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Editorial Note

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AGRICULTURAL SECTOR BANKS CREDIT AND ITS IMPACT ON ECONOMIC PERFORMANCE IN NIGERIA

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Abstract
The study empirically investigated the impact of commercial banks' credit to the real sector on economic growth of Nigeria, covering the period, 1981-2020. Quarterly data from statistical bulletins of Central Bank of Nigeria and National Bureau of Statistics were used during the study. Autoregressive Distributed Lag (ARDL) approach was adopted for estimation. Economic growth, proxied by gross domestic product, agricultural gross domestic product and industrial gross domestic product were regressed against the explanatory variables (Commercial banks' credit to agriculture, industry, manufacturing and mining, quarrying and solid minerals; Government expenditure on agriculture; Agricultural credit guarantee loan; Inflation and Lending rates), thus forming three models in the study. Prominent among the findings is that significant relationship exists between Nigeria's commercial banks' credit and economic growth. The study further revealed that under most of the models, commercial banks' credit key explanatory variables were statistically insignificant contrary to apriori expectations. On the basis of these findings, the study therefore concludes that the impact of commercial banks' credit to the real sector on the economy is mixed and largely insignificant in Nigeria. Based on the findings, the study recommends, that as a means of monitoring commercial banks' credit to the real sector, funds should be granted to registered agriculturists and industrialists on the basis of evident track records of real sector produce with a view to ensuring that misapplication and misappropriation are drastically reduced if not eradicated.
Key words: Banks' *Credit, Real Sector, Economic Growth, Agricultural Growth, Industrial Growth ARDL Approach*

Introduction

An in-depth look at the major contributors to gross domestic product (GDP) reveals that agriculture, services' and industrial sectors rank highest. Nonetheless, with increases in Banks' credit and economic growth over the years of study, economic growth indices (unemployment rate, the level of income per capita, poverty) are abysmal. Worried over this situation, Sanusi again echoes that available statistics have put the national poverty level of Nigeria at 54.4 per cent while unemployment has risen to 19.7 percent by National Bureau of Statistics. Currently, these figures are 62.6% and 13.9% as at 2016 respectively, in further expression of worry, Sanusi expressed that while China and Thailand occupy a 5th and 22nd position in 2009 Global Hunger Index, Nigeria was ranked 64th. The ugly situation of Nigerian economic indicators underscores the United Nations Development Program's Annual Report (2014) that Nigeria continues to be an example to the rest of the World on many fronts, having attained the rank of being the biggest economy in Africa after rebasing. However, juxtaposing United Nations Development Program's (UNDP) positive remarks and the poor economic growth indices of Nigeria, one is poised to ask if commercial Banks' Credit to real sector has any impact on economic growth in Nigeria. It is on the basis of this question that the research work is premised and further, the research attempts to study the impact of Commercial Banks' Credit to the productive sectors on the growth of Nigerian economy. Consequently, this work evaluates the relationship between commercial banks' credit to the real sector and economic growth in Nigeria, covering the period, 1981-2016. The research work has a broad aim to ascertain the influence of Commercial Banks' credit to the agricultural sector on agricultural growth in Nigeria. Predicated in this, the researchers formulated the hypothesis thus:

Ho: There is no significant effect does not exist between commercial banks credit to agricultural sector and growth in agricultural output in Nigeria.

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of Related Literature

Conceptual Reviews

The conceptual reviews reviewed the relevant underlying concepts and variables in the study with the view of exposing their linkages and for a clearer understanding of the research exercise.

Concept of credit policy

Credit policy is a monetary policy mechanism of transmitting funds through the banks and informal credit markets to the economy while monetary policy is a package of actions designed to manage money supply growth during a period of time. It consists of discretionary measures designed by monetary authorities to regulate and influence the supply, cost and direction of money and credits provided to the economy, (Osinubi, Amaghionyeodiwe and Folawewo, 2002). Banks' credit (loans and advances) is a mechanism that banks use to channel funds to the economy with the aim of stimulating it for rapid economic growth. The efficient use of banks' credit serves as an instrument for evaluating the strength of the monetary policy.
Credit policy instruments are used by monetary authorities to achieve some of its

overall objectives that include: high level of employment; price stability and economic growth among others. Credit policy may involve the granting of credit to selected segments of the economy. Explaining further, Essien and Akpan (2007) posit that credit policy refers to strategies directed at developing and encouraging investment in some sectors of the economy and this essentially involves granting loans on preferential terms and conditions to priority sectors of the economy.

Financial intermediation, financial development and economic growth

The world without finance is unimaginable. Financial intermediation remains an integral function of financial institutions. Financial intermediation is achieved through the mobilization of funds from the surplus-spending groups and simultaneously channelling same to deficit- consuming economic units for productive purposes. The judicious use of the funds by the productive sector culminates into economic growth and improvement of the welfare of citizens. A notable economist, William Schumpeter in 1934 identified the critical role financial institutions play in facilitating technological innovations through credits given to entrepreneurs. Schumpeter stressed that funds granted to entrepreneurs with innovative and productive ideas consequently enhance economic growth. This treatise by the prominent economist provoked and attracted chronicle of literature and empirical studies in finance- growth nexus all over the globe, then and thereafter.

The financial sector in any economy is critical to real sector growth because it provide an appropriate avenue for funds to be pooled together and risks diversified to fund economic activities, which would otherwise have exposures to non-funding. Oduyemi, (2013), posits that the financial sector provides an efficient avenue for the selection, funding and monitoring of risky projects that stimulate and strengthen economic growth. An economy where financial intermediaries are absent, then, the cost of operations and funding of risky ventures in the real sector may be prohibited while participation in productive activities will be discouraged.

Banks' credit and economic growth in Nigeria

The banking industry represents a vital segment of the economy. Similar to the real sector, banks provide substantial credit required for productive and industrial activities in the economy. Banks perform major functions in the growth and development of an economy. Jhingan (2006) captures economic growth as a quantitative and continuous increase in a country's income per capita or output accompanied by increases in labour force, consumption, capital and volume of trade. For growth in output, consumption, capital and labour force; finance is critical and banks are essential agents that provide credit that foster productive initiatives and stimulate growth. While the real sector and economic growth remain critical to a nation, the financial institutions (banks) that provide the conduit through which funds (credit) that invigorate economic growth are nonetheless vital. Bank credit is the provision of access to bank loans and advances to persons, firms or government by the banking system. On this note, Branch, Cooper and Moxey (2014) assert that bank credit as an essential means of elevating standards of living and achieving economic development remain central in every economy and dominate the financial sector even as they account for an overwhelming proportion of business funds financed externally within the domestic and international markets. Hence, bank credit plays a fundamental role in the growth and development of an economy. The provision of bank credit to individuals and firms increases household consumption and investment in productive ventures respectively. The bank credit provided to the economic units has a multiplier effect that leads to a boost in economic activities which further spurs job creation; poverty reduction; increase in income per capita and literacy level; development of human capital among several other benefits. In their contribution, Safdar, Iqra, Ishfaq and Muhammad (2015) submit that increase in bank credit influences asset price and their obtained value. The scholars explain that a rise in asset price offers the owner the chance to borrow more due to wealth appreciation and further credit produces the sensation of increased wealth which makes people feel happier insofar as they are moving within the kingdom of this ring. Agbada and Osuji (2013) in their submission, propose that economic growth is fostered by raising savings, efficiently improving in the allocation of loanable funds and promoting capital accumulation.

Banks role in providing credits to economic units help to eliminate both transactions and information asymmetry costs associated with granting credit to fraudulent entrepreneurs with deceptive and quality paper proposals that will rather deprive genuine industrialists' loans that positively impact on economic growth. On this note, King and Levine (1993); Bencivenga and Smith (1996) conceive that through credit facilities, banks identify entrepreneurs that can introduce new goods and methods of production that facilitate long-run investment in high return projects. In asserting to the importance of banks' credit in promoting production, Skaggs (1999) stresses that through lending, banks bring under-utilized resources into production, thereby extending market frontiers and also promote venture capitalists via credit facilities. In a related contribution, Sharon, Yvonne and Martiniqua (2014) add that bank credit contributes to economic expansion because it remains an important link in monetary transmission; financing production, consumption and capital formation that in turn affects economic activity.

Structure of Nigerian economy and the real sector

Nigeria is situated at the Gulf of Guinea in West Africa, with a land mass of about 923,773 square kilometres and a population of about 160 million people. The country is the largest populated black race in Africa and the World. It became an independent nation on 1st of October, 1960, with 36 states and 774 local government areas with its Federal Capital at Abuja.

The country has two principal vegetation belts, namely: rain forest belt and savannah grass lands belt and two major rivers; namely Niger and Benue that divided the country into three major geographical regions namely; West, East and North. Other important rivers found in the country include Imo; Anambra; Gongola; Kaduna and Cross River. There are equally a few mountains and plateaus along the eastern boundary and the northern region. As a tropical region, Nigeria has two climatic seasons: - Rainy (April to November) and Dry seasons (December to March). The topography of the country (mountains, rocks, valleys and closeness to the ocean) and its climatic condition account for the enormous deposit of mineral resources; animal rearing and agricultural produce.

The Nigerian real sector

The Nigerian real sector is responsible for the production and distribution of goods and services in the country. It is where productive activities; utilization of raw materials and other factor inputs (labour, land and capital) and distribution of goods and services take place. Sanusi (2011) posits that real sector is the main engine and driver of economic growth and development. For the purposes of our study, Nigerian real sector is classified into three, namely: agricultural; industrial and services' sectors. The agricultural sector comprises of crop production, livestock, forestry and fishing. The sector practices subsistence and modem farming. The sector is responsible for food production that is consumed directly; and the provision of raw materials that serve as factor input or feeder to our industries. Before crude oil was discovered in 1967, Nigerian economy was predominantly agrarian; afterwards, exploration of crude oil became a dominant revenue activity of the nation. Nevertheless, agriculture still remains the preponderant sector of Nigeria economy with regard to food production, employment generation, provision of raw materials to the infant industries and major contributor to gross domestic product (GDP). It is necessary to mention that every region of Nigeria can boast of over two agricultural and animal produce. The produce from agriculture helps feed the nation, serve as major input in the manufacturing process and it is equally exported to generate foreign exchange income. Nigerian agricultural sector is, however, characterized by the predominance of subsistence small scale farming; peasant farmers with poor farm equipment, low technology, low yield and lacking in bankable assets to attract credits from Commercial Banks. Irrespective of the role agriculture plays in the economy, the sector has not been able to meet its traditional challenge of feeding the Nigerian population; meeting the raw material needs of the industries and providing a surplus for export purposes. Nevertheless, the agricultural sector remains the dominant and mainstay of the Nigerian economy.

The agricultural sector stands as a major resource base of the nation's wealth and contributes substantially to the country's aggregate Gross Domestic Product (GDP). It is surprising to observe that despite the dominance of the agricultural sector in aggregate gross domestic product (GDP) contribution before the advent of crude oil in early 1970s and later, its contribution has been dwindling, from a dominant position of 55.8 % of gross domestic product (GDP) in 1960 - 1970 to 41.2%; 42%; 41.7%; 40.2% and 24.43% in 1981-1990, 1991- 2000, 2001- 2010 and 2011-2016 decades respectively.

The reasons for low productivity in the sector are traceable to continued use of subsistence farming methods; poor adoption of modern technology; inadequate provision of agrochemicals and lack of improved seedlings among several others. However, CBN (2013) adds that inadequate access to funds in agricultural investment hinders improved productivity in the sector.

The industrial sector is comprised of manufacturing; crude petroleum; solid minerals; building and construction; and mining and quarrying. Manufacturing segment is responsible for the processing of inputs from the primary sector into either semi-finished or finished good. Crude petroleum and solid minerals involve the extraction and exploration of crude oil, tin ore, coal and other solid minerals. Prior to the finding of crude oil in the 1970s, the manufacturing sector thrived and contributed meaningfully to gross domestic product. Although the agricultural sector, like the manufacturing segment of the industry lost its glory due to neglect with the advent of crude petroleum, gas production and exploration. By extension too, tin ore and coal that were the primary mining activities of the citizens in the 1960s and 1970s lost their glory as one of the main sources of government revenue. These two foremost solid minerals (tin ore and coal) have gone into extinction during the last three decades or more. It is necessary to emphasize that the increasing contribution of crude petroleum and gas in aggregate gross domestic product is not attributable to the refining of crude oil or an enhanced industrial components of petrochemicals but accounted by crude oil production. The manufacturing segment is comprised of micro; small; medium and large scale enterprises engaged in agro based businesses, cottage and handicrafts. Nigeria, as an independent nation in 1960, embarked on various policies and programmes (including indigenization decree of 1974) as enshrined in Nigerian’s development plans aimed at transforming the country from its predominantly agrarian nature, to a highly industrialized economy. The decline in Gross Domestic Product (GDP) contribution by the industrial sector is attributed to various factors including inconsistencies and reversals of policies, and infrastructural bottlenecks. Other factors include: overdependence on foreign raw materials inputs; poor foreign exchange earnings; low patronage of domestic goods by citizens owing to their preference to foreign substitutes; double taxation; absence or poor power generation and inaccessibility to credits. Statistically, industrial sector’s contribution to total gross domestic product in the past ten years is relatively low when compared to the other sectors of the economy. For instance, manufacturing contributed 3.8%; 4.02%; 4.17%; 4.16%; 4.23%, 9.35% and 9.28%, in 2005; 2007; 2009; 2011; 2013, 2015 and 2016 respectively to total Gross Domestic Product.

The decline in industrial sector's contribution to the gross domestic product in the past decade especially the manufacturing segment is worrisome due to its adverse effect on the economy, i.e. unemployment; low productivity; poverty; crime and depletion of foreign reserve.

The Nigerian services' sector, likewise, consists of commerce and service related activities. The composite of the sector include: utilities, transport, communication, distributive trade, hotels and restaurants, personal and professional, finance and insurance, real estate, education and other business services. The Services' sector contribution to aggregate gross domestic product (GDP) increased from 27.9 % in 2003 to 41.74 % in 2013. The increase recorded in the sector's contribution is primarily accounted by the privatization of the telecommunications industry in 2000. The telecommunication industry is competing favourably with Banking, Oil and Gas industries with regard to product services and employee remuneration. In the past ten years, the sector contributed about 29%; 32.3%; 35.6%; 38.4%; 41.7%, 53.18% and 53.55% to gross domestic product in the years 2005; 2007; 2009; 2011; 2013, 2015 and 2016 respectively.

The economy has passed through series of policy regimes and development plans as a framework for developing and restructuring the economy. The nation has undergone four National development plans viz; 1962-1968; 1970-1974; 1975-1980 and 1981 that is aimed at putting the nation on a fast track of development and infrastructural rehabilitation. The indigenization decrees of 1972 and 1974 were aimed at giving greater control of the ownership and means of production to Nigerian indigenes within the framework of nationalism. Another phenomenal change that brought a turning point and impacted strongly on the economy of the country was the introduction of Structural Adjustment Program (SAP) economic reform in 1986. The economic reform was aimed at removing all structural and administrative impediments in the country so as to foster a friendly market based financial and economic environment that will enhance growth at the domestic and international levels. The objective of the program was to encourage growth of private enterprises through an efficient allocation of resources via deregulation and liberalization of trade including the financial industry. In fact, the gains recorded through Structural Adjustment Program (SAP) were truncated in 1994 when successive military governments introduced the re-regulation policy in the economy. Thus, the exchange and interest rates were capped due to high-interest rates recorded at 48 % and 60 % for commercial banks and non-bank financial institutions respectively even as inflation was 48.8 % and 61.3 % respectively in 1992 and 1993. The change in government from military to civilian in 1999 after an uninterrupted sixteen years of military dictatorship witnessed yet many economic reforms aimed at addressing the enormous distortions caused by the military, hence, restoration of the economy to the path of recovery and growth. Next, came the 2004 reform captioned, National Economic Empowerment and Development Strategy (NEEDS).

Historical development of the Nigerian banking industry

The Nigerian banking industry has undergone different phases. Adopting Nzotta (2004) stylized classification; the study examined the development under the following periods:

i. Free Banking Period (1892 - 1952)

Commercial Banking business in Nigeria started during the free banking period with the advent of African Banking Corporation of South Africa, in 1892. The establishment of the bank was initiated by a shipping firm known as Elder Dempster Company, based in Liverpool, United Kingdom. The bank opened its branch then, at Lagos. The bank was set up with the aim of financing the shipping business of the promoter, within the territory of West Coast of Africa and Liverpool.

In 1894, British Bank of West Africa (BBWA) that was set up in 1893 started operations. During the same period of operation by British Bank of West Africa (BBWA), West African Currency Board (WACB) that was responsible for the receipt, storage and issuance of West African Silver Coins, in exchange for Sterling coins or London drafts was entrusted to British Bank of West Africa (BBWA) hence; later became an agent for West African Currency Board (WACB). British Bank of West Africa (BBWA) is the present First Bank of Nigeria Pic.

Anglo-African Bank was another bank that came on board in 1899. It was established in Old Calabar. British Bank of West Africa later took over this bank in 1912. In 1957, the name of British Bank of West Africa (BBWA) was changed to Bank of West Africa, shortly after Ghana’s independence. Later in 1965, the bank’s name was again changed to Standard Chartered Bank of London and finally, to First Bank of Nigeria Limited in 1979. This was after Nigerian government acquired sixty per cent shares of the bank. Currently, the bank is a Public Liability Company (Pic) and fully privatized.

About 1916, another bank known as “The Colonial Bank” was established, but nine years later, precisely in 1925, Barclays Bank took it over together with the Anglo-Egyptian Bank and National Bank of South Africa, to form Barclays Bank DC. The bank operated with the name till 1979 when its name was changed to Union Bank of Nigeria and the name remained till date. Equally, in 1949, another foreign bank with the name, British and French Bank for Commerce was established but this bank metamorphosed to United Bank for Africa in 1961. The name of the bank has remained unchanged till date.

Due to the nonexistence of banking legislation during the time, the period was known as “free banking era” because many banks were licensed during the era. A characteristic of free banking age was that many of the banks established during the time were foreign with the sole aim of fostering the businesses of Nigerian colonial masters. The businesses engaged by the foreigners were mainly merchandise (importing and exporting) with no efforts to enter into productive activities that could promote growth of Nigerian economy. Paradoxically, the credit obtained by foreigners to execute their businesses from these banks were domestic savings from Nigerian citizens and according to Nzotta (2004), the colonial banks preferred investing their proceeds in London financial markets where they believe the funds were safe.

On realizing that the colonial banks were established to flourish the merchandise businesses of the colonial masters without any plans to develop the country's real sector, some Nigerian citizens spearheaded the establishment of indigenous banks that could foster growth of the real sector and the economy generally. Unfortunately, the indigenous banks were short-lived due to poor management, under capitalization, fraud, mounting bad debts and the 1930 global economic downturn. According to Onoh (2002), another reason for failure was the lack of a regulatory and supervisory authority to guide banks and play the role of last resort. A foremost local bank established by indigenous businessmen residing in London was the Industrial and Commercial Bank in 1924 but was liquidated six years later due to the aforementioned reasons. Other indigenous banks established during the era were; Nigeria Merchant Bank (1931-1936), National Bank of Nigeria (1933), Agbomagbe Bank (1945), Nigerian Farmers and Commercial Bank (1947-1952) and African Continental Bank (1948).

ii. Pre-Central Banking Era (1952-1959)

With the enactment of 1952 Banking Ordinance, the era of free banking came to an end. The Ordinance sliced down the number of banks on the basis of "definition of Banks" and "Banking business" and the minimum capital base for banks. Due to the stringency of the ordinance, some of banks voluntarily liquidated while out of the several banks (both indigenous and foreign), only seven survived and remained in the business of banking.

iii. Banking Legislation Period (1959-1970)

Bank legislation was possible and imminent with the establishment of Central Bank of Nigeria in 1959. Nzotta (2004) posits that the establishment of the Central Bank of Nigeria led to increased banking supervision and control, which substantially curtailed unprofessional misconduct common in the system hitherto. The establishment of Central Bank of Nigeria (CBN) saw the apex bank in full control of the activities of commercial banks in Nigeria. Some issues evident about this era include; orderliness, correction of banking deficiencies, an end to bank collapse and promulgation of Banking law in 1969. The Banking law led the foundation for regulation and supervision of Nigeria banking industry.

iv. Indigenization Period and Post - Okigbo Panel (1970-1985)

This era was marked with the indigenization of Nigerian enterprises that include foreign owned banks operating in the country. During this era, the Nigerian government had to intervene through direct ownership and took control of enterprises by employing indigenes to ensure the achievement of certain economic goals. With the enactment of Indigenous Enterprises Promotion Decree 1972 as amended in 1977, both the Federal Government and the Nigerian public were able part-own 60 per cent shares of expatriate banks and companies. It was during this era that wholly owned banks by the Nigerian government including three development banks (i.e. Nigerian Bank for Commerce and Industry; Nigerian Agricultural and Cooperative Bank and Nigerian Building Society now Federal Mortgage Bank Ltd) were implemented. This phase is important because it was the period when State commercial banks and development finance companies were established.

The phase was also significant because the recommendation of Okigbo's panel on financial system review was implemented then. The panel brought an overhaul in Nigerian financial system through financial intermediation process; enlargement of the framework for expansion of branch banking and rural banking as a means of encouraging banking habits in rural communities for an enlarged savings mobilization in the country.

v. Deregulation Period (1986-1992)

This era witnessed an overall transformation in the financial system by introducing a couple of reforms due to flaws in allocation of credit and its associated costs. The deregulation of Nigerian economy in 1986 gave the country a free hand as regards resource allocation. The policy among several others saw to the privatization of government interests in various banks and the entrant of new many banks; keen competition in savings mobilization among banks that gave room for efficiency as opposed to arm-chair services in the past; packaging of new bank products; introduction of electronic banking and a standardized accounting system that increased the tempo of financial intermediation in the country.

During this period too, came the licensing of two specialized banks (Peoples Bank and Community Banks) aimed at bridging the financing gaps in the nation. Nigeria Deposit Insurance Corporation (NDIC) was establishment in 1988 with the aim of insuring depositors' fund; Urban Development Bank (UDB) for urban development purposes and Primary Mortgage Institutions (PMI) to assist in mortgage financing. As a way of strengthening the legal framework of the banking system, Banks and Other Financial Institutions Decree (BOFID) of 1991 was enacted while the prudential guidelines was introduced to guarantee effective monitoring of banks' earning and non-earning assets.

vi. Banking Distress Period (1993-2002)

This era witnessed the distress in banks due to a host of issues. There was stiff competition for scarce savings mobilization in the banking system owing to a huge number of banks (Commercial and Merchant) and nonbanking institutions; unwholesome activities were perpetrated by some operators to outsmart others and remain in business; deposits were accepted at high rates and loans were given indiscriminately that led to an unprecedented level of nonperforming loans. Added to this catalogue of issues were insider abuses; fraud; low ratio of regulatory staff to the number of banks and financial institutions for effective monitoring and inadequate human capacity both at the board, management or supervisory levels to guide and control competition. Even when distress was evident in some banks, the regulatory body adopted 'holding actions' as a management option for distressed banks. However, to avoid catastrophe in the system during the era, Central Bank of Nigeria and Nigeria Deposit Insurance Corporation acquired some distressed banks, suggested the recapitalization of some banks and encouraged merger and acquisition of some. But when the efforts of Central Bank of Nigeria did not get the desired goal, the licenses of four banks in 1994 and twenty-six bank licenses were revoked in 1988 due to the banks' inability to statutorily meet the minimum capital requirements for banking operations.

