of the objectivity, independence, efficiency and quality of the auditor, the willingness of the shareholders and the management to keep the auditor”. Based on this study, auditor switching is seen as the movement of auditor from one client company to another either by the process of resignation or remover at the Annual General Meeting (AGM) by shareholders. Therefore, downward switching and upward switching was employed for the measurement of auditor switching.

## **Audit Litigation**

Audit litigation risk is a component of the auditor’s business risk (SAS 47). Business risk of the auditor occur when his/her is exposed to loss or injury to his professional practice from litigation, adverse publicity, or other events arising in connection with financial statements examined and reported on (AICPA, 1983). Geiger and Rama (2006:20), “are of the view that the absence of a going concern report for their financially stressed clients makes the auditors vulnerable to litigation”. It therefore implies that the investors may allege a reporting failure when a going concern report was not issued. Audit risk as a whole consists in the existence of a potential possibility for the auditor to present a positive opinion on the audited financial statements either by mistake or on purpose. Francis and Krishnan (1999) suggested that the threat of litigation provides auditors the incentive to report more conservatively for their audit clients. Specifically, they suggest that the higher the likelihood of auditor litigation, the greater the probability of the auditor issuing a going concern qualification for the client. Audit risk is the risk faced by auditors that they will fail to disclose material errors in the financial statements.

Campbell, Chen, Dhaliwal and Steele (2014), added that mandatory risk factor disclosures in corporate filings signify that disclosing risks in the financial statements in the description of critical audit matter by critics assume that risk factor disclosures tend to be boilerplate. However, the disclosure of critical audit matters may increase the cost of the audit, delay in issuing the audit report, and audit quality which is a sign of litigation in the financial statement (Carcello & Li, 2013). Nikolovski, Zdravkoski, Menkinoski, Dičevska and Karadjova (2016:23), “viewed that audit risk is the risk that occur when the auditor present an opinion that the financial statements are not presented fairly and impartially when they actually are”. Meanwhile, auditors may not be under-auditing income-decreasing discretionary accruals. In the view of Akhor, Akrawah and Okunrobo (2018), audit related litigation risk is primarily determined by the features of the audit engagement. Based on this study, audit litigation arises from the antecedent of audit failures among quoted companies.

## **Audit Tenure**

Audit firm's tenure is the length of time it has been filling the audit needs of a given client, has been mentioned as having an influence on the risk of losing an auditor's independence (Adeyemi & Okpala, 2011). A long association between a company and an accounting firm may lead to such close identification of the accounting firm with the interests of its client's management that truly independent action by the accounting firm becomes difficult pointed out that complacency, lack of innovation, less rigorous audit procedures and a learned confidence in the client may arise after a long association. Qawqzeh, Endut, Rashid, Johari, Hamid and Rasit (2018) defined audit tenure as the number of years an audit firm carried out audits assignment in a client or the number of years a company employs the same auditor. Auditor's tenure can be based on short term audit assignment and long term audit assignment. Meanwhile, the presence of longer auditor's tenure might impair the independence of the auditor and professionalism of the auditing profession.

In the view of Feleke (2017), a period of long audit tenure may cause and increase in the knowledge about the client's internal operations and reflect negatively on the auditor's independence in relation to higher audit quality. Moreover, shorter audit tenure provides the audit firm less knowledge about the client internal control mechanism which may lead to low level of audit quality. Rennie Kopp and Lemon (2014:137), posited that audit client relationship based on relationship outcome that may greatly impact on auditor-client agreement or disagreement. However, the disagreement may strengthen or weakened the auditor-client relationship on the area of auditor's judgement. Pierre and Anderson (1984) viewed audit tenure as short term basis when the same auditor has audited the financial statements of a company for two or three years, long audit tenure is when the same auditor has audited the financial statements of a company for nine or more years and medium audit tenure is when the same auditor has audited the financial statements for four to eight years.

## **Audit Fees**

The audit fees defined as the sums payable to the auditor, for carrying out audit services offered to the auditing company (Akrawah & Akhor, 2016). Ohidoa and Okun (2018) added that audit fee is the amounts of fees received by an auditor for carrying out an audit assignment on the accounts of the client firm. The determination of audit fee has become very critical after the corporate and audit failure experienced in Enron and Cadbury Plc in Nigeria (Abubakar, 2016). Soltani (2007) defined audit fee as the cost associated with companies that perceived to experience weak internal control process. The audit fees is the sums payable/paid to the auditor, for carrying out audit services offered to the auditing company (client). The company may change services of the audit firm for the purpose of reducing audit fee competition (Oladipupo & Emina, 2016). The auditor switching provides opportunities for new auditor to offer services at a discount to win a new client.

Gul, Basioudis and Ng (2011) claimed that the amount of paid to the auditor affects the auditor independence of the auditors rather than NAS fees. Audit fees are payments made to the auditor during the course of the carrying out the audit function and non-audit fee is the payments for other non-audit services carried out by the auditor which may not be part of the audit engagement negotiation. However, the presence of audit committees may be primarily interested in negotiating a lower audit fee for their clients instead of going for higher audit quality that attract a higher audit fee (Asthana, Khurana & Raman, 2019). They noted that fee competition is a useful mechanism for enhancing the quality of the audit report. Based on this study, audit pricing and existence of non-audit service (NAS) might has a signaling effect on auditor switching.

### **Audit Firm Size**

Savitri (2019) is of the view that audit firm size is of the condition for management take on auditors switching. Large audit firms are more likely to issue a more accurate opinion and for their audit clients to experience fewer restatements of financial statements and be subject to fewer regulatory sanctions. Ali, Noor, Khurship and Mahmood (2015) argued that the firms that are large in size have more funds to utilize the best technology and expertise to generate in time financial information to public. Therefore, the large sized firms manage their earning less as compared to small sized firms by keeping in view its reputation and cost in the existence of financial analysts.

### **Audit Delay**

Scholars and researchers of accounting has stressed that audit delay is called audit report lag or time lag. Nehme, Assaker and Khalife (2015) defined audit delay as the difference between company's fiscal year-end and the audit report date and reported in days. The timely disclosure and transparency in the financial statements are keen to quality financial reporting (Enofe, Aronnwam & Abadua, 2013). In the view of Robbitasari and Wiratmaja (2013), audit delay in releasing the audited financial statement of quoted company is one of the primary reasons why company change their audit firm in order to witness timely financial report to the user of the accounting information.

Timely corporate financial reporting is an important qualitative attribute and a necessary component of financial accounting (Dezoort & Salterio, 2001). However, "the discovery of material misstatements within financial statements subsequent to their issuance can impair the reputation of the company that issued those financial statements and the firm that performed the audit (Chaney & Philipich, 2002). Bos and Strating (2014) asserted that the disclosure of critical audit matters in auditor's report has the likelihood of influencing the division of roles between the auditor, the management board and the supervisory board members and the reporting of management and audit committees in the management report.



The audit report is the end product of every audit assignment that the auditor issues to the members of a client company expressing his opinion on the truth and fairness view regarding an enterprise's financial statements. The timeliness of financial reporting is the availability of information needed by decision makers for useful decision making before it loses its capacity to influence decisions. Recognizing the importance of timely release of financial information, regulatory agencies and laws in Nigeria have set statutory maximum time limits within which listed companies are required to issue audited financial statements to stakeholders (Iyoha, 2012).

## **Review of Empirical Studies**

The empirical framework was carried out in accordance to the objectives and hypotheses of the study under investigation and this discuss below: Yaman, Wen and Jinzheng (2013), "investigated the reason of auditor switching in China". The study made use of some selected listed companies in China and employed logistic regression technique for the data analysis. The logistic regression results revealed that the largest proportion of shareholding, the proportion of independent directors, and board meetings had a significant and negative correlation with auditor switching while full disclosure, litigation, and arbitration had a significant positive correlation with auditor switching.

Theng, Mun, Wei, Ying and Wen (2014) carried out a study on the determinant of auditor's switching in Malaysia's public listed T & S companies. The objective of the study is to examine the relationship between level of risk, ownership concentration, changes in audit fees on auditor switching. The study made use of ordinary least square regression for the analysis of data. The regression results showed the level of risk (audit litigation), ownership concentration, changes in audit fees and going concern issue had a significant relationship with the auditor switching. They also found out that the level of complexity has no significant relationship with the auditor switching. The study therefore recommended that management should make proper direction to enlighten the users of financial users in relying on the works of auditors as well as in determining the reasons behind such switching.

Suyono, Feng and Riswan (2013), examined the determinants of auditor switching in Indonesia". The objective of the study was to examine the effect of financial condition of the client, audit fee, competition intensity among audit firms, audit tenure and size of audit firm on auditor switching. "Primary sources of data were employed by distribution of 136 questionnaires to the Chairmen of manufacturing companies listed in Indonesian Stock Exchange for the periods of February to July 2012". It would be revealed from the results that financial condition of the client, competition intensity among audit firms, and audit tenure had a significant positive effect on auditor switching while audit fee and the size of audit firm had an insignificant effect on auditor switching.

Qawqzeh, Endut, Rashid, Johari, Hamid and Rasit (2018), examined the relationship between auditor tenure, audit firm rotation and audit quality. The study used longitudinal research design in the collection of secondary data for the analysis. It would be revealed from the regression results that mandatory audit firm rotation reduces audit quality. The result also revealed that the long time between the auditor and his client negatively impacted on audit the independence, audit quality and auditor switching. The study therefore recommended that management should carefully evaluate long auditor tenure as it impaired the level of audit quality and independence. This therefore implies that mandatory audit firm rotation brings about additional costs to client firm.

Budisantoso, Rahmawati Bandi and Probohudono (2017), examined the moderating effect of audit opinion accuracy on the relationship between corporate governance and downward auditor switching in five countries of Association of Southeast Asian Nations region. The sample population was made up of manufacturing companies listed in stock exchange of Indonesia, Malaysia, Singapore, Thailand and Philippine. Secondary data was sourced from the audited annual financial report of the sampled population and Logistic regression technique for the data analysis. “It would be revealed from the logistic regression results that audit committee, audit independent and financial deepening had a negative effect on downward auditor switching and thereby leading to high level of audit tenure”. The suggested that monitoring role of audit committee has the tendency of increasing audit quality and also prevent high auditor switching. Khasharmeh (2015), investigated the determinants for auditor switch among listed companies in Bahrain Bourse. The adopted a primary source of data where Cronbach’s alpha was used to test the reliability level of the construct items and T-test and multiple logistic regression techniques were used in the analysis. The t-test results showed that there are significant mean differences between auditor switching financial conditions of the client, audit fees, change in management and “qualified audit opinion. Also, the multiple logistic regression analysis revealed that financial condition of client, size of public audit firm and change in management have negative relationships with auditor switch while audit fees, competition among PAF and qualified audit had positive relationships with auditor switching. The study recommended that a comparative study of auditor switching for different emerging capital markets should be conducted.

Similarly, Asthana, Khurana and Raman (2019), investigated the competing views on the relation between fee competition among Big 4 auditors and audit quality in US local audit markets”. They found out from the empirical findings that audit fee competition has a positive relation with the incumbent auditor’s switching risk. “The study suggested that fee competition is a useful mechanism for enhancing the quality of the audit report.

Savitri (2019), carried out a study on auditor switching behaviour in LQ45 companies in

Indonesia. The objective of the study was to investigate the effect of audit opinions, the size of public accounting firms and changes in management auditor switching. The study made use of secondary data where 33 companies were sampled for the period of 2014 to 2016 and adopted logistic regression in the analysis of data. The logistic regression results showed that but the size of the public accounting firm had a significant effect on auditors switching while audit opinions and management changes had no significant effect on auditor switching. This therefore means that management of the companies decided to implement of audit switching for quality financial reporting. The studies suggested public companies with a larger number of samples should be incorporated and add variables such as audit fees, client financial conditions, and the level of competition in further empirical studies.

Akinpelu, Omojola, Ogunseye and Bada (2013), studied the pricing of audit services in Nigerian commercial banks. They adopted a cross-sectional research design for the data analysis for the year 2009. “The empirical result from the study showed that a positive and significant relationship exists between auditor size, current saving deposits account ratio and the number of consolidated subsidiaries and an insignificant relationship with audit fee.

Kasih and Puspitasari (2017), studied the effect of audit delay, client size and audit committee changes on auditor switching in all companies listed on Indonesia Stock Exchange for the period of 2012 to 2015. The sample size of 156 listed companies on Indonesia Stock Exchange was selected with total observation 624 and logistic regression technique for the analysis of data. The regression results revealed that client size has a negative and significant effect on auditor switching while audit delay and audit committee changes has a positive and insignificant effect on auditor switching. The study recommended that public accounting firm and auditors should maintain a reasonable level of independency in order to increase the quality of audit and timeliness of financial report.

Enofe, Mgbame and Abadua (2013), determined the relationship between audit firm rotation and audit report lag in Nigeria quoted company. The study adopted a cross-sectional research design where secondary data was collected from fifty (50) randomly selected quoted companies on the floor of the Nigerian Stock Exchange (NSE) for the year 2011. The Ordinary Least Square technique (OLS) was used in the analysis of data with the aid of Eviews 7.0 econometric software. The regression results showed that audit fees, financial year-end and audit firm size had a positive relationship with audit report lag. The result also showed that audit firm rotation and company size had a negative and insignificant relationship with audit report lag. The study recommended for further empirical study should be carried out on the influence of ownership structure and government policies on audit report lag.

Pawitri and Yadnyana (2015), studied the effect of audit delay on auditor switching in Indonesia. The study made use of secondary data sourced from quoted companies on Indonesia Stock Exchange and employ ordinary least regression technique for the data analysis. The results showed that audit delay has significant effect to auditor switching. This implies that presence of audit delay witness in the audited financial report make company to the change the services of audit firm. The study recommended that the presence of audit delay could influence stock price and also public and investor's view.

## **Theoretical Framework**

The study is anchored on signaling theory.

### **Signalling Theory**

The signalling theory acts a signal to management teams in relation to auditor switching for higher quality reporting. The, Ong and Ng (2016) argued that the signaling theory provides better signal of promising expectations from the emerging market information. However, there is good indication for shareholders' interests which have to be properly monitored. The theory also creates a platform for better audit reporting useful to improve performance of the company. Sun, Salama, and Hussainey (2010), argued that the signal theory used to reduce the level of information asymmetry in the capital market". Therefore, "the adoption of International Financial Reporting Standard (IFRS) would help to enhance transparency and timeliness of audited financial report to users of accounting information (Moon, 2008). Meanwhile, the application of IFRS is a good signal to the stakeholders as information disclosed under international standards is of high quality and enhance the disclosure of critical audit matters. The absence of asymmetry information might help cushion the effect of auditor's switching.

## **3. METHODOLOGY**

### **Research Design**

The study adopted the longitudinal research design. The research design enabled the researcher to examine the signaling effect of audit firm mechanism on auditor switching in Nigeria listed non-financial companies on the floor of the Stock Exchange. The population for the study consisted of all the one-hundred and seventy (170) quoted companies in the Nigerian Stock Exchange (NSE). The companies for the population have the responsibility to publish their financial statements for seven consecutive years for the period 2012- 2018. The random sampling technique was adopted and our sampling technique is adjusted to ensure fair representative from each company of the sector in the sample size. In considering sample size, Saunders and Thornhill (2003) suggested that a minimum number of thirty (30) for statistical observations provided a useful rule of thumb. Therefore, the sample size was based on the one-hundred and seventy (170) quoted companies as at 31

December, 2018 in Nigerian Stock Exchange (NSE, 2018 Fact Sheet).

### 3.1: Sample Selection of Quoted Companies

Sectors	Service Companies/Mergers	Non-Service Companies
Agric		5
ICT	7	
Services	25	
Conglomerates	6	
Constructions/Real Estate		9
Healthcare		10
Industrial Goods		14
Financial Services	57	
Natural Resources		4
Oil and Gas		12
Consumer Goods		21
<b>TOTAL</b>	95	75

**Source:** Author's Compilation (2020)

Companies from ICT, conglomerates, services and financial services were excluded from the sample population. The justification for excluding these companies are based on the fact that these companies are service rendering companies as well as conglomerate companies. Therefore, we use the statistical formulae of Ewododhe (2011) to arrive at the sampled size of the remaining total population of 75 quoted companies. This was mathematically expressed as:  $n=1/3N$ ;  $1/3 \times 75 = 25$

### Model Specification and Measurement of Variables

A binary regression econometric model is specified in equation in this study. By definition, binary regression econometrics model is one that seeks to explain variation in the values of the dependent variable on the basis of changes in the independent variables. The model

below is adapted from McFadden Logistic Regression Model (1974) as measured in recent prior studies (Francis & Wang, 2005; Krishnan, Sami & Zhang, 2005). The logistic regression was functionally represented below:

$$\text{AUDSW} = F(\text{AUDLG}, \text{AUDT}, \text{AUDF}, \text{AUDF}, \text{AUDD}) \dots\dots\dots (1)$$

The binary regressions with error term ( $e_t$ ) is expressed in the econometric equation below;

$$\text{AUDSW} = \beta_0 + \beta_1 \text{AUDLTG} + \beta_2 \text{AUDT} + \beta_3 \text{AUDF} + \beta_4 \text{AUDFS} + \beta_5 \text{AUDD} + e_t \dots\dots\dots (2)$$

Where;

### **Dependent Variable**

AUDSW = Audit switching was measured by a dummy variable: “1” if auditor has been switched and “0”, if auditors have not been switched (Chadegani, Mohamed & Jari, 2011; Nazri, Smith, & Ismail, 2012).

### **Independent Variables**

AUDLTG= Audit litigation. Audit litigation was measured by a dummy variable (1) if the audit report on restatement of financial reports, wrong doings and law suit against the company otherwise (0) (Akhor, Akrawah & Okunrobe, 2018)

AUDT = Audit Tenure. Audit tenure was measured by a dummy. “1” if audit firm audit the company for the sampled period of 7 years otherwise “0”.

AUDF = Audit Fee. Audit fee was measured by the amount paid to the audit firm for carrying out their audit engagement (De Fond, 1992).

AUDFS = Audit Firm Size. Audit firm size was measured by a dummy variable, “1” for Big 4 audit firm [Deloitte, Klynveld Peat Marwick Goerdeler (KPMG), Ernst & Young and Pricewaterhouse coopers(PWC)] OTHERWISE “0” (Choi, Lim & Mali, 2017)/

AUDD = Audit Delay. Audit delay was measured by the company’s year-end (eg December 31<sup>st</sup> until the date of auditor sign the audited financial report (measured with number of days) (Nehme, Assaker & Khalife, 2015; Pawitri & Yadnyana, 2015).

The a priori sign;  $\beta_1, \beta_3, \beta_5 > 0$   $\beta_2, \beta_4 < 0$ ;  $\beta$  = Constant Coefficient;  $\beta_1 - \beta_5$  = Explained coefficients of the independent variables

## Method of Data Analysis

The econometric techniques adopted in this study were Logit and Probit regression techniques. The use of Logit and Probit regression methodology in this study is based on the fact that the dependent variable is a dummy. The regression analysis was evaluated using individual statistical significance test (Z-test) and overall statistical significance test (LR-test). The goodness of fit of the model was tested using the coefficient of determination (McFadden R-Squared). The analyses in this study were conducted using E-views 9.0 and Stata 13.0 econometric software.

## 4. PRESENTATION AND DISCUSION OF RESULTS

In order to examine the determinants of auditor's switching, we employed binary logit and binary probit regression techniques to examine the relationship between the dependent variable and independent variables and to test the formulated hypotheses. The regression results obtained are presented in table 4 below:

Table 4.1: Binary Regression Results

	Expected Sign	Logit	Probit
C		-1.85 (-2.67)* [0.00]	-1.09 (-2.76)* [0.00]
AUDLGT	-	-0.27 (-0.41) [0.68]	-0.15 (-0.43) [0.67]
AUDT	-	-16.61 (-14.23) [0.00]*	-4.73 (-19.60) [0.00]*
AUDF	-	2.96 (0.68) [0.49]	1.68 (0.67) [0.50]
AUDFS	- +	-0.21 (-0.37) [0.71]	-0.11 (-0.36) [0.71]
AUDD	-	0.002 (0.67) [0.50]	0.001 (0.62) [0.53]

Pseudo R <sup>2</sup>	0.13000	0.12950
Wald Chi <sup>2</sup>	253.67	1145.75
Prob > Chi <sup>2</sup>	0.0000	0.0000

Note: (1) Parentheses ( ) are z-statistic while bracket [ ] are p-values

(2) \* 1 level of significance & \*\* 5 level of significance.

**Decision Rule:** Hypotheses is tested at 5% (0.05) at level of significance. The null hypothesis (H<sub>0</sub>) was accepted, if the probability value (P-value) is greater than 5% (0.05) otherwise rejected.

The table 1 above shows that the coefficient of determination (Pseudo R<sup>2</sup>) value of 0.13000 and 0.12950 for binary logit and binary probit regression revealed that about 13% of the systematic changes in the dependent variable, auditor's switching were jointly explained by the independent variables, audit litigation, audit tenure, audit fees, audit firm size and audit delay leaving about 87% unexplained by factors not captured in the model. On account of the overall significance of the model, the Wald Chi<sup>2</sup> and its associated probability of 0.00 across the binary models (logit and probit) indicates that all the independent variables taken holistically significantly explain the dependent variable. Hence, the explanatory power of the model is strong.

Based on the individual relationship of the independent variables, the signs of the z-statistics showed that audit litigation (AUDLIGT) exerts a negative (-0.27) and insignificant (0.68) effect on auditor's switching (AUDSW) of the binary logit and a negative (-0.15) and insignificant (0.67) effect on auditor's switching (AUDSW) of the binary probit. The negative effect signifies a change in audit litigation would lead to low level of auditor's switching but it is statistically insignificant. The insignificant effect is because the variable failed z-test at >0.05 level of significance.

Audit tenure (AUDT) exerts a negative (-16.61) and significant (0.00) effect on auditor's switching (AUDSW) at 1% level of significance of the binary logit and exerts a negative (-4.73) and significant (0.00) effect on auditor's switching (AUDSW) of the binary probit at 1% level of significance. With respect to the individual significance of the variable, the probability values of the z-statistics revealed that the variable significantly reduce the level of auditor's switching at 1% significance level. This therefore means that the presence of audit tenure has the probability of experiencing low level of auditor's switching. This indicates audit tenure is a main determinant of auditor's switching. The significant effect is because the variable passed z-test at < 0.05 level of significance.

Audit fee (AUDF) exerts a positive (2.96) and insignificant (0.49) effect on auditor's switching (AUDSW) of the binary logit and exerts a positive (1.68) and insignificant (0.50) effect on auditor's switching (AUDSW) of the binary probit. The positive effect signifies an increase in audit fees would lead to frequency of auditor's switching but it is statistically



insignificant. The insignificant effect is because the variable failed z-test at  $>0.05$  level of significance.

In the case of audit firm size (AUDFS), the variable exerts a negative (-0.21) and insignificant (0.71) effect on auditor's switching (AUDSW) of the binary logit and exerts a negative (0.11) and insignificant (0.71) effect on auditor's switching (AUDSW) of the binary probit. The negative effect implies that change in client firm size has the tendency of reducing level of auditor's switching but it is statistically insignificant. The insignificant effect is because the variable failed z-test at  $>0.05$  level of significance and audit delay (AUDD) exerts a positive (0.002) and an insignificant (0.50) effect on auditor's switching (AUDSW) of the binary logit and exerts a positive (0.001) and an insignificant (0.53) effect on auditor's switching (AUDSW) of the binary probit. The positive effect indicates the presence of audit delay has the tendency of witnessing high level of auditor's switching but it is statistically insignificant. The insignificant effect is because the variable failed z-test at  $>0.05$  level of significance. To check for the misspecification of the model, Ramsey Rest test is conducted and it is revealed that the high probability value of the t-statistic, f-statistic and likelihood ratio (0.1376, 0.1376 and 0.1286) showed that the model for the study is well specified. This means that the result from this study is very sound for policy implementation and recommendation.

## Discussion of Findings

The discussion of findings is done based on the following hypotheses:

**Audit litigation has no significant effect on auditor's switching:** The binary regression showed that audit litigation exerts a positive and an insignificant effect on auditor's switching across the binary models (logit and probit). The finding was inconsistent with the findings of Akinbuli (2010) that audit expectation gap is based on the high rate of litigation that awaits the audit profession and as well as the alarming increase in liability against the auditor. The findings of Cheng and Theng (2014) and Yaman Wen and Jinzheng (2013) were also inconsistent with the result that litigation has a significant positive association with auditor switching. The study therefore suggested that we should accept the hypothesis that audit litigation has no significant effect on auditor's switching.

**Audit tenure has no significant effect on auditor's switching:** Audit tenure exerts a negative effect and a significant effect on auditor's switching across the binary models (logit and probit) at 1% level of significance. The finding is consistent with the findings of Suyono, Feng and Riswan (2013) that audit tenure significantly affect auditor switching. The result is also consistent with the finding of Qawqzeh, Endut, Rashid, Johari, Hamid and Rasit (2018) on the relationship between auditor tenure, audit firm rotation and audit quality that the long time between the auditor and his client negatively impacted on auditor

switching. The study therefore suggested that we should reject the hypothesis that audit tenure has no significant effect on auditor's switching.

**Audit fee has no significant effect on auditor's switching:** Audit fee exerts a positive and an insignificant effect on auditor's switching across the binary models (logit and probit). The finding is consistent with the findings of Suyono, Feng and Riswan (2013) audit fees had an insignificant effect on auditor's switching. The study of Nyakuwanika (2014) was inconsistent with the finding that audit fees significantly influence auditor's switching from one company to another. The finding of Hussein (2015) and Asthana, Khurana and Raman (2019) were also inconsistent with the results that audit fee competition had a positive relation with the incumbent auditors switching risk. Also, the finding of Khasharmeh (2015) on the determinants for auditor switch among listed companies in Bahrain Bourse found contrary result that audit fees had positive relationships with auditor switching. The study therefore suggested that we should accept the hypothesis that audit fee has no significant effect on auditor's switching.

**Audit firm size has no significant effect on auditor's switching:** Audit firm size exerts a positive and an insignificant effect on auditor's switching across the binary models (logit and probit). The result is inconsistent with the finding of Savitri (2019) on auditor switching behaviour in LQ45 companies in Indonesia that but the size of the public accounting firm had a significant effect on auditors switching. The findings of Choi, Lim and Mali (2017) on the relationship between mandatory audit firm rotation and Big4 effect on audit quality in South Korea also inconsistent with the result that mandatory audit firm rotation and audit firm size were significantly related. The study therefore suggested that we should accept the hypothesis that audit firm size has no significant effect on auditor's switching.

**Audit delay has no significant effect on auditor's switching:** Audit delay exerts a negative and an insignificant effect on auditor's switching across the binary models (logit and probit). The result is consistent with the findings of Kasih and Puspitasari (2017:589) on the effect of audit delay, client size and audit committee changes on auditor switching in Indonesia that audit delay has a positive and insignificant effect on auditor switching. The findings of Enofe, Mgbame and Abadua (2013) on the relationship between audit firm rotation and audit report lag in Nigeria support the results that audit firm rotation had a negative and insignificant relationship with audit report lag. The result is inconsistent with the findings of Pawitri and Yadnyana (2015) on the effect of audit delay on auditor switching in Indonesia audit delay has significant effect to auditor switching. The study therefore suggested that we should accept the hypothesis that audit delay has no significant effect on auditor's switching.

## 5. CONCLUSION AND RECOMMENDATION

The study focused on the signaling effect of audit firm mechanisms on auditor's switching in Nigeria. The presence of accounting quality increases with increase in auditor's switching as a result of increased auditor independence. The audit report is the end product of every audit assignment that the auditor issues to the members of a client company expressing his opinion on the truth and fairness view regarding an enterprise's financial statements. However, corporate organizations have to change the service of an audit firm as a result of poor audit quality. Auditor's switching is seen as the movement of auditor from one client firm to another either by resignation or dismissal by the recommendation of the audit committees. The rate of auditor's switching is mainly due to lack of audit independence. The independence of the auditor is very keen in the determination of the amount of money paid in the audit engagement. The binary regressions results showed audit litigation exerts a positive and an insignificant effect on auditor's switching, audit tenure exerts a negative effect and a significant effect on auditor's switching, audit fee exerts a positive and an insignificant effect on auditor's switching, audit firm size exerts a positive and an insignificant effect on auditor's switching and audit delay exerts a negative and an insignificant effect on auditor's switching across the binary models.

The study recommended that management of quoted non-financial companies should consider the level of audit risk in the area of auditor's switching with the aim to improve audit quality and auditor independence, the study also recommended that shareholders of non-financial quoted companies should consider the effect of auditor's tenure before selection and engagement of auditor and recommended that shareholders of quoted companies should ensure that there is timeliness of financial reporting.

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# DETERMINANTS OF AUDIT FEES AMONG QUOTED MANUFACTURING COMPANIES IN NIGERIA

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## **Abstract**

*This study examined the determinants of audit fees of quoted companies in Nigeria. The study determine the association between firm size, firm complexity, firm profitability and audit fees among manufacturing companies quoted on the Nigeria Stock Exchange. A total of fifty-five (55) quoted manufacturing companies were selected for a period of seven (7) years (2012 – 2018). The data used in this study were sourced from the audited annual report of the sampled companies. The data were estimated with the aid of E-view 9.0 econometrics software using the Panel Least Square (OLS) regression technique. The study uncovered that there is a significant relationship between firm size, firm complexity, firm profitability and audit fee. We therefore recommend that corporate organization in Nigeria should pay proper attention to firm size and firm complexity as they are major determinants of audit fees in Nigeria.*

**Key words:** Audit fees, firm complexity, firm profitability, firm size

## **Introduction**

Audit is an independent inspection of an entity where the auditor delivers unbiased results about the appropriation of funds by underlying organization (Masood & Afzal, 2016). The providers of audit service charge their clients certain fees as remunerations for their audit efforts, the audit firms are at liberty to charge what they deem fit as audit fees (Oladipupo & Monye-Emina, 2016). According to Urhoghide and Izedonmi (2015), audit fee refers directly to payments made to the auditor that relates directly to the audit function. Generally, the audit fee should cover audit costs and provide a reasonable profit. Therefore, the audit fee can be seen as a combination of two items; audit cost and profit or auditors reward.

Audit fees is the amount (wages) charged by the auditor for an audit exercise performed on the financial statements of an enterprise (auditee) (Kimeli, 2016). Kimeli (2016) confirmed that “audit fee determination is affected by audit firm attributes or by the client’s company characteristics. He added that high audit fees will be charged by big 4 audit firms, which are normally big in terms of staffing and geographical coverage, with high reputation gained from several years’ experience and industry specialization, but competition amongst audit firms is however expected to lower audit fees charged and that big companies with risky operations and likely high profitability are charged relatively higher audit fees compared to smaller companies”.

Urhoghide and Izedonmi (2015) made us to understand that “Simunic (1980) was the first to explore the determinants of audit fees using empirical evidence”. “He finds that the complexity of the business, asset size, asset-liability ratio, etc. all affects the level of audit fees”. From then on, many scholars continue to study the determinants of the audit fees base on Simunic’s audit fee model. Since the early work on the pricing of audit services by Simunic (1980), substantial progress has been made in understanding and providing country specific empirical evidence on the factors which are involved in the determination of audit fee (Urhoghide & Izedonmi, 2015). They include the US studies, like the Taylor and Simon (1999); Callaghan, Parkash and Singhal (2008); Mellett, Peel and Karbhari (2007); Rubin (1988); Pratt and Stice (1994) and Bedard and Johnstone (2010). Similarly, the UK studies include Moizer, (1997); Brinn, Peel and Roberts, (1994) and Pong (2004). In spite of this, it will be misleading to assume implicitly that findings in the developed countries in respect of audit fee determinants can be taken ipso facto as being exactly the same in the developing economies (Nigeria inclusive). This is because of certain peculiarities of the business environments in several developing markets. For example, unlike for developed markets, developing markets have only a few business entities listed on the stock exchanges and most audit firms’ sizes can be classified as small and medium and the presence of the big audit firms looms large in certain sectors such as in the financial and petroleum industries. Also, the audit environment, general business environment, regulatory framework, culture, technology, legal and business sizes differ very significantly. For instance, what may be considered as a small company in developed countries may be regarded as large in developing countries. All these factors could in fact impinge or reflect in one way or the other in the determination of the audit fee (Urhoghide & Izedonmi, 2015).

According to Kimeli (2016), the audit fee charged is influenced by auditor dependent factors: auditor size, the reputation of the auditor, auditor experience, competition in the audit market, industry specialization of the auditor and big four status of the auditor. Audit fees is also determined by the audited company factors such as company size, complexity of operations of the company, audited firm risk, and the profitability of the audited firm. Similarly, Musah (2017) affirm that audit fee is determined on the basis of characteristics specific to auditing firm and client. Characteristics of client include: size of its business, complexity of its business and risk of the business. However, engagement attributes are also significant determinants of audit fee (Sundgren & Svanstrom, 2013; Hentati & Jilani, 2013). Hay, Knechel, and Wong, (2006) conducted a meta-analysis of the audit fee studies conducted up to year 2007. In their study, they discussed the audit fee determinants that have been used in all studies conducted regarding pricing of audit service. Results of the study show that auditors charge fee based on three factors. These are; client specific (client’s business size, client’s risk and client complexity), auditor specific (size of the firm) and engagement (busy season). The study shows that client’s size of business had



significant positive relationship with audit fee in all studies while other attributes of client, that is, client's complexity of business and client's risk show mixed results. Audit fees are also determined by the client's company factors such as company size, complexity of operations of the company, client's company risk, and the profitability of the clients' company (Hay et al., 2006).

In line with the above discussion, this study relies on the affirmation of Hay et al., (2006) and Musah, (2017) by using company specific variables of firm size, firm complexity, firm profitability as well as firm industry) as the determinants of audit fees in Nigeria.

### **Statement of the Research Problem**

Although the determinants of audit fees in developed economies are known, little about determinants of audit fees in Nigeria exist in literature. Moreover, there seem to be little empirical investigation into the relative significance of the determinants of audit fees on listed companies in Nigeria. Thus, there is the need to examine whether company specific variables of firm size, firm complexity, firm profitability and firm industry are significant in determining auditing fees in Nigeria. Also, from the considerable amount of research so far been conducted in both developed and developing countries on the determinants of audit fee, the researchers observe the existence of theoretical divergence and inconsistency in the finding of the previous studies. Examples are the studies of Otete (2018), Musah (2017), Kimeli (2016), Kikhia (2015), Urhoghide and Izedonmi (2015), Urhoghide and Emeni (2014), Hassan and Naser (2013).

From previous empirical studies, Otete (2018) found that client's firm size have a significant influence on the auditor's fee. The study of Musah (2017) reveals client's size of business and profitability are significant determinants of audit fee. Kimeli (2016) found a significant link between client size, client complexity and audit fee; while the study of Urhoghide and Izedonmi (2015) shows that firm size and complexity have a positive and significant impact on audit fee. Similarly, Kikhia (2015) found that company size seems to have been the key determinant of external audit fees. Also Hassan and Naser (2013) found a direct relationship between corporate size, business complexity and audit fees. And Urhoghide and Emeni (2014) found that client size, profitability, complexity, and industry exert a significant effect on audit fees in Nigeria.

On the contrary, the study of Kimeli (2016) found no significant relationship between client profitability and audit fee. Also Urhoghide and Izedonmi (2015) found that profitability and industry have a negative and significant influence on audit fee, while Hassan and Naser (2013) revealed that audit fees are not significantly influenced by company's profitability.

The existence of these inconsistencies in the findings of the previous studies creates room for knowledge gap and the call for more investigation in this light and consequently

the need for the study. Premised on the above problem, this study would seek to answer the following research questions:

1. What is the relationship between firm size and audit fees?
2. What is the relationship between firm complexity and audit fees?
3. What is the relationship between firm profitability and audit fees

### **Objective of the Study**

The objective of this study from the view point of the researcher is basically segmented into general and specific objectives. The general objective is on the determinants of audit fees among quoted firms in Nigeria. However, the specific objectives of the study are to:

- i. examine the relationship between firm size and audit fees;
- ii. ascertain the relationship between firm complexity and audit fees; and
- iii. examine the relationship between firm profitability and audit fees;

### **Research Hypotheses**

In order to establish the factors serving as the determinants of audit fees, the following null hypotheses are specified as:

- Ho<sub>1</sub>: There is no significant relationship between firm size and audit fees.  
Ho<sub>2</sub>: There is no significant relationship between firm complexity and audit fees.  
Ho<sub>3</sub>: There is no significant relationship between firm profitability and audit fees.

### **Literature Review**

#### **Concept of Audit Fee**

Audit fee is the cost incurred by the company to pay a public accounting firm in order to audit the financial statements of the company (Rusmanto & Waworuntu, 2015). According to Elkana (2016), audit fees refer to the remuneration payable to an auditor for audit services rendered. Audit fee determination is affected by audit firm attributes or by the client's company characteristics. High audit fees will be charged by big 4 audit firms, which are normally big in terms of staffing and geographical coverage, with high reputation gained from several years' experience and industry specialization. Competition amongst audit firms is however expected to lower audit fees charged.

Soyemi and Olowookere (2013) describe audit fees as the sums payable/paid to the auditor, for the audit services offered to the auditee (client). Similarly, Amba and Al-Hajeri (2012) define audit fee as a fee that company is expected to pay to an external auditor for performing audit and assurance services. This type of fees is of interest to both auditors and their clients as it represent cost to companies as much as reputation of quality of audit services. Companies are required by law to have their accounts audited at reasonable fee without compromising on quality of audit. On the other side, auditors expect to receive

adequate fees for their services to maintain their services at a satisfactory level.

### **Determinants of Audit Fee**

From our examination of contemporary accounting literature, we find the following factors to be quite recurrent as determinants of auditor fees. We shall review a number of these determinants as follows:

#### **Firm Size and Audit Fee**

The firm size means that the ability a firm possesses and the variety and number of production capability or the quantity and multiplicity of services a firm can be offered concomitantly to its customers (Sritharan, 2018). Firm size is the size of a company measured by the amount of total assets or property owned by the company (Putra & Wilopo, 2017).

According to Hassan and Naser (2013), large size companies would be involved in more activities than small ones. They are usually more publicly visible and they tend to disclose more information than small companies. Consequently, more audit services and time are needed to audit large size companies than small ones. They also have enough financial resources to recruit big international audit firms. Hence, large size companies would pay higher fees than small ones. Using corporate size is justified based on the basis that auditors spent more time on auditing transactions of more complex businesses (Khasharmeh, 2018).

#### **Firm Complexity and Audit Fee**

In addition, another major variable in explaining the variance between audit fee charges is the organizational complexity of the client firm (Davis, Copley, & Dount, 1993). Audit fees were shown to vary according to number of subsidiaries (Wilson, 2003), the ratio of auditee's receivables and/or inventories to the auditee's total assets (Simon, 1985). In these studies, organizational complexity was found to be positively related to audit fee determination. Nevertheless, Firth (1997) found that organizational complexity was related to audit fees but this relationship was rather weak or insignificant.

Auditee (firm) complexity could be defined as either the number of segments of an organization or the change in its conglomerate status. It is likely that the level of audit work will increase with the level of firm complexity. In previous private sector studies, proxies for complexity have included the number of subsidiaries, the number of industries in which the company participates, the number of different company locations and variables relating to asset composition. Basically, audit fees are dependent on how long auditors have to spend for an audit engagement. It means companies with complexity are charged higher audit fees.

## **Firm Profitability and Audit Fees**

Corporate profitability can basically be defined as the degree to which an organization can effectively utilize its available funds and assets and convert them into profits (Ehi-Oshio, Adeyemi & Enofe 2013). Profitability is defined as an indicator to the firm's performance in managing its assets (Elshabasy, 2017). Based on the agency theory, profitability is considered an indicator for satisfying the shareholders' needs, especially when returns on equity (ROE), is used as profitability measurement as it measures the firm's performance (Ebrahim, Soliman, & Rezk, 2015).

Empirically, Mgbame, Eragbhe, and Nosakhare (2012) found return on assets (ROA) considered alongside auditor tenure to be inversely related to audit quality aside from ROE which exhibited a positive effect. The two variables measure profitability and performance respectively and are expected to also influence audit fees.

## **Empirical Studies on Determinants of Audit Fees**

Urhoghide and Izedonmi (2015) examine the effects of audit client characteristics, audit firm characteristics, corporate governance variables on audit fee in Nigeria. The study used secondary data obtained from the published annual accounts and reports of one hundred and fifty three (153) companies from eleven (11) sectors of companies quoted on the Nigerian stock exchange from 2007-2012. The variables were analyzed using descriptive and correlation analysis. Thereafter, multiple regression analysis was conducted using pooled ordinary least squares and the panel estimated generalized least squares. Consistent with other prior research, the results for audit client characteristics revealed that audit client size and complexity have a positive and significant impact on audit fee while profitability, fiscal year end and industry have a negative and significant influence on audit fee. For corporate governance variables, board diligence, board expertise, board size, board independence, and audit committee independence, all have a positive and significant impact on audit fee. For audit firm characteristics, audit firm type, and international linkage have a positive and significant impact on audit fee while audit firm tenure has a negative and significant impact on audit fee.

Iqbal, Ahmed, Zaidi, and Raza (2015) explore the determinants of share price in Karachi Stock Exchange's (KSE) oil & gas and cement sector. The study employed a panel data approach on oil & gas and cement sector of Karachi Stock Exchange (KSE) over the period of 2008 to 2013. The fixed effect and random effect model was used to determine the research objective. The study reveals that earning per share and book value per share are positive and significant determinants of share price in both sectors while dividend yield is negatively significant in cement sector.

Ajide (2014) examined the determinants of audit pricing in Nigerian commercial banking industry. Panel data analysis was carried out to find out the determinants of audit fees with variables such as banks' complexity, risk and operating performances as the

explanatory variables and audit fees as the explained variable. Fourteen (14) commercial banks were selected out of twenty-two which made up the population. Data were sourced from the annual reports and accounts of the selected banks for the year 2008 to year 2012 period. The Fixed effect firm model estimations revealed that there is a positive association of complexity, risk, but negative association between operating performances and audit fees.

Soyemi (2014) examined the clients' and the auditors' attributes as factors capable of determining external audit fees to be paid/payable by non-financial companies listed on the Nigerian Stock Exchange (NSE). Specific characteristics that were investigated to have significant influences on external audit fees are size, complexity, risk, and auditor type. The findings from this study appear to be largely consistent with previous works as the regressions significantly accounted for variations (adjusted  $R^2=43\%$ ) in the pricing of external audit fees across industry. Surprisingly, the premium value for the Big4 was not only positive, but significantly higher suggesting the near dominance of the audit market by these big accounting firms in the Nigeria.

Hassan and Naser (2013) examined factors influencing audit fees paid by non-financial companies listed on Abu Dhabi Stock Exchange (ADX). Data were collected from the 2011 annual and corporate governance reports published by the Emirati non-financial companies listed on ADX. Backward regression analysis was employed to assess the association between audit fees and certain company's attributes. Their findings showed a direct relationship between audit fees and corporate size, business complexity and audit report lag variables. An inverse relationship was detected between audit fees and industry type and audit committee independence. The findings also revealed that audit fees are not significantly influenced by company's profitability, risk, and status of audit firm.

Furthermore, Akinpelu, Omojola, Ogunseye, and Bada (2013) also investigated the determinants of audit fees in commercial banks in Nigeria. They collected data from a sample of banks mostly quoted on Nigerian Stock Exchange. Consistent with previous studies, the results showed that bank size, degree of bank complexity and transaction and saving accounts to total deposit ratio are positively related and statistically significant to audit fees charged by the auditors. Even though, non performing loan was positively related to audit fees, it was statistically insignificant. While, the risk weighted capital adequacy ratio was negatively related and statistically insignificant to audit fees.

## **METHODOLOGY**

The study adopts ex-post factor research design. Ex-post facto design is a quasi-experimental study examining how an independent variable, present prior to the study in the participants, affects a dependent variable.

The population of the study consists of the entire sixty four (64) manufacturing companies quoted on the Nigerian Stock Exchange (NSE, 2018).