To ensure sanity in the system and increase public confidence, the government promulgated the Failed Banks and Financial Malpractices Decree of 1994.

vii. Universal Banking Period (2002-2004)

The liberalization of banking licensing in 1986 led to the emergence of many new banks especially merchant banks, propelled by huge opportunities in foreign exchange arbitraging. However, some policy initiatives by CBN and government authorities made it possible for commercial banks to undertake certain activities that traditionally fall within the scope of merchant banking. On that note, the distress and failure of many banking houses as diminishing profitability of others brought about the clamour for Universal banking practice. The demand for universal banking was to ensure that a level playing ground is created for all the banks, (Okafor, 2000). Thus, Universal Banking system was approved by Central Bank of Nigeria (CBN) with a number of guidelines for its commencement. The guidelines provide that all licensed banks are free to choose which activity or activities to undertake (money or capital market, insurance services or a combination thereof). In that case, the activities banks engage in determine the type financial regulations to adopt. The implication therefore, is that a single uniform license was issued to all conventional banks desirous of practising universal banking without delineation as to 'commercial' or 'merchant' when the old license would have been returned to Central Bank of Nigeria (CBN). The advent of universal banking introduced "multi-purpose banking" concept and further disabled the commercial-merchant banking barrier. The period was also characterized by merger of three development banks (Nigerian Industrial Development Bank, Nigerian Bank for Commerce and Industry and Nigerian Economic and Reconstruction) into one functional development bank known as Bank of Industry (BOI). Similarly, a new bank known as Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) surfaced through the merger of Nigerian Agricultural and Cooperative Bank, Peoples Bank and Family Economic Advancement Programme.

viii. Bank Consolidation Period (2004 -2009)

The era became necessary in 2004 when Central Bank of Nigeria (CBN) came up with the consolidation agenda owing to the need to strengthen the banking system, prevent illiquidity and undercapitalization; restore confidence of the public and safety of depositors' funds; avoid collapse of the financial system; reposition banks to meet economic development needs; increase banks' capital base; enhance expansion of shareholders' base that will enhance sound corporate governance; ensure emergence of international banks and contend with global trends. The apex bank then, raised upwards the minimum capital base of banks from N2Billion to N25Billion with a maximum implementation period to December 31, 2005. This policy led to mergers and acquisition of some banks while those banks that were highly capitalized were unaffected by the policy or acquired smaller banks. At the conclusion of consolidation exercise, number of banks reduced significantly from eighty-five to twenty-five banks. The argument in support of bank consolidation exercise is that the increase in capital base of banks will enhance liquidity and access to loanable funds. Availability and accessibility of funds will further reduce interest rate charged by banks thereby creating demand for investment credits' that will stimulate economic growth. However, empirical studies on post-consolidation in Nigeria have not strongly confirmed the expectation of the exercise. Despite huge funds injected from domestic and international sources to boost banks' capital base, the real sector is yet to feel the significant impact of bank credit on the economy after more than ten years post-consolidation of banks.

ix. Post-Consolidation Period (2010- Date)

With the financial tsunami that globally rocked the financial industry in 2007 that did not exempt Nigerian banks, it became obvious that many of the so-called bank's assets arising from credits were toxic. The venomous assets were hugely non-performing while they remained painted in financial books of banks. The era witnessed unethical and unprofessional practices by bankers that led to the erosion of banks' capital base. The situation necessitated the establishment of an asset management agency known as "Asset Management Corporation of Nigeria" (AMCON) and was charged with the responsibility of of buying the toxic assets of banks rather than declaring the banks bankrupt. The idea behind setting up the corporation was to restore public confidence and ensure safety of depositors' funds. It was during this period also that some chief executives of banks caught in unethical and disreputable practices were removed. The era equally saw to the discharge of chief executives of banks that have served more ten years on the Board or served out two tenures consecutively. There was also an adoption of uniform end-of- year accounting for all Nigerian banks, effective 2010 during the period.

Another striking event during this time was the decline in the number of banks from twenty-five to twenty-one due to recent capital adequacy exercise that was aimed at ensuring solvency, high- level liquidity, great ability to assume risks and restoration of public confidence in the industry. During the post consolidation period, Basel 1 and 2 accords were implemented in accordance with international standard practices due to the globalization phenomenon. The Basel accord, though a good development in the banking industry but has so many challenges that cut across industries, economies and regions. Basel accord was originally formed by Group of Ten (G10) most industrialized nations of the world, however, membership has been enlarged to include developed and developing countries. Basel 1 and 2 accords are helpful in harmonizing banking supervision, regulation and capital adequacy standards in international market economics.

The post-consolidation era further ushered in Bank Verification Number (BVN) exercise championed by Central Bank of Nigeria (CBN) in 2015. The exercise has the aim to restore confidence in the financial system and equally reduce fraud related cases in banking sector. Bank Verification Number (BVN) links a depositor to all his account information in other banks the customer has account. The measure is targeted not only to reduce frauds committed with bank officials but also reduce fraud and looting in Nigerian economy.

Theoretical Framework

When a banker starts to study the theory of financial intermediation in order to better understand what he has done during his professional life, he enters the world unknown to him. That world is full of concepts which he did not, or hardly, knew before and full of expressions he never used himself; asymmetric information, adverse selection, monitoring, costly state verification, moral hazard and a couple more of the same kind. He gets the uneasy feeling that a growing divergence has emerged between the microeconomic theories of banking... (Scholtens & Wensveen, 2003).

This section pursued a theoretical explanation of methods, postulations and theories that guide banks as financial intermediaries; bank credit as a vehicle in stimulating growth in the economy and economic growth as one of the ultimate macroeconomic goals of a nation. Hence, the study reviewed some relevant theories that guided the research on bank credit and economic growth.

Perfect model or resource allocation theory

The theory of resource allocation by Arrow - Debreu model hold that economic agents interact through markets, therefore, financial intermediaries have no roles and financial intermediation is unimportant. In the Arrow-Debreu world of complete perfect market paradigm the following conditions subsist: absence of an individual party to influence prices; equal borrowing/lending conditions and circumstance for all parties; absence of discriminatory taxes; homogeneity, divisibility and tradable financial titles; and absence of information, transaction and insolvency costs. The theory states that every market participant has prior, immediate and full information on all factors and events that relate to the (future) value of traded financial instruments. The perfect model theory proposed that surplus and deficit economic units locate each other since they have perfect information on each other's preferences at no cost in an attempt to exchange savings against readily available financial instruments. However, some theories have argued against this traditional dogma by clarifying on financial intermediation roles. Few of the theories include; asymmetric information (imperfect information) and agency, all of which lead to imperfections in the market, in addition to transactions costs that arise from information asymmetry between lenders and borrowers. The modem theory of financial intermediation is hinged on two arguments namely; - intermediaries (such as banks) ability to provide liquidity and their ability to change assets' risk features. Thus, banks, in the words of Diamond & Dybrig (1983) are able to act as coalitions of deposits that provide households and business enterprises with insurance against idiosyncratic shocks that adversely affect their liquidity positions. The agency argument for intermediaries' roles is the value creation arising from the transformation of quality asset in a situation where the market is unable to meet the supply and demand for credit.

Empirical Review

Murtala, Siba, Ahmad, Muhammad and Ali (2015) to establish the relationship that exists between financial intermediaries and economic growth in Nigeria. Annual time series data from 1970 - 2013 was used to analyse the long-run and short- run relationship between the development of financial intermediaries and economic growth and the direction of causality relationship between the indicators. The stationarity test showed that the variables were integrated at first difference and there was co-integration between the series and the presence of a structural break in 1987, 1992 and 1996. The bound test for co-integration showed a stable long-run relationship between the indicators of financial intermediaries and economic growth while the coefficient of error correction was statistically significant. The findings revealed however, that bank credit has a negative influence on economic growth; causality test revealed a bi-directional relationship between bank credit and economic growth while a unidirectional causality moved from economic growth to insurance premium and value of stock transactions during the study frame.

Safdar, Iqra, Ishfaq and Muhammad (2015) investigated the relationship between bank credit to private sector and economic growth in Pakistan, ranging from 1973 - 2013. Economic growth was the dependent variable in the study while bank credit to private sector, interest rate, inflation and investment to Gross Domestic Product and government consumptions were the independent variables. Data was collected from World Bank Indicators. Unit root test established stationarity of variables in the study. Co-integration VECUM and Granger causality tests were employed to test relationships, causality effects and analyse the impact of bank credit on economic growth. The findings from the analysis revealed that Bank credit has a strong relationship with economic progression and in the short-term, the relationship between the variables was significant. The study further showed that Bank credit has an adverse impact on economic growth in Pakistan.

Ozor, (2018) studied commercial banks' credit to the agricultural sector on economic growth of Nigerian Economy. Autoregressive Distributed Lag (ARDL) approach was adopted for estimation. The study found that significant relationship exists between Nigeria's commercial banks' credit to agricultural sector and economic growth. The study further revealed that under most of the models, commercial banks' credit key explanatory variables were statistically insignificant contrary to a-priori expectations. On the basis of these findings, the study therefore concluded that the impact of commercial banks' credit to the agricultural sector on the economy is mixed and largely insignificant in Nigeria.

Mikhail (2015) studied the causality relationship between the ratio of domestic private credit to gross domestic product and growth in the real gross domestic product per capita using a framework of country-by-country time-series for twenty four OECD economies, from 1980— 2013. A proposed threefold methodology that included - lag-augmented Vector Auto-Regressive Granger causality tests; Breitung-Candelon causality tests and causal inference based on a Fully Modified Ordinary Least Square (FMOLS) approach were used to test for causal linkages. The results revealed that the three tests in 12 out of 24 countries in the sample, yielded uniform results in terms of causality presence (absence) and direction. Causality relationship from credit depth to economic growth was found in UK, Australia, Switzerland, and Greece, hence, refuting the findings that financial development shifts from a supply-leading to the demand-following pattern as economic development proceeds.

Suna (2015) investigated the effect of domestic credits created by banking sector on macroeconomic variables for ten selected European countries by using annual panel data from 2006-2012 and regression model for estimation. The result of the study revealed that domestic credits created by banking sector for ten European countries has no effect on inflation but affected economic growth.

Sibindi and Bimha (2014) examined the causal relationship between banking sector development and economic growth in Zimbabwe by using Granger causality method of vector error correction model. Banking development was proxied with the ratio of real broad money to real gross domestic product and the ratio of real domestic credit to real gross domestic product. Further, the proxy used for economic growth was absolute values of real gross domestic product while real domestic credit and real broad money were proxies for financial intermediary development. The findings from the study established a long-run relationship between economic growth and banking sector development.

An impact of Commercial Banks' credit to the private sector on economic growth in Nepal from the supply side perspectives was investigated by Neelma (2014). The data for the study was time series in nature, 1975-2013, with the application of Johansen co-integration and Error Correction Model for analysis. The empirical results established a positive effect of bank credit to the private sector on the economic growth in the long run. The study further revealed an existence of a feedback effect from economic growth to private sector credit in the short-run.

Branch, Cooper and Moxey (2014) carried out an empirical assessment of private sector credit, economic growth, government expenditure, interest rate and inflation in the Bahamian economy, from 1989 - 2014. The study employed the Ordinary Least Squares approach for estimation, Johansen cointegration test and Granger Causality test for cointegration and causality relationships respectively. Historical trends from the study revealed that periods of either economic boom or downturn were mirrored by changes in credit. The findings showed a positive and significant influence of economic growth and government expenditure on credit to the economy; depicted long-run cointegrating relationship among private sector credit and the exogenous variables while the Granger Causality test revealed that both economic growth and government expenditure cause credit to the private sector whereas private sector credit in The Bahamas is "demand following" rather than "supply leading".

Kapingura (2013) empirically examined the dynamic relationship between financial development and economic growth in South Africa, from 1960 - 2012. The data was yearly time series in nature. Vector Error Correction Model and an application of maximum likelihood estimation to Vector Auto-Regressive (VAR) were simultaneously used to determine the long-run and short- run determinants of the dependent variable in the study. The research provided empirical evidence on the causal impact of the financial market on economic growth in South Africa. The study further showed bidirectional causality between the stock market and economic growth and unidirectional causality was established from the bond market to economic growth.

Sackey and Nkrumah (2012) examined the effects of Financial Sector Development on Economic Growth in Ghana by using Johansen Co-integration analysis within a bi-variate Vector Autoregressive framework. Quarterly time series data set of data ten years, (2000 - 2009) was used for the study. The findings from the analysis showed a significant and positive relationship, between Financial Sector Development and Economic Growth in Ghana.

In a study to investigate the long-run impact of banks credit on economic growth in Ethiopia over a coverage period of 1971-2011, Murty, Sailaja and Demissie (2012) employed Johansen Multivariate Co-integration approach on an annual time series data for estimation and analysis. The study also investigated how the transmission mechanism of bank credit to the private sector affects long-run growth. The findings of the study gave a positive and significant equilibrium relationship between bank credit and economic growth in Ethiopia. The findings equally revealed that bank credit to the private sector positively impacted on economic growth.

Were, Nzomoi and Rutto (2012), used sectoral Panel data to investigate the impact of bank credit accessibility on the country's economic performance of her key sectors. The study adopted the GMM and Seemingly Unrelated Regression (SUR) fixed effects models for estimation. The findings of the study produced a positive and significant impact of credit on sectoral gross domestic product.

Asuamah, Kwarteng and Awuah (2012) carried out a theoretical review of previous empirical studies on the link and causality between economic growth and financial development. The study used purposive sampling method in its selection of reviewed research works. Results from the empirical studies reviewed showed a positive and significant relationship between finance and economic growth in some of the studies whereas other studies reviewed did not establish same findings. Similarly, in some studies examined, there was unidirectional causality while in other studies there was bi-directional causality between economic growth and financial development.

Ali (2012 investigated) the Banking Sector Development and Economic Growth with the use of annual time series data and during the period, 1992-2011. The study used Granger Causality tests to establish a one-way causality running from economic growth to banking sector variables that include; deposit growth and credit to private sector. Conversely, bank credit to the private sector, bank size, efficiency and concentration has no significant impact on economic growth. The result of the findings reveals support for demand- following hypothesis in Lebanon.

Nuno (2012) investigated the relationship between banks' credit and economic growth in the European Union (EU - 27), from 1990 - 2010. The study employed dynamic panel data (GMM - System estimator) for analysis. The findings of the study showed that savings promote economic growth while inflation and bank credit revealed a negative impact on economic growth.

An examination of the changes in Banks' credit across a group of emerging market economies in the last decade was undertaken by Kai and Vahram (2011). The study employed quarterly time- series data and cross-section information that were sourced from International Monetary Fund (IMF) databases. The data spans a period from the Q12001 - Q22010 and covered thirty-eight countries; Argentina, Brazil, Bulgaria, Chile, China, Colombia, Costa Rica, Croatia, Czech Republic, Egypt, El Salvador, Estonia, Georgia, Guatemala, Flungary, Indonesia, Israel, Jamaica, Jordan, Korea, Latvia, Lithuania, Malaysia, Mexico, Morocco, Panama, Peru, Philippines, Poland, Romania, Russia, Serbia, South Africa, Thailand, Turkey, Ukraine, Venezuela, and Vietnam. The result of the findings disclosed that domestic and foreign funding contributed positively and symmetrically to credit growth. The findings equally revealed that strong economic growth leads to high credit growth while on the other hand, high inflation with increasing nominal credit is detrimental to real credit growth. The study further showed that loose monetary conditions at domestic or global levels resulted to new credit.

Siti, Zarinah and Kee-Cheok (2012) in their study explored the relationship between the real sector and the financial sector in Malaysia, from 1986Q1 - 2011Q4. To examine the role of financial variables in real output in the long and short-runs, Parsimonious Error Correction Model (PECM) was used in the study. The findings disclosed the existence of a long-term relationship between real output and the financial sectors while causality tests revealed that real output has strong relationships with real estate and banking sectors.

In a related study, Lorenzo, Arjan, Christoffer and Marco (2011) studied whether bank loans and credit standards have an effect on output by using a Panel approach for the Euro Area and observing data at a quarterly frequency that covered the period, 1999Q1 - 2008Q1, i.e. from the inception of the European Monetary Union. The Euro area countries included in the analysis were Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal and Spain. The researchers applied the identification strategy employed by Driscoll (2004) for the United States. The result of the findings provides empirical evidence for the existence of a bank lending channel of monetary policy transmission in the Euro area. In addition, and in contrast to the findings in the United States of America, the study revealed that in the Euro area, changes in the supply of credit both in volumes and credit standards terms applied on loans to enterprises have significant influence on real economic activity.

Avinash, Tanisha and Daryl (2012) carried out a study to assess the sectoral distribution of commercial Banks' credit on economic growth and development in Trinidad and Tobago for a period covering, 1970-2008. The paper drew heavily from the credit channel of the monetary transmission mechanisms of Trinidad and Tobago and employed Vector Error Correction Model (VECM) to assess the relationship between credit and investment and also determine the causal directionality of the relationships (if any). The result of the analysis showed that overall credit. Siti, Zarinah and Kee-Cheok (2012) in their study explored the relationship between the real sector and the financial sector in Malaysia, from 1986Q1 - 2011Q4. To examine the role of financial variables in real output in the long and short-runs, Parsimonious Error Correction Model (PECM) was used in the study. The findings disclosed the existence of a long-term relationship between real output and the financial sectors while causality tests revealed that real output has strong relationships with real estate and banking sectors.

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Athanasios and Antonios (2010) empirically investigated the causal relationship between financial market development and economic growth in United Kingdom during the period, 1965- 2007 by using Vector Error Correction Model (VECM) and Granger causality tests on an annual time series data. The study was aimed to unravel whether financial market development causes economic growth or the reverse, by taking into cognizance the negative effect of interest rate. To achieve the objective, classical and panel unit root tests were used to establish stationarity of the data. Johansen co-integration analysis was applied to examine whether the variables are cointegrated of the same order using the maximum Eigen values and trace statistics tests. The results of the study showed a short-run increase in economic growth of per one percent led to an increase of stock market index per 0.6%, while an increase of interest rate per one percent led to a decrease of stock market index per 1.59% in the United Kingdom. The negative sign of the estimated coefficient of error correction term confirmed the long-run equilibrium between the examined variables. The Granger causality tests revealed that there is a bilateral causal relationship between economic growth and financial market development in the United Kingdom.

By using Vector Autoregression (VAR) approach in the study to examine the impact of financial development on economic growth in China for a 20 - year period, Jordan and Qi (2006), applied innovation accounting (variance decomposition and impulse response function) analysis to examine interrelationships between variables in the VAR system. The result of the study showed that financial development comes as the second force (after the contribution from labour input) in leading economic growth in China. The study hence supports the view that financial development and economic growth exhibit a two-way causality.

Vighneswara (2010), in his study evaluated the impact of financial inclusion and inclusive growth on bank-based financial intermediation in a developing economy like India, during the period, 1975 - 2007. The study used annual data and appropriate statistical techniques in its analysis. The findings of the research revealed that to realize the objective of inclusive growth and sustainable economic development, a precondition to reduce poverty is accessibility to finance by the poor.

Guglielmo, Christophe, Robert and Anamaria (2009) empirically investigated the relationship between financial development and economic growth in ten new European Union (EU) members, during the period, 1994-2007. The data for analysis was estimated by using a dynamic panel model. The study, in its findings revealed that Granger causality test showed that causality runs from financial development to economic growth, but not in the opposite direction and besides, a more efficient banking sector accelerated growth. It was also clear from the findings of the study that the stock and credit markets were still underdeveloped in the selected economies and due to the absence of financial depth in those economies their contribution to economic growth was inadequate.

Burzynska (2009) examined the financial development and economic growth in the Chinese banking sector with an annual time series data that covered the period, 1978-2005. The variables used in the study were; gross domestic product, rural credit cooperatives, capital constructions and other medium and long term loans.

The study employed a co-integration test for empirical analysis. The result of the findings indicated the existence of cointegration between economic growth and all financial development variables, an implication of a long run equilibrium relationship among the variables.

In a study to investigate one of the important functions of the banking system - transformation of short-term liquid deposits into long-term illiquid financial assets that can fund long gestation activities and, consequently, raise the rate of economic growth, Nikola (2008), in his doctoral dissertation, collected two new annual data sets on the maturity of Banks' credit to the private sector from seventy-four countries, over a coverage period, 1990 - 2005 while the second data set contained quarterly observations covering fourteen transition countries from 1995 - 2006. The result of the findings from the data on a broad set of countries indicated that economic growth is enhanced in countries where the financial system extends more long-term credit. Additionally, using the same data set, the study revealed that credit maturity depends on a number of institutional and economic factors and credit maturity has an impact on economic growth via its influence on the availability of long-term external financing.

By employing a dynamic Granger Causality model in the examination of the direction of causality between financial development and economic growth in Kenya, Odhiambo (2008) found from the study that demand-following response predominates in Kenya, and the choice of measure of financial development is a determinant in causality between financial development and economic growth.
Zang and Kim (2007) investigated in their study the causal relationship between financial development and economic growth in East Asian countries. The study applied Sims-Geweke causality technique on large panel data from the selected countries. The result of the analysis revealed significant confirmation to support economic growth-led financial development; however, the study could not provide evidence to support a positive unidirectional causal association running from financial development to economic growth.

Atindehou, Gueyie and Amenounve (2005) used an annual time series data from 1960-1997 to empirically test the causality relationship between finance and economic growth in the context of West African country members of the Economic Community of West African States (ECOWAS). The result of the findings in all but a few countries showed a weak causal relationship between finance and economic development on one side, and between economic development and finance on the other side. The results further indicated specifically that economic development impacted on finance in Burkina Faso, Mauritania, Niger, Nigeria, Sierra Leone and Togo. Conversely, financial variables explained economic development in Ivory Coast, Mali, Gambia, Mauritania and Sierra Leone. The study remarkably revealed the limited role credits played in economic development. The findings of the study further showed that in only two countries, credits granted by financial institutions (mainly banks) to the economy made an insignificant impact on economic development during the period of the study.

Calderon and Liu (2003) used a pooled data from 1960-1994 to examine the direction of causality between financial development and economic growth of 109 developing and industrial countries. The study employed Geweke decomposition for causality tests and analysis. The findings from the paper made among several revelations that: financial development in general leads to economic growth; the coexistence of Granger causality from financial development to economic growth and vice versa; in developing countries, financial development made greater contribution to the causal relationships than in industrial countries; financial development on economic growth have stronger effect with longer sampling gap and lastly, faster capital accumulation and growth in productivity are avenues through which financial development drives economic growth but productivity growth is the stronger channel.

In a related study in nine OECD countries and China, Shan, Morris and Sun (2001) employed Vector Auto-Regressive (VAR) approach to investigate causal relationship between financial deepening and economic growth. Evidence from the study revealed insufficient proof to hold to the finance-led economic growth hypothesis, hence, the scholars cautioned against making such conclusion.
Kar and Pentecost (2000) used data from Turkey to investigate the causal relationship between financial development and economic growth. The result of the findings by the duo showed that the sensitivity of the causal direction between financial development and economic growth is a determinant of financial development measurement choice.

MODEL SPECIFICATION

Thus, the model is mathematically represented in this form:

ARgdp = f (Barg, Bind, Gagr, Acgl, infl, lend) ... (3.1)

AAgdp = f (Bagr, Gagr, Acgl, infl, lend) ... (3.2)

Algdp = f (Bmfg, Bmqs, infl, lend) ... (3.3)

Econometrically, the functional models in equations 3.1 - 3.3 are specified thus:

$ARgdptt = po+ pi(Bagr_t) + p_2(Bind_t) + p_3(Gagr_t) + p_4(Acgl_t) +p_5(infl_t) + p_6(lend_t) + p_t$ ... (3.4) $AAgdpt = p_0 + Pi(Bagr_t) + p_2(Gagr_t) + p_3(Acgl_t) + p_4(infl_t) + P5(lend_t) + p_t$ (3.5)

$Algdpt = po + Pi(Bmfgt) + p_2(Bmqs_t) + p_3(infl_t) + p_4(lend_t) + p_t$ (3.6)

Putting some of the above relationships in their semi-natural logarithm form, the model is thus expressed as follows:

$ARgdp_t=p_0+ PilogBagr_t+ p_2logBind_t+ p_3logGagr+ p_4Acgl_t + p_5infl_t + p_6lend_t+ p_t$ (3.7)

$AAgdp_t=Po+ PilogBagr_t+ p_2logAcgl_t+ p_3infl_t + p_4Lend_t+ p_t$ (3.8)

$AIgdp_t=p_0+ PilogBmfg_t+ p_2logBmqs_t+ p_3infl_t + p_4Lend_t+ p_t$ (3.9)

Where:
Log = Natural Logarithm
ARgdpt = Growth in Real Gross Domestic Product at time t
AAgdpt = Agricultural contribution to Growth in Gross Domestic Product at time t
Algdpt = Industrial contribution to Growth in Gross Domestic Product at time t
$Bagr_t$ = Bank Credit to the Agricultural Sector at time t
$Bind_t$ = Bank Credit to the Industrial Sector at time t
Bmfgt = Bank Credit to the Manufacturing Sector at time t
$Bmqs_t$ = Bank Credit to Mining/Quarrying, Solid Minerals/Oil and Gas Sector at time t
$Gagr_t$ = Government expenditure on agriculture at time t
$Acgl_t$ = Agricultural Credit Guarantee Loan at time t
$infl_t$ ~ Inflation rate proxied by consumer price index at time t
$lend_t$ = Interest rate proxied by commercial banks' lending rate at time t
p. = stochastic or error term
t = time series
Po = Constant
Pi - 06 = Coefficients of the explanatory variables

Explanation of Variables
Dependent variables

Real gross domestic product (RGDP): This is the total monetary value of goods and services produced within a country usually a year. Gross domestic product is an aggregate of all the goods and services produced in a country during a year and measured in monetary terms while economic growth is referred to as a positive change in the national income or the level of production of goods and services by a country over a certain period of time, (Ibrahim, Akano and Kazeem 2015). Gross Domestic Product is an index for measuring the health of an economy. It has been chosen because of its wide application by scholars and researchers alike as it serves a useful parameter for economic growth. The values are in billions of Naira (N'B) and in percentages for descriptive and estimation analyses respectively.

Agricultural gross domestic product (AGDP): It is a subset of Gross Domestic Product. It reflects the contribution of the agricultural sector to gross domestic product. This is the total monetary value of goods and services from crop production; livestock; forestry and fishing. Agricultural output is a significant contributor of the Nigerian Gross Domestic Product. Growth in agricultural output is affected by Bank credit to agriculture; Government expenditure on agriculture; Agricultural Credit Guarantee Scheme Loan; inflation and lending rates. The values are in billions of Naira (N'B) and in percentages respectively for descriptive and estimation analyses.

Industrial gross domestic product (IGDP): Industrial Gross Domestic Product GDP is another important dependent variable that shows the contribution of the industrial sector to aggregate gross domestic product. It represents an aggregate monetary value of goods and services arising from Crude Petroleum and Natural Gas; Solid Minerals (coal mining, metal ores, quarrying and other mining activities); and Manufacturing (oil refining, cement and other manufacturing). Growth in industrial gross domestic product is a function of Banks' credit to the manufacturing; solid minerals; quarrying; crude petroleum and natural gas production; inflation and lending rates. The values are in billions of Naira (N'B) and in percentages respectively for descriptive and estimation analyses.

Independent variables

The independent variables in this study comprised of the distribution of Commercial Banks' credits to real sectors of the Nigerian economy. The activity sectors that will serve as independent variables in our study have been categorized by CBN in its Statistical Bulletin of various years. The sectors have been considered to be the economic hubs of the country. Banks' credits to these sectors are expected to have a positive impact on economic growth of the Nigerian economy. The variables are Commercial banks' credit expressed in billions of Naira (N'B).to the:

i. Agricultural sector symbolized as Bagr.
ii. Industrial sector denoted by Bind and it is comprised of Commercial Bank Credit to Mining/Quarrying/oil and gas and Solid Minerals (Bmqs) and Commercial Banks' Credit to the Manufacturing (Bmfg) sector.

Control variables

Referring to the works of Younes and Chtioui (2006), Okwo, Eze and Ugwunta (2012) posit that control variables are other determinants of economic growth. Control variables are important variables that are indicators of macroeconomic stability, (Imoughele, Ehikioya, Ismaila and Mohammed, 2013). Neelam (2014) used interest rate and inflation as control variables in the study of the impact of Banks' Credit on Economic Growth in Nepal while Eyas (2014) used government expenditure as a control variable in a similar study in Saudi Arabia.

The control variables that were employed in our study aside bank credit include:

i. Government expenditure on agriculture (Gagr) - Government on annual basis spends on agriculture through its capital expenditure in the realization of the fact that the private sector alone cannot bring out the desired investment in this highly productive and capital intensive sector. Government expenditure on agriculture is the total amount spent by the government on the agricultural sector over a period of time. It is measured in N'Billion. An increase in the level of government expenditure on agriculture is expected to bring about an increase in the level of the nation's output as well as agricultural output. Hence, government's expenditure on agriculture is expected to have a positive relationship with economic growth.

ii. Agricultural Credit Guarantee Loan (Acgl) - This window of credit was set up by the Federal Government of Nigeria and Central Bank of Nigeria to provide credit to the agricultural sector in the ratio of 60:40. The Scheme started operation in 1978 and the loan is managed by Central Bank of Nigeria. The scheme is meant to share the risks of banks in agricultural lending and hence encourage them to continue to extend credit to the agricultural sector.
iii. Inflation (infl) - Inflation, is a factor that affects endogenous growth model. Increases in inflationary rate leads to decline in employment because with a rise in inflation, marginal value of the present day unit of consumption is reduced hence, people are induced to work less. With less labour, the marginal product of capital is permanently reduced, resulting in a slower rate of capital accumulation and output. It is included in the model to determine its effect on credit availability and output.
iv. Bank lending rate (lend) -Lending rate is a factor that affects bank credit. Lending rate is a proxy for interest rate (cost of funds). Obamuyi, Edun and Kayode (2012) stresses that lower interest rate motivates investment, productivity, hence brings about economic growth. The high lending rate, on the other hand, discourages demand for bank credit which also retards growth.

Test of Hypothesis

This hypothesis states as follows;

Ho$_1$: Significant impact does not exist between Commercial Banks' credit to the Agricultural sector and Growth in Agricultural output in Nigeria.

The impact of banks' credit to the agricultural sector on agricultural growth in Nigeria was carried out with the inclusion of lags of the dependent and independent variables as regressors in the study as reported in table 4.9.5 using the Autoregressive Distributed Lag approach (ARDL) method.

The result in table 4.9.5 below revealed that one and four lag periods observed in growth in agricultural outputs (AAgdp) are statistically significant at 1% and 10% with p-values (0.0000) and (0.0609) respectively. Government expenditure on agriculture (Gagr) at one lag period was significant at 5% cut off rate, having a p-value of (0.0361). Also, Agricultural credit guarantee loan (Acgl) was statistically significant, respectively at 1% current and one-lag period with p- values (0.0000) and (0.0001); inflation (infl) at one and two-lag periods had significant impact at 5% (0.0584) and 10% (0.0720) levels while banks' lending rates (lend) at current and one-lagged period are statistically significant with p-values of (0.0174) and (0.0072) respectively.

Table 4.9.5: Summary of the ARDL Regression Estimation results for Lead Hypothesis 2 on the Relationship between Commercial Banks' Credit to the Agricultural Sector and Agricultural Growth in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AAGDP(-l)	1.046762	0.083397	12. 55159	0.0000**
AAGDP(-2)	-0. 132312	0.122294	-1.081921	0. 2815
AAGDP(-3)	-0.148990	0.120678	-1.234608	0.2195
AAGDP(-4)	-0.152294	0.080487	-1.892161	0.0609
LBAGR	0.700588	0.760555	-0.921154	0.3589
LGAGR	0.775542	0.532654	1.455995	0.1481
LGAGR(-l)	-1.134370	0.535107	-2.119893	0.0361*
LACGL	14.42716	3.173438	4.395702	0.0000**
LACGL(-l)	-13.26687	3.173438	-4.180600	0.0001**
INFL	0.048741	0.036635	1.330453	0.1860
INFL (-1)	-0.120782	0.063182	-1.911649	0.0584*
INFL (-2)	0.065476	0.036063	1.815589	0.0720
LEND	-0.199649	0.082777	-2.411873	0.0174*
LEND(-l)	0.228802	0.083646	2.735367	0.0072**
C	2.928000	0.868677	3.370642	0.0010
R-squared	0.880341			
Adj R-squared	0.866023			
F-statistic	61.48422			
Prob(F-statistic)	0.000000			
Durbin-Watson stat	1.831484			

Source: *Researcher's compilation from E-view 9.0*
*NB: ***; **; * = Significant @ 1%; 5% and 10% respectively*

The results from ARDL regression estimates in table 4.9.5 above and appendix 8b showed that one lag period of agricultural growth had positive coefficient value in the growth of agricultural output in Nigeria during the period of study, 1981-2016. This implies that one percent increase in agricultural growth will proportionately lead to 46.76 percent increase in growth of agricultural output in Nigeria, while growth of agricultural output in Nigeria will decrease respectively by 13.23 percent, 14.9 percent and 15.23 percent in the second, third and fourth lag periods of agricultural growth. Commercial Banks' credit to agriculture (Bagr) has positive coefficient value and an insignificant impact on agricultural growth which means that growth in agricultural output will increase by 70.06 percent with one percent increase in Commercial Banks' credit to the agricultural sector. However, government expenditure on agriculture (Gagr) has positive coefficient value during the current period and negative coefficient value in one lag period. This means that growth in agricultural output increased by 77.55 percent with one percent increase in government expenditure on agricultural sector while growth retarded in agricultural output by 113.43 percent in one lag period with an increase in government expenditure on agricultural sector. Agricultural credit guarantee loan during the study period has positive coefficient value (14.43) and statistically significant on agricultural growth. The implication is that one unit increase in Agricultural credit guarantee loan increased growth in agricultural output by 14.43 units. Inflation during the current period is incorrectly signed and impacts insignificantly on growth in agricultural output but on the contrary, one lag period in inflation was correctly signed with negative coefficient value (-0.120782) and significantly impacted on growth in agricultural output during the study. Bank lending rate was correctly signed and significantly impacted on agricultural growth during the current period while it was wrongly signed in one lag period but had insignificant impact on dependent variable. While bank lending enhanced growth in agricultural output by almost 20% with one percent decrease in lending rate, it retarded it by 22.9% with one percent increase in lending rate during the study period.

The strong coefficient of determination (R^2) value of 0.880341 means that about 88% of the total variation in the dependent variable (growth in agricultural output), was explained by the explanatory variables (Bank credit to Agriculture, Government expenditure on agriculture, Agriculture credit Guarantee Loan, inflation and lending rates) while the unexplained variation of about 12% was left to stochastic variables.

Durbin Watson's test of autocorrelation gave a tolerable value close to 2, which depicts that the variables in model 2 are devoid of autocorrelation.
The negative coefficient value (-0.386800) of the co-integration equation CointEq (-) was correctly signed and statistically significant. The result signifies the existence of long-run co- integrating relationship as well as short-run adjustment mechanism of 38.68% back to long run equilibrium.

Discussion of Findings

Commercial banks' credit to the agricultural sector and agricultural growth in Nigeria.

From the ARDL regression estimation results in table 4.9.5 and appendix 8b, the study found that the model agreed to the production theory's assertion that input factors of production most times do not reflect on economic growth in the short or current period but impacts on it after a long time. That could be the reason why the lags of growth in agricultural output; government expenditure on agricultural sector; agricultural credit guarantee loan; inflation and commercial banking lending rates made positive impacts on growth in agricultural output in Nigeria during the period of study. Hence, the economic implications that hold in model 1, was obtainable in model 2 with regard to past values of agricultural growth statistically impacting on agricultural growth.

The negative coefficient value of bank credit to agricultural is not in conformity to apriori expectation. The finding violated economic postulation which states that the higher the credits to economic units, the greater the growth in output and vice versa. However, our findings showed that even as banks’ credit to the agricultural sector increased over the study period numerically, growth in agricultural output decreased during the study period. This finding could reveal that either commercial banks’ credit to the agricultural sector was not perhaps monitored for proper channeling or credit was diverted for other uses. The poor performance of commercial banks’ credit to the agricultural sector becomes more worrisome when compared with Agricultural Credit Guarantee Loan that irrespective of its poor volume over the years maintained both positive coefficient values and significant impact on the predictor variables of economic growth and growth in agricultural output. The insignificant impact of credit to the agricultural sector revealed in the study agreed with the study of Omosebi and Saheed (2016) and Chisasa and Makina (2015) on Agricultural credit and economic growth nexus in Nigeria and Bank credit and agricultural output in South Africa respectively. The finding is equally confirmed by the study carried out by Oni, Akinlo and Elumilade (2014) using Vector Error Correction Model. Elowever, contrary to the findings of this study, Udoka, Mbat and Duke (2016) found a positive and significant relationship between Commercial Banks credit to the agricultural sector and agricultural production in Nigeria.
Model 2 is further re-written hence;

$$\mathbf{AGDP_t = p_0 + (3i(Bagr_t) + p_2(Gagr_t) + p_3(Acgl_t) + p_4(infl_t) + p_5(intr_t) + p}$$

Table 4.9.5, shows that only three explanatory variables (government expenditure on agriculture, agriculture credit guarantee loan and bank lending) met the apriori expectations respectively with their positive, positive and negative coefficients. Also, the changes in the explanatory variables taken together have been able to explain at least 88% of the total variations in the dependent variable, agricultural growth, thus leaving about 12% to chance occurrence.

Conclusion

On the basis of the above-stated findings, the study therefore concludes as follows; That commercial banks’ credit to the economy has not performed satisfactorily, given the insignificant nature of most of the explanatory variables under all the models. Also, it is instructive to note that under all the models, most of the key explanatory variables failed the apriori expectation test.

Recommendations

Based on the findings of this study and discussions thereto, we make the following recommendations:

i. That government as a strong force in creating an enabling environment for the thriving of the agricultural sector should strongly assist through its institutions and agencies in the provision of modem agricultural equipment; introduction of new methods and processes of farming; provision of improved seedlings and livestock breeds; and the introduction of value-chain processes in the sector. This will help in curbing high unemployment level in the country as it will lead to increased productivity; food sufficiency; improve living standards as well as reduction on the dependence on oil as a major source of revenue to the government. Government's should show sufficient commitment in the agricultural sector in order to make it attractive to young and teeming graduates at all levels as well as discourage peasant traditional methods of agriculture.

With a revelation of a significant influence of bank credit to the mining, quarrying and solid minerals sector on the growth of industrial output in Nigeria during the study period, the study recommends that; Central Bank of Nigeria as the apex bank should encourage commercial banks to look inwards by forming a consortium with domestic banks and foreign financial institutions, with the aim of providing medium - long term credit to investors in this sector rather than the usual short term credit. Bank credit of long-term nature will help investors acquire capital equipment needed in this sector that is capital intensive. If this is done, jobs will be created, output will increase, revenue generated and the economy will blossom. Further, to encourage reasonable investments in the sector, government should endeavour to grant tax holiday to investors in the sector in order to give them sufficient time to recoup their investments and pay off the loans.

The study recommends that since agricultural credit guarantee loan impacted positively on economic growth and agricultural output in Nigeria as showed from the result, funds approved through this window should hence be reasonably and regularly increased as records show that it is inadequate compared to commercial banks' credit to the agricultural sector. The positive impact of agricultural credit guarantee loan on the economy depicts efficient utilization of funds directed to the sector.

As the study revealed a significant impact of inflation rate on economic growth during the study period, we advise that monetary authorities should step up its fiscal policy measures to maintain the status quo while deficit financing of government budget in recent years should be used strictly and cautiously to avoid high inflationary rate that will erode the stability and economic benefits enjoyed over the years from a growing economy.

v. The study found that banks' lending rate to the Nigerian real sector during the period of study was high since it violated the apriori expectation. High lending rate is an impediment in boosting the appetite for bank credit by the productive economic units and by extension a disincentive to economic growth. In the light of this, the study recommends to both the apex bank and policy makers to advise commercial banks to raise interest rate on savings deposit so that it will be competitive in attracting idle funds from surplus units, hence, increase funds for investments. Further to this recommendation, the study advocates financial inclusion policy of Central Bank of Nigeria aimed at enhancing access to bank credit and increasing productive activities especially among those at the lower wrung of the income ladder should be sustained with the aim of increasing investible funds and reducing high lending rates. The study additionally proposes that financial regulatory authorities should come up with policies that will ensure the emergence of sector-oriented development banks through government-private partnership initiatives. This is because highly capitalized banks and robust development banks will reduce lending rate; enhance competition and promote medium to long-term credits to the real sector.

1. With a revelation of an insignificant impact of bank credit to the industrial sector on Nigerian economic growth during the study, it is therefore, recommended that government's capital expenditure on social services other than bank credit should be tailored at providing basic infrastructures like power and good transportation networks that will attract potential and existing industrialists into the industry because the sector remains very vital to any economy. Equally important is the need for the government to revive our moribund textile industry that constitutes a reasonable chunk of our industries as well as either place a ban or increase the tariff on the importation of textiles into the country. These efforts will go a long way to reviving and creating jobs in the industiy.

References

Adekunle, O.A., Salami, G.O., & Adedipe, O. A. (2013). Impact of financial sector development on the Nigerian economic growth. *American Journal of Business and Management, 2(4).*

Agbada, A.O., & Osuji, C.C. (2013). An empirical analysis of trends in financial intermediation and output in Nigeria. *Global Journal of Management and Business Research in Finance,* 73(13), 18-27.

Ajibola, J.O., Ishola, R.A., & Samuel, O.D. (2014). Commercial bank credit and sectoral growth in sub-Saharan Africa: Evidence from Nigeria. *Global Advanced Research Journal of Management and Business Studies*, 3(9).

Akanji, O.O. (2010). The central bank of Nigeria: The liquidity and the sectoral credit allocation. *Bullion Publication of the Central Bank of Nigeria,* 34(1), 3-6.

Aliyu, M. & Yusuf, A.H. (2013). Impact of private sector credit on the real sector of Nigeria. *International Journal of Business and Social Research (IJBSR),* 3(5), 105-116.

Asuamah, S.Y., Kwarteng, E., & Awuah, J. B. (2012). What is the link between finance and economic growth? A review. *European Journal of Business and Management,* 4(13), 12- 19.

Atseye, F.A., Edim, N.O., & Ezeaku, H.C. (2015). An empirical investigation of the impact of bank credit on economic growth in Nigeria. *Indian Journal of Applied Research,* Vol. 5, Issue 11,268-271.

du, N.P., & Okumoko, T.P. (2013). Financial development and economic growth in Nigeria. *European Journal of Business and Management,* 5(19), 69-81.

Avinash, R., Tanisha, M-R. & Daryl, C. (2012). An assessment of sectoral distribution of commercial bank credit on economic growth and development in Trinidad and Tobago, 1970-2008. *Central Bank of Barbados Working Paper,* 1-21.

Ebi, B.O. & Emmanuel, N. (2014). Commercial bank credits and industrial subsector's growth in Nigeria. *Journal of Economics and Sustainable Development,* 5(10), 1-11.

Egbetunde,T. (2012): Banks' credit and rural development in Nigeria, (1982-2009). *International Journal of Finance and Accounting* 2012.

Ekpenyong, D. B., & Acha, I. A. (2011). Banks and economic growth in Nigeria. *European Journal of Business and Management*, 3(4), 155-166.

Ihemeje, J.C., Umeh, J.C., & Ogbanje, C.E. (2011). Thesis writing and defense: The intricacies and rudiments for academic and professional studies. Onitsha, Anambra State: ERI Print Ltd.

Imoughele, E., Ismaila, L., & Mohammed (2013). Commercial bank credit accessibility and sectoral output performance in a deregulated financial market economy: Empirical evidence from Nigeria. *Journal of Finance and Bank Management, 1(2),* 36-59.

Iwedi, M., Igbanibo, D.S., & Onuegbu, O. (2015). Bank domestic credits and economic nexus in Nigeria, (1980-2013), *International Journal of Finance and Accounting, 4(5),* 236-244.

Kai, G. & Vahram, S. (2011). Determinants of bank credit in emerging market economies. *IMF Working Paper WP/11/51,* 1-20.

Nnaji, C.E; Chukwu, E. & Nnaji, M. (2013). Electricity supply, fossil fuel consumption, CO2 emissions and economic growth: Implications and policy options for sustainable development in Nigeria. *International Journal of Energy Economics and Policy,* 5(3).

Nnamdi, I, S. (2015). Private vs public sector bank credits and economic growth nexus in Nigeria: Where does efficacy rest? *Research Journal of Finance and Accounting,* 6(13), 226-237.

Nuno, C. L. (2012). Bank credit and economic growth: A dynamic panel analysis. *The Economic Research Guardian, 2(2), 256-267.*

wakanma, P.C., Nnamdi, I.S., & Omojefe, G.O. (2014). Bank credits to the private sector: Potency and relevance in Nigeria's economic growth process, *Accounting and Finance Research,* 3(2), 23-35.

waru, N.M., & Okorontah, C.F. (2014). Banks' credit as an instrument of economic growth in Nigeria. *International Journal of Business and Law Research, 2(2),* 25-33.

Nwite, S.C. (2014). Determinants of financial intermediation and its implications on economic growth in Nigeria. *British Journal of Marketing Studies,* 3(9), 49-56.

Nwosa, P.I., Ajibola, M.A., & Olufemi, M.S. (2011). Causal relationships between financial development, foreign direct investment and economic growth - The case of Nigeria. *International Journal of Business Administration, 2(4),* 93-102.

Obademi, O. E. & Elumaro, A. (2014). Banks and economic growth in Nigeria: A reexamination of the financial repression hypothesis. *American Journal of Business and Management,* 3(1), 1-9.

Obamuyi, M.O., Edun, A. T. & Kayode, O.F. (2012). Bank lending, economic growth and the performance of the manufacturing sector in Nigeria. *European Scientific Journal, 8(3),* 19-36.

Oduyemi, A.O. (2013). Understanding monetary policy series No 33: The real sector. Central Bank of Nigeria 10th Commemorative Anniversary.

Oni, O., Akinlo E., & Elumilade, O. (2014). Impact of bank credit in the real sector: Evidence from Nigeria. *Global Journal of Business Research (IJBSR),* 3(5), 39-47.

Onuorah, A. C., & Ozurumba, B. A. (2013). Bank credits: An aid to economic growth in Nigeria. *Information and Knowledge Management,* 3(3), 41-50.

Oriavwote, V. E., & Eshenake, S. J. (2014). An empirical assessment of financial sector development and economic growth in Nigeria. *International Review of Management and Business Research,* 3(1), 139-149.

Osman, E. G. A. (2014). The Impact of private sector credit on Saudi Arabia economic growth (GDP): An econometrics model using (ARDL) approach to co-integration. *American International Journal of Social Science,* 3(6).

Ozor,K.C.(2018). Commercial banks' credit to the real sector on economic growth of Nigerian Economy. A Ph.D dissertation submitted to the department of banking and finance, Michael Okpara University of Agriculture, Umudike, Abia State.

Sackey, F. G., & Nkrumah, E. M. (2012). Financial sector deepening and economic growth in Ghana. *Journal of Economics and Sustainable Development, 3(2),* 122-139.

Safdar, H. T., Iqra, S., Ishfaq, A., & Muhammad, R.U. (2015). Impact of bank lending on economics growth in Pakistan: An empirical study of lending to private sector. *American Journal of Industrial and Business Management, 5,* 565-576.

Sanusi, L.S. (2011). Growing Nigeria's real sector for employment and economic development: The role of Central Bank of Nigeria. *A paper delivered at the inaugural memorial lecture in honour of the late Professor Uzoaga at the University of Nigeria, Nsukka,* 1-26.

Sharon, B., Yvonne C. & Martiniqua M. (2014). An empirical analysis of the nexus between private sector credit, economic growth, government expenditure, interest rate and inflation: A case of Bahamas (1989 - 2014). *Research Department of Central Bank of The Bahamas.*

Udoka, C. O., Mbat, D. O., & Duke, S. B. (2016). The effect of commercial banks' credit on agricultural production in Nigeria. *Journal of Finance and Accounting,* 4(1). 1-10.

Ugbaje, D. O., & Ugbaje, H. E. (2014). Empirical study of financial sector development on economic growth in Nigeria, (1990-2010), *International Journal of Public Administration and Management Research,* 2(3), 122-137.

Vighneswara S. (2010). Bank-based financial intermediation for financial inclusion and inclusive growth. *Banks and Bank Systems,* 5(4), 63-73.

Were, M., Nzomoi, J., & Rutto, N. (2012). Assessing the impact of private sector credit on economic performance: Evidence from sectoral panel data for Kenya. *International Journal of Economics and Finance, 4(3),* 182-190.

Yakubu, Z., & Affoi, A. Y. (2014). An analysis of commercial banks' credit on economic growth in Nigeria. *Current Research Journal of Economic Theory, 6(2),* 11-15.

ONLINE TAX ADOPTION AS AN ACCOUNTABILITY TOOL ON IGR, EVIDENCE FROM ABIA STATE.