The sample size for this study is fifty-five (55) manufacturing companies quoted on the Nigerian Stock Exchange as at 31<sup>st</sup> December 2018. The sample size was achieved with the aid of Yamani (1967) formula. The computation of Yamani is based on the formula:

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

Where:

n = Sample Size

N = Population

e = Margin of Error (0.05)

Where:

N = 64 (*population of manufacturing companies*)

(e)<sup>2</sup> = 0.05 *level of significance*

$$\frac{64}{1 + 64(0.05)^2}$$

$$= \frac{64}{1 + 64 \times (0.0025)}$$

$$= \frac{64}{1 + 0.16}$$

$$= \frac{64}{1.16}$$

$$= 55$$

### Model Specification

The model for this study is in line with prior studies (Iosivan, 2008; Carson, Fargher & Simon, 2005) who examined the determination of audit fee from the demand factors which deals largely with the audit-client features. The model is specified below:

Audit Fee = f(Firm Size, Firm Complexity, Firm Profitability, Client Industry) .....1

This can be re-specified in regression form as:

AUDFEE<sub>it</sub> = a + β<sub>1</sub>FSIZE<sub>it</sub> + β<sub>2</sub>FCOMP<sub>it</sub> + β<sub>3</sub>FPROF<sub>it</sub> + e<sub>it</sub> .....2

**Where:**

AUDFEE	=	Audit Fee
FSIZE	=	Firm Size
FCOMP	=	Firm Complexity
FPROF	=	Firm Profitability
$e_{it}$	=	Error terms
"i"	=	Firms
"t"	=	Time

The apriori signs are  $\beta_1 > 0$ ,  $\beta_2 > 0$ ,  $\beta_3 > 0$ , and  $\beta_4 > 0$

**Operationalization of Variables**

S/N	Variables	Abbreviation	Definition	Measurement	Used By	Aprori Sign
1.	Audit Fee	AUDFEE	Dependent Variables	This is operationalized using log of the amount of audit fees paid to external auditors by the firms	Soyemi, & Olowookere, (2013)	
2.	Firm Size	FSIZE	Independent Variable	The firm size is operationalized using the log of total assets	Hassan & Naser (2013)	
3.	Firm Complexity	FCOMP	Independent Variable	Firm complexity is operationalized using the ratio of inventories and receivable over total assets	Soyemi (2014)	+
4.	Firm Profitability	FPROF	Independent Variable	Firm profitability is operationalized using profit after tax	Hassan & Naser (2013)	+

*Source: Compiled from Previous Empirical Studies*

## DATA ANALYSIS AND INTERPRETATION

**Table 1: Descriptive Statistics**

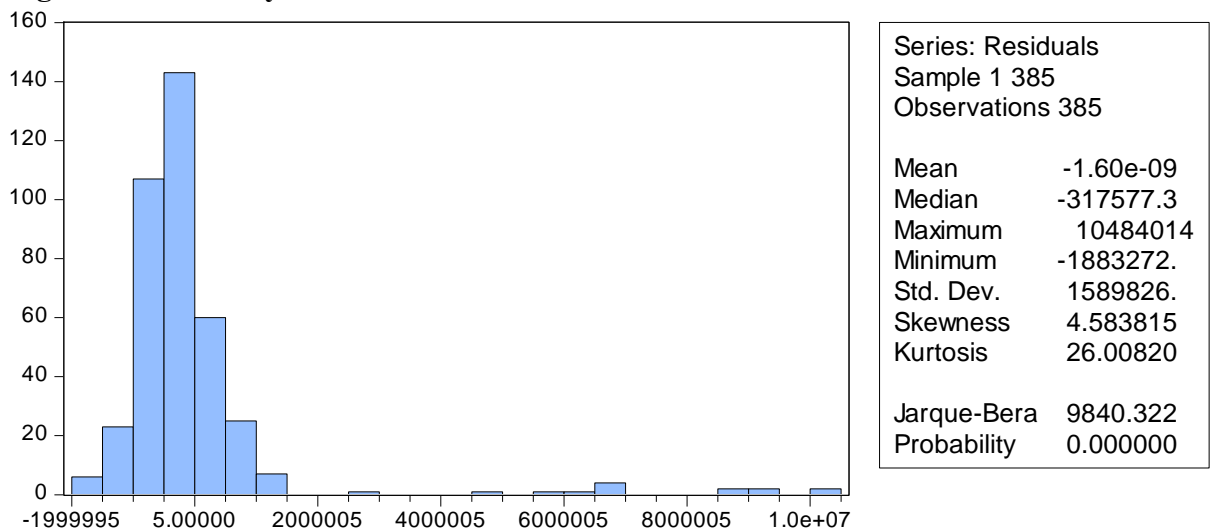
	<b>AUDFEE</b>	<b>FCOMP</b>	<b>FPROF</b>	<b>FSIZE</b>
Mean	349951.2	0.883951	25230148	7.116928
Median	14500.00	0.142447	412386.0	7.028959
Maximum	11000000	53.47256	19183618	10.43302
Minimum	2.139000	6.679848	-99590176	3.483016
Std. Dev.	1685251.	5.033338	17217799	1.102854
Skewness	5.431845	8.528049	6.910358	0.052515
Kurtosis	31.32622	78.04590	71.23920	4.449280
Jarque-Bera	14764.66	95011.55	77763.59	33.87107
Probability	0.000000	0.000000	0.000000	0.000000
Sum	13473122	340.3213	97136069	2740.017
Sum Sq. Dev.	10905871	9728.444	1.138378	467.0538
Observations	385	385	385	385

*Source: E-view 9.0 Output, 2020*

The descriptive statistics in table 4.1 shows the characteristics of the variables from the fifty-five (55) selected manufacturing companies that formed the overall sample of the study. As observed, the mean value of the dependent variable Audit Fee (AUDFEE) showed positive values ranging from 2.139000 to 11000000 suggesting that Audit Fee (AUDFEE) of the selected manufacturing companies for the period under review skewed towards the company complexity and the values are positive. The mean values of all the other independent variables [Firm Size (FSIZE), Firm Complexity (FCOMP), Firm Profitability (FPROF)] showed positive values with mean values of 0.883951, 25230148 and 7.116928 respectively. The standard deviations of each of the variables showed minimal dispersion ( $\pm$ ) from the mean values which are highly desirable. More so, the probability values of the Jarque Bera test for all factors are significantly lower than the 0.05 indicating that the series are uniformly distributed.



**Figure 4: Normality Test**



***Source: Researchers Computation, 2020***

The histogram normality and other descriptive statistics of the regression variables are revealed in the normality test above. The result showed a mean Jarque-Bera test of 9840.322 and associated probability value of 0.000000 which is significantly lower than the 5% level indicating that not all the series are evenly distributed. Thus, the issue of endogeneity arising from the heterogeneous nature of the data are likely evident.

**Table 2: Correlation Analysis**

Covariance Analysis: Ordinary

Date: 12/07/20 Time: 04:55

Sample: 1 385

Included observations: 385

Correlation				
t-Statistic				
Probability	AUDFEE	FCOMP	FPROF	FSIZE
AUDFEE	1.000000			
	-----			
	-----			
FCOMP	-0.027753	1.000000		
	-0.543350	-----		
	0.5872	-----		
FPROF	0.047824	-0.020974	1.000000	
	0.937001	-0.410555	-----	
	0.3493	0.6816	-----	
FSIZE	-0.279607	-0.170529	0.356256	1.000000
	-5.699343	-3.386936	7.461638	-----
	0.0000	0.0008	0.0000	-----

*Source: Eviews 9 (2020)*

Table 2 presents the correlation matrix of variables adopted in the study. The aim is to show how the variables are related among themselves and to also check for possible high correlations which could lead to multi collinear problem. As observed from the result, a significant negative correlation exists between the dependent variable Audit Fee (AUDFEE) and the variables of Firm Complexity (FCOMP). A significant positive correlation exists between the dependent variable Audit Fee (AUDFEE) and the variable of Firm Profitability (FPROF) at 0.047824; while the variables of Firm Size (FSIZE) showed significant negative associations with the dependent variable Audit Fee (AUDFEE) at -0.279607. However, the variable that has significant association with the dependent variable of Audit Fee (AUDFEE) passed the scale at 1% level of confidence. This suggests that all the independent variables move in the same direction with the dependent variable. It is also observable that the issue of high-correlation is not evident among the variables as none of the correlation coefficients is above 0.90.

## Diagnostic Tests

To ensure reliability and validity of the empirical results, some diagnostic tests were conducted. In order to test for the presence of multicollinearity in the model, the Variance Inflation Factor (VIF) was carried out, the Heteroskedasticity test was conducted using Breusch-pagan-Godfrey test.

**Table 3: Variance Inflation Factors**

Variance Inflation Factors

Date: 12/07/20 Time: 04:58

Sample: 1 385

Included observations: 385

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
FCOMP	27020284	1.063786	1.031877
FPROF	2.567883	1.172214	1.147510
FSIZE	64434794	50.50568	1.181360
C	33100988	50.02608	NA

*Source: Eviews 9 (2020)*

The result of the variance inflation factor in Table 3 shows the absence of multicollinearity. The centered VIF values of the explanatory variables are far below the benchmark of 10. The explanatory variables of Firm Complexity (FCOMP) reported a centered VIF of 1.031877; Firm Profitability (FPROF) 1.147510, Firm Size (FSIZE) 1.181360. All the variables of the model recorded a center VIFs that are not substantially different from 1.00 and are not indicative of the problem of multicollinearity.

**Table 4: Heteroskedasticity Test: Breusch-Pagan-Godfrey**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	11.27763	Prob. F(3,381)	0.0000
Obs*R-squared	31.39978	Prob. Chi-Square(3)	0.0000
Scaled explained SS	384.5098	Prob. Chi-Square(3)	0.0000

*Source: Researcher's Compilation (2020)*

The test for Heteroskedasticity is presented in Table 4. It checks for the presence of non-constant variable leading to the breakdown of the BLUE properties in which the efficiency and consistency property may be lost. The decision rule is to conclude that there

is no Heteroskedasticity if the F-statistic values are respectively greater than the critical values at 5% level. In the absence of this (i.e. if the critical values at 5% is greater than the F-statistic and observed R-square value), we conclude that there is Heteroskedasticity. As shown in Table 4.4, the p-value (3.38%) of the corresponding observed chi-square value is greater than 5%. Hence, we accept the null hypothesis of heteroskedastic error term which is desirable. The implication of this is that the regression results can be applied reliably.

## Estimation Results

The fixed effect and random effect model estimation technique were to be adopted. However, in order to ascertain the one that is most appropriate, the Hausman's Test was applied. The result obtained is shown below:

**Table 4: Hausman Test Result**

### Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	0.133757	3	0.9875

**Source: Author's Computation (2019)**

**Null Hypothesis:** Random effect model is not desirable

**Alternative Hypothesis:** Random effect model is desirable.

Decision Rule: Accept null if product is greater than 5%.

Accept alternative if product is less than 5%.

From the result of the Hausman Test, the chi-square statistics has a value of 0.13 and the corresponding p-value is greater than 5%. Hence, the null hypothesis was accepted. This implies that the fixed effect model is most appropriate for the study.

**Table 5: Regression Results**

Dependent Variable: AUDFEE

Method: Panel EGLS (Period random effects)

Date: 12/07/20 Time: 05:06

Sample: 2012- 2018

Periods included: 7

Cross-sections included: 55

Total panel (balanced) observations: 385

### Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FCOMP	-28382.67	16560.17	-1.713911	0.0874
FPROF	0.001691	0.000511	3.311673	0.0010
FSIZE	-543384.9	80868.65	-6.719352	0.0000
C	4199616.	579616.1	7.245513	0.0000
Effects Specification				
			S.D.	Rho
Period random			0.000000	0.0000
Idiosyncratic random			1607950.	1.0000
Weighted Statistics				
R-squared	0.510041	Mean dependent var	349951.2	
Adjusted R-squared	0.403034	S.D. dependent var	1685251.	
S.E. of regression	1596072.	Sum squared resid	97057740	
F-statistic	15.70326	Durbin-Watson stat	1.653091	
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.110041	Mean dependent var	349951.2	
Sum squared resid	97057740	Durbin-Watson stat	1.653091	

#### ***Source: Researcher's Computation via Eviews 9 (2020)***

As shown in the above table, the R-squared coefficient of determination stood at 0.51 which indicates that the model explains about 51% of the systematic variations in the dependent variable Audit Fee (AUDFEE). The Adjusted R<sup>2</sup> which controls for the effect of inclusion of successive explanatory variables on the degrees of freedom was 40% meaning that about 60% of the systematic variations in Audit Fee (AUDFEE) were not explained by the model after adjusting for the degree of freedom. However, the proportion of the variation not captured by the model has been addressed by the error term. The F-statistics value and the associated p-value stood at 15.70326 and 0.000000 respectively indicating that the hypothesis of a joint statistical significance of the model cannot be rejected at 5% level of significance and the linearity specification of the model can be assumed as appropriate.

The evaluation of the slope coefficients of the independent variables revealed the existence of negative relationship between Firm Complexity (FCOMP) and Firm Size

(FSIZE) and the dependent variable Audit Fee (AUDFEE) as depicted by the slope coefficient of -28382.67 and -543384.9 respectively. On the other hand, the other independent variable of Firm Profitability (FPROF) has positive relationships of 0.001691 with the dependent variable Audit Fee (AUDFEE) as shown in the table. It is worthy to note that all the variables of Firm Complexity (FCOMP), Firm Profitability (FPROF) and Firm Size (FSIZE) passed the significance test at 5% level, meaning the variables of Firm Complexity (FCOMP), Firm Profitability (FPROF) and Firm Size (FSIZE) significantly influence Audit Fee (AUDFEE) during the period under review as depicted by the findings of this study. Thus, a positive change in Firm Complexity (FCOMP), Firm Profitability (FPROF) and Firm Size (FSIZE) will likely increase Audit Fee (AUDFEE) significantly by up to 0.0874, 0.0010 and 0.0000 respectively. Lastly, the Durbin-Watson value of 1.65 suggests that there is no evidence of autocorrelation among the error term.

## **Conclusion and Recommendations**

### **Conclusion**

The purpose of this study is to empirically examine the determinants of audit fees among quoted manufacturing companies in Nigeria. Specifically, the study looked at how the variables of firm size, firm profitability and firm complexity affect audit fee of selected listed manufacturing companies in Nigeria. The study employed multiple regression estimation approach on information extracted from a sample consisting of fifty-five (55) listed manufacturing companies in Nigerian Stock Market between the years 2012 to 2018. The model was regressed to check for the existence of significant relationships between the dependent (audit fee) and independent variables (firm size, firm profitability and firm complexity). The results showed that there is a significant relationship between firm size, firm profitability, firm complexity and audit fee among quoted manufacturing companies on the Nigerian Stock Exchange for the period under review.

### **Recommendations**

Based on the findings in this study, the following recommendations become imperative;

3. Corporate organization in Nigeria should pay proper attention to firm size, firm complexity and industrial type as they are major determinant of audit fee in Nigeria.
4. Improvements can be made to this study by increasing the number of observations and the number of independent variables such as IFRS specific variables (i.e. risk exposure measures) especially those studying the financial sector; this would provide better evidence in further studies.
5. It is also recommended that future researchers can conduct comparative studies of Nigeria with other developing or developed countries. These kinds of studies will

- be useful as regards the influence of institutional setting on the level of audit fees. Moreover, such studies will be helpful in explaining how diverse regulatory requirements may affect the level of audit fees in different institutional settings.
6. Finally, future research might also examine the potential impact of audit firm industry specialization (e.g. expertise) on external audit fees.

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# INTERNAL FINANCIAL CONTROL MECHANISM AND MANAGEMENT OF FUNDS IN NATIONAL JUDICIAL COUNCIL

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## **Abstract**

*This study examines the effect of internal financial control mechanism on management of funds in National Judicial Council in Nigeria. The study adopted survey research design and the population of the study comprises of all the staff in Accounts and Audit departments in National Judicial Council. Convenience sampling was used on the population size of the study that comprised of (140) staff in Accounts and Audit departments in National Judicial Council. A sample of 103 out of 140 staff in Accounts and Audit departments in National Judicial Council are selected for the study. However, 115 questionnaires were administered to the sampled staff to provide for missing questionnaires, but only 112 out of the 115 administered were returned and analyzed. Thus only 3 questionnaires were missing from the 115 sampled staff in Accounts and Audit departments in National Judicial Council. The data for this study were collected from primary source. The study designs a set of questionnaire that captures the various financial control strategies in terms of authorization of transactions, segregation of duties, independence of audit, and information technology. The questionnaire was carefully designed in structured close ended of 5 point likert format (Strongly agreed (2), Agreed (1), Undecided (0), Disagreed (-1), Strongly Disagreed (-2)), and a few open ended questions to seek the opinion of the respondents on some of the key issues. OLS was used and found out that, authorization of transactions, independence of audit, and information technology are positively related to public fund management in the National Judicial Council of Nigeria with statistical significance. Conversely, insignificant positive effect of segregation of duties on public fund management was found. It is recommended among others that, National Judicial Council of Nigeria should make concerted efforts to ensure that, all transactions are authorised before any payment is made. This is to say that, all expenditures in the National Judicial Council of Nigeria must be supported by written documents for authentication.*

**Keywords:** *Financial Control Mechanism, Management of Funds, National Judicial Council, Nigeria*

## 1. Introduction

There is general awareness all over the world for the need to pay greater attention to the improvement of public sector management. The reason is obvious, government constitutes the largest single business entity and her pattern of expenditure through its various parastatals, agencies and commissions stimulate lot of economic activities. As a result of these Government huge involvements in economic activities, initiatives are being taken all over the world towards improvement of the standards of accounting and auditing departments in government. The public sector accountant has the responsibility of developing systematic arrangements to assist management in the performance of the services of the institution while the public sector auditor has among other duties, the complementary role to examine whether management actually performs that efficiently.

Transparency and accountability in the use of public funds typically engender greater trust in government (International Federation of Accountants (IFAC), 2012). Consequently, most activities of government globally are centred on improving public confidence in the management of its funds through enacted of reforms and series of measures aimed at improving the efficiency of resource mobilization and allocation. However, many countries in African struggle with the most appropriate approach to ensure effective public financial management.

In each budget year in Nigeria, funds are dispensed to all levels of government based on a predetermined allocation formula through which the funds are disbursements to the various ministries, departments and agencies based on the approved budget estimates (The Constitution of the Federal Republic of Nigeria, 1999). These funds which are meant for capital projects, recurrent expenditures and other developmental initiatives, when disbursed, are usually misappropriated by corrupt government officials for personal enrichment (Olurankinse, 2012). For example in the Nigerian educational sector, most of the funds appropriated for the sector ended up in the pockets of top government officials (The Premium Times, 2017). One of the consequences of misappropriation of educational funds is reflected in the level of poor infrastructure in Nigeria secondary schools (Educate Nigeria, 2017). This includes poorly built schools, which in turn negatively affects the provision of classrooms environment conducive to learning (Gbenu, 2012). The mismanagement of public funds is also reflected in the lack of laboratories and its equipment. This challenge has made education in Nigeria to be more theoretical and practical. For effective teaching and learning environment, well equipped laboratories and classrooms are needed; but the reality is that major of Nigerian secondary schools today lack these essential facilities (Ike, 2017). This current research, therefore, is an attempt to contribute empirically to the existing literature by understanding the predictors of efficient and effective management of funds in public sector.

Specifically, the study aims to predict whether three dimensions of internal financial control mechanism namely: authorization of transaction, information technology and communication, segregation of duties and independent audit are statistically significant predictors of management of funds in National Judicial Council. This is in addition to other previous studies like Nkuah, Tanyeh and Asante (2013) who sought to determine the relationship between financial control systems and public sector efficiency in Ghana while

Sari, Ghazali and Achmad (2017) studied the effect of internal audit and internal control system on public accountability in Indonesia state universities. Al-Hawtmeh and Al-Hawtmeh (2016) study examine the effect of internal control on the effectiveness of financial control in administrative government units in Jordan. Kinuthia (2012) studied the impact of financial controls on financial efficiency of free secondary education funds among secondary schools in Nairobi. While acknowledging the contribution of previous scholars in enriching the literature on public financial management, however, majority of these studies surveyed mainly used qualitative research design through simple percentage, mean and standard deviation as evidenced from studies by Kinuthia (2012), Simiyu (2014), Ejoh and Ejom (2014) and Mrsik, Nenovski and Radenkovic (2016); consequently, there is a methodological gap, hence there is the need for more robust research methodology in this regard. It is against this backdrop, that this current study adopted a different methodology that is more appealing in understanding the effect of internal financial control mechanism on management of funds so as to confirm the findings of previous studies or otherwise. In addition, the above-mentioned studies empirically establish evidence from foreign countries at different times. However, there exist scanty studies on the effect of internal financial control mechanism on management of funds in Abuja, Nigeria which is the motivation for this research at this time and in the study area. In view of the foregoing, therefore, the current study examines the effect of internal financial control mechanism on management of funds in National Judicial Council.

## **2. Literature Review**

### **2.1 Concept of Public Financial Management Effectiveness**

Public financial management is the system by which the financial aspects of the public goods and services are directed, controlled and influenced, to support the delivery of the government goals and objectives (Onuorah & Appah, 2012). Public financial management concerns the effective management of the collection and expenditure of funds by governments (Brusca, Gómez-villegas & Montesinos, 2016). As societal needs will inevitably be greater than the resources available to government, all public resources must be used as efficiently as possible with a minimum of government wastage (Bandy, 2014). Efficient public financial management is central to creating a relationship of mutual trust and shared consensus between government and citizens that is at the core of the development process (Maronga, Weda & Kengere, 2013).

The effectiveness of the PFM system in any country depends on a network of interlocking processes, within a framework of institutions at global, regional, national and sub-national level (Babatunde, 2013). The quality of PFM depends on how well the individual institutions work, the quality of inputs provided to the system, the feedback and control mechanisms that ensure a focus on objectives, and on how well the system functions as a whole (Brusca, 2016). It is influenced by factors such as culture, people skills, the political economy, leadership, environmental and systems related issues. A strong Public Financial Management (PFM) system is a catalyst for economy's growth and development (Mestry, 2013). It ensures that the government and its departments raise manage and spend public resources in an efficient and transparent way (Maronga et al., 2013). Sound systems, strong legal and regulatory frameworks as well as a competent and productive civil service are the cornerstones of an efficient PFM regime (Onuorah & Appah, 2012). Public Financial

Management reforms have been identified as the key drivers to efficient public service delivery and creation of wealth and employment.

## **2.2 Financial Control Mechanism**

### **Authorization of Transaction**

While designing the forms and procedures of effective internal control, provision should be made for proper authorization with a view to establish for accountability for all action taken. In general, such a system means that approved procedures and methods should be employed by the client's accounting staff (Tanui, Omare & Bitange, 2016). The system consists of the chart of accounts, procedures, manuals, computers program and system documentation manual, flow-chart of the transaction processing, and the variety of paperwork forms and approved signature provisions that characterize large-volume transaction data (Kamaruddin & Ramli, 2015). There must be a well-defined organizational structure showing how responsibility and authority are delegated. That is an entity's organizational authority and boundaries of responsibility. This makes it designated areas or to prepare frauds undetected in areas of responsibility.

### **Segregation of Duties**

Millichamp (2002) defines segregation of duties as follows: No one person should be responsible for the recording and processing of a complete transaction. The involvement of several people reduces the risk of intentional manipulation or accidental error and increases the element of checking of work. Article 15 of "Procedures and Principles on Internal Control and Ex-Ante Financial Control" says that duties of the authorizing officer and accounting officer cannot be given to the same person (Bedard, Hoitash, Hoitash & Westermann, 2012). Employees assigned to ensure internal financial control shall not be given the responsibility of preparation and implementation of financial decisions and transactions such as responsibility to prepare approval document and its supporting documents, specifications and draft contracts, and acceptance of goods and services. To ensure reduction of possibility errors and abnormalities, an employee not to be responsibility for more than one of the authorization, custody, and record keeping financial transaction (Rendon & Rendon, 2015). When the work of one employee is checked by another, and when the responsibility for custody for assets is separate from the responsibility for maintaining the records relating to those assets, there is appropriate segregation of duties. This helps detect errors in a timely manner and deter improper activities; and at the same time, it should be devised to prompt operational efficiency and allow for effective communications. Improper segregation of duties increases the possibility of fraud carelessness and unreliable record keeping, whereas with a proper division of duties, the work of one person or group. The segregation of duties is valuable not only preventing errors and fraud, but also in providing the advantages of specialization, better performance and easier employee training. Segregation of duties is one of the most important features of an internal control plan (Rendon & Rendon, 2015). Its fundamental premise is that an employee or small group of employee should not be in a position to initiate, approve, undertake, and review the same action. These transaction or duties can be labelled incompatible if carried out by the same employee.

## **Independent Audit Function**

The public accounting profession is built on the foundation of independence (Al-Khaddash, Al Nawas & Ramadan, 2013), with regulatory bodies requiring auditors to be independent both in fact and in appearance. Auditor independence refers to the cornerstone of the integrity of all auditing process where maintaining the independent audit function is obligatory for auditors and required by the standard of profession (Choo, 2014). The auditor's independence can be categorized into two, which is "independence in fact" and "independence in appearance". To be independence in fact means to be actually objectives in all relationship between firms and their client; whereas independence in appearance means the subjective state of the relationship as perceived by client and third party (Sun, Lan & Liu, 2014). Nowadays, most people are of the opinion that the decline in the level of audit independence is an important ethical value in the accounting profession (Al-Khaddash et al., 2013). According to Sun et al. (2014), when auditors and clients are negotiating issue about the financial statement, the most important part of an auditor's role is to maintain the integrity of the independent audit function. This is because the auditors are required to follow the standards of the accounting profession. If the users of the audit report do not believe that the auditor is independent, less confidence and assurance will be put on the auditor's opinion in the audit report (Al-Khaddash, et al., 2013). Restrictions have been provided in the Sarbanes-Oxley Act 2002 to enhance auditor independence and to prevent corporate scandals such as Enron and WorldCom (Sun, Lan & Liu, 2014). The opinion of an independent auditor adds credibility to the financial statements and enhances the quality of financial reporting (Kantudu & Samaila, 2015). The professional independence of the auditors is considered to be one of the major postulates of auditing as per Choo (2014) and it is, therefore, expected that while expressing an opinion, the auditors would act exclusively in the capacity of auditors. Sun et al (2014) observes that external audit is promoted as a trust engendering technology to persuade the public that the government officials are not corrupt and all government workers are made accountable.