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Abstract
This study was carried out to examine online tax adoption as an accountability tool on internally generated revenue in Abia State. In order to determine the relationship between online tax adoption and internally generated revenue, the study proxy online tax adoption using online direct tax assessment (ODTA) and online road taxes (ORT). The study adopted an ex post facto design and data were collected from the National Bureau of Statistics (NBS). Using Wilcoxon statistical test tool, the findings of the study indicate a positive and significant relationship between online direct tax assessment (ODTA), online road taxes (ORT) and internally generated revenue in Abia State Nigeria at 1% and 5% significant level respectively. Thus, the study concludes that the adoption of online taxes as a tool for accountability ensures and enhances internally generated revenue in Abia State. In lieu of the findings of the study, the study recommended the need for the adoption of online taxes which enhances the revenue generation of the state other than the former (manual collection) where most of the collected taxes and levies are not remitted to the government.
Keywords: Online Tax Adoption, Online Direct Tax Assessment, Online Road Taxes, Internally Generated Revenue (IGR), Accountability
Keywords: *E-tax, E-tax adoption, E- Tickets, Internally, internally generated revenue*

Introduction

Tax that has been an avenue through which societies can earn revenue. Government can use tax to encourage or discourage some consumption of goods which can be reinvested into capital projects. Tax can be used for income redistribution to reduce inequalities as a means of generating revenue to the government.
For many years now, countries have impose higher taxes on cigarettes and alcohol and the revenue realised is invested in development particularly in health sector. Michael (1993).

Nigeria has long relied on the revenues from oil, recovered loots, Grants, aids and repatriated funds. There is a widespread recognition of the need to justify the sources of the government project and build a more sustainable revenue base for accountability and inclusive growth. As the value or the posted price of crude oil drops on daily basis, as a reason of technological advancement, pandemic and economic crisis. There is an urgent need for States to look for a means to diversify their revenue other than the statutory allocation they receive from the federal government which is dwindling. There's an urgent call for states to look for means to generate revenue and block loopholes on the already existing revenue that are been collected but are not full accounted for.

Tax is seen as a contribution and when it is been contributed and it is not been geared towards the purpose for which the contribution was made, it will make the taxpayers to slack in the payment of the contribution and this gives rise to the accountability of the internally generated revenue which will lead to equitable tax administration without impediment on economic growth. Internal generated revenue remains the only panacea of infrastructural development and public funding service as oil revenue is dwindling, state should use effective and innovative revenue management skills to increase their IGR to the point of adequately funding both capital and recurrent expenditures. When adequate digital methods are put in place, it will reduce tax evasion and the revenues being used to put in place necessary infrastructure will be beneficial to the tax payer and at the same time boost the IGR of the state because when there is an enabling environment for business to thrive, the taxpayers will happily pay taxes without compulsion. Revenue generation has remained a major concern for numerous nations comprising Nigeria. Okauru, (2011).

Tax is never a new discovery in Nigeria or in the world, it has been in existence as man is. Online tax is neither a novel idea but just that it has not been adopted by so many states in Nigeria in their internally generated revenue. Tax is a charge imposed by a government on persons, entities or property, administered to generate revenue for the government. Black, (1999).

According to World Bank report on Nigeria published on the 1st May 2013 "it was stated that 95% of the government budget expenditure depended on his projected oil revenue based on current world prices". According to federal account allocation committee (FAAC) most states of the federation depend solely on federal allocation. Eze et al. (2019) postulated that in Nigeria, in terms of public revenue generation tax revenue is ranked next to revenue from petroleum sector. Every state has the potential to be self-sufficient if only they can harness her potential adequately and in the verge of this, Abia state government abolished the use of tout in revenue collection on the 11th of February 2021 and begins e- ticketing (Online tax) (Gordi Udeajah, Guardian Newspaper) as a means to ensure transparency, accountability, increase in the internally generated revenue to fund their capital and recurrent expenditure as well as to augment other expenditures.

Predictably the oil revenue has continued to decline at the international market due to technological innovation that seek to eliminate consumption of oil products. The total revenue accruable to the nation from sale of oil is determined by the forces of demand, supply, and the quantity sold at the international crude market determines the amount to be shared among the tiers of government. It is on this note that this study is carried out to examine Online Tax Adoption as an Accountability tool on Internally Generated Revenue in Abia State.

In Abia State, sequel to the incessant misconduct, misappropriation, mismanagement of revenue realised through paper ticket, tickets forgery, poor accountability on remitted funds by the revenue drivers and collectors , double taxations by the tax payers, complaints of racketeering, touting, misconduct and sundry ills by revenue collectors has made the taxpayers to loose faith and trust in tax payment. They believed that government is not doing any meaningful infrastructural development for them that will aid their business to thrive while the government claimed that those revenue collected weren't accounted for and many did not reach the appropriate quarters.

In Abia state, the sundry ills by commuters as touts jumping in moving vehicles and dragging of steering with drivers as such as it causes accidents, choas and endangers the lives of citizenries and unwholesome act traced to illegal enforcers led to high tax avoidance and evasion in the state which has been one of the major challenges in the tax administration in the state. E-tax was introduced with the chief aim of combating vices that were mainly associated with the collection of taxes like; Tax evasion, filing of wrong tax returns and claiming of undeserved tax refunds. Wamathu, (2014).

In Nigeria, revenue from income taxes has been grossly understated due to improper tax administration, assessment and collection. Ola, Adegbie and Fakile (2011). As a result of fraud, forgery that is been encountered by the print or paper ticket made the government to ban illegal enforcers and touting in other to adopt a more transparent means of revenue collection.

Herbert, et al (2018). Emerging nation residents lethargy towards taxation is a combination of causes among which is lack of transparency and accountability by government agencies and bureaucractic inertia by various tiers of government of nations.

Owing to the precarious situation in the country, there is an urgent need for States to look outside the box to tighten loopholes were money were leaking to ensure accountability in their IGR which could help sort some recurrent and capital expenditures. Because, it is believed that it is the duty of the citizens to pay tax and the contractual duty of the government to account for all the taxes received.

Abia state is a state that has the manpower, the natural resources, the market and the economy to boom but it all these are not harnessed because of tax evasion and poor infrastructural development in the state which is attributed to unaccountability of tax and this made the chairman of the Board of Internal Revenue (Mr Celestine Agbare)

and the coordinator Abia Economic Advancement team (Sir Mac Atasie) to synergies with revenue generating MDA’S on how to crub the menace.
It is on the light of this, that gave rise to the study on the online tax adoption fas an accountability tool on internally generated revenue in Abia State to examine it's compliance and any impact it has on the Internally Generated Revenue of the state since its adoption. Predicated on the issues raised, the researcher examined the following specific objectives:

1. To determine the impact of Adoption of Online Direct tax assessment as an accountability tool on Internally Generated Revenue in Abia State
2. To determine the impact of Adoption of Online Road Taxes as an accountability on the Internally Generated Revenue in Abia State.

In order to direct the flow of this work, the following hypotheses were formulated:

H_{01}: Adoption of Online Direct Tax Assessment does not have significant impact as accountability tool on Internally Generated Revenue in Abia State.

H_{02}: Adoption of Online Road Taxes does not have significant impact as accountability tool on Internally Generated Revenue in Abia State.

The paper is organised as follows’ the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of related literature

Conceptual Reviews

Online Tickets or E-Tickets

It is a digital ticket that is valid as a paper ticket or its equivalent. it is an electronic ticket which gives the holder right like the paper ticket. It could mean ticket one buys online.

Online tax adoption is a system in which tax is paid through a debit card or payment through banks and once the payment is made, a pin is given as a receipt that the taxpayer is to be presented whenever the need arises. It requires taxpayers to pay their duties online from their individual or business bank account (FIRS, 2015).
The author, sees online tax as the process of taking advantage of digitalisation on the collection of compulsory payment or charges levied on the citizens, corporate organisations and business entities in other to assist government on developmental projects and to finance government expenditures

E-tax.

Electronic tax or e-tax reporting refers to the process of filing the report and it's comfortable supporting documents to an authority using a computer or publicly switches to the phone or cell phone lines via the internet (William Wagner).

Electronic taxation (e-taxation) is the deployment of computer system and networks in the process of levying and payment of taxes. It involves the application of computer techniques in the process of tax assessment collection and administration.it is is generally referred to as a payment and a feeling it is an extension of the growing concept of e-governance and e-commerce. Newman R and Eghosa E (2019). It refers to organisational process with data transfer between the IT system of professionals and those of tax authority. Position must support tax authority processes workflow systems and electronic record management on the other hand acknowledge management and automated risk analysis to assess the credibility of tax returns, the tax inspectors required support not only to check the accounting data of taxpayers but also to fight against illegal employment, tax evasion and social security fraud at the construction site Makolm and Orthofer (2007).

The Operation of Online Tax Ticket

The online ticket is operated by feeding the mini computer, phones with the name of the operator, the plate number and the mobile number of the buyer. A text message is sent to the operators, when the task force ask for it, the text messages will confirm it and plate number of the payers and the number or code given. And it will help drivers and operators to run their business at ease.

The state partners with staff of banks involved in revenue collection, take them through the new process and also work with interswitch group to ensure payment across all channels remain seamless and easy. This is applicable for other taxes and levies (Abia State internal Revenue Service, 4th Sept 17.43 Facebook for android). ABBSIN: Abia State social identity number; it is an electronic number that uniquely identify a tax-paying entity, (individual) corporate to the other state government and a state internal revenue service. The TIN is generated once for life and needed to access most of the online services of Abia State internal Revenue Service and this is how the direct assessment is been carried out.

Internally Generated Revenue.

It is the revenue that Local and State government generate within the area of jurisdiction. The capacity of local government to generate revenue internally is one of crucial consideration for creation of a local council. The State Internally Generated Revenue is computed by the National Bureau of Statistics and Joint Tax Board from official records and it is submission by the 36 States Board of Internal Revenue. This submission are then validated and authenticated by the joint tax board chaired by the Federal Inland Revenue Service.

The Components of Internally Generated Revenue

1. **MDA's Revenue;** this relates to revenue generated administratively by state Ministries Departments and Agencies during the course of providing various services to residents in the States
2. **Direct Assessment;** direct assessment may relate to a form of personal income tax used to assess tax for self-employed individual with the self-assessed tax, a new taxpayer can assess him /himself and pay the calculated amount. Direct assessment may also relate to those imposed on business especially (informal) by the state authority, this is based on the size of their activities.
3. **Pay As you earn (PAYE)** this is a form of personal income tax that refers to tax deducted directly from wages and salaries of employees operating in the formal sector. All employees in Nigeria are responsible for deducting Pay As You Earn (PAYE) that is from their employees earnings.
4. **Road Taxes**; road tax is the daily levies paid by commercial transporters, tricycle operators, Motorcycle operating within the States.
5. **Other Taxes**; these include various taxes such as levies on market traders, land registration and other land related fees /development levies on individuals , pool betting/ lottery/ gaming fees, stamp duties on individuals .

Schedule of taxes and levies by the state government are; pay as you earn, direct taxation (self-assessment) withholding taxes for individual, capital gains tax for individual, stamp duties on instrument executed by individuals, pool betting ,lotteries gaming and casino taxes, road taxes, business premises registration ,development Levy for individual, naming of Street registration fees in state capitals ,right of occupancy fees on land owned by the state government, market taxes and levies ,real estate finance involved Hotel , restaurant and event centre. Cconsumption tax (where applicable, environmental tax, ecological, mining and quarry fees (where applicable) slaughter/ abattoir fees where Government is involved in its construction, service charges ,development Levy, social services contribution levy.

How to Strengthen Connection between Tax and Accountability.

According to Webster's Dictionary, "Accountable is defined has been responsible, liable, explainable legally bound to".

Accountability implies that performance is measured and it will result in consequences that depend on the failure or success to meet the expected standard for which they are responsible.

In order to improve the tax morale and Compliance, taxpayers need to understand taxes they pay and what the revenue are used for. Because when citizens are forced to pay taxes, they are more likely to feel ownership, (i.e) to determine the stewardship and accountability of the tax they pay because accountability is about stewardship explainable, liable to something and when entrusted with such, one should be seen to be up and doing.

Theoretical Review

Online/ E-Tax Adoption.

This work is anchored on technology acceptance model (TAM) developed by Davis et al (1989), Lindahl tax and theory of accountability as explained by Vanice et al (2013).

This term is preferred because it suits the study scenario. According to Szajna (1994) & Legris, Ingham &Collette (2003), TAM has predictive validity for intend to use and self-reported usage and has proven to be a theoretical as in explaining individual acceptance, behaviour towards an information systems such as e-filing. As reported by other scholars Park (2009).

The Technology Acceptance Model (TAM) is an information system theory model that help to explain and predict user behaviour of information technology. Also the TAM framework is explaining individual acceptance behaviour towards an information systems such models how users come to accept and use a technology. According to Davis (1989) users are motivated to use the system by two main factors: perceived usefulness and perceived ease of use. Perceived usefulness is the user's expectation that by adopting new technology could result into improvement of work performance. While perceived ease-of-use being a degree to which a person expects that using a particular system will be free of effort.

Lindahl Tax.

A Lindahl tax is a form of taxation conceived by Erik Lindahl in which individuals pay for public goods according to their marginal benefits. They pay according to the amount of satisfaction or Utility they derive from the consumption of an additional unit of the public goods. Lindahl taxation is designed to maximise efficiency for each individual and provide the optimal level of a public goods. Lindahl can be seen as an individual share or the collective tax burden of an economy. The optimal level of a public good is that quantity at which the willingness to pay for one more unit of the good taken in totality for all the individual is equal to the marginal cost of supplying that good.

Lindahl tax is the optimal quantity times the willingness to pay for one more unit of that good at it's quantity.

Accountability

As explained carefully by Vanice, et al (2013) The useful way to understand accountability is to distinguish between it's two most prevalent uses;

(1) As a virtue (2) As a mechanism.

As a virtue, accountability is seen as a quality in which a person displays a willingness to accept a responsibility, a desirable trait in public officials, government agencies or firms. In this use, accountability is positive feature of an entity. As a mechanism accountability seen as a process in which a person has a potential obligation to explain his or her actions to another party who has the right to pass judgement on the actions as well as to subject the person to potential consequences for his or her actions. Accountability Theory Focuses on the process of accountability, it proposes several mechanism that increases accountability perception. For example quotes "even the simplest accountability manipulation necessarily implicate several empirical distinguishable sub manipulations" Lerner and Tetlock (l999 p.255), including the presence of another person, identifiability and expectation of evaluation. Recent research has shown that IT design artifacts of systems can manipulate the four core components of accountability Theory and thus improve employees felt accountability towards organisation system security without disruptive intervention of training (Vanice et al, (2015)

The four core components of accountability are:

(I) Identifiability (2) Expectation of evaluation, (3) Awareness of monitoring and (4) Social presence.

(1) Identifiability is a person's knowledge that his output could be linked to him and thus reveal his or her true identity. Williams, et al. (1981)

(2) Expectation of evaluation is the belief that one's performance will be assessed by another (party). According to some normative ground rules and with implied consequences Lerner and Tetlock, (1999).

(3) Awareness of monitoring is a user's state of active cognition that his / her system related work is monitored Vanice, et al (2015).

(4) Social presence is awareness of other users in the system. Vanice, et al. (2015).

Empirical Review

Studies conducted in Tanzania by Yonazi (2020) Rumanyika, &Mashenene (2014) reported constraints related to low level of ICT development in the country. Nevertheless, making compliance with regulation for e-filing affordable cannot be neglected in the process of rolling out the systems to taxpayers.

Nnubia et al (2020). Analysed the impact of the tax assessment on income generation in Nigeria. The assessment applied optional information gotten from federal inland revenue service charge report and CBN statistical delivery and quarterly economic report. This data were time arrangement data convered the time frame from first quarter 2012 to second quarter of 2018. The information gathered were broken down into ordinary least square method. The results show a hopeful gigantic effect of pre (before the starter of e -charge evaluation)organisation personal expense and value-added tax on income generation in Nigeria and an opposite irrelevant effect of post association yearly obligation pay were included appraisal pay income, age in Nigeria. After the presence of e-charge assessment at 5% degree of basic.

Nkechi and Onuora (2018) Investigated the effect of internally generated revenue on infrastructural development of the South Eastern States in Nigeria. Secondary data were used for the study and they were obtained from budget estimate of each five states of the Eastern States of Imo, Abia, Ebonyi, Enugu and Anambra state from the period of 2013 -2017. The study adopted descriptive statistics correlation and linear multiple regression for data analysis and interpretation. Findings from the study revealed that that is a significant positive relationship between IGR and infrastructural development in the south east States.

Peter and Ferdinand (2017) analyse the relationship between IGR and capital expenditure utilisation in Cross River State Nigeria from 2007 to 2015. Secondary data sought from Cross River State budget office of internal revenue service, ministry of finance were used for the study. Descriptive statistics were used to analyse the relationship between IGR and capital expenditure utilisation in Cross River State. Findings from the study indicate that increase in government expenditure without corresponding Revenue will widen the budget deficit, stating that Cross River State government should increase the size of its IGR in order to accommodate the capital expenditure of the State.

Nasir (2015) analyses executing electronic duty fillings and instalment in Malaysia: The fundamental target was to call attention to the advantages of taking up a decent e -charge framework rather than a manual framework. The investigation utilised auxiliary information from Malaysia Inland Revenue report from 2004 to 2011 utilising pattern examination to feature the expansion in expense firms made since the inception of e-charge framework in 2004. For the initial 2 years , the quantity of citizen utilising the e-filing framework stayed far beneath desire at about 5% and expense specialist were all while handling difficulties presented by the new framework from disillusioning 4% to an encouraging 34% and 37% in 2012. Over a similar assessment forms expanded from 14.5% of 52GDP to 15.3% is likewise indicated, how consistence was expanded and less hour utilised in gathering charges whenever actualized well and utilised by most citizens advantages and expenses specialist this ensure a superior way of life for all.

Afuberoh and Okoye (2014) examined the influence of tax collection on income generation in Nigeria, regarding FCT and some named state in the nation. Utilizing a regression investigation, figured with the guide of SPSS form 17.0. The agent applied on salary and essential springs of information termination uncovered among others that destination has a noteworthy interest on income generation, its Impact on assessment has an important effect on gross domestic product.

Akwe (2014) examines the effect of non-oil tax revenue on economic growth from 1993 to 2012 in Nigeria. To accomplish this, examination of objective, significant, optional information utilised from the 2012 statistical bulletin of the Central Bank of Nigeria (CBN) were used this information examined utilising the adoption of online taxes ensures and enhances revenue generation in Abia State Nigeria. Like wise a positive effect of non-oil tax revenue on monetary growth in Nigeria.

Lai (2008) analysed the effect of e -filling on revenue generation in Malaysia, using a survey investigation and auxiliary widespread of information. Most of the investigation uncovered that tax collection has a lot of effect on Income generation. Former tax collection has an important impact on gross domestic product (GDP), tax evasion and tax avoidance have a noteworthy effects on income generation in Malaysia

Sweeny, et al (1999) and Yilmaz and Coolidge (2014) reported some of these costs for small tax payers, additional capital may be needed to invest for e- filing in order to put the system in place. This may entail purchasing of hardware and connectivity to internet. If the costs are high, it is likely that they affect e-filing adoption in the short-run. In the long run, the accumulated benefits outweighs these cost.

Methodology

This study adopts ex-post facto design in examining the impact of online tax adoption as an accountability tool on internally generated revenue (IGR) in Abia state. This was adopted based on the fact that our data is secondary data that exists already which cannot be manipulated or controlled. Data for the study were collected from National Bureau of Statistics (NBS). Hence, the study was limited to Abia state Nigeria.

Wilcoxon statistical test tool was employed to examine the relationship which exists between online tax adoption and internally generated revenue in Abia State Nigeria.

Secondary data collected from national Bureau of Statistics and the figures are given in the table below:

Internally generated revenue at state level.

	PRE ONLINE TAX ADOPTION (2019)	**ROAD TAX (2019)**
1.	Direct Assessment (2019) ₦177,303,831.36	N130,613,394.51
2.	Direct Assessment (2020) Q1 N85,519,703027	N96,089,570.00
3.	Direct Assessment (2020) Q2 = N20,169.757.9	Road Tax 2020 Q2 N22,200,000.00
4.	Grand Total 2020 N105,689,490.36	Grand Total 2020 N118,289,570.00

	Post online Tax Adoption	**Post online Adoption 2021**
5.	Direct Assessment 2021 Q1 = N81,640,899.59	Q1 = N130,298,465.84
6.	Direct Assessment 2021 Q2= N58,937,015.00	Road Tax Q2 = N102,928,885.00
	Grand Total 2021 N140,577,914.59	Grand Total 2021 N233,227.350.84

Source: National Bureau of Statistics internally generated revenue at state level H1, 2019,

H1 2020, H2 2021
Q1= 1st Half of the year
Q2= 2nd Half of the year

Operationalization and Measurement of Variables
The dependent variable in this study is internally generated revenue (IGR) while the independent variable of Online Tax Adoption was proxy using Online Direct Tax Assessment (ODTA) and Online Road Taxes (ORT).

Results and Discussion
Wilcoxon Statistical Test Tool was employed to test the linear relationship between the dependent and independent variables. It was operated using SPSS version 20 as shown in the table 4.1.1-4.1.2 below:

Table 4.1.1: Result on Impact of Online Direct Tax Assessment (ODTA) as an Accountability Tool on Internally Generated Revenue (IGR) in Abia State Nigeria

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between IGR and ODTA equals 0.	Related-Samples Wilcoxon Signed Rank Test	.005	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: SPSS Computational Result (2022).

Table 4.1.2: Result on Impact of Online Road Taxes (ORT) as an Accountability Tool on Internally Generated Revenue (IGR) in Abia State Nigeria

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between IGR and ORT equals 0.	Related-Samples Wilcoxon Signed Rank Test	.017	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: SPSS Computational Result (2022).

Discussion of Findings

The result of the analysis of the study using Wilcoxon test tool operated with SPSS version 20 is expressed as follows:

H01: Adoption of Online Direct Tax Assessment (ODTA) does not have significant impact as an accountability tool on Internally Generated Revenue (IGR) in Abia State.

In view of the analysis as shown on Table 4.1.1, the result shows a median difference between online direct tax assessment (ODTA) and internally generated revenue (IGR). Thus implies that online direct tax assessment has positive and significant impact on internally generated revenue. The Wilcoxon's test as shown on the table above shows a p-value of 0.005. This probability value is statistically significant at 1% level. Hence, the null hypothesis was rejected as suggested by the decision rule shown in the Table and alternate hypothesis accepted which contends that the adoption of online direct tax assessment (ODTA) have significant impact as an accountability tool on internally generated revenue (IGR) in Abia State.

This is in tandem and in agreement with the findings of Peter and Ferdinand (2017). Analysed the relationship between IGR and capital expenditure utilisation in Cross Rivers State Nigeria from 2007 to 2015. Found that increase in government expenditure without corresponding Revenue will widen the budget deficit stating that Cross River State government should increase the size of its IGR in order to accommodate the capital expenditure of the State.

H02: Adoption of Online Road Taxes does not have significant impact as an accountability tool on Internally Generated Revenue in Abia State.

In view of the analysis as shown on Table 4.1.2, the result shows a median difference between online road taxes (ORT) and internally generated revenue (IGR). Thus implies that online road taxes have positive and significant impact on internally generated revenue. The Wilcoxon's test as shown on the table above shows a p-value of 0.017. This probability value is statistically significant at 5% level. Hence, the null hypothesis was rejected as suggested by the decision rule shown in the Table and alternate hypothesis accepted which contends that the adoption of online road taxes (ORT) have significant impact as an accountability tool on internally generated revenue (IGR) in Abia State.

This is in consonance and aligns with the findings of Nkechi & Onuora (2018) Effect of IGR on infrastructural development of Eastern States findings revealed that there's a significant positive relationship between IGR and the infrastructural development in South East Nigeria. Likewise, Lai (2008) found that tax collection has effect on Income alongside the former (print tickets) have impact on tax evasion, GDP and tax avoidance.