## **Information and Communication Technology**

In the 21st century, 'Information and Communication Technology' (ICT) is at the forefront of modern business concerns (Abiola, 2014). There is no doubt that the manual system of accounting is cheaper than the automated accounting system which is one of the reasons why small businesses still use it (Hagmann, 2013). But as a business grows, there is a need for a shift from manual accounting of financial transactions to automated processes i.e. Information and Communication Technology especially in today's generation where most transactions are performed with the use of electronic gadgets such as Computers, Computer software and the internet. The Accountant only needs to enter the transactions into the software which simply performs computations and presentation thereby relieving the accountant of such task. Any company with large size seeking to be efficient and effective in it financial operations would need to adopt an automated system of accounting (Riggins & Weber, 2016). For a company to attain efficiency and effectiveness, it would require capacity to process accurate and timely information, hence, the need for Information and Communication Technology.

Information and Communication Technology (ICT) which can also be referred information technology (IT), is a more specific term that emphasize the importance of integrated

communications such as telephones lines and wireless signals, computers including enterprise software, , storage device, and audiovisual systems, which enables users to access, store, and influence information as desired (Abiola, 2014). This implies that ICT is a generic term that includes all communication device or application, encompassing like radio, television, cellular phones, computer and network hardware and software (Riggins & Weber, 2016). The configuration of computerized accounting systems is such that internal check and balance are built to ensure that all financial transactions and accounts are appropriately balanced before the financial statement is reported on (Salome & Chukwunwendu, 2014). It also ensures the accuracy of journal entries during posting, ensuring that employees' transactions are properly recorded (Riggins & Weber, 2016). Since the rapid use ICT organizations are able to process large amount of financial information with speed and accuracy through computerized accounting system. Quicker processing time for employees have also reduced the amount of time needed to choose appropriate accounting period. Transactions that would have taken an accountant months or years to prepare are done quickly and faster and thereby cutting high cost that would have resulted in preparing the reports (Mancini, Vaassen & Dameri, 2013).

## **2.2 Empirical Review**

### **Authorization of Transaction and Public Fund Management**

Rono, Njeru and Kwasira (2017) studied the effects of internal control systems towards sustainable financial prudence in public universities in Kenya. The study adopted descriptive survey research design. The study was conducted across six selected chartered public universities in Kenya where a total of 289 accounts, finance, and management staff constituted the study population. A sample of 127 respondents was obtained using stratified random sampling method. The study employed semi-structured questionnaires to collect data. Data analysis was both descriptive and inferential. The study indicated that strengthening internal control systems in public universities was likely to result in enhanced sustainable financial prudence. Internal control systems were concluded to be essential in enhancing sustainable financial prudence in local public universities. It is recommended that public universities in Kenya should put in place sound internal control systems that advocate for ethical values and integrity. The finance managers in these universities are advised to objectively implement policies on internal control systems in order to ultimately ensure sustainable financial prudence.

Mrsik et al (2016) evaluate the effect of state audit in improving accountability in managing the public funds. Descriptive analysis was adopted for analyzing state audit office report for five years from 2010 to 2014. The data for the research were collected from the web sites of Macedonian state audit office of Macedonia, state audit Institution of Serbia and state audit office of the Republic of Croatia. The research compared the results from two state audits in neighboring countries. The findings of the study revealed that weaknesses in the management of public funds. Ajibolade and Oboh (2017) carried out a study to examine the effect of government budgeting on public funds management and economic development in Nigeria using a simple regression estimation technique from time series data set of budgetary information over a 16-years period from 2000 to 2015. The findings of the study confirm that government's annual budgeting system is limited in achieving its fiscal objectives. The budget approach indicates a state of lack of accountability and

transparency in public funds management. Findings also indicate that the level of economic development in Nigeria is does not have any relationship with the size of government expenditure. Practical implications – The study recommended the government needs to restructure its approach to budgeting and adopt a more resilient approach that suits its environment and economic uniqueness in effort to ensure efficient management and accountability of public funds. Evans (2016) research dissertation examined the effect of development expenditure on management of public funds in the Metropolitan, Municipal and District Assemblies in Ghana. The research design adopted for the study was explanatory research method and data collection methods included both primary and secondary, with primary data collected by use of 200 self-administered questionnaires. The findings of the study revealed that there is a strong relationship between development expenditure and management of public funds. The researcher recommended that, Management of the District Assembly in Ghana should ensure that laid down procedures for government budgeting are adhered to strictly. Wang'ombe and Kibati (2016) study analyzed the effect of records management and internal monitoring and controls on effective use of public funds in the Nakuru County Government's Treasury. The study adopted explanatory research design using 74 staffs involved in the management of finances based on stratified random sampling technique. Data were collected using questionnaires administered to the respondents. Descriptive and Inferential statistics were used to analyze the data. The study indicated that records management practices did not have significant influence on utilization of Government funds. However, internal monitoring and controls significantly affected the effective use of funds. The study recommended that Governments at all level should enhance internal monitoring and controls.

### **2.2.2 Segregation of Duties and Public Fund Management**

Owechi (2012) paper examines the criticism leveled against government of Uganda due to failure to ensure good financial management. Specifically, the study assessed how good governance practices promote good planning, budgeting, resource allocation, effective resource utilization and production of reliable financial reports. Using both qualitative and quantitative data collected responses from public servants in the Ministry of Gender Labor, Social Development and the members of the Public Accounts Committee. The study revealed that good governance by public servants from a legal point of view in terms of the principles of transparency, participation and accountability. The study also revealed that the practice of transparency is moderately low among senior and top staff; in addition, the level of accountability did not meet the set standards set by government in its rules and regulations. Participation in the planning and budgetary process was only among senior account officials. The Public Accounts Committee responsibilities were also limited to compliance checks. Nyanyuki, Okioga, Ojera, Nyabwanga and Nyamwamu (2012) paper sought to determine the effect of accounting practices on management of funds in Kenya public secondary schools in Kisii Central District. To achieve the objectives of the study a survey design was adopted using 90 respondents of Principals and Bursars. The data collected through questionnaires were analyzed using Pearson's correlation coefficient and regression analysis. The study revealed that use of accounting practices is positively associated with the level of Management of Funds in public secondary schools. The study



concluded that accounting practices have a significant influence on management of funds in public secondary schools and thus recommends the use of such accounting practices to improve the general management of funds in public secondary schools in Kenya.

Fasua and Osagie (2016) conducted an empirical study on the relationship between financial control and fraud prevention in the Nigerian public sector. The research methodology adopted in the study was a survey designed with the aid of thirty three (33) copies of questionnaire from selected Edo and Ondo State. The regression analysis findings reveal that the existing internal control measures by federal government are adequate to prevent fraud in the public sectors, in addition, the success of these effective controls depend on ethical behavior of public officers at all levels. The study therefore, recommended that, public officers with good ethical behavior like integrity and honesty as well forensic experts should be employed to examine the relevant controls put in place. Lagat and Okelo (2016) carried out a study on the effect of internal control systems on financial management in Baringo County government in Kenya. A sample of 97 employees in financial and accounting positions was used for the study. The study adopted the Committee of Sponsoring Organizations of the Tread way Commission (COSO) theoretical framework for analysis of internal control systems using five variables namely; control environment, control activities, risk assessment, information and communication and monitoring. The research concluded that control activities and monitoring of information communication technology, significantly influences financial management. Control activities and ICS monitoring significantly predict changes in financial management, while control environment and information and communication does not significantly affect changes in financial management.

### **2.2.3 Independence of Audit and Public Fund Management**

Prempeh, Twumasi and Kyeremeh (2015) examined the financial Control systems in existence in Polytechnics in Ghana. Case study design was adopted. A sample size of 50 staff members was selected using the simple random sampling. The study found out that three main financial control systems of preventive, directive and detective control systems are in existence in the Sunyani Polytechnic. Successfully, realistic budgets were implemented and results are actively monitored. The findings revealed that there was existence of internal financial controls. It was also revealed that the level of compliance was high and this is very commendable and must be encouraged. It was also discovered there was a fair amount of compliance but sanctions are rarely given to a person who does not comply with the laws and conventions of internal financial control. It was recommended that pre-audit should be done for all transactions and seriousness need to be attached to it. It was recommended that audit units need to be strengthened in the Polytechnics. It also was recommended that review of internal control needs to be done from time to time, so that new standards can be embraced for performance and improvement.

Badara (2012) conducted a survey on the role of internal auditors on effective financial control in Bauchi State local government of Alkaleri. The methodology adopted for data collection is only primary source using 35 questionnaires which were administered and returned by the staff of Accounting and Internal audit department. Simple percentage was employed for data analyzed with the findings revealing that lack of proper independent

exercise by the internal auditor, lean internal audit unit staff, the internal control system is very weak toward financial and other controls and also non adherence by the auditors on general auditing standard. The paper recommends that internal auditors should exercise the degree of independency on various levels of department within the organisation in performing their duties, the internal control system should be efficient in such a way that it will prevent any act of financial crime and detection of fraud and local government council should established a scheme for internal auditors training from time to time because it will enhances their operational capacities and skills in administering the internal control system by way of attending professional seminars, workshop and symposium.

Nkuah et al (2013) in their study sought to determine the relationship between financial control systems and public sector efficiency in Ghana. Using an exploratory research design on forty-seven respondents selected through purposive sampling from fifty six (56) respondent were selected from population of District Chief Executive, Coordinating Director, Budget officer, Internal Auditor, Finance Officer, Revenue Collectors, Accountants, Assembly Members and Household. The study revealed three main sources of funds for the Assembly, from government, non-governmental organizations and internally generated funds (IGF). The Assembly has put in place effective control practices such as the issuance of official receipts when payments are made, keeping the revenue generated in a bank accounts which require signatures of many officials to withdraw. It also serves as a control measure to prevent management and staff to have easy access to them illegally. The study also revealed that there was strict compliance with the procurement laws in terms of acquisition of goods, and award of contracts. It is recommended that, there should be periodic in-service training for the accounting personnel to improve their knowledge, skills and abilities. A research on the effect of internal audit and internal control on public accountability in Indonesia state universities was done by Sari, Ghazali and Achmad (2017). The researchers used a survey research design to select 90 respondents involved in financial management in the survey area. The research data are the primary data obtained by sending questionnaires to the respondents. The data collected were analyzed using regression analysis methods. The researcher found internal audit does not affect and cannot improve accountability while internal control system does affects and improve accountability. Al-Hawtmeh and Al-Hawtmeh (2016) study examine the effect of internal control on the effectiveness of financial control in administrative government units. The study also determines whether there limiting factor to the assessment of internal controls for the effectiveness of financial control in administrative government units. Lastly, the study sought to determine the effect of audit experience and qualifications on the effectiveness of financial control in administrative government units. In order to achieve the objectives of the study and the testing of hypotheses, the researcher designed a questionnaire. This questionnaire was distributed to managers and employees in the internal control of the administrative government units. Out of the 125 questionnaires distributed, 96 were recovered with an adoption rate of 77%. The results showed that the assessment of internal control units for the effectiveness of financial control in administrative government units typically became high. Also, accounting entries which is related to income and expenditure were in accordance with laws, financial regulations, and the prescribed accounting for financial controls. Hence,

this is the constraints that limit the effectiveness of the auditors of the Audit Bureau when they conducted financial and managerial control and evaluation in administrative government units. Thus, the researcher attributed this result to the existence of certain obstacles, the most important routine work, lack of incentives and benefits, and others as indicated in the results of the study. Based on the results of the study, the researcher recommended the need for attention to the human element as one of the main components of internal control system.

#### **2.2.4 Information Technology and Public Fund Management**

Munge, Kimani and Ngugi (2016) the study evaluated the factors influencing financial management in public Secondary Schools in Nakuru County. Specifically, it analyzed the influence of budget management and financial controls on financial management. The study was guided by budget, financial control, and agency theories. The study adopted a cross-sectional survey research design. The study targeted heads and bursars of public secondary schools in Kenya. The accessible population constituted all the 172 school heads and 172 bursars of public secondary schools in Nakuru County. Stratified random sampling method was adopted to draw a sample of 78 from the accessible population. A structured questionnaire was used to collect data. A pilot study was conducted before the main study in order to examine the reliability and validity of the research questionnaire. The Cronbach alpha coefficient was used to test reliability while the university supervisor was consulted to determine the content validity of the research questionnaire. Data analysis was aided by the Statistical Package for Social Sciences analytical tool. Data analysis encompassed both descriptive and inferential statistics. Study findings were presented in form of tables. The study established that budget management and financial controls positively and significantly influenced financial management. The study recommended that public secondary schools should have effective budget management mechanisms and strong financial controls.

Wakiriba, Ngahu and Wagoki (2014) study sought to establish the effect of control activity on financial management in Mirangine Sub County of Nyandarua County. The study adopted a descriptive design and targeted 30 accounting, finance and administrative staff in the government departments in Mirangine Sub County. The study employed a census survey where all members of the target population constituted the study sample. A structured questionnaire was used to collect data. Both descriptive and inferential statistics were used in data analysis. The study findings were presented in the form of tables and figures that captured both descriptive and inferential results. The study concludes that the public sector in Mirangine Sub County has an effective internal control system characterized by clear separation of roles, supervision and commitment of management. However, there are weaknesses in the implementation of financial controls since internal audit function is not well extended to all the departments. On financial management, the study concludes that the prudential use of financial resources in Mirangine Sub County is not appropriate although there is improved asset use and classification of revenues and expenditures. The final conclusion of this study is that there is a significant positive relationship between control activities and financial management. The study recommends competence staff profiling, establishment of information system within the departments and improving the generation of more finances for the operations of the government

departments. Okon and Akpan (2011) study was focused on the relationship between financial control measures and enhancement of administrative effectiveness of secondary school Principals in Akwa Ibom State. The population of the study was 227 principals from the 227 public secondary schools in the state. The sample size for the study was 192 using stratified random sampling technique for the selection. Eighteen-item structured questionnaire designed by the researcher was used for data collection. The instrument was face validated by five experts. Three (3) null hypotheses were tested. The major findings were that the principals have not adopted budget preparation, budget implementation and internal auditing for the control of school finances. It was found that there is significant relationship between the variables and principals' administrative effectiveness. The recommendations made based on the findings were that (1) State Secondary Educational Board should instruct principals to prepare annual budget of their schools. (2) State Secondary Education Board should properly monitor the implementation of the school budget. (3) Internal auditors should be sent by the Ministry of Education to Schools.

Onatuyeh and Aniefor (2013) examine the impact of internal audit functions on public sector management and accountability in Edo State of Nigeria. Its main objective is to ascertain the extent to which effective internal audit functions could be used as an instrument to improve public sector management and accountability in Edo State. Data were collected via a well-structured and tested questionnaire administered on 245 respondents in the audit departments of 12 government ministries and parastatals in Benin City, Edo State. The data collected were analyzed using Cross tabulations, descriptive statistics and Spearman rank order correlation coefficient. The findings of the study suggest that effective internal auditing ensures proper stewardship reporting, and inadequate qualified manpower does hinder proper auditing of government accounts in Edo State. Based on these, it is concluded that auditing of government accounts is fundamental to the effective and efficient stewardship reporting by accounting officials without political and administrative interference. Hence, it is recommended among others that objectivity, integrity and transparency should be observed by auditors and council officials and improvement of internal auditors' remuneration and fringe benefits should be improved for enhanced performance.

### **2.3 Theoretical Framework**

This study anchors on the theory of agency. A significant body of work has built up in this area within the context of principal agent framework. The work of Jensen and Mecklin (1976) as pointed in their work, theory of the firm: managerial behavior, agency costs, and ownership structure pointed in particular, the importance of this theory; and of Namazi (2013) as said, in their study, agency problems and residual claims, that this theory is the most important in studying performance of MFIs. The agency theory identifies the agency relationship where one party - the principal, delegates work to another party, the agent as Mallin (2010) says in her study corporate governance. The agency relationship can have a number of disadvantages related to the opportunism or self-interest of the agent as Vimrová (2017) argues in his study on access for all: building inclusive financial system; for example the agent may not work in the interest of the principal, or the agent may act only partially in the best interest of the principal.

Furthermore the agent could misuse his power for monetary or agent not taking appropriate risks in accordance with the interest of principal because the agent perceive those risks as not being suitable and the principal could have different perceptions to those risks (Mallin, 2010). There could also be the challenge of information asymmetry. This occurs when the principal and the agent have access to different information. This could mean that the principal is at a disadvantage since the agent usually has more access to information (Hongxing & Yu'na, 2013). In the context of control of corporations, agency theory assert that corporate governance systems, especially board of directors, as important monitoring and control mechanism to ensure that any problems that may be brought about by the principal-agent relationship are reduced (Hongxing & Yu'na, 2013). Managers are usually the agents of the corporation's owners, but managers must be monitored and checks and balances put in place to ensure management do not act beyond their power (Abdullah, Murad and Hasan (2015). The cost of management acting beyond their power including the necessary checks and balance is called agency costs (Kim, 2010) is. Much of agency theory as related to corporations is set in the context of the separation of ownership and control as described in the work of Hongxing and Yu'na, (2013) in their work on the Modern Corporation and private property, and also on the work of Mallin (2010).

### 3. Methodology

This study adopted Survey research design as it focuses on people, the vital facts of people including their beliefs, opinions, actions, attitudes, motivations, and behaviour. The population of the study comprises of all the staff in Accounts and Audit departments in National Judicial Council. Convenience Sampling would be used for the study. The methodology used to sample from a larger population would depend on the type of analysis being performed. The population size of the study comprised of (140) staff in Accounts and Audit departments in National Judicial Council (National Judicial Council, 2019). Sampling techniques is a process used in statistical analysis in which a predetermined number of observations would be taken from a larger population. The methodology used to sample from a larger population would depend on the type of analysis being performed. The simple random sample was used in this study. A sample of 103 out of 140 staff in Accounts and Audit departments in National Judicial Council are selected for the study. However, 115 questionnaires were administered to the sampled staff to provide for missing questionnaires, but only 112 out of the 115 administered were returned and analyzed. Thus only 3 questionnaires were missing from the 115 sampled staff in Accounts and Audit departments in National Judicial Council. The sample size was calculated using 50% confidence interval.

According to Taro Yamane (1967)

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

Where:

N = Population

n = Sample size

$e = (0.05)^2$

140

n =

$1 + 140(0.0025)$

### Sample Size = 103

The data for this study were collected from primary source. Primary source involved going to the field to obtain data from the respondents. The study designs a set of questionnaire that captures the various financial control strategies in terms of authorization of transactions, segregation of duties, independence of audit, and information technology. The questionnaire was carefully designed in structured close ended of 5 point likert format (Strongly agreed (2), Agreed (1), Undecided (0), Disagreed (-1), Strongly Disagreed (-2)), and a few open ended questions to seek the opinion of the respondents on some of the key issues.

### Reliability and Validity

The reliability was insured by testing the instruments for the reliability of values (Alpha values) as recommended by Cronbach, (1946). Cronbach recommends analysis for Alpha values for each variable under study. According to Sekaran 2001 Alpha values for each variable under study should not be less than 0.6 for the statements in the instruments to be deemed reliable. Consequently, all the statements under each variable were subjected to this test and were proven to be above 0.6. The validity of the data collection instruments was done with the help of Questionnaires.

**Table 3.1 Scale Reliability of Variables**

Variables	Cronbach's Alpha
Authorization of Transaction	0.91
Segregation of Duties	0.89
Independence of Audit	0.94
Information Technology	0.87
Public Fund Management	0.73

**Source: Researcher's Computation (2019)**

Table 3.1 revealed that all the variables have Alpha Values above 0.6 mark recommended by Sekaran. Therefore all the variables in the instrument are deemed reliable.

Ordinary Least Squares Method of Regression was used with the aid of Statistical Package for Social Sciences (SPSS) to determine and analyze the effect of anti-fraud strategies on fraud perpetration in listed insurance companies in Nigeria. Furthermore, frequency distribution and percentages (%) were used to know the proportion of responses of the

respondents in relation to the subject matter. Thus, the frequency distribution and percentages (%) guide the study on the percentage of responses with respect to a statement. The independent variables were financial control mechanisms in terms of authorization of transactions, segregation of duties, independence of audit, and information technology, while public fund management was the dependent variable. In line with the fulfilment of the regression assumptions, the study runs the descriptive statistics to describe the characteristics of the data, as well as know the direction of the normality. Furthermore, correlation matrix was run to know the individual relationship between the variables, as Variance Inflation Factor (VIF) was used for the test of Multicollinearity of the explanatory variables. Test of Heteroskedasticity was run for the cross sectional dimension.

### Regression Model

$$MPF = \beta_0 + \beta_1AUTOTRANS + \beta_2SEGD + \beta_3INDAUD + \beta_3INFTECH + e_i \dots\dots\dots i$$

Where: MPF = Management of Public Fund, AUTOTRANS = Authorisation of Transactions, SEGD = Segregation of Duties, INDAUD = Independence of Audit, INFTECH = Information Technology,  $\beta_0$  =constant,  $\beta_1$  to  $\beta_3$  are the coefficients of the independent variables and  $E_t$ = Error term. On apriori we expect:

**$\beta_1 > 0$ ,  $\beta_2 > 0$   $\beta_3 > 0$  and  $\beta_4 > 0$**

The a-priori signs indicate that, all the independent coefficients are positively related to Public Sector Financial Management.

## 4. Results and Discussions

### Data Presentation

**Table 4.1: Responses on Financial Control Mechanisms and Public Fund Management**

Response	Managemen t of Public Fund	Authorisatio n of Transaction	Segregatio n of Duties	Independenc e of Audit	Informatio n Technology	Percentag e of the Responses
Strongly Disagreed	12	17	19	14	18	14.3
Disagreed	12	11	10	9	9	9.1
Undecided	7	6	8	12	9	7.5
Agreed	24	33	22	27	20	22.5
Strongly Agreed	57	45	53	50	56	46.6
<b>Total</b>	112	112	112	112	112	100

**Source: Field Survey, 2019**

Table 4.1 presents data with respect to financial control mechanisms in terms of authorization of transaction, segregation of duties, independence of audit, and information technology, as well as management of public fund in National Judicial Council, Nigeria. It is indicated that, 22.5% (about 23%) of the total respondents agreed that financial control mechanisms help in the control of public fund in the National Judicial Council of Nigeria, as 46.6% (about 47%) of the respondents strongly agreed. 9.1% of them disagreed and 14.3% strongly disagreed. The percentage of those that are yet to decide is 7.5% (about 8%).

**Table 4.2 Statistics**

	Management of Public Fund	Authorisation of Transaction	Segregation of Duties	Independence of Audit	Information Technology
Valid	112	112	112	112	112
Missing	0	0	0	0	0
Mean	.9107	.6964	.7143	.5357	.7768
Median	2.0000	1.0000	1.0000	1.0000	1.5000
Std. Deviation	1.40497	1.46330	1.53886	1.61596	1.52286
Minimum	-2.00	-2.00	-2.00	-2.00	-2.00
Maximum	2.00	2.00	2.00	2.00	2.00
Sum	102.00	78.00	80.00	60.00	87.00

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.2 presents a statistics table in relation to public fund management, authorization of transaction, segregation of duties, independence of audit, and information technology. Valid observations are 112, and the number of missing questionnaire is zero. The mean scores are 0.9107, 0.6964, 0.7143, 0.5357, & 0.7768 for public fund management, authorization of transaction, segregation of duties, independence of audit, and information technology respectively. The respective median scores are 2.00, 1.00, 1.00, 1.00, & 1.50. The minimum scored is -2, while the maximum scored is 2. The respective summations of the variables are 102, 78, 80, 60, & 87 for public fund management, authorization of transaction, segregation of duties, independence of audit, and information technology.