Contribution to knowledge

Previous studies on IGR and online tax did not test it on online tax adoption and direct assessment on Abia State. Rather, the test on other variables like Custom duties, Value added tax, IGR on infrastructural development and economic development on other states in Nigeria. But this study, arises to fill the gap in literature and contributing to *knowledge by adding to the body of literature by using data collected from National Bureau of Statistics to test the online adoption of tax on IGR of Abia State. And this will be of relevance to tax administrators, state governments that are having challenges on accountability on IGR, help to strengthen the loopholes in revenue collection, cut down cost of print tickets and at the same time be useful to the general public.*

Conclusion

The study having established a model fit on online tax adoption (ODTA & ORT) found that online tax adoption is an accountability tool for revenue generation in Abia State Nigeria. Hence, the study concludes:

Based on our findings, the following recommendations were made:

1. The study having found positive and significant association between the adoption of online direct tax assessment (ODTA) and internally generated revenue (IGR) recommended the need for the adoption of ODTA which enhances the revenue generation other than the former (manual tax collection) where most of the collected taxes are not remitted to the government and at the same time will enhance accountability and sanity in tax administration, crub tax evasion, boost accountability on the IGR and in the long run boost infrastructural development of the state.
2. Government should ensure that online road tax rate will not be seen as a burden to the payers and its incidence be light so that the taxpayers could comply and in the long run, this will crub tax evasion. Moreover, taxpayers will be ever willing to pay, when the burden of tax is not so much felt and will slack in payment of the tax if the government doesn't give accountability of the revenue by providing basic amenities and infrastructural development. Those touts that

were revenue drivers should be absorbed into the online ticket marketers or should be empowered into one skill or the other to make them gainfully employed to avoid constituting nuisance or miscreants threatening the economic development of the state.

References

Adereti, S., Sanni, M., & Adesina, J. (2011). Value added tax on economic growth of Nigeria. *European journal of Humanities and Social Sciences, 10*(1), 456-471.

Afuberoh, D. , and Okoye, E.(2014) The Impact of Taxation on Revenue Generation in Nigeria; A study of Federal Capital Territory and Selected States. International Journal of Public Administration and Management Research (1) (PAMR), 2(2), 22-47.

Akwe, J. A. (2014). Impact of non-oil tax revenue on economic growth: The Nigerian perspective. *International Journal of Finance and Accounting,* 3(5), 303-309.

Anthony, Vanice, Paul, Benjamin, Lowry. and Dennis Eggetti (2013) ."Using accountability to reduce access policy violation in information systems "in H.I Adebowale, "E-Taxation in Nigeria: Issues and challenges I,T,L,J 160, 162.

Black, (1999). Black's Law Dictionary (Seventh Edition) West Group Centres for Medicare and Medicaid Services Office of Information Service. (2008, March 27) Selecting a development approach United State Department of Health and Human Services (HHS).

Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology, *MIS Quarterly*, 13, 319-339.

Davis, F. D., Bagozzi, R, P., & Warshaw, R. P. (1989). User acceptance of computer technology: a comparison of two theoretical models, *Management Sciences*, 35, 982 -1003.

Eze, Lorwuese, & Abba. (2016).The challenges and the imperative of tax system reforms in Nigeria. *International Journal of Economics and Finance, 8*(3), 151-164

FIRS, (2015) FIRS introduces electronic filing of tax returns and online payment of taxes. Retrieved from: http// PWCNigeria.type paid.com/files/PWC tax alert firs introduces electronic tax filing-2.pdfm

Gordi Udeajah, Guardian Newspaper Umuahia, 12 February 2021.

Herbert, Nwarogu, & Nwabueze (2018) Tax reforms and Nigeria's economic stability. *International Journal of Applied Economics, Finance and Accounting, 3(*2)74-87

Internally Generated Revenue at state level H1 2020 Report Date October 2020. Data source National Bureau of statistics.

Lai, M.L. (2008) Effect of e-filing on revenue generation in Malaysia. Journal of Accounting Research, 46(5), 1085-1142.)

Legris, P., Ingham, j., & Collerette, P. (2003). Why do people use information technology? A critical review of technology acceptance model information and management, 40,191-204.

Nasir, M. G, Haruna, M. A., & Abudalahi, M. (2016). Evaluating the impact of value added tax on the economic growth of Nigeria.

Nnubia, C. I., Okafor, G. O, Chukwunwike, O. D, Asogwa, O, S., & Ogan, R. (2020) Effect of e-taxation on revenue generation in Nigeria: A pre-post analysis, *Academy of Entrepreneurship Journal.*

Ola, Adegbie. & Fakile. (2011). Petroleum Profit Tax and Nigeria Economic Development. *International Journal of Research in Computers Application and Management*, 11-18

Omaliko, E., Okeke, P., and Obiora, F. (2021). Impact of covid-19 pandemic on liquidity and profitability of firms in Nigeria, *International Journal of Academic Research in Business and Social Sciences, 11*(3), 1331-1344

Onalapo, A., A, Aworemi, R., and Ajala, O. A. (2013). Assessment of value added tax and it's effect on revenue generation in Nigeria. *International Journal of Business and Social Science 4*(1), 220-225.

Peter, O. and Ferdinand, I.(2018) Analysis of Generated Revenue and Capital Expenditure utilisation in Cross River State. Corpus .ID 212500036.

Park, S. Y. (2009). An Analysis of the Technology Acceptance Model in Understanding University students' Behavioral Intention to Use E-Learning Educational Technology and society, 12, 150-162.

Sweeny, J.C, Soutar G. N., and Johnson, L. (1999). The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of Retailing* 75, 77-105.

Uzoka, P. U., and Chinedu, C. O. (2018). Effect of tax revenue on economic growth in Nigeria. *International Journal of Social Science Research*, 4(7).

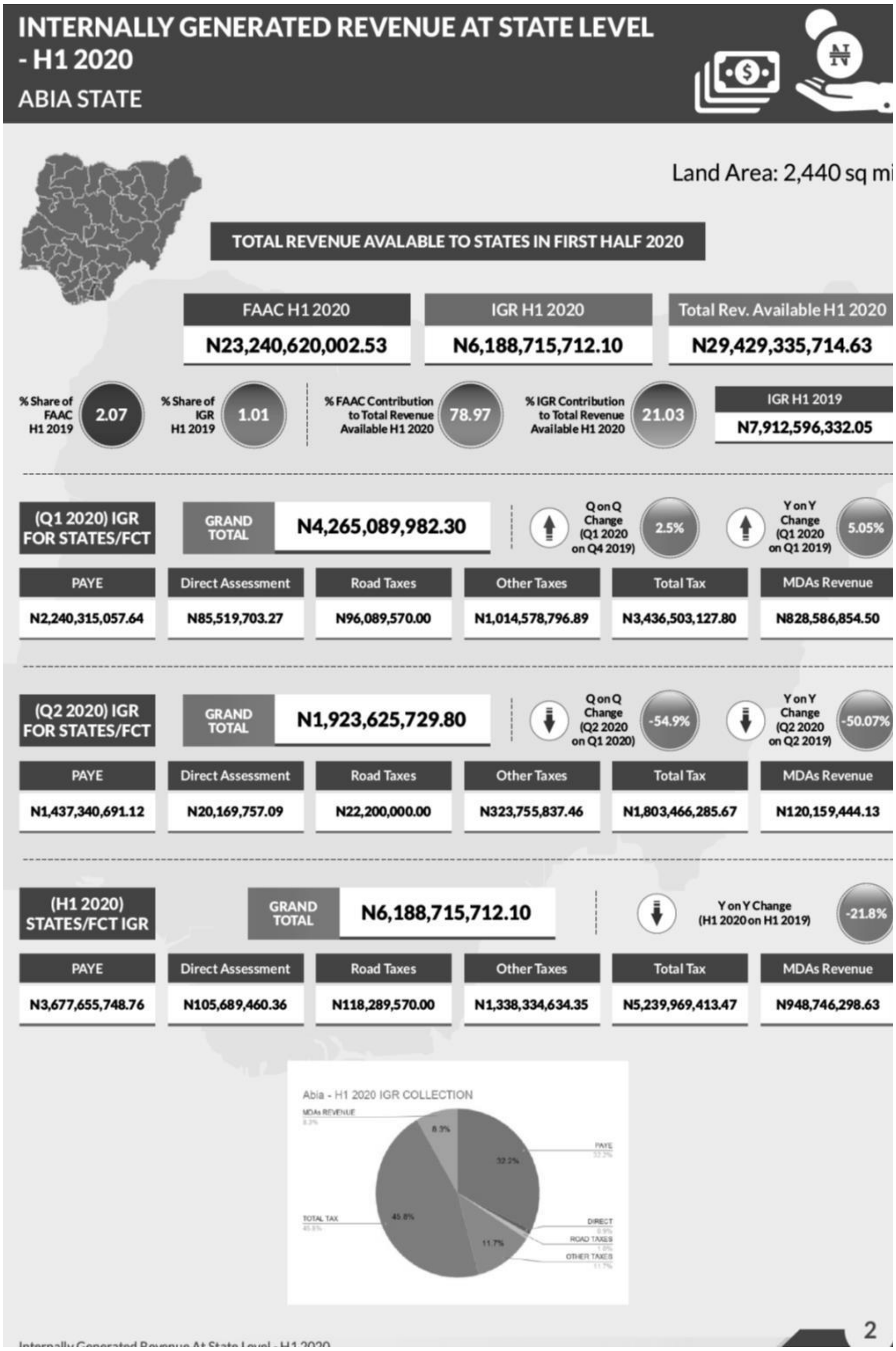
Williams, Hawkins and Latane (1981) Social Loafing; A Meta Analytic Review and Theoretical Integration. WWW. Psych.purdue.edu, Willia55.

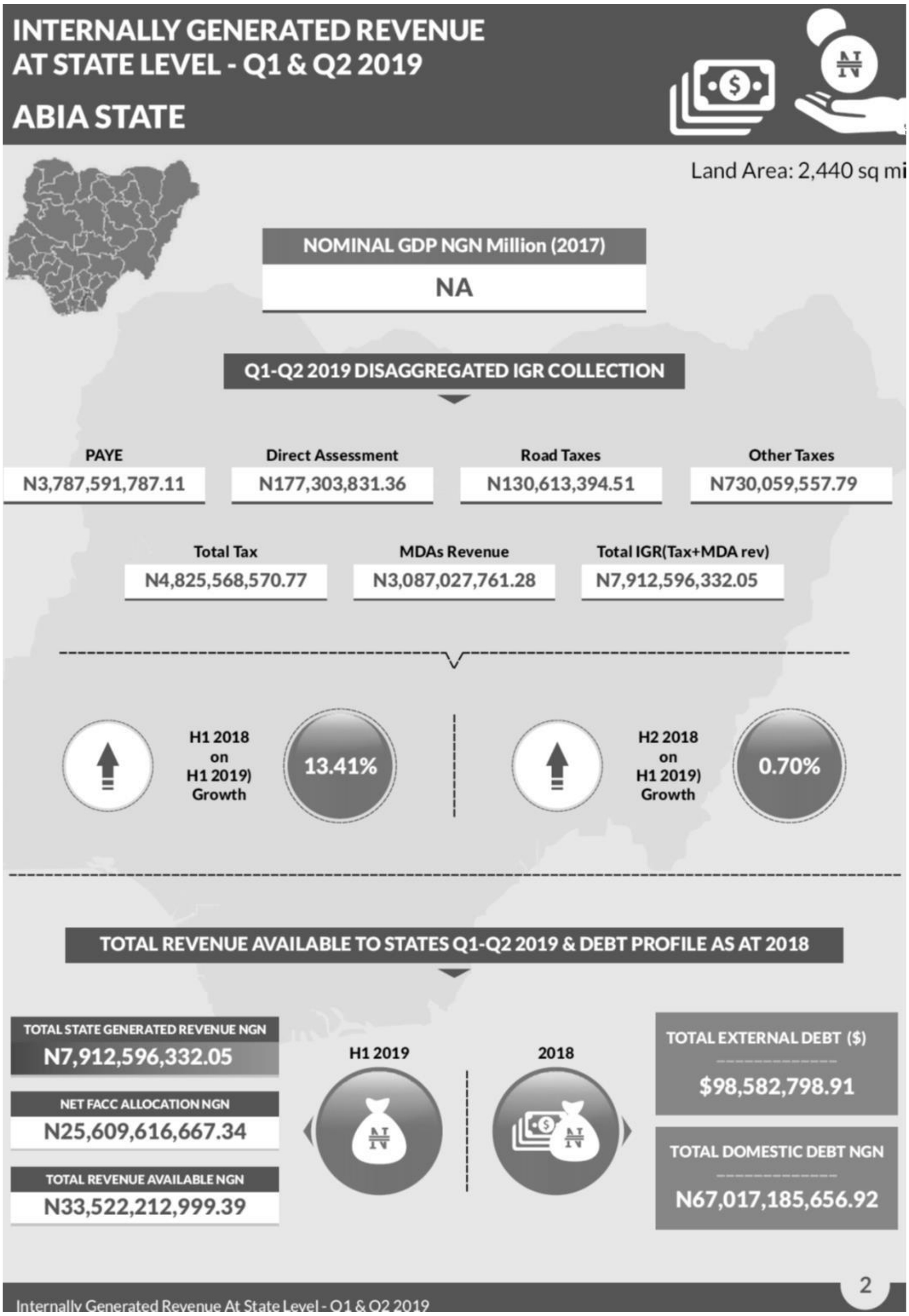
Wamathu,W.E (2014) Effect of Electronic Taxation on Financial Performance of Audit Firms in Kenya : A Research Project L submitted in Partial Fulfilment of The Requirement for the Award of Masters of Science in Finance Degree Programme in University of Nairobi.

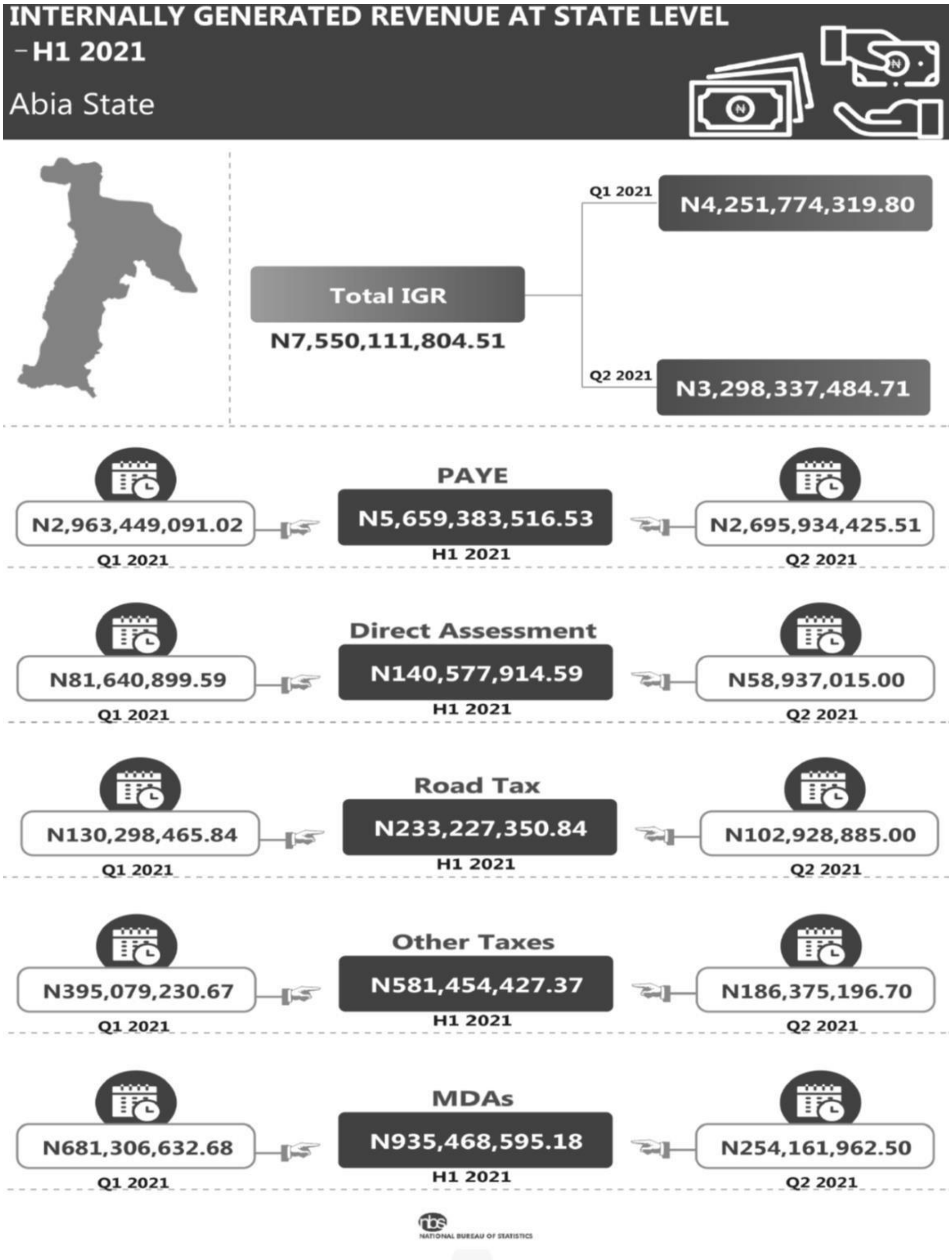
Worlu, C. N., & Emeka, N.(2012). Tax revenue and economic development in Nigeria: a macro econometric approach. *Academic Journal of Interdisciplinary.*

Yonazi, J. J. (2010). Enhancing adoption of e- government intiatives in Tanzania (Unpublished doctoral dissertation) University of Groningen. Groningen, The Netherlands.

Appendix


INTERNALLY GENERATED REVENUE AT STATE LEVEL - H1 2020
ABIA STATE
Land Area: 2,440 sq mi
TOTAL REVENUE AVALABLE TO STATES IN FIRST HALF 2020
FAAC H1 2020
N23,240,620,002.53
IGR H1 2020
N6,188,715,712.10
Total Rev. Available H1 2020
N29,429,335,714.63
% Share of FAAC H1 2019
2.07
% Share of IGR H1 2019
1.01
% FAAC Contribution to Total Revenue Available H1 2020
78.97
% IGR Contribution to Total Revenue Available H1 2020
21.03
IGR H1 2019
N7,912,596,332.05
(Q1 2020) IGR FOR STATES/FCT
GRAND TOTAL
N4,265,089,982.30
Q on Q Change (Q1 2020 on Q4 2019)
2.5%
Y on Y Change (Q1 2020 on Q1 2019)
5.05%
PAYE
N2,240,315,057.64
Direct Assessment
N85,519,703.27
Road Taxes
N96,089,570.00
Other Taxes
N1,014,578,796.89
Total Tax
N3,436,503,127.80
MDAs Revenue
N828,586,854.50
(Q2 2020) IGR FOR STATES/FCT
GRAND TOTAL
N1,923,625,729.80
Q on Q Change (Q2 2020 on Q1 2020)
-54.9%
Y on Y Change (Q2 2020 on Q2 2019)
-50.07%
PAYE
N1,437,340,691.12
Direct Assessment
N20,169,757.09
Road Taxes
N22,200,000.00
Other Taxes
N323,755,837.46
Total Tax
N1,803,466,285.67
MDAs Revenue
N120,159,444.13
(H1 2020) STATES/FCT IGR
GRAND TOTAL
N6,188,715,712.10
Y on Y Change (H1 2020 on H1 2019)
-21.8%
PAYE
N3,677,655,748.76
Direct Assessment
N105,689,460.36
Road Taxes
N118,289,570.00
Other Taxes
N1,338,334,634.35
Total Tax
N5,239,969,413.47
MDAs Revenue
N948,746,298.63
Abia - H1 2020 IGR COLLECTION
MDAs REVENUE
8.3%
PAYE
32.2%
TOTAL TAX
45.8%
DIRECT
ROAD TAXES
OTHER TAXES
11.7%
2


INTERNALLY GENERATED REVENUE
AT STATE LEVEL - Q1 & Q2 2019
ABIA STATE
Land Area: 2,440 sq mi
NOMINAL GDP NGN Million (2017)
NA
Q1-Q2 2019 DISAGGREGATED IGR COLLECTION
PAYE
N3,787,591,787.11
Direct Assessment
N177,303,831.36
Road Taxes
N130,613,394.51
Other Taxes
N730,059,557.79
Total Tax
N4,825,568,570.77
MDAs Revenue
N3,087,027,761.28
Total IGR(Tax+MDA rev)
N7,912,596,332.05
H1 2018 on H1 2019) Growth
13.41%
H2 2018 on H1 2019) Growth
0.70%
TOTAL REVENUE AVAILABLE TO STATES Q1-Q2 2019 & DEBT PROFILE AS AT 2018
TOTAL STATE GENERATED REVENUE NGN
N7,912,596,332.05
NET FACC ALLOCATION NGN
N25,609,616,667.34
TOTAL REVENUE AVAILABLE NGN
N33,522,212,999.39
H1 2019
2018
TOTAL EXTERNAL DEBT ($)
$98,582,798.91
TOTAL DOMESTIC DEBT NGN
N67,017,185,656.92
Internally Generated Revenue At State Level - Q1 & Q2 2019
2


INTERNALLY GENERATED REVENUE AT STATE LEVEL
-H1 2021
Abia State
Q1 2021
N4,251,774,319.80
Total IGR
N7,550,111,804.51
Q2 2021
N3,298,337,484.71
PAYE
N2,963,449,091.02
Q1 2021
N5,659,383,516.53
H1 2021
N2,695,934,425.51
Q2 2021
Direct Assessment
N81,640,899.59
Q1 2021
N140,577,914.59
H1 2021
N58,937,015.00
Q2 2021
Road Tax
N130,298,465.84
Q1 2021
N233,227,350.84
H1 2021
N102,928,885.00
Q2 2021
Other Taxes
N395,079,230.67
Q1 2021
N581,454,427.37
H1 2021
N186,375,196.70
Q2 2021
MDAs
N681,306,632.68
Q1 2021
N935,468,595.18
H1 2021
N254,161,962.50
Q2 2021
NATIONAL BUREAU OF STATISTICS

EFFECT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN NIGERIA (1986-2020)

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Abstract
This study examined the effect of financial deepening on economic growth in Nigerian from 1986 to 2020 using data sourced from the CBN statistical bulletin (2020). The Nigerian financial sector is beleaguered with fissures that have frustrated its potential to facilitate economic growth, Funds accumulated by financial intermediaries are insufficient to cater for the desired level of economic growth. The objective of this study was to find out how financial deepening has influenced the economy. Financial deepening was measured by money supply to GDP, insurance premiums to GDP, Stock market capitalization to GDP and private sector credit to GDP while economic growth was represented by real GDP. The study adopted the ex-post facto research design in conducting the research. The data was subjected to statistical analysis using the Ordinary Least Square regression. The findings of the study revealed that money supply to GDP and Market capitalization to GDP has positive and significant relationship with economic growth in Nigeria while private sector credit to GDP and insurance premiums to GDP ratio had negative relationship with economic growth in Nigeria. The study recommends that Credit to private sectors should be channeled to the real sector of the economy which will lead to economic growth .The monetary authorities should also ensure adequate supply of money to facilitate economic transactions for economic growth to desired levels. The monetary authorities should develop policies that aids entry of more establishments into the capital market and Insurance policies should be made to ensure the relevance and increased patronage of insurance sector in Nigeria.
Keywords: *Economic Growth, Financial deepening, Nigeria.*

Introduction

Financial deepening is the means of developing and expanding financial institutions and services. It is also an increase in the delivery of financial assets in the economy. Banks and other financial institutions engage premeditated positions in the operation of any economic scheme and serve as the mechanism through which economic activities revolves. This supports the economic theory that the financial sector of any economy is an engine of growth and development. According to Nwakobi, Olekma and Ananwude (2016) the opportunity that is needed to sustain growth in an economy is lubricated by the dexterity of liquid money. The Nigerian financial and economic ambiance has witnessed substantial improvement. Growth is enhanced by the development of the financial system, which makes financial products/services accessible and affordable. Financial deepening is to improve economic conditions through increased competitive efficiency within financial markets thereby indirectly benefiting non-financial sectors of the economy. Financial deepening also helps in increasing the provision and choices of financial services (Nwolisa & Cyril, 2019).In the Nigerian economy there are several financial institutions offering separate services to the general public. They include banks, insurance, capital market, pension and mortgage institutions. These institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation or decline (Igwebuike, Udeh & Okonkwo, 2019). The financial sector performs critical activities such as the provision of securities markets, fund management, insurance, pension services and risk management. The target of every country is to achieve a sustainable economic growth that will lead to economic development in the long-run and many sectors of the economy contribute to the growth of a nation. Financial intermediaries supported the efforts of these sectors by mobilization and allocation of funds in order to boost their activities. Nigeria has been making economic policies in order to be part of global reality in developing the financial system. These activities encouraged mobilization and allocation of funds to various sectors of the economy. The relationship between financial deepening and economic growth has been an increasing inclination in the world and has incessantly remained a leading issue at any point in time. This attention is well-justified, since a better understanding of how the financial sector contributes to economic growth has important regulatory implications (Kolawole, Ijaiya, Sanni & Aina, 2019).