**Table 4.3** **Management of Public Fund**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagreed	12	10.7	10.7	10.7
Disagreed	12	10.7	10.7	21.4
Undecided	7	6.3	6.3	27.7
Agreed	24	21.4	21.4	49.1
Strongly Agreed	57	50.9	50.9	100.0
Total	112	100.0	100.0	

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.3 presents frequency table on management of public fund in National Judicial Council, Nigeria. 24 of the respondents representing about 21.4% agreed that financial controls affect management of public funds. 57 of them representing about 50.9% strongly agreed. However, 12 (10.7%) disagreed, as 12 (10.7%) strongly disagreed. 7 of them representing 6.3% are yet to decide.

**Table 4.4** **Authorisation of Transaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagreed	17	15.2	15.2	15.2
Disagreed	11	9.8	9.8	25.0
Undecided	6	5.4	5.4	30.4
Agreed	33	29.5	29.5	59.8
Strongly Agreed	45	40.2	40.2	100.0
Total	112	100.0	100.0	

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.4 presents frequency table on authorization of transaction in National Judicial Council, Nigeria. 33 of the respondents representing about 29.5% agreed that authorization of transaction affect management of public funds. 45 of them representing about 40.2% strongly agreed. However, 11 (9.8%) disagreed, as 17 (15.2%) strongly disagreed. 6 of them representing 5.4% are yet to decide.

**Table 4.5** **Segregation of Duties**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagreed	19	17.0	17.0	17.0
Disagreed	10	8.9	8.9	25.9
Undecided	8	7.1	7.1	33.0
Agreed	22	19.6	19.6	52.7
Strongly Agreed	53	47.3	47.3	100.0
Total	112	100.0	100.0	

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.5 presents frequency table on segregation of duties amongst staff in National Judicial Council, Nigeria. 22 of the respondents representing about 19.6% agreed that segregation of duties affect management of public funds. 53 of them representing about 47.3% strongly agreed. However, 10 (8.9%) disagreed, as 19 (17.0%) strongly disagreed. 8 of them representing 7.1% are yet to decide.

**Table 4.6** **Independence of Audit**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagreed	14	12.5	12.5	12.5
Disagreed	9	8.0	8.0	20.5
Undecided	12	10.7	10.7	31.2
Agreed	27	24.2	24.2	55.4
Strongly Agreed	50	44.6	44.6	100.0
Total	112	100.0	100.0	

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.6 presents frequency table on independence of audit staff in National Judicial Council, Nigeria. 27 of the respondents representing about 24.2% agreed that independence of audit staff affect management of public funds. 50 of them representing about 44.6% strongly agreed. However, 9 (8.0%) disagreed, as 14 (12.5%) strongly disagreed. 12 of them representing 10.7% are yet to decide.

**Table 4.7** **Information Technology**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagreed	18	16.1	16.1	16.1
Disagreed	9	8.0	8.0	24.1
Undecided	9	8.0	8.0	32.1
Agreed	20	17.9	17.9	50.0
Strongly Agreed	56	50.0	50.0	100.0
Total	112	100.0	100.0	

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.7 presents frequency table on information technology in National Judicial Council, Nigeria. 20 of the respondents representing about 17.9% agreed that information technology affects management of public funds. 56 of them representing about 50.0% strongly agreed. However, 9 (8.0%) disagreed, as 18 (16.1%) strongly disagreed. 9 of them representing 8.0% are yet to decide.

**Table 4.8** **Correlations**

		Manageme nt of Public Fund	Authorisati on of Transaction	Segregati on of Duties	Independen ce of Audit	Informati on Technolo gy
Pearson Correlati on	Manageme nt of Public Fund	1.000	.920	.891	.924	.900
	Authorisati on of Transaction	.920	1.000	.918	.923	.942
	Segregation of Duties	.891	.918	1.000	.983	.972
	Independen ce of Audit	.924	.923	.983	1.000	.973
	Information Technology	.900	.942	.972	.973	1.000
Sig. (1- tailed)	Manageme nt of Public Fund	.	.000	.000	.000	.000

N	Authorisation of Transaction Segregation of Duties	.000	.	.000	.000	.000
	Independence of Audit Information Technology	.000	.000	.	.000	.000
	Management of Public Fund	.000	.000	.000	.	.000
	Authorisation of Transaction Segregation of Duties	.000	.000	.000	.000	.
	Independence of Audit Information Technology	300	300	300	300	300
	Management of Public Fund	300	300	300	300	300
	Authorisation of Transaction Segregation of Duties	300	300	300	300	300
	Independence of Audit Information Technology	300	300	300	300	300

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.8 is a correlation table on public fund management, authorization of transaction, segregation of duties, independence of audit, and information technology. It indicates a strong positive correlation between all the variables. The result depicts that audit independence is higher, then followed by authorization of transactions, information technology, and segregation of duties.

**Table 4.9 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.978 <sup>a</sup>	.957	.956	.29520	.578

a. Predictors: (Constant), Information Technology, Authorisation of Transaction, Independence of Audit, Segregation of Duties

b. Dependent Variable: Management of Public Fund

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.9 present the overall association of the variables and the proportion of the public

fund management that is explained by financial controls in National Judicial Council, Nigeria. It is evident that about 96% of variation on public fund management in National Judicial Council, Nigeria can be explained by financial controls in terms of authorization of transaction, segregation of duties, independence of audit, and information technology.

**Table 4.10** **ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	209.783	4	52.446	601.818	.000 <sup>b</sup>
	Residual	9.325	107	.087		
	Total	219.107	111			

a. Dependent Variable: Management of Public Fund

b. Predictors: (Constant), Information Technology, Authorisation of Transaction, Independence of Audit, Segregation of Duties

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.10 is the ANOVA table. It depicts that the model is fit given by high F-statistics of 601.818 with its corresponding P-value of 0.000.

**Table 4.11** **Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.222	.036		6.166	.000		
Authorisation of Transaction	.242	.086	.252	2.811	.006	.050	2.185
Segregation of Duties	.017	.127	.019	.134	.894	.021	4.485
Independence of Audit	.217	.076	.018	2.855	.004	.052	1.202
Information Technology	.642	.105	.696	6.119	.000	.031	3.530

a. Dependent Variable: Management of Public Fund

**Source: Researcher's Computation, 2019 using SPSS Version 20**

Table 4.11 presents the positive and significant effects of financial controls in terms of authorization of transaction, segregation of duties, independence of audit, and information technology on management of public fund in National Judicial Council, Nigeria. This is given by the P-values of 0.006, 0.004, & 0.000 for authorization of transaction,

independence of audit, and information technology respectively. The Variance Inflation Factor (VIF) of 2.185, 4.485, 1.202 & 3.530 depict absence of autocorrelation.

### **Discussion of Findings**

It is evident from the above results and analyses that, authorization of transactions is positively related to public fund management in the National Judicial Council of Nigeria with statistical significance. This implies that, mismanagement of funds in the National Judicial Council in Nigeria, is reduced significantly when acquisition of any item is strictly authorised by a superior officer in line with the procedures and rules in the civil service. This finding agrees with the findings in the previous works such as Mrsik et al (2016); Evans (2016); Wang'ombe and Kibati (2016); and more recently, Ajibolade and Oboh (2017), and tallies with the theory of agency. Similarly, a significant positive effect of independence of audit on public fund management was found. This means that, mismanagement of public fund in the National Judicial Council in Nigeria is reduced if there is strict adherence to the rule of the game. This is to say that when audit is independent, abuse of public fund is highly minimized. This finding is consistent with the findings in the previous studies such as Owechi (2012); Nyanyuki, Okioga, Ojera, Nyabwanga and Nyamwamu (2012); Fasua and Osagie (2016); Lagat and Okelo (2016); Prempeh, Twumasi and Kyeremeh (2015). Furthermore, a significant positive effect of information technology on public fund management was found. This implies that, the use of computer technology in the administration and computation of the finances of the National Judicial Council in Nigeria, helps in curtailing financial misappropriations. This finding supports the earlier findings in the works of Al-Hawtmeh and Al-Hawtmeh (2016); Bello, Ayoib and Zalina (2017); Rono, Njeru and Kwasira (2017).

Conversely, insignificant positive effect of segregation of duties on public fund management was found. This means that, although separation of responsibilities of staff in the NJC in Nigeria would have reduced financial mismanagement, but the responsibilities amongst staff are not well segregated. This is to say some responsibilities are still left with one staff to discharge, thus making it easier for mismanagement and misappropriation of funds in the NJC. This finding is in tandem with the findings in the works of Wakiriba, Ngahu and Wagoki (2014); Onatuyeh and Aniefor (2013); Ejoh and Ejom (2014).

### **5. Conclusion and Recommendations**

Based on the findings of the study, it is concluded that, mismanagement of funds in the National Judicial Council of Nigeria, is highly controlled when all assets and expenditures are authorised before any payments are made. This is to say that, purchases of any kind must be supported by written authorization to be legal. Thus any purchase that is not supported by legal document is voidable and tantamount to litigation. It is also concluded that, independence of audit reduces financial mismanagement in the National Judicial Council of Nigeria. Furthermore, the study concludes that, use of computer technology greatly helps in financial mismanagement. However, the study concludes that, separation of responsibility amongst the staff of the NJC would have enhanced financial management of the NJC, but the NJC has not been separating its staff such that no one person does the work alone. It is therefore broadly concluded that, internal financial control mechanisms help in reducing fund mismanagement in the National Judicial Council of Nigeria.

It is recommended that, National Judicial Council of Nigeria should make concerted efforts to ensure that, all transactions are authorised before any payment is made. This is to say that, all expenditures in the National Judicial Council of Nigeria must be supported with written documents for authentication. National Judicial Council of Nigeria should ensure that due processes are strictly adhered to. This is to say that, the audit should be independent such that adherence to the rules and procedures are complied with. National Judicial Council of Nigeria should insist on the use of computers. They should install accounting software that can easily facilitate financial computations. Preparation of responsibilities among the staff members of the National Judicial Council of Nigeria should be insisted. This will go a long way to reducing financial mismanagement and misappropriation, since no one person will be tasked on a job from beginning to the end.

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# FORENSIC ACCOUNTING AND TAX EVASION IN NIGERIA

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## **ABSTRACT**

*One of the major challenges facing the development of the Nigerian economy is fraudulent practices. The efforts of Economic and Financial Crimes Commission, EFCC and the Independent Corrupt Practices and Other Related Offences seemed not to have yielded any positive results. There is no doubt that fraudulent activities, including tax fraud has affected negatively on government revenue targets. Forensic accounting emerges as a response to fraud related cases of which tax evasion is inclusive. The study examined forensic accounting and tax evasion in Nigeria. The study adopted theoretical research design. The paper utilized content analysis of library materials, journal publications, internet materials, relevant standards, tax laws and the fraud triangle theory. The study concluded that tax evasion has a strong potential of stealing the wealth of the nation and impoverish her people. Based on this, using forensic accounting technique will go a long way in improving the economic development of Nigeria.*

**Keywords:** Forensic accounting, Tax evasion, fraudulent activities, Fraud triangle, Nigeria

## **INTRODUCTION**

The Federal Government in its efforts to tackle financial fraud, established the Economic and Financial Crimes Commission, EFCC Act of 2004, the Independent Corrupt Practices & Other Related Offences, ICPC Act of 2000, the Advance Fee Fraud and Other Related Offences Act of 2006 and the Money Laundering (Prohibition) (Amendment) Act of 2012 but yet the efforts seemed not to have yielded enough positive results. This has made the government to consider establishing the Proceeds of Crime Recovery and Management Agency to take care of recovered assets from financial fraud related activities. Financial Fraud has grown like whirl wind both in the private and public sectors of the Nigerian

economy. Efiog (2012) posits that financial fraud has been on the increase with a chain effect involving the parliamentarians, the top notch in the financial institutions, the civil and public servants, the teachers in the class room setting, the law interpreters, to the one that enforces the law. The propensity to commit financial fraud and fraud related crimes are endless. For example, what will motivate a top ranked head of a ministry; a junior staff in a local government or a primary school teacher in a village school to risk his white collar job people are praying for, his reputation and his career and will go ahead committing financial fraud with the feeling that his action will go unnoticed. Our everyday financial needs are caused by lack of investments, ostentatious lifestyles, greed, avarice, gambling, and debts. Financial Fraud is simply a global menace as no country or institution is free from it, although, the worst hit of it are the developing countries. In recent times, there has been the appearance of modern organized financial fraud, tax related frauds inclusive.

Taxation is one of the most vital fiscal instruments the Federal and State governments use to raise fund needed for the provision of social amenities. Bahadur (2018) posits that taxation is a primary tool to raise the revenue required by the government to finance its public expenditure responsibilities. Governments all over the world, Nigeria inclusive are confronted with the issue of lack of capital to finance their social responsibilities due to low tax to GDP ratio caused by high rate of tax evasion. Omodero (2019) submits that the situation is such that individuals and firms that are engaged in legitimate businesses also hide under underground economy to evade tax with impunity. He added that tax evasion is a taxpayer's deliberate refusal to comply with his tax obligations through none or partial disclosure of his/her income sources to the relevant tax authorities for proper assessment. According to Bahadur (2018), tax evasion is both illegal and unethical as it decreases government revenue and hinders the overall economic development. It is an act of concealing taxes, through the submission of false documents, false statements or unrealistic information. Modugu and Omoye (2014) posit that tax evasion is the failure to disclose the correct income that should be taxed either through misstatement of facts, falsification of figures, filing of incorrect returns or by misrepresentation of tax liabilities.

Individuals or corporations can purposely refuse to pay taxes by concealing the true state of affairs of their businesses due to high tax rates prevailing in a country and possibly

failure of the government to utilize the tax revenue to provide the needed infrastructures, Omodero, (2019). The common form of tax evasion practiced in Nigeria is the deliberate act of failing to file tax returns with the relevant tax authorities in the country (Modugu & Omoye, 2014). This is why underground economy and tax evasion work together, although the slight difference is that underground economy increases the gross domestic product of a country, but the resultant effect, which is tax evasion, harms the government because it robs the government of the revenue it should have earned, (Omodero, 2019). According to Faseun (2001), tax evaders can be prosecuted for criminal offences and the court has the legal backing to subject them to penalties, fines and even imprisonment.

McCann (2006) puts-in that tax evasion is conceived as a crime by most countries because it involves stealing government revenue while tax avoidance is the application of all strategies by a tax payer to ensure that he does not pay more tax than the law stipulates. In a global context, tax evasion is considered as a serious crime. However, (Folayan & Adeniyi, 2018, Obafemi, 2014, Mughal and Akram, 2012, Adebisi & Gbegi, 2013, Onyeka & Nwankwo, 2016) added that several reasons have been used to justify tax evasion in our contemporary times, such reasons include: high tax rates, illiteracy, lack of proper awareness, corruption in public offices, lack of adequate training for tax officials, embezzlement of tax revenues, loopholes in the tax laws, inability to interpret complex tax laws, weak legal framework and failure on the part of the judicial system to enforce relevant statutes against tax defaulters. These reasons notwithstanding, tax evasion is usually harmful to any economy especially the evolving economies, like Nigerian economy.

This alarming increase in Tax Evasion and other financial fraud requires a more sophisticated accounting technique approach to handle it. One of the most effective and efficient accounting techniques is forensic accounting. The Association of Certified Fraud Examiners (ACFE) defines forensic accounting as the use of professional accounting skills in matters involving potential or actual civil or criminal litigation, including but not limited to, generally acceptable accounting and audit principles, the determination of lost profits, income, assets, or damages, evaluation of internal controls, fraud related issue and any other matter involving accounting expertise in the legal system. Forensic accounting is seen as the specialty area of the accountancy profession which describes engagements that result

from actual or anticipated disputes or litigation. “Forensic” entails “suitable for use in a court of law,” and it is to that standard and potential outcome that forensic accountants generally have to work (Crumbley, Heitger&Smith, 2005). According to Baird and Zelin (2009), Forensic accounting is an important investigative tool for the detection of tax fraud. It provides an accounting analysis to the court for dispute resolution in certain cases and it also provides the court with explanation to the fraud that has been committed. That is why forensic accounting plays a vital role in detecting and reducing fraudulent activities in the Nigerian economy. It is under this foregoing that this study sets out to critically examine the impact of forensic accounting on tax evasion in Nigeria

Governments all over the world, Nigeria inclusive are confronted with the issue of lack of capital to finance their social responsibilities due to low tax to GDP ratio caused by high rate of tax evasion. Tax evasion is more prevalent in Nigeria than in any other developing countries because of its adjudged corruption tendencies, (Nosiri, 2020). Omodero (2019) submits that the situation is such that the individuals and firms that are engaged in legitimate businesses also hide under underground economy to evade tax with impunity. He added that tax evasion is a taxpayer’s deliberate refusal to comply with his tax obligations through none or partial disclosure of his/her income sources to the relevant tax authorities for proper assessment. This act harms the government because it robs the government of the revenue it should have earned, decreases its revenue and hinders the overall economic development of the nation. The failure of the government and the anti-graft agencies to tackle this has put so much pressure on the professional bodies of accounting and other statutory bodies to look for a better of tackling tax evasion fraud in Nigeria. It is based on this that this study is designed to examine the impact of forensic accounting on tax evasion in Nigeria

Thus, the aim of this paper is to x-ray the impact of forensic accounting on tax evasion in Nigeria. Specifically, the study sought to examine tax evasion and forensic accounting in Nigeria and to determine ways of tackling fraudulent activities, tax evasion fraud inclusive in Nigeria



## **REVIEW OF RELATED LITERATURE**

The review of related literature in this work was sub-divided into three sections, namely, the conceptual framework, theoretical and empirical framework.

### **CONCEPTUAL FRAMEWORK**

#### **Fraud**

Chakrabarty (2013) saw fraud as any behavior by which one person intends to obtain a dishonest advantage over another where the person makes an illicit gain while the other party incurs a loss. (Sommer, 2014) saw it as ‘any illegal act characterized by deceit or concealment or violation of trust which do not directly depend on the use of violence, perpetrated in firms to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage. In whichever way fraud is seen, it is considered a serious crime in the Nigerian economic development

#### **Tax Evasion**

Tax evasion is a system whereby a taxpayer deliberately refuses to pay his tax or tries in an illegal manner to reduce his tax liability. Tax evasion can also be seen as when one intentionally refuses to declare all his sources of income or understate his income when filling tax returns. Edwin (2007) further hinted that tax evasion simply refers to an intentional effort by people, corporate bodies, trust and other institutions to illicitly refuse to pay their tax and reporting true and fair value of their earnings by a means of evading. Soyode and Kojola (2006) define tax evasion as an intentional and conscious practice of not revealing full taxable income. It is a violation of tax laws in which the tax rate due by a taxable person is unpaid after the minimum required period (Temitope, Olayinka & Abdurafiu, 2010). According to Richardson (2008), tax evasion is an intentional, illegal and unacceptable behavior or activities involving a direct violation of tax law to evade the disbursement of tax. Kim (2008) believes that tax evasion is illegal and violation of tax laws, whereas tax avoidance is a legal way of decreasing tax burden. Both the two are not acceptable but the latter is less serious to the former in eroding the revenue generation use for financing public expenditure. Olatunde (2007) and Sikka & Hampton (2005) identified

that tax evasion is among the main societal evils obstructing the progress in developing nations and eroding the prevailing welfare of the public in developed markets in the world. However, in the developing countries such as Nigeria very little consideration was devoted for curbing the problem to the detriment of public welfare (Temitope et al. 2010). Despite the fact that a fortunate society shall only be perceptible if its domestic tax revenue proceed would be generated for the purpose of social wellbeing of the public (Sikka & Hampton, 2005 and Olatunde, 2007).

### **Causes of Tax Evasion**

Different factors are the causal that encourage and make taxpayer acting toward evasion has been identified by various studies and authors. As the problems of tax evasion cut across many countries developed and developing the causes also seems to be unanimously universal. This is because tax is levied on the citizen and corporate entities as a contribution toward the redistribution of limited resources and taking care of public expenditure. Therefore, taxpayers share unique attitude in minimizing their tax liability through all the available and possible means to maximize their selfish interest. Adebisi et al., (2010) suggested the following as causes of tax evasion in many countries where taxes are levied: unfair distribution of facilities (amenities), poor management and misuse of tax collected, lack of essence of civic responsibility, taxpayer inaccessibility to government services.

Unfair distribution of amenities provided with the tax revenue by government make some taxpayers feeling self of not belonging and isolated from the society. This situation may create grudges and misunderstanding between the taxpayer and tax authorities. The taxpayer may see that no reason any longer for him to pay any more taxes because the benefit expected from paying the tax is to get back services provided by the government. Ovute and Eyisi (2014) stress that mismanagement and misuse of collected taxes would create a suspicious situation between the tax stakeholders and the essence of continue paying. Whenever collected proceeds of tax are not properly utilized, it results in mistrust between tax authorities and people, which finally led to evasion activities. Lack of essence or interest to pay tax may arise from illiteracy and act of unpatriotic by the citizens. People are reluctant to pay their civic responsibility simply because of personal interest and

ignorance (Leyira, Chukuma & Asian, 2012). Proper awareness and enlightenment would change the situation and encourage compliance. Taxpayer inaccessibility to benefit from the services provided by government change his view for paying tax. In this situation they see no reason for paying tax while the services provided by government they are not enjoying any more. This may happened where people are living in a remote areas and hence hardly to be reached by government infrastructure and services. This all led to evasion behaviours and to curb the situation right measures need to be considered at a right time.

Adebisi, Cobham (2005) identified five reasons for tax revenue losses (evasion) to be; the domestic shadow economy, foreign asset held by domestic residents, income shifting by multinational firms over transfer pricing, tax competition among countries which drives up tax rates, and non-payment of taxes which are due but which are not collected for few reasons like e.g. shortcomings of the tax administration.

Other important factors that cause tax evasion from the literature are inflation rate, income level, unemployment, tax rate, poor tax system, the size of the government and weaknesses of tax policies, regulations and trade openness (Razieh Tabandeh et al., 2012). Furthermore, Fakile & Adegbie, (2011) while deliberating on tax evasion; they conclude that the following are among the main causes of tax evasion in many countries particularly developing one. These are: high tax rate that make evasion more attractive, encouraging and economical, absolute ignorance of tax laws, lack of physical benefits accruing to the taxpayer and lack of confidence and trust in government for effective management of the tax. Others are, reluctant and unwillingness to pay the tax by the taxpayer for personal interest, in ability to detect the evaders by tax authority, bribery and corruption in the tax system and administration and lastly ridiculous low penalty set by the law for the late payment of due taxes. Therefore from the afore discussion about the factors that encourage and causes tax evasion seem to be interrelated and all are either default from tax laws, tax administration and even from the government. Most of the identified causes are due to taxpayer dissatisfaction with the management and effectiveness of tax usefulness. Very few problems were identified from taxpayer attitudes and behaviour such as self-interest as a causal of tax evasion.

## **The Nigeria Tax System**

ABWA, (2007) posited that the tax system usually involves a tripartite aspect, namely the policy, the tax laws, and the tax administration. The ABWA further went ahead to explain Tax Policy, Tax Laws and Tax Administration which follows thus:

### **a. Tax Policy**

The tax policies are general statements of intention which guide the thinking and the action of all concerned towards the realization of the set goals. They usually include:

- i. Movement of emphasis from income tax to consumption tax which is less prone to tax evasion;
- ii. Pursuance of a tax law regime with the aim of reducing individual tax burden, widening the tax net and encouraging savings and investments; and
- iii. Introduction of the self-assessment scheme to encourage taxpayers' participation in the tax assessment process which is considered to be realistic in approach. The policy can also include movement from coercive method of taxation to voluntary compliance as in the case of Nigeria of recent.

### **b. Tax Laws**

The tax laws include the following notable tax legislations in Nigeria:

- i. Personal Income Tax Act Cap. C21, LFN 2004(as amended);
- ii. Companies Income Tax Act Cap C21 LFN 2004 (as amended);
- iii. Petroleum Profits Tax Act Cap P13 LFN 2004(as amended);
- iv. Capital Gains Tax Act Cap C1 LFN 2004;
- v. Value Added Tax Act Cap V1 LFN 2004(as amended);
- vi. Tertiary Education Tax Act Cap E4 LFN 2004; and
- vii. Stamp Duties Act Cap S8 LFN 2004.

In Nigeria, the Constitution vests the legislation of income tax, whether personal or corporate on the Federal Government in order to promote uniformity. However, the administration of the various taxes is shared by the three tiers of government. Tax laws are reviewed periodically in line with the changes in social-political and economic conditions of the country.

The power to impose tax in Nigeria is within the exclusive legislative authority of the federal government. There are various machineries set up by the government to ensure strict compliance of these laws; non-compliance attracts penalties and fines.

#### c. Tax Administration

This involves practical interpretations and application of the tax laws. The bodies charged with the administration of tax in Nigeria are the Federal, the State and Local governments. The tax authorities of these tiers of government derive their formation from the Federal laws which include:

- (i) The Federal Inland Revenue Service Board, sections 1, 2, and 3 of the Companies Income Tax Act (CITA) Cap C21 LFN 2004;
- (ii) The Board of Internal Revenue (SBIR), sections 85A, B and C of Personal Income Tax Act as amended; and
- (iii) The Local Government Revenue Committee, sections 85D and E of Personal Income Tax as amended.

#### **Forensic Accounting**

Forensic Accounting has been conceived as one of the most effective and efficient ways of tackling tax evasion in Nigeria. There have been many definitions by different authors as to what is forensic accounting. However, no single definition has been adjudged the best. The Association of Certified Fraud Examiners, (2010) defines forensic accounting as the use of professional accounting skills in matters involving potential or actual civil or criminal litigation, including but not limited to, generally acceptable accounting and audit principles, the determination of lost profits, income, assets, or damages, evaluation of internal controls, fraud related issue and any other matter involving accounting expertise in the legal system. In the opinion of Kasum (2009) and Crumbley (2003), forensic accounting can also be viewed as investigative accounting or fraud audit, a discipline that combines forensic science and accounting. According to Crumbley, forensic science refers to the application of laws of nature to the laws of man. Extending this further, he asserted that a forensic scientist is one who examines and interprets evidence and facts in legal cases and also offers expert opinions regarding their findings in the court of law. Zysman (2004) views forensic accounting as a synthesis of accounting, auditing and investigative skills.

Coenen (2005) asserts that forensic accounting uses accounting concepts and techniques in solving legal problems. According to Baird and Zelin (2009), forensic accounting is important investigative tool for detection of fraud. It provides an accounting analysis to the court for dispute resolution in certain cases and it also provides the court with explanation to the fraud that has been committed. That is why forensic accounting may play a vital role in detecting and reducing accounting frauds in the business sector. In this concept, forensic accountants provide an account analysis to determine the facts necessary to resolve a dispute before it is brought before the court or the lawsuit process takes its course (Ozkul & Pamukc, 2012). One of the major jobs of forensic accountants is to discover the perpetrators of fraud that has occurred in the company per year. This includes, investigating money laundering activities, theft and tax evasion. Insurance companies hire forensic accountants to detect insurance frauds such as arson, and law offices engage forensic accountants to uncover marital assets in divorce cases (Weygandt, Kieso, & Kimmel, 2008).

One can deduce from the definitions presented so far that forensic accounting involves the application of accounting concepts and conventions, auditing techniques and investigative skills in solving legal matters. More so, it is worthy of emphasis that the responsibility of detecting and preventing financial fraud, including tax evasion in financial reporting lies not only in the hands of management of an organization, but also other control mechanisms. Internal control system, internal auditing and audit committee are the key elements for detection and prevention financial frauds that are created through property misuse as well as those that use financial reporting as instruments of frauds. But external auditing and forensic accounting perform retrospective control of financial information with the aim of detecting omissions, frauds and securing the reliability and credibility of the financial reporting. The emphasis of forensic accounting in the opinion of Kristic (2009) is on ensuring the reliability and credibility of financial statements which would be possible by the application of forensic accounting to unveil likely numerous financial frauds that seriously threaten the trust of many users of financial information. This is where forensic accounting reporting comes in to fill the gap so that accountability of fraud is established and the report considered as evidence in the court of law (Crumbley, 2003).

## **THEORETICAL FRAMEWORK**

### **Fraud Triangle Theory**

This study was anchored on Fraud Triangle Theory. The theory was propounded by Donald Cressey in 1950. Donald Cressey, a criminologist, started the study of fraud triangle theory by arguing that there must be a reason behind everything people do. Questions such as why people commit fraud led him to focus his research on what drives people to violate trust? He interviewed 250 criminals in a period of 5 months whose behaviour met two criteria: (i) initially, people accept the responsibilities of trust in good faith, and (ii) circumstances make them violate the trust. He relates that three factors (pressure, opportunity, and rationalization) must be present for an offense to take place. Cressey further states the following: *“Trust violators, when they conceive of themselves as having a financial problem that is non-shareable and have knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust. Also they are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property”* (Crassey 1953, p. 742).

**The three elements why people commit fraud as perceived by Donald Cressey are listed and explained thus:**

#### **Perceived Pressure**

Perceived pressures have been seen as one of the factors that lead people into financial fraud, including tax evasion. Every fraud perpetrator faces some pressure to commit unethical behavior (Abdullahi and Mansor, 2015). These pressures can either be financial or non-financial pressures. Albrecht et al. (2006) pointed out that, since the pressure to commit fraud may not be real it is important to use the word perceived. If the perpetrators believed that they were pressurized, this belief could lead to fraud. Perceived pressure can exist in various ways, especially in non-sharable financial need. Financial pressure is recognized as the most common factor that lead an entity to engage in an evil action. Specifically, about 95% of all fraud cases have been perpetrated due to the fraudster's financial pressures (Albrecht et al., 2006).

## **Perceived Opportunity**

The concept of perceived opportunity suggests that people will take advantage of circumstances available to them (Kelly and Hartley, 2010). The nature of perceived opportunity is like perceived pressure in the sense that the opportunity does not have to be real too. However, the opportunity exists in the perception and belief of the perpetrator. In most cases, the lower the risk of being caught, the more likely it is that fraud will take place (Cressey 1953). Several factors lead to the existence of an opportunity to commit fraudulent activities in an organization such as negligence of employee's breach of policies and lack of disciplinary action (Sauser, 2007). Wilson (2004) explains "opportunity" as the ability to override fraud controls. Rae and Subramanian (2008) alarm that opportunity refers to the ability and power of an employee to realize the weaknesses of the organizational system and taking advantage of it by making fraud possible. Furthermore, Srivastava, Mock and Turner (2005) and Hooper et al. (2010) argue that, even when the pressure is extreme, financial fraud cannot occur unless an opportunity is present. An opportunity has two aspects: (i) the inherent susceptibility of the organization to manipulation, and (ii) the organizational conditions that may warrant a fraud to occur. For example, if there is an inadequate job division, weak internal control, irregular audit, and the like, then the conditions will be favorable for the employee to commits fraud.

## **Rationalization**

The third element in Fraud Triangle Theory is rationalization. This concept indicates that the perpetrator must formulate some morally acceptable idea to him before engaging in unethical behavior. Rationalization refers to the justification and excuses that the immoral conduct different from criminal activity. If an individual cannot justify dishonest actions, it is unlikely that he or she will engage in fraud. Some examples of rationalizations of fraudulent behavior include "I was only borrowing the money", "I was entitled to the money because my employer is cheating me." Additionally, some fraudster excuses their action as "I had to steal to provide for my family", "some people did it why not me too" (Cressey, 1953). Rationalization is difficult to notice, as it is impossible to read the mind of the fraud perpetrator. Individuals who commit fraud possess a particular mind-set that



allows them to justify or excuse their fraudulent actions (Hooper and Pornelli, 2010). Rationalization is a justification of fraudulent behavior because of an employee's lack of personal integrity, or moral reasoning (Rae and Subramanian, 2008). The propensity to commit fraud depends on ethical values as well as on their personal attitudes of individuals (Kenyon and Tilton, 2006). Howe and Malgwi (2006) concluded that a bridge between incentive/pressure and opportunity is created when an individual can rationalize the fraudulent behavior.

### **Empirical Review**

Akinyele and Ogunmakin (2016) studied the impact of tax evasion on government revenue generation in Southwest Nigeria for the period of 1999-2014. The results showed that, 61 percent of the expected revenue of the states was hampered by avoidable consequence of tax evasion through non-compliance with collection and remittances. Mehrara & Farahani (2016) examined the effects of tax evasion and government tax revenues on economic stability in OECD countries using data from 1990-2013. They found that, tax evasion led to economic instability and more tax revenues will be beneficial to a better economic condition. Adebisi et al (2013) wrote on the effects of tax avoidance and tax evasion on personal income tax administration in Nigeria. They discovered that tax avoidance and tax evasion have negative impact on personal income tax administration in Nigeria. Ibadin and Eiya (2013) examined tax evasion and tax avoidance behavior of the self-employed, using some selected states in Nigerian geo-political zone. The results revealed that, respondents are of the opinion that tax evasion is ethical sometimes, and there is significant relationship between the ethical view, mode of tax administration and cultural practices of the self-employed. Obafemi (2014) carried a study on the effects of tax avoidance and tax evasion on Nigeria economic development. He adopted survey research design and responses were obtained through a well-structured questionnaire administered to 150 Nigerians, out of which are tax payers and tax evaders. He found that, tax evasion and avoidance have adversely affected the economic growth and development of Nigeria. Olabisi (2010) investigated the causes and effects of tax evasion and tax avoidance in Lagos state, and he obtained primary data from the total number of 127 questionnaires administered to personal income tax payers in Lagos state. His results revealed that, the tax administration in Lagos

state is very inefficient and ineffective and there is no adequate information on the tax payers in the state. Onyeka, et al (2016) examined the effect of tax evasion and avoidance on Nigeria's economic Growth. They found out that tax evasion and avoidance had negative significant effects on the growth of the Nigerian economy. Modugu et al (2014) appraised the evasion of personal income tax in Nigeria and obtained primary data through administration of 160 questionnaires to some selected self-employed individuals in Edo State. They found that, the tax payers' relationship with tax authority and weak penalties have a significant influence on tax evasion in Nigeria. There is need for the acquisition of relevant skills on forensic accounting by accountants, auditors and tax administrators for positive impact on the fight against tax evasion and other fraudulent activities. And this can only be achieved through the introduction of forensic accounting in the curricula of National Universities' Commission, the professional training bodies of accounting, the auditing firms, etc

### ***Knowledge Gap in Literature***

The Federal Government in a bid to reduce financial fraud, established the EFCC and the ICPC but yet their efforts seemed not to have yielded enough positive results. This has made the government to consider establishing the Proceeds of Crime Recovery and Management Agency to take care of recovered assets from financial fraud related activities. The failure of the government and the anti-graft agencies to tackle fraudulent activities in the Nigeria has put so much pressure on the professional bodies of accounting and the statutory bodies to look for a better way of reducing fraudulent activities, tax evasion inclusive in the country. It is against this background that this study is geared towards examining impact of forensic accounting on tax evasion in the Nigerian economic development.

## **METHODOLOGY**

The study adopted a theoretical research design. Research design is a plan of investigation that specifies the sources and types of information relevant to the research problem.

Data for the research was collected through secondary sources. The research made use of

content analysis which involves in-depth review of journals, relevant accounting standards, tax laws, periodicals, textbooks, ICAN study Materials, internet materials, ANAN study materials, newspapers, articles and other books on the subject matter.

## **DISCUSSIONS**

One of the reasons for the present state of underdevelopment in Nigeria is financial fraud, tax evasion inclusive. Onyeka and Nwankwo (2016) added that though tax frauds are problems that face every tax system but the Nigerian situation seems different when viewed from the level of corrupt practices in the country. These fraudulent practices are seen as sabotaging the economic development of Nigeria and impoverishing her people. Most developed countries of the world, like, America, Italy, Germany, etc generate their substantial revenue from tax based incomes. But this is not the case of Nigeria where taxes are evaded. According to Soyode, *et al.* (2006), tax evasion is seen as a deliberate and willful practice of not disclosing full taxable income in order to pay less tax. It is a deliberate violation of tax laws and it is evident in situations where tax liability is fraudulently reduced or false claims are filled on the revenue tax form (Olabisi, 2010; Soyode, *et al.* 2006). The federal Government has made several efforts to tackle the cases of tax evasion fraud in Nigeria but yet tax evasion cases still persists. However, the Federal Government of Nigeria needs to improve on her weak litigation support for prosecution of tax evasion cases by the use forensic accounting in her fight against tax evasion fraud. Court delays and judicial system needs to be properly improved upon. The Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and other related offenses Commission (ICPC) should encourage adequate training of their staff on forensic accounting skills for fraud detection and prevention. The National Universities' Commission, the Institute of Chartered Accountants of Nigeria and the Association of National Accountants of Nigeria should incorporate forensic accounting in their curricula for post-graduate studies and professional examinations. The government should embrace forensic accounting in tackling the cases of fraudulent activities, including tax evasion fraud, especially in this cutting-edge technology. The government should ensure that appropriate sanction and prosecution should be meted at anyone caught in tax evasion

and other fraudulent activities. The current effort of the Federal Government by creating a new anti-graft agency, “The Proceeds of Crime Recovery and Management Agency and other anti-corrupt agencies should be encouraged and sustained.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The study examined forensic accounting and tax evasion in Nigeria. Fraudulent activities, including tax evasion have become a menace in the Nigerian economic development. Edwin (2007) hinted that tax evasion simply refers to an intentional effort by people, corporate bodies, trust and other institutions to illicitly refuse to pay their tax and reporting true and fair value of their earnings by a means of evasion. Forensic accounting has been discovered to be a very strong mechanism in detecting fraud, particularly tax evasion fraud. In conclusion, it is therefore adduced that tax evasion fraud has great potentials of stealing our wealth and impoverish her people. Based on this, using forensic accounting techniques to detect this tax fraud will go a long way in improving the economic development of Nigeria

### **Recommendations**

The following recommendations were forwarded:

The Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and other related offenses Commission (ICPC) should encourage adequate training of their staff on forensic accounting skills for fraud detection and prevention.

Federal Government of Nigeria needs to improve on her weak litigation support for prosecution of tax evasion cases by the use forensic accounting in her fight against tax evasion fraud. Court delays and judicial system needs to be properly improved upon.

The National Universities’ Commission, the Institute of Chartered Accountants of Nigeria and the Association of National Accountants of Nigeria should incorporate forensic

accounting in their curricula for post-graduate studies and professional examinations.

The government should embrace forensic accounting in tackling the cases of fraudulent activities, including tax evasion fraud, especially in this cutting-edge technology.

The government should ensure that appropriate sanction and prosecution should be meted at anyone caught in tax evasion and other fraudulent activities

The current effort of the Federal Government by creating a new anti-graft agency, “The Proceeds of Crime Recovery and Management Agency and other anti-corrupt agencies should be encouraged and sustained.

Finally and most importantly, the government should ensure that the citizens enjoy the provision of adequate social amenities and infrastructural facilities such as health care facilities, good roads, job creation, power supply, etc. These are the dividends that accrue to tax payers and that will prove effective application of tax revenue by the government. When the citizens observe the fact that the taxes so far paid are being well applied, they will be well motivated to pay more and imbibe proper tax habit, (Mitchel, 2016)

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# **SPECIFIC DETERMINANTS OF CAPITAL ADEQUACY RATIO OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA**

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## **Abstract**

*The study examines the effect of specific determinants of capital adequacy ratio of quoted deposit money banks in Nigeria. Ex-post facto research design was adopted using panel data of ten years (2010-2019) to explore the effect of independent variables (credit risk, liquidity, leverage, profitability, bank size, and loan growth) on the dependent variable (capital adequacy ratio). The population of the study is the 14 banks quoted as at 2019. Purposive sampling method was used to select all banks provided they have consistent data set. Thus 13 quoted banks were used. The study made use of secondary data from banks' annual reports and accounts of the listed deposit money banks in Nigeria, and the CBN Bulletin. Panel regression was used and found out that, credit risk is significant positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. Liquidity is insignificant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. Financial leverage is insignificant and negatively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. Profitability is significant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. Bank size is insignificant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. Loan growth is significant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases significantly as loan growth increases. Based on the findings of the study, it is concluded that, increase in default or nonperforming loans increases the degree and extent of capital adequacy ratio of quoted deposit money banks in Nigeria to serve as a buffer to any negative shock resulting from nonperforming loans and advances. The study recommends among others that, Quoted DMBs in Nigeria should try to put in place more stringent rules that will ensure all loans and advances to be given out to customers are adequately perused and assessed to avoid and reduce issue of nonperforming loans resulting from default. This will go a long way in reducing default risk such that money kept as CAR will be reduced in order to increase the liquidity of the banks for better profits.*

**Keywords:** *Capital Adequacy, Credit Risk, Liquidity, Leverage, Profitability, Bank Size, loan Growth, Quoted DMBs, Nigeria.*

## 1. Introduction

Capital adequacy refers to amount of capital relative to a financial institution's loans and other assets (Barsel II, 1988). It represents the most critical element of banks stability and solidarity (Wen, 2010). Investors and stakeholders do not seem to understand what really determines capital adequacy and why some banks do better than others (Ongore, 2012). In Kenya today investors and stakeholders do not appear to understand what really determines capital adequacy and why some banks perform better than others (Ongore, 2012). In an effort to promote efficiency in the banking industry, to control weaknesses resulting from worldwide liberalization and deregulation, the Basel Capital Accord of 1988 (Basel I) which led to the endorsement of a new capital adequacy framework (Basel II) in 2004 (operational from 2007) marked the beginning of a new phase of re-regulation with an attempt to bring about an international harmonization of banking regulations (Bichsel and Blum, 2005). In assessing bank's efficiency, the level, nature and composition of capital and the cost income ratio are some of the key measures used to determine performance of a bank (Bourke, 1989). Kwan and Eisenbeis (1995) and Hughes and Moon (1995) argued that it is necessary to recognize explicitly the concept of efficiency in the empirical models linking bank capital to risk and to distinguish between efficient and inefficient risk undertaking. There are conflicts in capital theories for example Capital buffer theory encourages high capital while capital structure theory does not (Modigliani & Miller, 1958).

Although Capital Adequacy Ratios at commercial banks have increased since the risk-based standards have been introduced, the question arose as to what degree of these increases were a response, specifically to risk-based capital maintenance, other bank specific ratios such as Deposit Asset Ratio, Asset Quality Ratio (AQR) as well as financial performances of banks in terms of profitability. Therefore this study employed multiple regression model to determine the extent to which changes in Capital Adequacy Ratio in the risk-based capital regime are primarily determine by key bank-specific ratios as contained in the Basel Accord model for capital adequacy computation as well as the Prudential Guideline of the Central Bank of Nigeria. Furthermore, the study is necessary in that there have not been sufficient researches on bank-specific determinants of Capital Adequacy Ratio since the wake of the banking sector consolidation in 2005 and the adoption of Basel II and III in Nigeria. Thus, this study is an attempt to fill the identified gaps and thus contribute to literature on the subject matter in Nigeria.

Furthermore, regulation of capital adequacy is of great importance, the existing literature indicates that factors other than regulation are also of excessive significance in explaining and determining banks' CAR. Many researches have been conducted in both developed and developing countries on CAR determinates (e.g., Abba, Okwa, Soje and Aikpitanyi (2018); Alajmi, and Alqasem, 2015; Al-Tamimi and Obeidat, 2013; El-Ansary and Hafez, 2015; Mekonnen, 2015; Olareqaju and Akanda, 2016; Shingjierngi and Hyseni, 2015). No research in Nigeria, with the exception of Abba, Okwa, Soje and Aikpitanyi (2018), studied bank specific determinants of Capital adequacy ratio. However, while, Abba, Okwa, Soje and Aikpitanyi (2018) dwelled on the period spanning 2005 through 2014, this study expands the horizon by taking into consideration period up to 2019 from 2010. Thus, this study examines the determinants of CAR of quoted DMBs in Nigeria in terms of credit risk, liquidity, leverage, profitability, bank size, and loan growth.

## 2. Literature Review

### 2.1 Conceptual Framework

#### Concept of Capital Adequacy

Capital adequacy ratio (CAR) is the ratio that is set by the regulatory authority in the banking sector, and this ratio can be used to test the health of the banking system, this ratio has mandatory requirement imposed by the state bank because this ratio ensures that the bank has the ability to absorb the reasonable amount of losses. Bokhari and Ali (2009) stated that CAR ensures that banks are in capacity to meet the liabilities and other risk such as credit risk, market risk, operational risk, and others. According to Al-Sabbagh (2004), capital adequacy is defined as a measure of bank's risk exposure. Capital adequacy ratios are measures of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures. It is an international standard which recommends minimum capital adequacy ratios that has been developed to ensure banks can absorb a reasonable level of losses before becoming insolvent (Chen, 2003). It is broadly defined as the percentage ratio of a financial institution's primary capital to its assets (loans and investments), used as a measure of its financial strength and stability.

#### Determinants of Capital Adequacy

**Credit Risk:** Non-performing loans or finance (NPL or NPF) are those loans (financing services) and leases banks can't retrieve from some customers for 90 days or more (A. Ghosh, 2015). They are written in the balance sheet under the item nonperforming loans (finance). Generally, credit risk can raise a financial loss if the borrower fails to honor his/her contractual obligations (Elsiefy, 2013). NPL was used by Abusharba et al. (2013) to measure asset quality and they found that NPF has a negative significant effect on CAR. It describes also the bank's capacity in spreading risk and default loan recovery. NPL is used by Polat & Al-khalaf (2014) as an indicator of loan quality. However, their results showed that NPL has no significant effect on CAR in Kingdom of Saudi Arabia banking sector. This ratio is used as an indicator of credit risk faced by banks by Srairi (2013). In a banking sector, asset quality refers to an evaluation of the credit risk associated with any particular asset. This term is used by banks to decide what numbers of their assets are at financial risk and how much allowance for potential losses they must have to make. One of the most common indicators of asset quality is the loans loss reserve to total assets ratio. This ratio has been found by El-Ansary and Hafez (2015) as one of the most significant variables expanding the variance of the Egyptian banks' CARs. In Nigerian banks, loans loss reserve has been found as having a positive impact on bank's CAR. It is measured by a ratio of Non-Performing Loans to Total Loans. NPL ratio is one of the key indicators that can be used in assessing the performance and quality of bank assets. The higher the NPL ratio indicates the worse the quality of bank credit and the amount of credit risk faced by banks are getting bigger and the impact on the bank's earnings (Nasser, 2003). As a result banks which have a high capital level are expected to have a lower NPL ratio as a result of the coverage of the loan losses by its equity. Therefore in this study the expected relationship between the NPL ratio and capital adequacy ratio is negative.