The Nigerian financial sector is plagued with fissures that have frustrated its potential to facilitate economic growth. A large portion of the Nigerian population are still financially excluded, Funds accumulated by financial intermediaries are insufficient to cater for the desired level of business growth Also, the insurance industry has a spun out indifference from the Nigerian populace due to mistrust, cultural and religious inclinations and delay in settling claims. In the stock market investors are drained of the low level of liquidity reflected on the low market capitalization to GDP ratio.

In respect to the challenges, efforts have been made by Nigerian monetary authority towards reforming the Nigerian financial sector. Despite structural, institutional and policy reforms to enhance the smooth functioning of the financial institutions to enhance the economy, the Nigerian financial sector has not been able to live up to its expectation as the boost of economic growth and development. The chief aim of the study is to determine the effects of the financial deepening on economic growth in Nigeria based on the relative contribution of the banking and non-banking financial Institutions.

Financial deepening is decomposed to include; money supply to GDP ratio, private sector credit to GDP ratio, Insurance premiums to GDP ratio and stock market capitalization to GDP ratio. On the other hand real GDP is the selected proxy for economic growth. In the light of these issues, the researchers formulated this under-mentioned hypothesis to navigate the investigation of the study:

Ho: Financial deepening does not significantly affect economic growth of Nigeria

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of related Literature

Conceptual Review

Concepts of Financial Deepening and Economic Growth

Financial deepening entails the ability of financial institutions to facilitate financial intermediation, create and develop financial services and render these services at affordable rate in an economy to facilitate growth of business enterprises. (John and Ibenta 2017). According to Efanga, Ogochukwu and Ugwuanyi (2020), Financial deepening may be defined as the increase in the introduction and supply of financial assets or securities within the financial sector (financial market) of the economy. Kiprop (2013) sees financial deepening as the increased provision of financial services, and access to basic financial services such as credit, savings and insurance that is, theincrease in the size of the financial system and in its role of financing with a wider choice of service geared toward the development of all levels of society. But in the words of Akhator and Marcus (2018), financial deepening refers to the increased provision of financial services with a wider choice of services geared to the development of all levels of society.

In the study of Nwaolisa and Cyril (2019) financial deepening is defined as the ability of financial institutions in an economy to effectively mobilize savings for investment purposes. Financial deepening vigorously attracts the reservoir of savings and idle funds and allocates same to entrepreneurs, business, households and government for investments projects and other purposes with a view of returns which forms the basis for economic growth. According to the International Monetary Fund (IMF) financial deepening occurs when sectors and agents use a range of financial markets for savings and investment decisions; financial intermediaries and markets deploy larger volumes of capital and handle larger turnover while financial sectors create assets for risk-sharing purposes. This definition captures the whole process of financial deepening as it takes into account all means of financing, whereas money supply is provided through different financial institutions (bank and non-bank institutions) using different financial instruments in different markets (money market, capital market, debt market).

Economic growth is the increase in the amount of goods and services produced by an economy over a period of time. It is conventionally measured as the percentage rate of increase in real gross domestic product, or real GDP. Economic growth can be measured as a percentage change in the Gross Domestic Product (GDP) or Gross National Product (GNP). The major source of per capital output in any country; whether developing or developed, with a market economy or centrally planned is an increase in productivity. According to Kolawole, Ijaiya, Sanni and Aina. (2019), economic growth is measured by the increase in the amount of goods and services produced in a country. Economic growth occurs when an economy's productive capacity increases which, in turn, is used to produce more goods and services. Economic growth means the increase in a nation's real gross domestic product (an increase in a nation's output of goods and services) or the physical expansion of the nation's economy (Antwi, Mills & Zhao, 2013). According to Bakang (2014), there are two main measures used to measure economic growth. The first is Gross national product (GNP) that computes the total value of goods and services produced by all nationals within and outside the country over a given period, and the second is Gross Domestic Product considered as the broadest indicator of economic output and growth. It is designed to measure the value of production of those activities that fall within the boundary of the national accounts system. GDP measures economic growth in monetary terms and looks at no other aspects of development. GDP can be expressed in nominal terms which include inflation or in real terms which are adjusted for inflation.

Theoretical Review

Theory of Financial Intermediation

This study is anchored on theory of financial intermediation which was propounded by Schumpeter (1911) which advocates that financial intermediaries play a fundamental role of intermediation in the growth process by transferring financial resources from the net savers to net borrowers, thus influencing investment and thereby economic growth. The theory suggests that financial intermediaries can overcome a market failure and resolve an information asymmetry problem by transforming the risk characteristics of assets. These asymmetries in credit markets arise because borrowers generally know more about their investment projects than lenders do. Information failures lead to specific forms of transaction costs and financial intermediaries appear to overcome these costs, at least partially. The work of Schumpeter (1911) supports the view that well-functioning financial intermediaries can promote the overall economic efficiency. By pooling and allocating funds, financial intermediation promotes entrepreneurship and innovation which are necessary components for economic development.

Empirical Review

In an attempt of determining the effect of financial deepening on economic growth, many scholars have carried out related studies from which some are reviewed.

Efanga, Ogochukwu and Ugwuanyi (2020) investigated the impact of financial deepening on the Nigerian economy between 1981 and 2018. Data employed for this study was obtained from Central Bank of Nigeria Statistical Bulletin. This study employed real gross domestic product as proxy for economic growth in Nigeria, while ratio of money supply to gross domestic product, ratio of private sector credit to gross domestic product and ratio of market capitalization to gross domestic product were adopted as regressors. The co-integration test and Fully Modified Least Squares (FMOLS) Model were utilized to analyze data. Inferential results generated indicated that financial deepening had positive impact on the Nigerian economy within the period under review. Eke, Okoye and Evbuomwan (2020), carried out a study on entrepreneurship and financial deepening in selected African economies from 1995- 2014 and evidence from the augmented Toda-Yamamoto technique , the result shows that human capital does not have long run causal effect on entrepreneurship , and financial deepening. Samuel-Hope, Ehimare and Osuma (2020) explored the effect of financial deepening on Nigeria's growth for 38 years covering 1981- 2018. The main research goals were to investigate the linkages among time and savings deposit of commercial banks, money supply and credit to the private sector on the economy's growth. Data was obtained from CBN Bulletin different issues and analyzed using Autoregressive Distributed Lag. From the result of analysis, the long run relationship existed but no regressor was found to be significant. Credit to the private sector to GDP was inversely related to GDP growth whereas money supply to GDP had positive relations with economic growth rate, time and savings deposits in commercial banks negatively affected national growth. Gisaor (2020) investigated the impact of financial deepening on economic growth in Nigeria between 1986 and 2017 using annual time series data in an Auto regressive Distributive Lag Model and Granger Causality Test. The result shows that an increase in MSS leads to a reduction in GDP in Nigeria. Thus, money supply constitutes a negative motivator of economic growth and development in Nigeria. Yousuo and Ekiou (2020) investigated the impact of financial deepening on economic growth in Nigeria for a period of thirty-eight years from 1981 to 2018, with four specific objectives; examining the effects of the monetized, credit, savings and stock markets criteria on the economic growth taking cognizance of the impact of administrative regimes. Time series data were employed sourced from the Central Bank of Nigeria statistical bulletin of 2018 edition, the classical least square of multiple regressions with the application of dummy variable to capture the effects of the various Regimes was adopted in analyzing the data. The results show that financial deepening has both short and long-term effects on economic growth, the estimated regression line is significance as confirm by the f-statistics. The stock market, credit criteria have positive and significant effect on economic growth, savings criteria has negative and significant effects on economic growth, while the monetized criteria have positive and insignificant effects on growth in the short run. Nwakobi, Oleka and Ananwude (2019) investigated the effect of financial deepening on economic growth in Nigeria: A Time Series Appraisal (1986-2018). The model estimation followed the Auto-regressive Distributive Lag (ARDL) approach with the effect estimated in line with the granger causality analysis and found that economic growth in Nigeria is not affected by financial deepening.

Igwebuike, Udeh and Okonkwo (2019) examined effects of financial deepening on the economic growth of Nigeria (1981 to 2016) through two of the basic arms of the financial industry (Insurance companies and Banking Industry). Secondary data from CBN statistical bulletin and Global Financial Development bulletin, 2017 as provided by the World Bank were utilized. The study adopted an ex-post facto research design. The analytical tool used was Ordinary Least Squares (OLS). It was found that insurance industry premium to GDP has positive but no significant effect while credit to private sector by commercial banks to GDP has positive and significant effect on economic growth in Nigeria. Amaefula (2019) evaluated if economic growth was enhanced by financial deepening. The variables employed in the study were gross domestic product (GDP), money supply (M2) and credit to private sector (CPS). This study covered theperiod between 1981 and 2016. Multiple regression analysis model and Auto-Regressive Distributed Lag (ARDL) Model results showed that financial deepening indicators had no effect on economic growth but when they considered the pooled additive effect on economic growth, it was discovered to have a positive and significant effect at 1% level of significance. The ARDL result revealed that there was no evidence of short-run relationship that existed between financial deepening and economic growth, but the long-run equilibrium relationship was recorded to be only significant at 10% level ofsignificance. Nwolisa and Cyril (2019) examined the impact of financial deepening on the growth of Nigerian -economy 1990-2016. The main objective of this study is to evaluate the effect of private sector credit, money supply and market capitalization on economic growth in Nigeria. The sources of data for this study are CBN statistical Bulletin and National Bureau of Statistics. The data obtained were analyzed using ordinary least square regression (OLS). The result of the analyses showed that the three independent variables of the study all have significant effect on Nigerian financial deepening. Ogbonna (2018), examines the impact of financial deepening on economic growth in Nigeria between 1970 and 2015, using Vector Error Correction Model, Impulse Response Function, and Forecast Error Variance Decomposition, with a distinction between size and activity variables of financial deepening. The results show that financial deepening and economic growth have a stable long-run relationship, and that activity variables of the financial deepening have more stimulating effect on economic growth than the size variables.

Werigbelegha and Ogiriki (2018) investigated the relationship between financial deepening and the growth of Nigerian economy; for the period (1990-2017). The study used Gross Domestic Product as proxy for growth of Nigerian economy and employed as dependent variable; Total Bank deposits, Market Capitalization and Credit to the Private Sector were used as the explanatory variables to measure financial deepening. Hypotheses were formulated and tested using timeseries econometrics model. The study concluded that financial deepening had a causal relationship with the growth of Nigerian economy. John and Ibenta (2017) examined the relationship between financial deepening and entrepreneurial growth in Nigeria from 1986 to 2016. The study employed Pearson Correlation in establishing relationships between the variables. The results revealed that the ratio of money supply to Gross Domestic Product (M2/GDP) has a positive but not significant relationship with entrepreneurial growth; the ratio of credit to private sector to GDP (CPS/GDP) has a positive (not significant) relationship with entrepreneurial growth; and the ratio of deposit money banks' branches to GDP (DMBB/GDP) has a negative and significant relationship with entrepreneurial growth. In view of this, study showed that money supply and credit to private sector are better indicators of financial deepening that can affect entrepreneurial growth positively in Nigeria.. Olawumi, Lateef and Oladeji (2017) examined the effect of financial deepening on the profitability of selected commercial banks in Nigeria using secondary data. Findings revealed that each component of financial deepening indicators has a strong relationship and are statistically significant. This provides empirical evidence that financial deepening made positive contributions to the level of profitability of the selected commercial banks in Nigeria. Karimo and Ogbonna (2017) examined the direction of causality between financial deepening and economic growth in Nigeria for the period 1970–2013. The study adopted theToda–Yamamoto augmented Granger causality test and results showed that the growth-financial deepening nexus in Nigeria follows the supply-leading hypothesis. This shows that it is financial deepening that leads to growth and not growth leading financial deepening. Adan (2017) examined the effect of financial deepening on economic growth in Kenya from 2000 to 2016. The study used credit to private sector, market capitalization and broad money to proxy financial deepening, while GDP was used to measure economic growth. The Pearson Product Moment Correlation was used to analyze the data. The findings of the study revealed that money supply had a negative relationship with economic growth while private sector credit and market capitalization had a positive relationship with economic growth. Paul (2017) examined the impact of financial deepening on economic growth in Nigeria,using data from secondary sources, (1986-2015). He employed the ordinary Least Square (OLS) technique, Co integration, and Error correction model (ECM) as estimation tools. Specifically,both the Augmented Dickey-Fuller (ADF) and Philips-Perron (Pp) tests were conducted to ascertain the stationarity of the variables. His results revealed that economic growth in Nigeria inthe long-run is influenced by the indices of financial depth. Also financial deepening is positively and significantly related to economic growth. Muhsin and Şerife(2016) examined the role of financial development on entrepreneurship by employing panel data estimation methods for 17 emerging markets economies over the period 2004-2009. In order to determine the linkages among the variables, two different measures for financial development and three institutional factors were utilized in the analysis. Empirical findings indicated that while financial development and per capita income level have significantly and positively impact on entrepreneurship theoretically.

Nwanna and Chinwudu (2016) examined the effect of financial deepening on economic growth in Nigeria from 1985 to 2014. They aimed at revealing the impact of stock market and bank deepening variables such as money supply, market capitalization, private sector credit and financial savings have on economic growth of Nigeria. The ordinary least square (OLS) econometric technique was adopted. The result of the analysis reveals that both bank based and stock market financial deepening proxies has significant and positive effect on economic growth and that the banking sector and stock market in Nigeria has an important role in the process of economic growth.

Wairagu (2016) studied the effects of financial deepening on entrepreneurial growth in Kenya. The financial deepening indicators comprised of credit received by entrepreneurs/SMEs, the affordable nature of interest rates, savings culture coupled with the financial sector regulation. The study employed a descriptive survey design and data were derived from both primary and secondary sources. The collected data were afterwards coded before the actual analysis with the useful aid of the Statistical Package for Social Sciences (SPSS). Major study findings indicated that the growth rate of the loans accessed by entrepreneurs/SMEs was on an unchanging progress in the period between 2006 and 2016. The four notable determinants (credit access, interest rates affordability, savings culture together with financial sector regulation) also had a confirmatory correlation with the expanded (growth) rate of entrepreneurs/SMEs.

Oyeleye (2016) examined the effect of financial depth on GDP between 1985 and 2014 in Nigeria. The focus of the study was on stock market and bank deepening variables. The selected variables included money supply, private sector credit, market capitalization and financial savings. The findings indicate the existence of a positive significant effect between financial depth and GDP growth rate. Igwe, Edeh and Ukpere (2016) determined the impact of financial deepening on economic growth in Nigeria. The supply leading hypothesis was adopted as the theoretical framework of the study. Data for analysis was for the period 1981-2012 were obtained from the Central Bank of Nigeria Statistical Bulletin. The explanatory variables were logged values of broad money supply/GDP and credit to the private sector/GDP. The times series data were tested for stationarity using the ADF unit root tests of stationarity and were found to be stationary at first difference. The Engle-granger co-integration technique and Error correction model was used for the test of long-run relationship. Findings revealed that money supply (MS) was positive and weakly significant in determining economic growth. Alrabadi and Kharabsheh (2015) examined financial deepening and economic growth using the case of Jordan economy from 1992 to 2014. The variables used include; GDP per capita, lending interest rate, total amount of exports and imports, total deposits, consumer price index, private sector credit, money supply and government expenditures. The study employed the Granger causality and Johansen cointegration tests in analyzing the data. The results revealed a long run equilibrium existed between financial deepening and economic growth. Victor and Samuel (2014) examined empirically, the implications of financial development for economic growth in Nigeria, using time series data covering the period between 1990 and 2011 from Nigeria. The co integration technique with its implied Error Correction Mechanism (ECM) was applied. This commenced with the ADF unit root test, followed by the Johansen co integration test. The variables included Real Gross Domestic Product, Financial deepening which is a ratio of money supply to Gross Domestic Product, liquidity ratio, interest rate and credit to the private sector. Financial sector development has not significantly improved private sector development. The minimum capital base and liquidity ratio has improved the level of economic growth in Nigeria. The Johansen co integration test suggests a long run relationship among the variables and the significant ECM which is negatively signed supports the long run relation among the variables and indicates a satisfactory speed of adjustment. Adu, Marbuah and Mensah (2013) studied financial deepening and economic growth in Ghana: The study investigate the long-run growth effects of financial deepening in Ghana using one indicator at a time among a set of controls variable. The financial deepening variables used are private sector credit ratio to GDP, money supply ratio to GDP, total domestic credit to GDP and total bank deposit liabilities to GDP and set of control variables namely inflation rate, trade openness, real gross government expenditure. The study test the variable using the ordinary least square method and found out that all the measure of financial deepening have a positive effect on economic growth in Ghana except broad money supply to GDP.

Onwumere, Ibe, Ozoh and Muonanu (2012) examines the impact of financial deepening on economic growth in Nigeria for the period of 1992 - 2008 and adopted the supply-leading hypothesis using variables such as broad money velocity, money stock diversification, economic volatility, market capitalization and market liquidity as proxies for financial deepening and gross domestic product growth rate for economic growth. They found that broad money velocity and market liquidity promote economic growth in Nigeria while money stock diversification, economic volatility and market capitalization did not within the period studied.

Research Methodology

This study adopted the *ex-post facto* research design in examining the effect of financial deepening on economic growth. This research design is most suitable for this study because of the kind of data available (time series data). The time series data on GDP, market capitalization, insurance sector premium, private sector credit to GDP and money supply to GDP were all obtained from the CBN statistical Bulletin (2021).

Model of the Study

This study adopts a similar model with the one used in the study of Nwaolisa and Cyril (2019) in which GDP growth rate was expressed as a function of private sector credit to GDP, Market capitalization to GDP and money supply to GDP ratio. In this study however, GDP is measured as a function of insurance premiums to GDP ratio (INPG), Private Sector Credit to GDP ratio (PSCG), Market Capitalization to GDP ratio (MCG) and Money Supply to GDP ratio (MSG).

The functional model is expressed in equation 1 thus;

$GDP = f(PSCG, MSG, MCG, INPG)$ 1

The econometric model of the study, which accounts for econometric parameters is shown in equation 2

$GDP = \alpha_0 + \alpha_1 PSCG + \alpha_2 MSG + \alpha_3 MCG + \alpha_4 INPG + \mu_t$.................... 2

α_0 is the intercept or the constant term; which is the value of the left-hand variable irrespective of the right-hand variable. α_1, α_2, α_3 and α_4 are the coefficients of the regression. μ_t is the error term of the regression.

Instruments for Data Analysis

P-value: The p-value procured by the OLS regression estimates will be used to test the research hypothesis. The p-values show the significance of the relationship between the independent variable and the dependent variable.

Decision Rule: The decision rule is to accept the null hypothesis of no significant effect if the p-value is greater than the chosen level of significance, which is 5% (0.05), otherwise reject the null hypothesis and accept the alternate hypothesis.

DATA PRESENTATION AND ANALYSIS

Data used in the analysis are shown in table below

Table 4.1: Time Series Data for RGDP, MSG, PSCG, INPG and MCG

Year	RGDP (₦'Billion)	MSG (%)	PSCG (%)	INPG (%)	MCG (%)
1986	15238	12.02	7.70	1.92	3.36
1987	15263.9	11.27	8.62	1.87	3.29
1988	16215.4	12.15	8.66	1.73	3.12
1989	17294.7	11.06	7.33	1.54	3.05
1990	19305.6	9.59	6.78	1.31	3.26
1991	19199.1	12.78	7.01	1.22	3.88
1992	19620.2	12.26	6.42	0.92	3.43
1993	19928	13.15	10.11	0.71	3.77
1994	19979.1	13.02	8.11	0.39	3.76
1995	20353.2	9.32	5.81	0.38	6.23
1996	21177.9	8.46	5.84	0.54	7.56
1997	21789.1	9.35	7.16	0.40	6.86
1998	22332.9	10.16	7.32	0.41	5.72
1999	22449.4	11.47	7.86	0.39	5.65
2000	23688.3	12.44	7.51	0.34	6.85
2001	25267.5	15.41	9.29	0.35	8.14
2002	28957.7	13.09	8.09	0.37	6.75
2003	31709.4	14.41	8.09	0.29	10.22
2004	35020.5	11.76	7.84	0.30	12.20
2005	37474.9	11.41	7.95	0.32	13.02
2006	39995.5	12.50	7.54	0.50	17.87
2007	42922.4	14.79	10.58	0.52	39.95
2008	46012.5	21.63	19.77	0.51	24.42
2009	49856.1	22.29	22.75	0.51	15.88
2010	54612.3	20.01	18.96	0.48	18.16
2011	57511	19.82	15.07	0.45	16.32
2012	59929.9	21.35	18.31	0.38	20.64
2013	63218.7	23.14	17.85	0.39	23.82
2014	67152.8	22.65	18.59	0.41	18.95
2015	69023.9	21.94	19.64	0.44	18.06
2016	67931.2	23.65	20.50	0.49	15.95
2017	68491	24.90	19.55	0.44	18.58
2018	69799.9	23.07	17.54	0.44	17.61
2019	71387.8	23.52	17.63	0.41	17.95
2020	70014.4	23.35	18.83	0.33	25.33

Source: *CBN, Statistical Bulletin, 2020*

The table reveals that real GDP has recorded steady improvement over the review period recording an all-time high in 2020. The only occurrence of a decline was in 2016 when GDP was valued at 67,931billion naira from a previous 69,023 billion naira in 2015. To aid further description of the trends, the descriptive statistics is employed as shown in table 4.2.

Table 4.2: Descriptive Statistics

	RGDP	**PSCG**	**MSG**	**MCG**	**INPG**
Mean	38574.98	11.90285	15.80608	12.27478	0.640117
Median	31709.45	8.616549	13.09368	10.21907	0.444108
Maximum	71387.83	22.75484	24.89526	39.95008	1.919697
Minimum	15237.99	5.806165	8.464230	3.053435	0.288778
Std. Dev.	20476.78	5.596864	5.409021	8.634904	0.470564
Skewness	0.438826	0.562027	0.401069	0.985437	1.752000
Kurtosis	1.576325	1.576468	1.520643	3.993661	4.621111
Jarque-Bera	4.079137	4.797830	4.129888	7.104568	21.73795
Probability	0.130085	0.090816	0.126825	0.028659	0.000019
Sum	1350124.	416.5997	553.2127	429.6174	22.40409
Sum Sq. Dev.	1.43E+10	1065.046	994.7552	2535.093	7.528634
Observations	35	35	35	35	35

Source: *Eviews 11.0 Descriptive Statistics Output, 2021*

As shown in table 4.2, RGDP averaged 38,574.98 billion naira over the period under review, with its highest figure standing at 71,387billion naira. On the average, private sector credit was 11.9% of Nigeria's GDP, with a minimum value of 8% and a maximum of 22.75%. Money supply is about 15% of Nigeria's GDP on average and is maxed at 24.89% with its lowest value at 8.46%. Market capitalization also averages 12.27% of Nigeria's economic growth and peaks up to 39.97% while falling to as low as 3.05 over the studied period. However, insurance sector has not performed anywhere as high as the other examined sectors as it averaged 0.64% of Nigeria's GDP and has its highest value below 2% (1.91%).

Data Analysis

Ordinary Least Square Regression

The result of the ordinary least square regression is shown in table 4.3;

Table 4.3: OLS Regression

Dependent Variable: RGDP
Method: Least Squares
Date: 11/29/21 Time: 08:44
Sample: 1986 2020
Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PSCG	-64.78535	717.9612	-0.090235	0.9287
MSG	2878.187	756.4721	3.804749	0.0007
MCG	476.7652	184.5244	2.583752	0.0149
INPG	-5996.683	2641.131	-2.270498	0.0305
C	-8160.338	5289.026	-1.542881	0.1333

R-squared	0.915231	Mean dependent var	38574.98
Adjusted R-squared	0.903929	S.D. dependent var	20476.78
S.E. of regression	6346.858	Akaike info criterion	20.48087
Sum squared resid	1.21E+09	Schwarz criterion	20.70306
Log likelihood	-353.4152	Hannan-Quinn criter.	20.55757
F-statistic	80.97580	Durbin-Watson stat	1.019462
Prob(F-statistic)	0.000000		

Source: *Eviews 11.0 Regression Output, 2021*

PSCG and GDP: Based on the regression coefficient of -64.785, it can be envisaged that every percentage increase in the private sector credit to GDP ratio will coincide with a 64 billion naira decline in GDP. This result however, shows statistically insignificant with a p-value above 0.05. The results of the OLS regression reveals that private sector credit negatively effect economic growth in Nigeria.

MSG and GDP: On the other hand, money supply to GDP was found to be positive. With a coefficient of 2,878.81, percentage increases in money supply is expected to coincide with 2.88 trillion naira increase in the value of real GDP in Nigeria. With the corresponding p-value below 0.05, the result is statistically significant.

MCG and GDP: On the other hand, market capitalization to GDP was found to be positive. With a coefficient of 476.76, percentage increases in market capitalization to GDP ratio is expected to coincide with 476 billion naira increase in the value of real GDP in Nigeria. With the corresponding p-value below 0.05, the hypothesis is statistically significant.

INPG and GDP: Insurance sector has a negative influence on economic growth in Nigeria. It follows that with a coefficient of -5996.68, any percentage increase can be alongside a decline of 5.99 trillion naira in Nigeria's real GDP. This prediction is also statistically significant as the probability value is 0.031 which is below 0.05. The F-statistic is 80.97 and the probability value of 0.000 reveals that the overall relationship between economic growth and financial deepening in Nigeria is significant. The R-squared value further reveals that 91% of the trend behaviour of Nigerian economic growth can be explained by the combined variations of private sector credit to GDP, Money supply to GDP, market capitalization to GDP and insurance premiums to GDP.

Discussion of the Findings

The study examined the effect of financial deepening on economic growth in Nigeria using econometric evidence from 1986 to 2020. Economic growth was measured using real GDP while financial deepening indicators used in this study was made to include; stock market capitalization to GDP ratio, private sector credit to GDP ratio, money supply to GDP ratio and insurance premiums to GDP ratio. The data were all obtained from the CBN statistical bulletin and subjected to statistical analysis.

The results showed that private sector credit to GDP has a negative relationship with economic growth in Nigeria. It shows that the amount of credit extended to the private sector negatively effects the level of economic growth. The prediction was however found to be statistically insignificant. This findings is quite similar to the findings of Osasere, Bashiru and Ehis (2020) who found that there is a negative and insignificant relationship between the ratio of credit to private sector to gross domestic product (CPS_GDP) and gross domestic product (GDP).

The results showed that money supply to GDP has a positive relationship with economic growth in Nigeria in line with priori expectations. It shows that the volume of money which facilitates economic transactions positively effects the level of economic growth. The result was also found to be statistically significant. This finding is also in line with the findings of Okafor, Bowale, Onabote, Afolabi and Ejemeyovwi (2021) as well as that of Samuel-Hope, Ehimare and Osuma (2020) which revealed that money supply to GDP had positive relations with economic growth rate.

The results showed that stock market capitalization to GDP has a positive relationship with economic growth in Nigeria in line with priori expectations. It shows that depth of the Nigerian capital market positively effects the level of economic growth. The result was also found to be statistically significant. This finding confirms the recent findings of Kolawole, Ijaiya, Sanni and Aina (2019) and Nwolisa and Cyril (2019) who found that capital market related financial deepening variable is a positive and significant determinant of economic growth in Nigeria.

The results of the analysis also showed that insurance premiums to GDP has a negative relationship with economic growth in Nigeria. It shows that the amount of premium accumulated by the insurance sector negatively effects the level of economic growth. The prediction was also found to be statistically significant.

Conclusion and Recommendations

Based on the findings of the study, the financial deepening in Nigeria has not fully effected economic growth to desired effects, based on the findings of this study, the researcher makes the following recommendations;

1. To reduce the incidence of non performing credits, Credit to private sectors should be granted with better conditions such as convenient interest rates, ensure that private sector credits are channeled to the real sector of the economy which will lead to economic growth
2. The monetary authorities should ensure adequate supply of money to facilitate economic transactions for economic growth to desired levels
3. The monetary authorities should develop policies that aids entry of more establishments into the capital market so as to ensure their standardization and further boost economic productivity.
4. Insurance policies should be made to ensure the relevance and increased patronage of insurance sector in Nigeria thereby improving its role to economic growth.

References

Adan, I. (2017). The relationship between financial deepening and economic growth in Kenya. Thesis submitted at the University of Nairobi, Kenya.

Adu, G., Marbuah, G. & Mensah, J. (2013). Financial development and economic growth in Ghana: Does the measure of financial development matter? *The Journal of Development Finance*, *3*(1), 192-203.

Akhator, A. P., & Marcus, G. O. (2018). Financial deepening and economic development of Nigeria: an empirical investigation. Veritas *International Journal of Entrepreneurship Development*, *1*(1), 125-139.

Alrabadi, D. &Kharabsheh, B. (2016). Financial deepening and economic growth. The case of Jordan. *Journal of Accounting and Finance, 16*(6), 158-169

Amaefula C.(2019) Does Financial Deepening Enhance Economic Growth? Evidence from Nigeria Using ARDL Model and Pooled Additive Predictor. *Global Scientific Journal*, *7*(1), 19-35.

Antwil, S., Mills, E.F., & Zhao, X. (2013). Impact of macroeconomic factors on economic growth in Ghana: A cointegration analysis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *3* (1), 35-45.

Bakang, M. L. (2015). Effects of financial deepening on economic growth in Kenya. *International Journal of Business and Commerce 4*(7), 1-50.

Central Bank of Nigeria (2020). Statistical Bulletin. CBN: Abuja.

Efanga, U., Ogochukwu, C. &Ugwuanyi, O. (2020). The impact of financial deepening on the economy of Nigeria (1981-2018). *Asian Journal of Economics, Business and Accounting, 15*(1), 12-21.

Eke, Okoye and Evbuomwan (2020) Entrepreneurship and Financial Deepening in selected African Economies:Does Human Capital Development Matter? *Innovation Management and Education Excellence through Vision 2020.*

Gisaor, V. (2020). The long run impact of financial deepening on economic growth in Nigeria. *International scientific conference on economic and social development – Porto, 16*(17), 127-138.

Igwe A, Edeh C.E. & Ukpere, W.I .(2016). Financial deepening and economic growth in Nigeria (1981-2012): a managerial economic perspective. Risk Governance & Control: *Financial Markets & Institutions,4*(4):121-131.

Igwebuike, C., Udeh, S. & Okonkwo, O. (2019). Effects of financial deepening on economic growth of Nigeria (1981-2016). *International Academy Journal of Business Administration Annals, 7*(1), 54-67.

International Monetary Fund. (2020). Financial deepening and international monetary stability. *IMF Staff Discussion Note.*

John E.I.,& Ibenta, S.N.O.(2017) Financial deepening and entrepreneurial growth in Nigeria. *Research Journal of Finance and Accounting, 8*(20), 40-51.

Karimo, T. M. &Ogbonna, O. E. (2017). Financial deepening and economic growth nexus in Nigeria: supply-leading or demand-following? *MDPI journal of economies, 5*(4), 1-18.

Kiprop, J. G. (2013). The relationship between financial deepening and the growth of small and medium enterprises in Kenya*,(Master's Thesis, University of Nairobi, Kenya).*

Kolawole, D., Ijaiya, A., Sanni, M. &Aina, T. (2019). Impact of financial deepening on economic growth in Nigeria. *Fountain University Osogbo Journal of Management (FUOJM), 4*(2), 57-73.

Muhsin K. & Şerife O (2016) Role of financial development on entrepreneurship in the emerging market Economies. *Eskişehir Osmangazi Üniversitesi İibf Dergis.*

Nwakobi, P., Oleka, D. &Ananwude, A. (2019). Effect of financial deepening on economic growth in Nigeria: A Time series appraisal (1986-2018). *Journal of Advanced Research and Reports, 7*(3), 1-9.

Nwakoby, C. I. N., &Ananwude, A. C. (2016). The role of non-bank financial institutions on financial intermediation process in Nigeria (1992-2014). *British Journal of Economics, Management & Trade, 14(*4), 1-15.

Nwanna, I. O & Chinwudu, C. F. (2016). The effect of financial deepening on economic growth in Nigeria (1985 -2014). *Journal of Economics and Finance (IOSR-JEF), 7*(4), 11-28.

Nwaolisa, E. & Cyril, U. (2019). Assessment of financial deepening on the growth of Nigerian economy: 1990-2016. *Journal of Contemporary Research in Business Economics and Finance, 1*(2), 16-29.

Ogbonna, S. (2018). Re-examining the Impact of Financial Deepening on Economic Growth in Nigeria: Size or Level of Activity? *Journal of Economics and Sustainable Development, 9*(7), 1-18.

Okafor, V., Bowale, E., Onabote, A., Afolabi, A. &Ejemeyovwi, J. (2021). Financial deepening and economic growth in Nigeria: A Johansen and Error correction Model Technique. *International Journal of Financial Research, 12*(2), 263-273.

Olawumi, S. O., Lateef, L. A. & Oladeji, E. O. (2017). Financial deepening and bank performance: a case study of selected commercial banks in Nigeria. *Journal of Mathematical Finance 7*(3), 519-535.

Onwumere, J.U.J; Ibe, I.G; Ozoh, F.O. &Mounanu, O. (2012). The Impact of Financial Deepening on Economic Growth: Evidence from Nigeria. *Research Journal of Finance and Accounting, 3(*10), 64-71.

Osasere, O., Bashiru, U. &Ehis, O. (2020). Impact of financial deepening on economic growth in Nigeria. *International Journal of Business and Management, 8*(4), 226-231.

Oyeleye, N. (2016). The effect of financial deepening on economic growth in Nigeria. *Journal of Applied Finance and Banking, 4*(1), 141-162.

Paul, N. (2017). Empirical analysis of the impact of financial deepening on economic growth in emerging economies: Nigeria in focus. *Journal of Finance, Banking and Investment*, *4*(1), 72-86.

Samuel-Hope, D., Ehimare, O. &Osuma, G. (2020). Impact of financial deepening on economic growth in Nigeria (1981-2018). *WSEAS Transaction on Business and Economics, 17*(96), 977-986.

Schumpeter, J. (1911).*The Theory of Economic Development.* Cambridge Harvard University Press.

Victor, S& Samuel, N. (2014). An empirical assessment of financial sector development and economic growth in Nigeria. *International Review of Management and Business Research,*(1).

Wairagu, R. (2016). Effects of financial Deepening on the Entrepreneurial Growth in Kenya: A Case Study of SMEs within Nairobi County. *A Masters Degree Thesis Submitted to the School of Business, University of Nairobi.*

Werigbelegha A.P & Ogiriki T. (2018). A causality investigation of financial deepening and the growth of Nigerian economy (1990-2017); *International Journal of Economics, Commerce and Management, 6(*6), 12-30.

Yousuo, F. & Ekiou, G. (2020). Financial deepening and economic growth in Nigeria (1981-2018). *Journal of Social and Administrative Science, 4*(2), 79-91.

FORENSICS AUDITING TECHNIQUES AND AUDIT QUALITY OF PUBLIC SECTOR ESTABLISHMENTS IN NIGERIA

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Abstract
This study examined the effect of forensics auditing techniques on the audit quality of Ministry, Department and Agencies *(MDAs) in Abia State, Nigeria. The proxy for independent variables include computer cross drive, network audit trail and live analysis, while dependent variable is audit quality. The research instrument used was questionnaire and the population of study was made up of staff of MDAs in Abia State from which 100 staff were purposively selected. Multiple regression models were employed for data analysis and testing of hypotheses. The results of the findings revealed that 77%, 86% and 85% of the independent variables respectively variations of audit quality are attributable to the variations in computer forensics techniques. The study concludes that computer forensics techniques have positive and significant effect on audit quality of MDAs in Abia State. The researchers therefore, recommend that Computer forensics procedures need to be followed during investigation and experts like the Certified Public Accountants should be engaged. Also, training of accountants on computer forensics will enable them obtain required skills for investigation of high profile crime prevalent among public office holders. The government needs to support induction and work related training, particularly for employees involved in internal control system and the financial regulations. The MDAs should take advantage of the modern accounting and auditing software to enhance efficiency and smooth operation of government business.*
Key words: *Information Technology, forensics auditing techniques, MDAs, Audit quality & Forensic evidence gathering techniques.*

Introduction

The world has become a global village as a result of high IT investments and the rapid pace of technological change. The current escalating costs of research and development have made it necessary for business organizations and governmental institutions to embrace forensic accounting techniques. The birth of information technology (IT), computers and peripheral equipment, over the last decades has brought innovation on how companies and institutions manage and control their resources. The accounting profession is witnessing major changes due to changes in technology. In addition to traditional accounting services, accountants are involved in such services such as attestation reviews, forensic accounting, and fraud examinations. The 21st Century accountants must thus, possess forensic knowledge and the skills to critically analyze various problems in order to remain updated. Information technology (IT) has enhanced the auditing techniques and investigative accounting because the modern digital environment offers new opportunities for fraudulent practices. In the public sector, there are many corrupt practices in-built in the system that made successive governments to adopt various control measures to minimize fraudulent act of public office holders. The Nigerian Civil service seems to be at the heart of corruption in the country with individuals charged with managing public funds engaging in unscrupulous and deviant behaviours. Civil service comprises of workers in the various Ministries or Departments or Agencies (MDAs) apart from those who hold political appointments. Anazodo, Okoye & Chukwuemeka (2012), observed that in 2001, a permanent secretary of the ministry of Defence was accused of embezzling funds amounting to N450 million. Also, the chairperson of the Education Tax Fund (ETF), and the Accountant General of the Federation, and the former Chairman of the Inland Revenue Services were alleged to have embezzled funds of the ETF to the tune of N40 billion between 1993 and 2000. Also, electoral frauds arising from every conduct of general election in Nigeria have put the electoral umpire Independent National Electoral Commission (INEC) under intensive pressure and helpless.

On 6th July, 2020, Premium Times Nigeria reported that the former Ag. Chairman of EFCC, was detained by presidential panel investigating allegation of corruption leveled against him by the Attorney General and Minister of Justice. The EFCC boss was detained for nine (9) days and suspended along with his twelve (12) directors and his secretary while the investigation continued, but the embattled EFCC boss claimed that he is being persecuted by corrupt politicians including his boss (Minister) because he insists that all looters of public funds must be brought to book. Also, the corruption saga in Niger Delta Development Commission (NDDC) is in the public domain, where the Minister revealed that some members of National Assembly, Governors and traditional rulers were beneficiaries of the alleged disbursed N40 billion. The beauty of this development is that we now have a government that is courageous to investigate powerful politicians if not for any other thing, because the rot in the NDDC especially from 1999 will be exposed to the general public. This is the first time EFCC boss is investigated instead of the usual practice of removing and replacing the officer with the loyal servant of the power that be at any point in time.

As observed by Okoye (2016), Corruption in Nigeria has become an industry all on its own, complete with stakeholders, investors and risk-return profile. “The fraud industry is organized with internal coordination, shared knowledge and a vertical exchange of benefits linking principal and agents. It closes off clients’ alternatives, creates a network of operatives, freezes out critics and non-corrupt agents, and shares rewards and risks among stakeholders." Unfortunately, people in Nigeria expect leaders to be corrupt; to be any less is regarded as too good to be true. Indeed, they are considered fools who have served in public office without accumulating ill-gotten wealth. Our system has never hold leaders accountable; ethnic and sectional loyalties override character and competence deficiencies. It does not matter if an insane (he or she) is put to lead provided he or she is from an ethnic group of choice by manipulations and not by credible electoral process. The accounting professional bodies are not left out in the fight against financial misstatement and misappropriation of entity's resources. The AICPA and PCAOB (Public Company Accounting Oversight Board) have issued statements regarding auditors' increased responsibility for IT knowledge, fraud recognition and the importance of evaluating IT controls during a financial audit. The Sarbanes-Oxley Act of 2002 (SOX, 2002), increased evidence of business fraud and advancements in IT networks and systems should lead organizations to a higher expectation of auditors' IT skills (Abdullah and Al-Jafari, 2011).

In recent time almost every financial fraud incorporates the use of a computer, whether the fraud is falsifying invoices or electronic money laundering. In the case of financial statements fraud, entries probably exist as electronic journal entries, login records found in log files, and electronic correspondence involved individuals. Auditors find themselves increasingly involved in evidence collection through computer forensics. Auditors with forensic IT skills have been in increased demand as a result of new regulatory requirements for compliance and higher emphasis on IT governance. In Nigeria, the government established anti-corruption agencies especially Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practices and other related offenses Commission (ICPC) to act as a watch dog over government assets and properties with a view to adopting best practices in the conduct of government business. Prior to the establishment of the above mentioned commissions, there was financial regulation and financial memorandum in place but public office holders refused to put them into use because of their corruption prone activities. Technology brings in computer security as a form of defense against unauthorized and malicious intrusion and computer forensics allows for identification of incidents, gathering of evidence, analysis of evidence and potentially recovery of records. The multidisciplinary and inter-disciplinary nature of computer forensics extends to records management. Therefore, this work is set out to investigate the effect of computer forensics techniques on the audit quality of public sector establishments in Nigeria. Predicated on the above arguments, the researchers examined the following objectives.

(i) To determine the effect of cross-drive analysis on audit quality of MDAs in Abia state, Nigeria.
(ii) To examine the effect of network audit trails on audit quality of MDAs in Abia state, Nigeria.
(iii) To examine the effect of live analysis on audit quality of MDAs in Abia state, Nigeria.

Based on the above stated objectives, the researchers formulated these hypothesis to guide their investigation thus:

H_{01}: Computer cross-drive analysis has no significant effect on audit quality of MDAs in Abia state, Nigeria.
H_{02}: Network audit trail has no significant effect on audit quality of MDAs in Abia state, Nigeria.
H_{03}: Live analysis has no significant effect on audit quality of MDAs in Abia state, Nigeria.

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of related Literature

Conceptual Reviews

Forensic Accounting

Hinders (2009) explains forensic accounting as the integration of accounting, auditing, and investigative skills. Simply put, forensic accounting is accounting that is suitable for legal review offering the highest level of assurance and including the now generally accepted connotation of having been arrived at in a scientific fashion (Crumbley, 2006). Investigation of fraud and corruption is confirmed thus, not to be new, even in Nigeria. It is only gaining prominence because of the growing wave of the crime under the seemingly new nomenclature in the 21st century (Coenen, 2005). Forensic accounting in the view of Howard and Sheetz (2006) is simply the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert witness. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation. From business, government, regulatory authorities, to the courts, evidence indicates that a high level of expertise is necessary to analyze current complicated financial transactions and events. As a result, forensic accounting has been thrown into the forefront of the crusade against financial deception (Rumaswany, 2005). Forensic Accounting is different from the old debit or credit accounting as it provides an accounting analysis that is suitable to the organization which will help in resolving the disputes that arise in business transactions. This new and ground-breaking accounting has two main areas which are:

i. Litigation support and investigation; and
ii. Dispute resolution

The former represents the factual presentation of economic issues related to existing litigation. In this capacity, the forensic accounting sustained by parties involved in the legal disputes and can assist in resolving dispute, even before they reach the court action. If dispute reaches the courtroom, the forensic accountant may testify as an expert witness. On the other hand, the latter is that of determining, whether criminal matters such as securities fraud which include financial settlement, identify theft and insurance fraud etc. In such complex cases forensic accountants make some recommendations or actions that can be taken to minimize future risk or loss. The need for forensic accountant arose because of the failure of audit system as the organizational internal and external audit failed to figure certain errors in the managerial system.

Computer Assisted Audit Techniques (CAATs)

Computer assisted audit techniques are all those audit procedures or techniques which make use of the computer or the computer data or the computer program as a means of evidence (Okafor, 2016). CAATs are used for compliance and substantive testing in the following ways:

i. To verify the existence of program controls;
ii. To verify the effectiveness of program controls;
iii. To determine the correctness of program processing procedures;
iv. To review transactions and balances in computer files and select exceptional items for further audit work. Example, to review the work files and select slow moving items for further audit examination;
v. To stratify transactions and balances in computer files for audit purposes, example, to classify debtors' balances into materiality bands such as balances below N100,000 balances from N100,000 to N500,000 and balances above N500,000.
vi. To select a sample of transactions and account balances from computer files on random basis for further audit testing;
vii. To match the contents of two or more computer files and select any unmatched items for further audit work. For instance, to match the Goods Delivery Notes (GDNs) file with the Sales invoices file and identify for further audit work, any GDNs without corresponding sales invoices or any sales invoices without a related GDNs.
viii. To print or display on screens the contents of computer files for audit purposes;

ix. To sort transactions and account balances into a desired sequence for audit purposes; and
x. To copy or download transactions and account balances in the client's computer files for testing in another computer installation. This will be done where the client's computer is busy and the auditor cannot perform his tests using the entity's computer.

Computer Forensics Techniques

i). Cross Drive Analysis

Cross-Drive Analysis (CDA) is a computer forensic technique that correlates information found on multiple hard drives. The technique, which is still being researched, can be used for identifying social networks and for performing anomaly detection (Olaoye and Dada, 2017).Several uses for cross-drive analysis have been identified:

a). Automatic identification of ‘‘hot’’ drives. With simple statistical techniques it is possible to automatically identify drives in a large collection that are likely to be of interest, and thus should be given higher priority.
b). Improving single drive forensic systems. Data collected during the course of cross-drive analysis can be used to create smarter single-drive forensic tools for example, by developing a ‘‘stop list’’ of information that can be safely ignored by other forensic tools.

c). Identification of social network membership. If several drives in a forensic repository are known to have been used by an organization under scrutiny for example, a terrorist organization, then cross-drive analysis can be used to determine if a newly acquired piece of digital media was used by an entity that had contact with the organization in question.

ii). Network Analysis

The network analysis is a method used to analyze, control and monitoring of business processes and workflows. Contrary to the work breakdown structure, a network diagram also considers the chronological order of activities, milestones and tasks, their durations and dependencies and visualizes them graphically or as a table, e.g. in a Gantt chart (Olaoye and Dada, 2017). The network analysis enables project managers to take various factors into account when creating a project plan such as Dependencies and Buffer times between activities, Earliest and latest start and end dates**,** Duration of activities**,** and Critical Path. The network analysis method is often used in procurement and production in order to control project processes more efficiently and to complete projects on schedule and on budget.Network analysis is the general name given to certain specific techniques which can be used for the planning, management and control of projects.

Two different techniques for network analysis were developed independently in the late 1950's - these were:

- PERT (Program Evaluation and Review Technique); and
- CPM (Critical Path Management).

PERT was developed to aid the US Navy in the planning and control of its Polaris missile program. PERT has the ability to cope with uncertain activity completion times (e.g. for a particular activity the most likely completion time is 4 weeks but it could be any time between 3 weeks and 8 weeks).

CPM was developed in the 1950's as a result of a joint effort by the DuPont Company and Remington Rand Univac. As observed by Investopedia (2019), in CPM the emphasis is on the trade-off between the cost of the project and its overall completion time (e.g. for certain activities it may be possible to decrease their completion times by spending more money. Network analysis is a vital technique because it enables us to take a systematic quantitative structured approachto the problem of managing a project through to successful completion.

iii). Live Analysis

Live Analysis is a branch of project management which studies continuous changes and includes the theories of integration, differentiation, measure, limits, analytic functions and infinite series. It is the systematic study of real and complex-valued continuous functions. It describes both the discipline of which calculus is a part and one form of the abstract logic theory (Ashamu, 2014). There are two broad subdivisions of live analysis named Real analysis and Complex analysis, which deal with the real-value and the complex-value functions respectively.

a). Real Analysis: Real analysis is a branch of analysis that studies concepts of sequences and their limits, continuity, differentiation, integration and sequences of functions. It focuses on the real numbers, including positive and negative infinity to form the extended real line. It deals with functions of real variables and is commonly used to distinguish that portion of calculus. It is natural to consider differentiable, smooth or harmonic functions in the real analysis, which is more widely applicable but may lack some more powerful properties that holomorphic functions have (Okpara, 2009),

b). Complex analysis: Complex analysis is the study of complex numbers together with their manipulation, derivatives and other properties. It is an extremely powerful tool which helps in providing a way of computing difficult integrals by investigating the singularities of the function near and between the limits of integration (Ashamu, 2014).