## **Bank Liquidity**

Liquidity refers to the ability of a bank to respond to short-term obligations. Therefore, a high liquidity ratio reduces liquidity risk and increases capital of a bank (Abusharba, et al., 2013). The results of empirical research support this concept and indicate a positive relationship between bank liquidity and CAR (e.g., Bateni et al., 2014 and Abusharba, et al., 2013). A liquid asset to customer and short term funding are included to proxy bank liquidity. Angbazo (1997) states that as the proportion of funds invested in cash or cash equivalents increases, a bank's liquidity risk declines, leading to lower liquidity premium in the net interest margins. Therefore, an increase in bank liquidity (high LACSF) may have a positive impact to capital ratio. Total loans with respect to CBs and total financing with respect to IBs to total deposits ratio is a measurement of bank's liquidity that assesses the bank's ability to meet short-term obligations and additional financial requirements. Total financing refers to Musharakah, Mudarabah, and Murabaha accounts in IBs. Generally, high liquid banks face low bankruptcy costs and can raise more debt, and this will have negative consequences on their capital positions (Bitar, Hassan, et al., 2018). The higher this ratio is an indication of low liquidity and, of course, the higher the risk. As a result if liquidity risk increased the CAR should be increased too due to the increase in the banks' expected default risk. Abusharba et al. (2013) research on Indonesian Islamic banks proved this as they found that there is a positive significant relationship between FDR ratio and CAR. Liquidity can be defined as the ability of bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses (BIS, 2008). Liquidity represents the ratio of liquid asset to Total Asset. It is used to determine the financial position of banks. Angabazo (1997) states that as the proportion of funds invested in cash or cash equivalents increases, a bank's liquidity risk declines, leading to lower liquidity premium in the net interest margins. Therefore, an increase in bank liquidity may have a positive impact to capital ratio. The same is supported by (Abusharba, et al., 2013; Parvesh & Afroze, 2014). This study hypothesizes a significant positive relationship between LQR and capital adequacy ratio, because the high liquidity reduces liquidity risks and increases capital.

## **Leverage**

The other bank specific variable is the bank leverage factors which proxy by the total equity to total liabilities ratio. A high EQTL denotes low leverage whereas a low EQTL indicates high leverage. Shareholder will find high leveraged banks are more risky compared to other banks, therefore this increase required rate of return of the shareholders. Consequently, the high leveraged banks (Low EQTL) may find raising new equity difficult due to the high cost of equity capital. Ultimately, the high leveraged banks may hold less equity than low leveraged banks. High leveraged banks hold more equity so there is positive relationship. The researcher will expect the coefficient of EQTL is positive. Leverage is a ratio of debt to total assets. It is used to determine the impact of debt to total assets on CAR (Al-Sabbagh, 2004). Banks with more loan loss reserves are more aggressive in their lending practices, and are willing to accept losses instead of negotiating concession with loan defaulters. This means, a positive effect could signal that banks voluntarily increase their capital to a greater extent in order to overcome their bad financial situation.

## **Profitability**

Profitability is used by all the previous research as a bank specific determinant of CAR. ROA and ROE are the two common indicators for measuring profitability. Masood and Ansari (2016) and Shingjergji and Hyseni (2015) found that neither ROA nor ROE has an impact on bank's CAR. Other studies revealed a positive impact for the ROA (e.g., Mekonnen, 2015); and Polat and Al-khalaf, 2014; AlTamimi and Obeidat, 2013), and a negative impact for the ROE (e.g., Mekonnen, 2015; Nuviyanti and Anggono, 2014). This study tends to examine the relationship between the two profitability measures and CAR. Profitability also influences a bank's capital adequacy ratio. Gropp and Heider (2007) find that more profitable banks tend to have more capital relative to assets. In general banks have to rely mainly on retained earnings to increase capital. ROA and the capital adequacy ratio is most likely positively related, because a bank is expected to have to increase asset risk in order to get higher returns in most cases (Jeitschko and Jeung, 2005). Hence, the bank's return on assets (ROA) in the capital equation is included as a measure of profits with an expected positive sign. Buyuksalvarc & Abdioglu (2011) argued that profitability tends to increase capital relative to assets in the Turkish banking sector. In addition, Gropp and Heider (2007) found that more profitable banks tend to have more capital relative to assets. Thus, a positive relationship is expected between profitability and capital adequacy ratio. Therefore, this study expects a positive relationship between ROA and capital adequacy.

## **Bank Size**

Bank size is one of the most common determinants of CAR in the existing literature. In some studies, impact of size on bank's CAR is found to be positive; (e.g., Mekonnen (2015); El-Ansary and Hafez (2015); and Polat1 and Al-khalaf (2014) however, some other studies found this impact to be negative (e.g., Alajmi and Alqasem (2015); and Bateni et al., (2014). The natural logarithms of total assets are used as a proxy of banks' size. Banks' size is important because of its relationship to bank ownership characteristics and access to equity capital. Bank access to equity capital may reflect a relative importance of bankruptcy cost avoidance or managerial risk aversion. Jackson et al. (2002) propose that the large banks wish to keep their good ratings and therefore have considerable market-determined excess capital reserves. However, Gropp and Heider (2007) and earlier Shrieves and Dahl (1992) found that a banking organization's asset-size is an important determinant of its capital ratio in an inverse direction, which means that larger banks have lower capital adequacy ratios. This may occur because firm size might serve as a proxy for a banking organization's asset diversifications which reduce their risk exposure. Therefore, we hypothesize either a positive or negative relationship between bank size and capital adequacy ratio.

## **Loan Growth**

One of the principal activities of commercial banks is to grant loans to borrowers. Because loans are among the highest yielding assets a bank can add to its balance sheet, and they provide the largest portion of operating revenue. The ratio of total loans to total asset for banks is important because of its relationship with diversification and the nature of investment opportunity set. It measures the impact of loans in assets portfolio capital

(Buyuksalvarc & Abdioglu, 2011). Thampy (2004) indicates that, since loans have the highest risk weight, a capital constrained bank would want to conserve its capital by allocating fewer assets to loans. This trend becomes more severe as the capital constraint becomes binding which is the case for banks with less than the required capital level. However, for banks with high capital adequacy ratios, there is little impact on loan growth. In capital constrained environment banks will reduce the supply of loans. Hence the impact of higher capital standards on the supply of bank credit in the economy would have a greater impact in economies which have a bank dependent or dominated financial system as opposed to a capital markets dominated system (Mpuga, 2002). Loan measures the impact of loans in assets portfolio. Increase in risk leads to higher capital ratio in order to compensate depositors for risk taking. Negative relation of Loan loss reserves means that in period of difficulties bank has slower adjusted capital ratio. Positive relationship can be seen as the bank voluntary increase car in order to overcome bad financial situation. Blose (2001), Hassan (1992) and Chol (2000) found negative relationship between capital adequacy ratio and loan loss reserves. Loan growth is a ratio of total loans to total assets for bank. This is important because of its relationship with diversification and the nature of investment opportunity set. It measures the impact of loans in assets portfolio on capital. The study conducted by Dreca, (2013) indicates that banks may require more loans to invest in diversified nature of business. So banks transform more capital into loans. Due to this fact the balance of capital gets reduced and invested in loan. The reduction of capital brings the reduction of capital adequacy ratio of the banks .The idea is also supported by finding of Buyuksalvarc and Abdioglu (2011).Thus, this study hypothesizes a negative relationship between LAR and capital adequacy ratio (CAR).

## **2.2 Empirical Review**

### **Credit Risk and CAR**

Abba, Okwa, Soje and Aikpitanyi (2018) analyze the bank-specific determinants of CAR in the Nigerian Deposit Money Banks (DMBs) using balanced panel data collected from financial statements of 12 selected quoted banks for the ten-year period 2005-2014. The index for profitability which is ROA was found to be the most important determinant of CAR, having recorded the highest coefficient in the multiple regression result. The study found out that Capital Adequacy Ratio of Nigerian deposit money banks is well above the regulatory minimum set by CBN as well as the requirements of Basel Accord. Also, Nigerian banks' risk portfolio is quite high and ROA is quite low. Depositors' interests are well protected as the asset base of DMBs is well above the total deposits. The study concludes that CAR is largely determined by banks risk-portfolio, deposit level, profitability and asset quality and that CAR of Nigerian banks is well above the regulatory minimum. The study recommends that Nigerian deposit money banks should adopt a more pragmatic risk-management mechanism and a risk-based capital maintenance approach backed by a robust data management system. Yunisa and Omah (2013) examined the role of capital adequacy ratios in deposit money banks in Nigeria. Data procurement was based on "parliolithic" track of transactions of specific financial institutions under consideration (Nigeria). The analysis was tailored to harness the meritorious advantages of capital adequacy ratio in banks and other financial institutions. The study reveals that the higher the capital adequacy ratio, the greater the level of unexpected losses it can absorb. The

study also reveals that capital adequacy ratios measure the amount of a bank's capital in relation to the amount of its risk weighted credit exposures. The risk weighting process takes into account the relative riskiness of various types of credit exposures that banks have, and incorporates the effect of off-balance sheet contracts on credit risk. The higher the capital adequacy ratios a bank has, the greater the level of unexpected losses it can absorb before becoming insolvent. Finally, the study reveals that the Basel Capital Accord is an international standard for the calculation of capital adequacy ratios. The Accord recommends minimum capital adequacy ratios that banks should meet. The CBN applies the minimum standards specified in the Accord to licensed banks. This helps to promote stability and efficiency in the financial system, and ensures that deposit money banks comply with generally accepted international standards.

Ho and Hsu (2010) examine the relation between firms' financial structures and their risky investment strategy in Taiwan's banking industry. Their first result demonstrates that the restrictions on capital adequacy ratio have indeed affected firms' risky investment strategies, as market share and leverage are positively related. Second, the firm performance is significantly and positively related to firm size, leverage and financial cost. Finally, the regression results show that financial structures for banking firms are positively related to the states of business cycle. Mbizi (2012) sought to determine the role of capital on commercial bank performance in Zimbabwe. Descriptive correlation method was used in this research and the population includes senior commercial bank performance. Twenty executives were selected from each of the chosen banks and interviewed on various issues pertaining to bank capitalization and performance. Findings revealed that there is a significant and positive relationship between commercial bank capitalization and its performance.

Al-Tamimi and Obeidat (2013) identified the most important factors that determine the Capital Adequacy of Commercial Banks of Jordan in Amman Stock Exchange for the period from 2000 - 2008 using Multiple Linear Regression Analysis and the Correlation Coefficient (Pearson Correlation). The independent variable was capital adequacy and the independent variables were liquidity risks, credit risks, capital risks, interest rate risk, return on equity, return on assets, revenue power ratio. The result of study showed the following: There is a statistically significant positive correlation between the degree of capital adequacy in commercial banks and the following independent factors: liquidity risk, and the rate of return on assets. In another hand, there is an inverse relationship with statistical significance between the degree of capital adequacy of commercial banks and factors independent of the following: the rate of return on equity and interest rate risk.

Pastory and Mutaju (2013) analyzed the relationship between the capital adequacy and asset quality of commercial the banks in Tanzania. The study employed Panel secondary data from 33 banks in the period (2006-2011) and the linear Regression model was used to test for the relationship between the two variables. The findings indicate that capital adequacy has a great influence on the asset quality. The increase in capital ratios has sometimes reduced the asset quality productivity and in most cases the levels of non-performing loans and non-performing asset have been increased with the increase in capital ratios. The bank with the higher capital adequacy has shown the lower asset quality in terms of non-performing loans. This shows that bank with higher capital level have the tendency to increase the loan size and expand portfolio and sometimes increase the chance

of the customer's failure.

### **Bank Liquidity and CAR**

Thoa and Anh (2017) analyse data set of observations for Vietnamese banks in the period 2011-2015, and it shows how the Capital Adequacy Ratio (CAR) is influenced by selected factors, namely: asset of the bank SIZE, loans in total assets LOA, leverage LEV, net interest margin NIM, loans lost reserve LLR, Cash and Precious Metals in total assets LIQ. Results indicate, based on data, that NIM and LIQ have significant effect on CAR. On the other hand, SIZE and LEV do not appear to have significant effect on CAR. Variables NIM, LIQ have positive effect on CAR, while variables LLR and LOA are negatively related with CAR.

Abusharba et al. (2013) analyzed the determinants of the capital adequacy ratio in the Indonesian Islamic banking industry. Secondary data were obtained from Islamic banks annual reports and Islamic banking statistics that derived from Bank Indonesia covering the period of 2009 until the end of 2011. Multiple linear regression analysis and pair-wise correlation matrix are used to explain the effect of explanatory variables; profitability, assets earning quality, deposits structure, liquidity and operational efficiency on a proxy variable which is the capital adequacy ratio. The study found that profitability and liquidity are positively related to the capital adequacy requirements. Meanwhile, uncollectable funds measured by nonperforming financing are significant but negatively related to the capital adequacy ratio. On the other hand, depositor's funds and operational efficiency have no significant effect on capital adequacy of Indonesian Islamic banks. Hewaidy and Alyousef (2018) suggest that there are some factors other than legal capital requirements determine banks' capital structures. This study investigates the impact of bank-specific and macroeconomic factors on bank's Capital Adequacy Ratio (CAR). Size, profitability (ROA & ROE), Asset Quality (AQ), Management Quality (MQ), Liquidity (LIQ), Net Interest Margin (NIM), and bank type are used as bank-specific factors. Gross domestic product (GDP) and inflation are used as macroeconomic factors. Annual data for all Kuwaiti listed banks is used for the period from 2009 to 2016. The findings indicate that in terms of bank characteristics, only bank size, AQ, MQ and bank LIQ have significant impact on CAR. The findings suggest that CAR tends to be more affected by how efficient bank resources are utilized than by any other bank characteristic or macroeconomic variable. El-Ansary and Hafez (2015) examined explanatory factors that influence capital adequacy ratio (CAR) in the Egyptian commercial banks. The study investigates determinants of CAR before and after global financial crises. Results vary according to the period understudy. For the whole period, results show that liquidity, size, and management quality are the most significant variables. Before the financial crises, results show that asset quality, size, and profitability are the most significant variables. After the financial crises, results show that asset quality, size, liquidity, management quality, and credit risk are the most significant variables that explain the variance of Egyptian banks' CAR.

Olarewaju and Akande (2016) examined the determinants of capital adequacy in Nigerian banks. The study found a direct and positive relationship between ROA, size, and CAR, while they found inverse linear relationships among ROA, credit risk, deposit structure, and liquidity that are statistically significant in determining CAR. The study recommends the need for all these affected banks to gear up and invest more on the significant factors



that can lead to improvements in their capital adequacy in order to achieve viability, sustainability and stability in the long-run. Bateni et al., (2014) examined the relationship between seven financial factors and CAR in Iranian private banks. The study showed a negative relationship between size and CAR, while positive relationships with loans asset ratio, ROE, ROA, and CAR. Deposits asset ratio and risk asset ratio were not having impact on CAR. Shingjergji and Hyseni (2015) analyzed the main banking determinants of the capital adequacy ratio in the Albanian banking system. The results indicated that profitability do not have any influence on CAR, while non-performing loans, loan to deposit ratio, and equity multiplier have negative and significant impact on CAR. Bank size has a positive impact on CAR. In Indonesia, Nuviyanti and Anggono (2014), examined determinants of CAR. The research found that operating expense to operating income ratio, loan to deposit ratio, and ROE have negative significant effect on CAR; on the other hand, non-performing loans and ROA have positive influence on capital adequacy ratio.

### **Leverage and CAR**

Narasimhan and Goel (2013) analysed capital adequacy and its relevance to the Indian banking sector with a study of four Indian banks. In this study analyzed the capital adequacy and the leverage of the banks under study and correlate it with their growth. To understand how the Debt to Equity ratio has enhanced the advances and the overall business of banks. ii. To study the relationship between the nature and level of debt in a firm's capital structure and the economic performance of the firm for the period FY 2008 – 2012, the years since the last world recession. The variables that have been considered as a measure of capital adequacy and structure are Debt to Equity and Capital Adequacy ratio. Earnings per share have been used as a measure of performance, while the interest spread has been used as a measure of the bank's margin. Their finding attempted to demonstrate that the Indian banks exhibit stability in such times of crisis due to their capital structure and regulatory environment. Abba, Okwa, Soje and Aikpitanyi (2018) analyze the bank-specific determinants of CAR in the Nigerian Deposit Money Banks (DMBs) using balanced panel data collected from financial statements of 12 selected quoted banks for the ten-year period 2005-2014. The index for profitability which is ROA was found to be the most important determinant of CAR, having recorded the highest coefficient in the multiple regression result. The study found out that Capital Adequacy Ratio of Nigerian deposit money banks is well above the regulatory minimum set by CBN as well as the requirements of Basel Accord. Also, Nigerian banks' risk portfolio is quite high and ROA is quite low. Depositors' interests are well protected as the asset base of DMBs is well above the total deposits. The study concludes that CAR is largely determined by banks risk-portfolio, deposit level, profitability and asset quality and that CAR of Nigerian banks is well above the regulatory minimum.

Aktas, Acikalin, Bakin and Celik (2018) evaluate the impact of bank-dimensional and environmental factors on bank's capital adequacy ratio in South Eastern European (SEE) region. Size, profitability (ROA), leverage, liquidity, net interest margin (NIM), and risk are used as bank-dimensional explanatory variables in a feasible GLS regression model. On the other hand, economic growth rate, inflation, real interest rate, Eurozone stock market volatility index, deposit insurance coverage, and governance indicator are added to the original model to control for environmental factors. Annual data from 71 commercial

banks belong to 10 different countries in SEE region for the period of 2007 – 2012 is used. This region mainly consists of the “transition economies” which are still experiencing the difficulties of turning into efficient market economies with high economic potentials. The results of our study show that among the bank dimensional explanatory variables size, ROA, leverage, liquidity, net interest margin and risk have statistically significant effects in determining CAR for the banks in the region. Among the environmental factors, economic growth rate, Eurozone stock market volatility index, deposit insurance coverage, and governance have statistically significant effects in determining CAR for the banks in the SEE region. Dreca (2013) analyse a data set of observation for 10 banks in period of 6 years in B&H shows how Capital Adequacy Ratio (CAR) is influenced by many factors such as: capital structure, size of the bank, profitability indicators, participation of deposits and loans in total asset, and leverage. Selected variables are chosen on the previous research and analysis is done through several methods and some diagnostics tests are performed in order to determine the most appropriate model that explains determinants of CAR. Results indicate based on data that SIZE, DEP, LOA, ROA, ROE AND LEV have significant effect on CAR. On the other hand LLR and NIM do not appear to have significant effect on CAR. Variables SIZE, DEP, LOA and ROA have negative effect on CAR, while variables LLR, ROE, NIM and LEV are positively related with CAR. All variables except LOA and ROA have expected signs. It is hard to distinguish which CAR is better higher or lower, from stability aspect it is better to have higher CAR, but from profitability side lower CAR is more preferable, so the banks should decide based on this study which variable to use in order to reach targeted CAR level. El-Ansary and Hafez (2015) examine explanatory victors that influence capital adequacy ratio (CAR) in the Egyptian commercial banks. The study covers 36 banks during the period from 2004-2013. We examined the relationship between CAR as dependent variable and the following independent variables: earning assets ratio, profitability, and liquidity, Loan loss provision as measure of credit risk, net interest margin growth, size, loans assets ratio and deposits assets ratio. Furthermore, we investigate determinants of CAR before and after the 2007- 2008 international financial crises. Results vary according to the period understudy. For the whole period 2003 to 2013 results show that liquidity, size and management quality are the most significant variables. Before the period 2008 results show that asset quality, size and profitability are the most significant variables. After the period 2009 results show that asset quality, size, liquidity, management quality and credit risk are the most significant variable that explain the variance of Egyptian banks' CAR.

### **Profitability and CAR**

Dreca (2013), using OLS regression, evaluated this subject-matter in Bosnian banks and found that loans, ROA, deposit, size, ROE and leverage significantly influence the capital adequacy ratio, while loan loss ratio and net interest margin were insignificant. Similarly, Allen, Nilapornkul and Powell (2013) using mixed factors found profitability, bad loans and GDP posing negative effects on leverage in Thai banks. Also, in the study of the Turkish banking sector, Buyuksalvarc and Abdioglu (2012) discovered the negative effect of loan to asset ratio; Return on Equity and leverage ratio on capital adequacy ratio. While Liquidity ratio and Return on Assets was found to be positive but significant, size, Deposit structure, Liquidity ratio and NIM have no significant effect on CAR. Alsabbagh (2004)

examined capital adequacy determinants in Jordanian banks and found that most Jordanian banks had adhered to the required Basel I capital accord minimum of 8% capital ratio and also revealed that CAR was directly affected by ROA, loan to assets ratio, risky assets ratio and dividend payout ratio of the bank, while deposits assets ratio, loan provision ratio and size of bank negatively affect CAR. In 2008, Gropp and Heider use both internal and external factors and found that profitable banks possessed more equity and it was the major determinant of capital in the United States and European large banks. This finding was consistent with the postulations of the pecking order theory. Similarly, Kleff and Weber (2008) aver that the capital level of banks is positively correlated with the profit of banks, therefore, profit accumulation generates a higher level of growth in capital which is contrary to the findings of the study carried out by Aremu, Ekpo, Mustapha, and Adedoyin (2013) on the Nigerian banking sector in which they found profitability, growth and banks' risk level to pose a significant but indirect relationship with capital level. They also discovered the inverse relationship of tangibility and tax charged with capital, but dividend payout and size of the banks were found to be positively and significantly related to their capital. However, Ahmad, Ariff, and Michael (2008) also confirm in the Malaysian banking sector the negative effect of earnings on their capital ratio. Comparatively, Bokhari and Ali (2009) analyze the capital adequacy determinants of Pakistan banking sectors employing deposits, GDP, portfolio risks and profitability as bank-specific factors affecting capital ratio. They found that profitability proxied by Return on Asset was inversely related to capital ratio but highly significant. However, deposit, portfolio risk and GDP have a negative but significant effect on the capital adequacy ratio. Finally, Williams (2011) examined the impact of the macro economic variables on the capital base in Nigerian banks and discovered that macroeconomic variables such as inflation, real exchange rate, return on investment, money supply and political stability are robust predictors of capital adequacy.

Bitar and Tarazi (2019) conduct a comparative analysis between IBs and CBs in 24 countries to examine the ability of creditors rights, measured by an index composed of a sum of four legal measures (no automatic stay, secured creditor paid first, restrictions on reorganization, and no management stay), in explaining CAR variance. They found robust evidence that the stronger the creditors' rights the higher the CAR only for CBs. They explained their findings as a consequence of different philosophies of both banking systems. CBs managers increase their capital buffers under strong creditors' rights in order to signal enhanced efforts for monitoring and to overcome the probability of losing control. On the other hand, IBs profit and loss sharing principle made creditors' rights irrelevant in their context. However, they found similar behavior of both banking systems in non-Muslim markets where the competition is low.

### **Bank Size and CAR**

Yu (2000) documents bank size; liquidity and profitability are the main determinants of bank capital ratio in Taiwan. The author summarises that large banks in Taiwan have much lower capital ratios than the small banks which is consistent with the previous study where the large banks feel that they are "too big to fail". The author also suggests that the banks mainly use internal source of capital, this contributes that more profitable banks tend to have higher capital ratios. The remarkable finding of this paper is the relationship between

the equity-ton asset ratio and the liquidity ratio is significantly positive for small banks, but significantly negative for medium size banks. Al-Sabbagh (2004) analysed determinants of capital adequacy ratio in Jordanian banks, by studying the financial statements of a sample of 17 banks in two periods. The first period is conducted from (1985-1994) which represent a time before applying Basel committee standards for capital adequacy ratio in Jordanian banks while the second period covers from (1995-2001) which is a time after applying Basel committee standards for capital adequacy ratio that represented in a minimum capital adequacy ratio (CAR) of 8%. The study found that most Jordanian banks are committed by a minimum 8% capital adequacy ratio. He used a model of nine independent variables expected to affect CAR using correlation coefficients and regression analysis. He found a negative relation between CAR and bank's size, while CAR was positively affected by ROA, loan to assets ratio (LAR), and equity ratio (EQR). CAR has a positive relation to risky assets ratio (RAR) in the period (1985-1994), while the relations become negative over the period (1995-2001). CAR is negatively affected by deposits assets ratio between (1985-1994), and positively affected by a size of banks' deposits in a period (1995-2001). CAR is negatively affected by loan loss provision (LPR), and positively affected by dividend payout ratio (DR) over the period (1995-2001).

Wong (2005) examined the Determinants of the capital level of banks in Hong Kong. They examined the behaviour of licensed banks in Hong Kong towards their capital adequacy decisions. A qualitative analysis is carried out and an econometric model is constructed to assess the relevance of hypotheses made in various studies. Licensed banks incorporated in Hong Kong are the set of banks considered. The data are on a quarterly basis, covering the period from 1992 Q1 - 2004 Q3 and involving 31 banks. The dependent variable CAR is the capital adequacy ratio. The explanatory variables regulatory capital requirement, risk, bank size, GDP growth rate, return on equity, average CAR of other banks in the same peer group, one-period lagged CAR, ratio of the interbank borrowing to the total borrowing and Asian financial crisis. In line with the experience in other economies and consistent with findings in banking literature, the CAR levels of banks in Hong Kong are determined by a number of factors, in addition to the regulatory requirements. Among banks' internal factors, risk appears to be highly relevant. It was found that banks' own assessments of risk, which may be different from that of the regulator, could have resulted in banks' holding a high level of capital. Romdhane (2012) tried to study the determinants of the banks' capital ratio in an emerging country. The study employed half-yearly data from the Tunisian banking industry for the period 2002- 2008. They used the standard capital determinants as explanatory variables. The dependent variable was capital ratio while the explanatory variables were risk, interest margin rate cost of equity, demand deposits variability, intermediation rate, term deposit/ demand deposit, average capital adequacy ratio, size of the bank. They found that the interest margin and the risk affect strongly the capital ratio. The deposit variability and the intermediation rate have the same sign. But, the equity cost and the deposits ratio both have a negative impact. The main determinants are the same for all the countries.

Al-Sabbagh (2004) analyzed determinants of capital adequacy ratio (CAR), by studying the financial statements of a sample of 17 banks in Jordan in two periods. The first period is conducted from (1985-1994) which represent a time before applying Basel committee standards for capital adequacy ratio in Jordanian banks. While the second period covers

from (1995-2001) which is a time after applying Basel committee standards for capital adequacy ratio, that represented in a minimum capital adequacy ratio (CAR) of 8%. The study found that most Jordanian banks are committed by a minimum 8% capital adequacy ratio, while some banks have higher than 8%. He used a model of nine independent variables expected to affect CAR. Using correlation coefficients and regression analysis, he found a negative relation between CAR and bank's size, while CAR was positively affected by ROA, loan to assets ratio (LAR), and equity ratio (EQR). CAR has a positive relation to risky assets ratio (RAR) in the period [1985-1994], while the relation becomes negative over the period (1995-2001). CAR is negatively affected by deposits assets ratio between (1985-1994) and positively affected by a size of banks' deposits in a period from (1995-2001). CAR is negatively affected by loan provision ratio (LPR), and positively affected by dividend payout ratio (DR) over the period (1995-2001). Based on the results he concludes that banks in Jordan should maintain or increase their capital adequacy ratio (CAR) to enhance the safety of the banking system, and the safety of the depositors.

Williams (2011) study the relationship between capital base and some macroeconomic, financial structure and banking variables using an error correction model during 1980 – 2008 in Nigeria. As dependent variable the study uses capital adequacy base while as independent variables the study used total loans, money supply, interest rate, inflation rate, demand deposit, political instability, exchange rate, liquidity risk, openness of the economy and investments. The study concludes that the money supply is a very important determinant of the capital adequacy base in Nigeria having a high and very strong level of significance. The real interest rate is negatively related to capital adequacy base meaning that an increase of real interest rate dampen the capital adequacy base. The real exchange rate is a significant determinant but its coefficient is not as expected while the deposit liabilities and liquidity risk are not statistically significant. The author finds out that investments and political instability are correctly signed and statistically significant to explain the capital adequacy base in Nigeria. Buyuksalvarc and Abdioglu (2011) investigate the determinants of the capital adequacy ratio (CAR) in the Turkish banks using secondary data. The capital adequacy ratio is used as dependent variable while as independent variables are use indicators that measure: Banks size, Deposits, Loans, Loan loss reserves, Liquidity, Return on Asset (ROA) and Return on Equity(ROE), Net interest margin and Leverage. From the regression results the authors find that Loans, Loans Loss Reserves, Leverage, ROA and ROE have a significant relationship with CAR while Bank size, Deposits, Liquidity and Net Interest Margin do not have effect on the CAR in the Turkish banks. Bokhari and Syed (2013) analyzed the determinants of capital adequacy ratio in banking sectors of Pakistan by using both internal and external factors. They used deposits, Gross Domestic production growth rate, portfolio risks and profitability as bank characteristics affecting capital ratio. They found that profitability measured by return on equity has negative significant effect on capital ratio. It also concluded that the variables, deposits, portfolio risks and Gross Domestic production growth rate have negative significant impact on capital adequacy ratio. Dreca (2013) analyzed determinants of CAR based on the data set of observation for 10 banks in period of 6 years in BOSNIAN and the result indicate that SIZE, Deposit(DEP), Loan to Asset ratio (LOA),ROA, ROE and leverage (LEV) have significant effect on CAR. On the other hand Loss Loan Reserve (LLR) and NIM do not appear to have significant effect on CAR. Variables SIZE, DEP,

LOA and ROA have negative effect on CAR, while variables LLR, ROE, NIM and LEV are positively related with CAR.

Ali and Hyseni (2015) studied by giving emphasis to the relationship between capital adequacy ratio and return on assets (ROA), return on equity (ROE), the non-performing loans (NPL) and bank size (Total Assets), equity multiplier (EM) and loan to deposit ratio (LTD) using quarterly data from 2007 to 2014 with a total of 31 observations. And the regression result indicates that those profitability indicators such as ROA and ROE do not have any influence on CAR while NPL, LTD and EM have negative and significant impact on CAR in the Albanian banking system. In contrary to other similar studies in this study, the bank size has a positive impact on CAR meaning that large banks have higher CAR. Similarly Yuanjuan and Shishun (2012) analyzed the relationship between the capital adequacy ratio (CAR) and some internal banking variables using regression analysis from 2005 - 2010. They use capital adequacy ratio as dependent variable while as independent variable they use: ROA, ROE, Earning per Share (EPS), Deposit loan ratio (DLR) and NPL. From the regression results the author find a positive relationship between ROA and CAR but a negative relationship between ROE and CAR. In the same time is noticed a negative relationship between CAR and credit risk (NPL) and also liquidity risk (DLR).

### **Loan Growth and CAR**

Ezike and Oke (2013) investigated the impact of the adoption of the Capital Adequacy Standards on the performance of Nigerian banks. The study involved the use of ordinary least squares (OLS) estimation technique to examine and determine the effect of the independent variables – loans and advances, shareholders funds, total assets and customer deposits – on the dependent variables – Earnings per share (EPS) and profit after tax. The results of the analysis showed that capital adequacy standards exert a major influence on bank performance. In addition the impact of the Nigerian monetary authority on the new capital requirements was found to be complemented with the adoption of the Basle accord framework. In addition, the study concludes with the recommendation that the CBN should not rely solely on the capitalization of banks as a determinant of bank performance but also should concentrate on efficient and effective bank supervision and risk management. Samad (2011) sought to determine capital ratio that significantly distinguishes failed banks from a group of non-failed peer banks can be used in providing an early warning signal for bank management and bank regulators. The study tested the hypothesis by using the ANOVA and the Kruskal-Wallis K tests t on four measures of capital adequacy. Data for all failed and survived banks during 2009 are obtained from the call reports of FDIC. Finding Both ANOVA and non-parametric, Kruskal-Wallis, tests strongly supports the hypothesis that there are significant differences between the two groups of banks with respect to their capital holding ratios. Buyuksalvarci and Abdioglu (2011) investigated the determinants of Turkish banks' capital adequacy ratio and its effects on financial positions of banks covered by the study. Data are obtained from banks' annual reports for the period 2006 - 2010. Panel data methodology is used in this study and analyzes relationships between independent variables; bank size, deposits, loans, loan loss reserve, liquidity, profitability (return on assets and return on equity), net interest margin and leverage and a dependent variable which is capital adequacy ratio (CAR). The results of the paper indicate that loans, return on equity and leverage have a negative effect on capital adequacy ratio,

while loan loss reserve and return on assets positively influence capital adequacy ratio. On the other hand, bank size, deposits, liquidity and net interest margin do not appear to have any significant effect on capital adequacy ratio.

### 2.3 Theoretical Framework

This study anchors on Pecking order theory that tries to capture the cost of asymmetric information and states that companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance preferring to raise equity as a financing means of ‘last resort’. This implies that internal financing is used first; when it is depleted, then debt is issued and when it is no longer sensible to issue more debt, equity is issued. The theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity implies issuing more shares which meant bring external ownership into the firm).

### 3. Methodology

The study uses descriptive research design using panel data from annual reports and accounts for the period of ten years (i.e. 2010-2019) to explore the effect of independent variables (credit risk, liquidity, leverage, profitability, bank size, and loan growth) on the dependent variable (CAR), and the nature of the relationship that exist between the variables. The population of the study is the 14 banks quoted on the floor of the Nigerian stock exchange as at 2019 (i.e. Access Bank Plc, EcoBank Plc, Fidelity Bank Plc, First Bank of Nig. Plc, First City Monument Bank Plc, Guaranty Trust Bank Plc, Jaiz Bank Plc, Stanbic IBTC Bank, Sterling Bank Plc, UBA Plc, Union Bank Plc, Unity Bank Plc, Wema Bank Plc, and Zenith Bank Plc). Purposive sampling technique was used to select banks based on the criteria that the banks: have availability of consistent data-set over the period and with at least a branch in all states of the federation; are listed and quoted on the Nigeria Stock Exchange as at 2020. Thus only 13 were selected for the study.

The panel regression model was used with the aid of E-Views version 9 to determine and analyze the effect of the internal determinants of CAR of quoted DMBs in Nigeria. Thus, the following multiple panel regression model equation was used to evaluate the determinants of CAR of quoted DMBs in Nigeria.

#### Panel Regression Model:

$$CAR = f(CR, LQ, LVG, PRF, BS, LG) \text{ -----} \quad i$$

$$CAR_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 LQ_{it} + \beta_3 LVG_{it} + \beta_4 PRF_{it} + \beta_5 BS_{it} + \beta_6 LG_{it} + \varepsilon_{it} \text{ -----} \quad ii$$

**Where:** CAR = Capital Adequacy Ratio (Equity to Risk Weighted Capital), CR = Credit Risk (Nonperforming Loans/Total Loans), LIQ = Liquidity (Cash and Short-term Funds/Total Deposit), LVG = Leverage (Debt/Total Assets), ROA = Profitability (PAT/Total Assets), BS = Bank Size (Log of Total Assets), LG = Loan Growth (Loans and Advances/Total Assets).

#### 4. Results and Discussions

**Table 4.1 Descriptive Statistics CAR, CR, LQ, LEV, PRF, BSIZE, LOAN**

	CAR	CR	LQ	LEV	PRF	BSIZE	LOAN
Mean	15.53538	10.02631	48.11846	65.60238	11.96238	27.31754	49.23085
Median	16.89500	4.585000	46.85500	65.53500	10.64500	27.41500	48.55500
Maximum	41.37000	78.68000	121.2200	125.0200	32.43000	28.75517	86.71000
Minimum	-57.34000	0.390000	-33.10000	21.80000	2.970000	25.61228	22.44000
Std. Dev.	12.28528	14.17378	18.50222	15.78591	6.306284	0.709256	10.72288
Skewness	-3.073895	2.970625	0.486827	0.916280	1.323633	0.201828	0.460610
Kurtosis	18.22818	12.64758	7.317828	5.987797	4.495274	2.309049	3.586044
Jarque-Bera	1460.836	695.3606	106.1214	66.54487	50.07093	3.468569	6.457170
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.176526	0.039614
Sum	2019.600	1303.420	6255.400	8528.310	1555.110	3551.281	6400.010
Sum Sq. Dev.	19469.73	25915.60	44160.82	32146.15	5130.229	64.89266	14832.44
Observations	130	130	130	130	130	130	130

**Source: Researcher's Computation using E-Views Version 9**

Table 4.1 presents Descriptive Statistics of the variable of the study. It describes the Mean, Standard Deviation, Skewness and Kurtosis. The average value of CAR recorded in the period of the study is 15.53, the Median is 16.89, and the Maximum reached is 41.37, while the Minimum reached is -57.34. The Kurtosis is 18.22 which exceeds 3. This indicates that the distribution is Leptokurtic. In the case of CR, average value stood at 10.02, the Median is 4.58 and the Maximum reached is 78.68. The Kurtosis is 12.64 which exceeds 3. This indicates that the distribution is Leptokurtic. LQ average stood at 48.11 and the Maximum reached is 121. The Kurtosis is 7.31 which exceeds 3. Thus indicates that the distribution is Leptokurtic. In the case of LEV, the average value stood at 65.60 and the Maximum reached is 125.02. The Kurtosis is 5.98 which exceeds 3. Thus indicates that the distribution is Leptokurtic. In the case of PRF, the average value stood at 11.96 and the Maximum reached is 32.43. The Kurtosis is 4.49 which exceeds 3. Thus indicates that the distribution is Leptokurtic. The BSIZE average stood at 27.31 and the maximum reached is 28.75. The kurtosis is 2.30 which is less than 3. Thus indicates that the distribution is platykurtic. The LOAN average stood at 49.23, the Median is 48.55 and the Maximum reached is 86.71, while the minimum is 22.44. The Kurtosis is 3.58 which exceeds 3. This indicates that the distribution is Leptokurtic.



### Table 4.2 Correlation Analysis

Covariance Analysis:

Ordinary

Date: 02/19/21 Time:

11:48

Sample: 1 130

Included observations: 130

Correlation Observations	CAR	CR	LQ	LEV	PRF	BSIZE	LOAN
CAR	1.0000 130						
CR	-0.3317 130	1.0000 130					
LQ	-0.0416 130	-0.0883 130	1.0000 130				
LEV	0.0098 130	-0.2716 130	-0.1943 130	1.0000 130			
PRF	-0.0291 130	0.1967 130	-0.0806 130	-0.1887 130	1.0000 130		
BSIZE	0.1461 130	-0.3108 130	-0.0605 130	0.3318 130	-0.5020 130	1.0000 130	
LOAN	0.1124 130	0.3047 130	-0.6000 130	-0.0308 130	-0.0755 130	0.0197 130	1.0000 130

### Source: Researcher's Computation using E-Views Version 9

Table 4.2 is the correlation result which indicates that there is a positive association between LEV and CAR of quoted DMBs in Nigeria. This is similar to that of BSIZE where positive correlation is found with CAR of quoted DMBs in Nigeria. Furthermore, LOAN and ROA, found to be positively correlated. Conversely, negative correlation is found between (CR, LQ and PRF) and ROA of quoted DMBs in Nigeria. The respective cases indicate the significance of the relationship given by 1.0000. It is also indicated in the results that the explanatory variables are not highly correlated.

### Hausman Specification Test

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	4.791317	6	0.2920

The Hausman Test indicates that Random Effect Model is most appropriate to Fixed Effect Model given the Chi-Square value of 4.79 with its corresponding P-value of 0.2920 which is greater than the critical value of 0.5.

### Regression Analysis

Dependent Variable: CAR

Method: Panel EGLS (Cross-section random effects)

Date: 02/19/21 Time: 11:55

Sample: 2010 2019

Periods included: 10

Cross-sections included: 13

Total panel (balanced) observations: 130

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-23.80336	48.53953	-0.490391	0.6247
CR	0.307812	0.082119	3.748371	0.0003
LQ	0.011249	0.069223	0.162498	0.8712
LEV	-0.084586	0.075274	-1.123703	0.2633
PRF	0.436047	0.185451	2.351283	0.0203
BSIZE	1.032209	1.723443	0.598922	0.5503
LOAN	0.284764	0.129051	2.206597	0.0292

Effects Specification			S.D.	Rho
Cross-section random			3.951421	0.1348
Idiosyncratic random			10.01273	0.8652

Weighted Statistics			
R-squared	0.133057	Mean dependent var	9.714540
Adjusted R-squared	0.090767	S.D. dependent var	11.11407
S.E. of regression	10.59768	Sum squared resid	13814.24
F-statistic	3.146293	Durbin-Watson stat	1.520279
Prob(F-statistic)	0.006637		

Unweighted Statistics			
R-squared	0.150297	Mean dependent var	15.53538
Sum squared resid	16543.49	Durbin-Watson stat	1.269472

**Source: Researcher's Computation using E-Views Version 9**

The regression line  $CAR = -23.80 + 0.30CR + 0.01LQ - 0.08LEV + 0.43PRF + 1.03BSIZE + 0.28LOAN$  indicates that CAR will increase by 0.30% for every 1% increase in CR,

increase by 0.01% for every 1% increase in LQ, decrease by 0.08% for every 1% increase in LEV, increase by 0.43% for every 1% increase in PRF, increase by 1.03% for every 1% increase in BSIZE, and increase by 0.28% for every 1% increase in LOAN. The F-Statistics of 3.14 with its probability value of 0.006 indicates the fitness of the model. The coefficient of determination ( $R^2$ ) of 0.133 indicates that only about 14% of variation in CAR of quoted DMBs can be explained by Bank specific determinants of CAR.

### **Multicollinearity**

Variance Inflation Factors

Date: 02/19/21 Time: 11:51

Sample: 1 130

Included observations: 130

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2429.235	2449.326	NA
CR	0.006469	1.955900	1.300231
LQ	0.005239	14.02443	1.794323
LEV	0.005007	22.97509	1.248362
PRF	0.036108	6.646537	1.436741
BSIZE	3.019666	2273.578	1.519806
LOAN	0.016300	41.70901	1.875196

### **Source: Researcher's Computation using E-Views Version 9**

The VIF for CR, LQ, LEV, PRF, BSIZE and LOAN are 1.30, 1.79, 1.24, 1.43, 1.51, & 1.87 respectively. This indicates that, the VIF are less than 10 respectively. Thus, the study concludes that there is no presence of multicollinearity. That multicollinearity exists only when the VIF is greater than 10.

### **Heteroskedasticity**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.906574	Prob. F(6,123)	0.0849
Obs*R-squared	11.06169	Prob. Chi-Square(6)	0.0865
Scaled explained SS	71.54754	Prob. Chi-Square(6)	0.0000

### **Source: Researcher's Computation using E-Views Version 9**

The Breusch Pagan-Godfrey Test of Heteroskedasticity on CR, LQ, LEV, PRF, BSIZE and LOAN given the  $\chi^2$  Prob of 0.0865, indicates that the data are homoskedasticity. Thus no presence of heteroskedasticity. Thus the p-value of 0.0865 which is greater than 0.05 makes the study to accept the hypothesis that the residuals are homoskedasticity not heteroskedasticity and is desirable.

## **Discussion of Findings**

### **Credit Risk and Capital Adequacy Ratio**

It is evident from the above results and analyses that, credit risk is significant negatively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases with increase in credit risk (nonperforming loans). This finding is consistent with the findings in previous studies such as Tibebe (2011); and more recently Chen and Pan (2012), but inconsistent with the findings in the work of Fredrick (2012). The study aligns with Buffer Theory of Capital Adequacy which requires banks to hold a “buffer” of excess capital with a view to absorbing any negative shock when it crops up such as nonperforming loans. The buffer capital also helps banks to take advantage of viable investment opportunities to increase their profitability.

### **Liquidity and Capital Adequacy Ratio**

Liquidity is insignificant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases insignificantly with increase in liquidity. This finding is in tandem with the findings in previous studies such as Thoa and Anh (2017), El-Ansary and Hafez (2015), Olarewaju and Akande (2016), and more recently, Hewaidy and Alyousef (2018).

### **Leverage and Capital Adequacy Ratio**

Financial leverage is insignificant and negatively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria decreases insignificantly with increase in financial leverage. This finding is in tandem with the findings in previous studies such as Narasimhan and Goel (2013); Aktas, Acikalin, Bakin and Celik (2018). The study supports the theory of pecking order which states that managers should insist that all means of raising internal loans are exhausted before thinking of raising external loans.

### **Profitability and Capital Adequacy Ratio**

Profitability is significant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases as profitability increases. This finding is supports the earlier findings of Dreca (2013), Buyuksalvarc and Abdioglu (2012), Aremu, Ekpo, Mustapha and Adedoyin (2013).

### **Bank Size and Capital Adequacy Ratio**

Bank size is insignificant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases insignificantly with increase in bank size. This finding is in tandem with the findings in previous studies such as Romdhane (2012); Williams (2011); Buyuksalvarc and Abdioglu (2011).

### **Loan Growth and Capital Adequacy Ratio**

Loan growth is significant and positively related to Capital Adequacy Ratio of quoted DMBs in Nigeria. This implies that, CAR of quoted DMBs in Nigeria increases significantly as loan growth increases. This finding is in tandem with the findings in

previous studies such as Ezike and Oke (2013); Samad (2011); Aspal and Nazneen (2014).

## **5. Conclusion and Recommendations**

Based on the findings of the study, it is concluded that, increase in default or nonperforming loans increases the degree and extent of capital adequacy ratio of quoted deposit money banks in Nigeria. This is to say that, banks make provision for capital adequacy to serve as a buffer to any negative shock resulting from nonperforming loans and advances. It is also concluded in line with the insignificant positive effect of bank liquidity on capital adequacy that, more level of liquidity in the bank enhances the rate of the capital adequacy of the DMBs in Nigeria. More so, conclusion is reached that banks are not making adequate provision for capital adequacy when it is perceived that they are dealing with outsiders' funds. Furthermore, the study concludes that, capital adequacy of banks increases when banks make more money through increased profitability. This is to say that, DMBs in Nigeria tend to increase their capital adequacy ratio the time they have excess profits. The size of the banks determines the level of the capital adequacy ratio of the DMBs in Nigeria. This can be concluded to say that big banks have the notion of too big to fail and thus, tend to increase their capital adequacy ratio to provide for uncertainty. The study finally, concludes that, banks tend to increase their rate of capital adequacy as more loans are granted to the customers. This is to say that, the DMBs in Nigeria are making provision for nonperforming loans by increasing their capital adequacy the time the increase their level of loan facilities to customers. Thus it can be generally concluded that, bank specific determinants of capital adequacy ratio have significant positive effects on capital adequacy ratio of quoted DMBs in Nigeria.

It is recommended that, Quoted DMBs in Nigeria should try to put in place more stringent rules that will ensure all loans and advances to be given out to customers are adequately perused and assessed to avoid and reduce issue of nonperforming loans resulting from default. It is also recommended that, quoted DMBs in Nigeria should make efforts towards ensuring that provision for CAR is made even when they are dealing with outsiders' funds. Quoted DMBs in Nigeria should diversify their means of earnings for better profitability. This is to say that, when banks have enough profits, they can easily save more to CAR. The quoted DMBs in Nigeria should make more efforts towards increasing the size of their assets, thereby increasing the capital adequacy ratio of the banks for better profitability. Finally, the study recommends that, more loans and advances should be given out to customers as that will improve the overall financial objective of the bank (profitability). Worthy to note is that, as the banks increase the rate of the loan facilities to customers, the rate of the CAR should as well be increased since loans are associated with risk of default and thus, the CAR will serve as buffer to absorb any negative shock driven from the growth in loans and advances.

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