IT and Forensic Accounting

The introduction of computer technology into accounting systems changed the way data was stored, retrieved and controlled. It is believed that the first use of a computerized accounting system was at General Electric in 1954. The formation and rise in popularity of the internet and e-commerce have had significant influences on the growth of IT audit. The Internet influences the lives of most of the world and is a place of increased business, entertainment and crime. IT auditing helps organizations and individuals on the internet find security while helping commerce and communications to flourish (Rumaswany, 2005). In reality technology plays several roles in assisting the forensic accounting investigation and those roles need to be supervised and managed in order to support the objectives of the investigation. The courts acceptance of computerized forensics evidence depends on how the overall scene investigated are protected and the deepness of records keeping and management is served at all times without any suspicious alterations and utterances towards any material used and presented as upper hand evidence in court hearings and proceedings (Rumaswany, 2005).

Computer hardware and software could be both used in committing an offense but software manipulation proved to be more apparent. Operating systems software consists of programs which keep computers running as automatically as possible whereas applications software consists of computer programs that apply the computer to the user's needs through carrying out a task the user wants performed. Both of them present challenges for forensic accountants to uncover fraud and other offenses. These software tools require forensic accountants to use state-of the-art facilities and software tools to equal the capacity of the two (Nunn, McCguire, Whitcomb and Jost, 2006). There are many new technological products that aid and allow investigators to recover deleted fields, crack encryption or codes and extract and sort data. One among the newly developed software program is that of KPMG Forensic Accounting which helps in determining how fraud was penetrated. This is through the preparation of TRACE or Transactional Representation of Assets and Court Evidence diagram. TRACE diagram provides a computer-generated graphical and concise summary of a series of transaction. This diagram also presents information on events or structures in an easy read format for the purpose of mapping the flow of funds through the penetrator's private companies/accounts while also identifying the parties involved.

Audit quality

Several definitions of audit quality exist but DeAngelo !981) cited in Amahalu and Egolum (2019) define audit quality as 'the market assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach. The probability that the auditor will report the detected misstatements is defined in Amahalu and Ezechukwu (2017) as auditor independence. Audit quality is an increasing function of an auditors' ability to detect accounting misstatement and auditor independence as assessed by the market. Similarly, Franze (2002), defined audit quality as the way an auditor conducts the audit in accordance with Generally Accepted Auditing Standards (GAAS) to provide reasonable assurance that the audited financial statements and related disclosures are (i) presented in conformity with Generally Accepted Accounting Principles (GAAP) and (ii) are not materially misstated whether due to errors or material misstatement from the standard, otherwise it is considered to reflect poor audit quality. Independent audit has been part of the financial reporting chain for a considerable time. This has resulted in more consideration being given to the audit quality of an audit and what audit quality means, how it could be defined and how it could be measured.

Audit Quality Indicators and measurement

Recently, more and more emphasis has been placed on measuring audit quality by regulators, oversight bodies, professional bodies and audit firms. This cumulated in Nine (9) bodies worldwide in setting out audit quality indicators (AQIs) that might be used to measure audit quality. Audit quality is a crucial instrument for ensuring transparency and accountability in both the public and private sectors. If the audit quality is responsible for the maximization or minimization of profit, then what are the circumstances that make these possible? The International Auditing and Assurance Standards Board (IAASB) published a ***Framework For Audit Quality***1 in February 2014. The Framework describes factors contributing to audit quality at engagement, audit firm and national levels, for financial statement audits. The objectives are to raise awareness of the key elements of audit quality, encourage key stakeholders explore ways to improve audit quality and facilitate a greater dialogue between them on the topic. The IAASB's Framework promotes the **key elements of audit quality** which are distinguished as follows:

a) **Inputs** covering such factors as values, ethics, and attitudes which are influenced by the culture of a firm; also it covers knowledge, skills, and experience of auditors as well as allocated time to complete the audit. These apply at both the engagement and firm levels as well as at national level;
b) **Process** covering audit processes and quality control procedures and their effect on audit quality;
c) **Outputs** including reports and information that are formally prepared for the purposes of audit;
d) **Key interactions within the Financial Reporting Supply Chain** covering formal and informal communication between stakeholders and the context which may influence those interactions; and
e) **Contextual Factors** including a number of environmental factors that might affect audit quality.

In support of IAAB (2014) and Public Company Accounting Oversight Board (PCAOB) concept release on audit quality indicators, Transparency (2015) reporting by Auditors of Public Interest Entities (PIEs) review of mandatory reports, adopted the following checklist for audit quality indicators.

Table 2.1: Checklist of Audit quality

S/N	Audit Quality Indicators	Measurement Key
1	Training hours per audit.	-Annual accounting and auditing training hours; -Total independence and ethics training hours for personnel groups.
2	Internal engagement qualities views.	-Percentage of findings of material weakness in internal control over financial reporting with no corresponding restatements for errors; -Percentage of restatement for errors.
3	External inspections.	-Number and percentage of inspected audit; -Number of quality control defects dealt with if any, combined with information about firms’ subsequent remediation efforts.
4	Number of audit staff per audit partner.	-Ratio of partners chargeable hours to chargeable hours of all other engagement personnel; -Ratio of audit managers’ chargeable hours to chargeable hours of all staff below the rank of manager.
5	Years of experience.	-Number of years on engagement; -Number of years in present assignment -Number of years: (i) within the firm (ii) in the auditing profession.
6	Partners’ workload.	-Average chargeable hours managed per audit engagement; -Number of public clients.
7	Industry expertise of audit personnel.	-Number of years of cumulative experience of partners, audit managers, specialists and engagement reviews.
8	Staff workload.	-Manager and staff average utilization percentage of current year and prior year actual; -Average hours worked per week.

9	Investment in development of new audit methodology and tools.	-Investment in engagement team as a percentage of revenue generated on engagement; -Investment in audit practice as a percentage of firms' revenue.
10	Staff turnover.	-Percentage of audit staff that have left the firm or reassigned to another audit engagement within the firm.
11	Independence.	-Anonymous independent survey of audit committee members overseeing one or more of firms' audit engagements to evaluate level and quality of communication between auditor and clients.
12	Technical resources support.	-Technical chargeable hours as percentage of total engagement hours.
13	Staff satisfaction survey.	-Percentage of audit staff with exceptional performance ratings on audit quality; -Percentage of staff with exceptional quality ratings above average; -Percentage of staff with low quality ratings.
14	External investigations.	-Internal quality reviews; -Technical competence testing' -Inspection.
15	Tone at the top.	-Independent survey of firm personnel; -Quality ratings and compensation.

Source: Researchers' compilations, 2020

Forensic investigation mechanism

The AICPA, in its Statement on Auditing Standards No. 99 (SAS 99), *Consideration of Fraud in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 316), states that an "auditor may respond to an identified risk of material misstatement due to fraud by assigning forensic specialists." SAS 99 suggests several procedures that are forensics in nature. These involve the performance of substantive tests or the application of methods and techniques of evidence collection based upon the possibility of fraud at various levels of management, including override of internal controls, falsification of financial statements, misappropriation of assets, and collusion. Examples include extended interviews of financial and non financial personnel, surprise audits including recounts of inventories, tests of low risk accounts, and special tests not ordinarily performed (SAS 99). Internal control, as defined by COSO (2009), is the process designed to help firms achieve its objectives in the effective and efficient use of resources, reliable financial reporting, and compliance with applicable laws and regulations. Forensic accountants utilize accounting, auditing and investigation skills while conducting an investigation. These accountants are trained to look into the dispute in a number of ways. They often retained to analyze, interpret, summarize and present a complex data in manner which is understandable and probably supported. Also they are often involved in various activities such as investigating and analyzing financial evidence, developing computer program, exhibiting documents and presenting the evidence obtained (Coenen, 2005).

Evidence Gathering and Investigation Techniques

As observed by Ogbuji (2009) reported in Osisioma (2009), there are various evidence-gathering methods in use. In most cases a combination of various evidence-gathering techniques is required to support a report. Sometimes, the elements of inappropriateness are fraud rather than oversight. The forensic expert should be careful to choose the most suitable assignment. The techniques include:

i. Interviewing
   Interviewing is an important evidence-gathering technique. It helps to obtain information which establishes elements of a crime, provides economic motives behind the perpetration.
ii. Vulnerability and Internal Control Charts
   Vulnerability and internal control charts help the investigator determine the best probabilities where inappropriateness is likely to occur.
iii. Document Examination
   This technique uncovers concealment efforts of perpetrators by manipulating source documents.
iv. Employee Searches
   This technique involves examining an employee’s desk locker, lunch box, etc. It is important not to violate a person’s constitutional rights through illegal searches. Searches are legal if conducted in a proper manner and with adequate notice. If obtained illegally, evidence can be inadmissible in court.
v. Invigilation
   This technique involves the close supervision of suspects during an examination period. It can be effective in identifying who commits the fraud and where the fraud is occurring. It is particularly useful in catching fraud that is committed by independent suppliers, night watchmen, warehouse supervisors, purchasing agents, and cashiers. Its drawbacks are: high cost and low employee morale.
vi. Observation
   Observation is watching, looking, spying or snooping to gather evidence. These observations are sometimes recorded on various kinds of media. This can show how the fraud is being committed.
vii. Undercover

Undercover operations require an agent or informant. This technique could be used for major criminal acts, i.e., organized crime activities. It is important that the operation remains secret. It is also very dangerous for the undercover agent.

viii. Specific Item

Specific item evidence is locating and identifying specific documents and projects that show fraud has occurred. This can be with one or more documents, i.e., altered contract, many cancelled cheques, annual allocation of fund to never existing projects or white elephant projects.

Theoretical framework

Theory of the Fraud Diamond

Wolf and Hermanson (2004) proffer the Theory of the Fraud Diamond, in place of the fraud triangle. They argue that the fraud diamond offers a better view of the factors leading to fraud. They added a fourth variable (capability), to the three-factor theory of Cressey (1953). Capability means that, the fraud perpetrator must have the necessary traits, abilities, or positional authority to pull off his crime. Wolf and Hermanson believed that many frauds would not have occurred without the right person with the right capabilities implementing the details of the fraud. Capability was added to the three variables of the fraud triangle (pressure, opportunity and rationalization). Onodi et al (2016), developed fraud box-key model as an improvement on the fraud diamond by adding corporate governance as the fifth variable. They argue that corporate governance is the key that open or unlock fraud box. While good corporate governance lock-up the box, corporate governance dysfunction unlock fraud box.

Empirical Review

Olaoye and Dada, (2017), researched on the roles of auditors in fraud detection and prevention in Nigeria deposit money banks: Evidence from Southwest. The study employed survey design in which a set of questionnaire was administered on the selected banks in Southwest Nigeria. Multiple regression technique and ANOVA were used for the analysis. The results indicated that the level of fraud control in Nigerian banks during the period covered was low. The result also revealed that risk assessment management, system audit and verification of financial reports adopted by the banking industry in Southwest Nigeria limit the fraudulent activities among the Nigerian banks by 35, 13 and 18 percent respectively.

Iyodo, Agbaji & Abu (2016), examined the consequences of bank frauds on the growth of the Nigeria economy. The scope of the study was from 1995 to 2014 and secondary data were used, while regression analysis and SPSS application software were employed for data analysis. The study revealed that bank frauds have negative and significant consequences on the growth of Nigeria economy.

Onodi, Okafor and Onyali, (2015), examined the effect of forensic investigation methods in corporate fraud deterrence in Nigerian banks. This study adopted a survey research design and data from primary source were collected through interviews and administration of questionnaires, while secondary source consists of reports on fraud and forgery in the banking sector. Statistical tools used to analyze the data include percentages, mean score, frequency tables, regression analysis and Z-test. Their finding revealed that expert services of forensic investigators are normally required in the prosecution of fraud, but majority of the audit and accounting personnel in Nigeria are suffering from poor perception and knowledge of forensic investigative methods.

Ashamu, (2014), carried out a study aimed at evaluating the effect of Fraud Management in the Banking Industry: Evidence from Nigeria. This study employed secondary data obtained from the Nigeria Deposit Insurance Corporation (NDIC) and the Central Bank of Nigeria (CBN). The study equally employed ordinary least square regression method and findings revealed that fraud occurrence in banks has impact on the expected loss of banks' staff involvements in fraud and fraud occurrence are also determinants of the amount lost to fraud in banks.

Gbegi and Adebisi (2014), conducted a joint research which examined forensic audit Skills and Techniques in fraud investigation in the Nigerian public sector. The population of their study comprised 129 senior staff of the three anti-corruption agencies in Nigeria (EFCC, ICPC, and CCB). Questionnaires were used in collecting primary data while secondary data were obtained from EFCC, ICPC and CCB. The data generated for this study were used for the testing of hypotheses using Analysis of variance (ANOVA) and time series analysis with the aid of SPSS version 17.0. They found out that, forensic audit skills and techniques have a significant effect on uncovering and reducing fraud in the Nigerian public sector.

Okoye and Gbegi (2013), examined forensic audit as a tool for fraud detection and prevention in the public-sector organizations with reference to the Kogi State of Nigeria. They employed both primary and secondary sources of data while 370 questionnaires were administered to staff of five (5) selected ministries in Kogi State of Nigeria. Out of questionnaire distributed to those ministries 350 were filled and returned. They used tables and simple percentages to analyze the data and Analysis of Variance (ANOVA) was used to test their research hypotheses. The study found that the use of forensic audit does significantly reduce the occurrence of fraud cases in the public sector.

In the work of Izedonmi (2012), some basic and common financial crimes in corporate organizations, situating the focus on Nigeria, and by extension, the developing world was examined. Their review indicated that the motivations for financial crimes were built around some risk factors, which include the incentive (or pressure, opportunity and rationalization) surrounding the financial criminals. They canvassed for the intervention of forensic audit to solve the vexed problems of financial crimes with a further recommendation that the forensic accountant adopts the inference, relevance and logic solution approach (IRLS) in dealing with financial crimes in corporate organizations in Nigeria.

Methodology

This study employed the use of the survey research. The population of the study consists of MDAs internal audit staff of Abia State. However, 100 members of staff were purposively selected and the research instrument that was used in collecting data for the study was questionnaire. Likert scale was used as follows: Strongly Agreed (SA) scored 5 points, Agreed (A) 4 points, Undecided (U) 3 points, Disagreed (D) 2 points and Strongly Disagreed (SD) 1 point. This order was reversed for all negatively worded items.

Model specification

The model adopted for this study is the multiple regression models thus:AQ = f (CCDA, NAT, LA). The above model is mathematically stated as thus:$AQ = ß_0 + ß_1CCDA + ß_2NAT + ß_3LA + e_i$

Where:

AQ = audit quality, CCDA = Computer Cross drive analysis, NAT = Network Audit Trail, LA = Live Analysis, $ß_0$ = Unknown constant to be estimated, $ß_1$- $ß_3$ = Unknown coefficients to be estimated, f = Depend upon or “is a function of” and e_i = Stochastic Error term.

Decision Rule: Reject the null hypothesis if the P-value of the test is less than 5%, otherwise accept it.

Table 4.1

Regression results between computer cross drive analysis and audit quality

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.900	.208		4.335	.000
	Computer cross drive analysis	.760	.047	.876	16.036	.000

a. Dependent Variable: Audit quality (See appendix I for detail)

Analysis on table 4.1 above and appendix I below revealed the following results:

Test results	**Interpretations**
P- value =.000 < .05	Decision: Accept alternate H_1 & reject H_0
R-square = 0.767 or 77%	77% of the sample variation in the dependent variable audit quality is explained or caused by the explanatory variable while 23% is unexplained.
Adjusted R^2 = 0.764 or 76%	The value of the adjusted R^2 is 0.764. This shows that the regression line which captures 76 per cent of the total variation in audit quality is caused by variation in the explanatory variable specified in the model with up to 24 per cent accounted for the stochastic error term.
F-Statistics = 257.143	The F-value of 257.143 is an indication that the model is statistically significant at 5 percent level of significant.
DW test = 0.40215	The test of autocorrelation using DW test shows that the D.W value of 0.40215 falls within the conclusive region of DW partition curve. Hence, we can clearly say that there is an existence of autocorrelation.

Table 4.2

Regression results between Network audit trail and audit quality

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.345	.132		10.156	.000
	Network audit trail	.723	.033	.928	21.972	.000

a. Dependent Variable: Audit quality (See appendix II for detail).

Analysis on table 4.2 above and appendix II below revealed the following results:

Test results	**Interpretations**
P- value =.000 < .05	Decision: Accept alternate H_1 & reject H_0
R-square = 0.861 or 86.1%	86.1% of the sample variation in the dependent variable audit quality is explained or caused by the explanatory variable while 13.9% is unexplained.
Adjusted R^2 = 0.859 or 85.9%	The value of the adjusted R^2 is 0.859. This shows that the regression line which captures 85.9 per cent of the total variation in audit quality is caused by variation in the explanatory variable specified in the model with up to 14.1 per cent accounted for the stochastic error term.

F-Statistics = 482.782	The F-value of 482.782 is an indication that the model is statistically significant at 5 percent level of significant.
DW test = 0.40844	The test of autocorrelation using DW test shows that the D.W value of 0.40844 falls within the conclusive region of DW partition curve. Hence, we can clearly say that there is an existence of autocorrelation.

Table 4.3
Regression results between live analysis and audit quality

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.250	.247		-5.062	.000
	Live analysis	1.292	.061	.922	21.055	.000

a. Dependent Variable: Audit quality (See appendix III for detail).

Analysis on table 4.3 above and appendix III below revealed the following results:

Test results	**Interpretations**
P- value =.000 < .05	Decision: Accept alternate H_1 & reject H_0
R-square = 0.850 or 85%	85% of the sample variation in the dependent variable audit quality is explained or caused by the explanatory variable while 15% is unexplained.
Adjusted R^2 = 0.848 or 84.8%	The value of the adjusted R^2 is 0.848. This shows that the regression line which captures 84.8 per cent of the total variation in audit quality is caused by variation in the explanatory variable specified in the model with up to 15.2 per cent accounted for the stochastic error term.
F-Statistics = 433.300	The F-value of 433.300 is an indication that the model is statistically significant at 5 percent level of significant.
DW test = 0.47300s	The test of autocorrelation using DW test shows that the D.W value of 0.47300 falls within the conclusive region of DW partition curve. Hence, we can clearly say that there is an existence of autocorrelation.

Findings

i). The analysis in appendix I revealed calculated t-statistics of 16.036 which is greater than the critical value (i.e.-1.96), the null hypothesis is rejected and the alternative that computer cross drive analysis has a significant effect on audit quality was accepted.

ii). The calculated t-statistics in appendix II revealed 21.972 which is greater than the critical value (i.e.-1.96), here the null hypothesis is rejected and the alternative accepted that stated that network audit trail has significant effect on audit quality in MDAs in Nigeria.

iii). The calculated t-statistics under appendix III revealed 21.055 which is greater than the critical value (i.e.-1.96), this shows that null hypothesis is rejected and the alternative accepted and this means that live analysis has a significant effect on audit quality of MDAs in Nigeria.

Conclusion

In conclusion, this study has been able to show the need for computer forensics techniques in assurance investigations in the public sector. Public sector is very important in developing economy especially in Nigeria where government sets pace for every sector during budgetary process. The public service in Nigeria is riddled with corruption in high places and it has become a norm for public office holders to be corrupt making it difficult for the country to move forward. Good governance is concerned with the assessment of government performance relative to the attainment of its stated goals. It is a measure of the level of transparency, integrity, effectiveness, and efficiency in the application of scarce resources to satisfy the desires and aspirations of the citizens. The anti-corruption agencies like EFCC and ICPC are overwhelmed with the volume of fraud cases they turn in on daily basis resulting in plea bargaining in some situations. This study looked into the skill a forensic accountant must acquire to enable him effectively audit through the computer instead of auditing around the computer. Computer forensics techniques such as cross drive analysis, network audit trail and live analysis have been found to be effective in forensic investigation especially now that most frauds are perpetrated with the aid of internet services.

Recommendations

The following were recommended:

(i) Computer forensics procedures need to be followed during investigation and experts like the Certified Public Accountants should be engaged. Appropriate disciplinary action in accordance with the Provision of Public Service Rules should be implemented where there is evidence of fraud. Criminal prosecution may also be instituted as well as civil action to recover any losses of public money or property.

(ii) Training of accountants on computer forensics will enable them obtain required skills needed for investigation of high profile crime prevalent among public office holders. The government needs to support induction and work related training, particularly for employees involved in internal control system and the financial regulations.

(iii) Since Information Technology and computer systems are the major tools for fraud perpetration, the MDAs should take advantage of the modern accounting and auditing software to enhance efficiency and smooth operation of government business.

References

Abdullah, K. A & Al-Jafari, M. K. (2011). Effect of Sarbanes-Oxley Act (SOX) on corporate value and performance. *European Journal of Economics, Finance and Administrative Sciences,* ISSN: 1450-2275 Issue 33.

Amahalu, N. N., Egolum, P. U. & Obi, J. C. (2019). Effect of auditors' rotation on audit quality of quoted deposit money banks in Nigeria. *International conference proceedings, Faculty of Management Sciences, Nnamdi Azikiwe University, Awka, Anambra State,* 467-479.

Amahalu, N. N. & Ezechukwu, B. O. (2017). Determinants of audit quality: Evidence from Deposit Money banks listed on Nigeria Stock Exchange (NSE). *International Journal of Academic Research in Accounting, 7* (2), 117-180.

American Institute of Certified Public Accountants (AICPA), (2005). *Management override of internal controls: The achilles hill of fraud prevention*. New York, NY: AICPA.

Anazodo, R. O., Okoye, J. C. & Chukwuemeka, E. E. (2012). *Cvil service reforms in Nigeria: The and panacea.* Onitsha: Noben Press Ltd.

Ashamu, S. O. (2014). Fraud management in the Nigerian banking industry: Evidence from Nigeria. *Journal of Technology, Entrepeneurship and Rural Development, 5* (1), Lead City University, Nigeria.

Coenen, T. L. (2005). "Forensic Accounting," A new twist on bean counting," Tracy@sequenceinc.com

COSO (Committee of Sponsoring organizations of Treadway Commission), (2009). Internal control-integrated framework: Guidance on monitoring internal control systems.

Cressey, D. (1953). *Other people's money: A study in the social psychology of embezzlement.* Glencoe, IL, Free Press.

Crumbley, D. L. (2006). "Forensic Accountants Appearing in the literature," www.forensicaccounting.com.

Deangelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics, 3* (3), 183-199.

Gbegi, D. O. & Adebisi, J. F. (2014). Forensic accounting skills and techniques in fraud investigation in the Nigerian public sector. *Mediteranean Journal of Social Sciences, 5* (3).

Hinders, D. (2009). What is forensic Accounting?" retrieved on 4 June 2009, from http://www.wisegeek.com.

Howard S. & Sheetz, M. (2006). *Forensic Accounting and Fraud Investigation for non Experts,* New Jersey, John Wiley and Sons Inc.

IAASB (2014). International Auditing and Assurance Standards Board (IAASB) framework for audit quality, February.

Iyodo, B. Y., Agbaji, J. S. & Abu, A. S. (2016). Consequences of bank frauds on the growth of Nigerian economy. *Global Journal of Commerce & Management Perspective, 5* (6): 19-28.

Izedonmi, F. & Ibadin, P. O. (2013). Forensic accounting and financial crimes: Adopting the inference, relevance approach. *African Research Review, 6 (4).*

Joshi, M. S. (2003). "Definition of Forensic Accounting" www.forensicaccounting.com. journey so far in service delivery. *Journal of Political Studies, 19* (2), 17-29.

KPMG (2008). Fraud survey.*Journal of Forensic Accounting, 36* (4): 9-20.

Nunn, L,; McGuire, B. L.; Whitcomb, C. & Jost, E. (2006). 'Forensic Accountants: Financial Investigations. *Journal of Business & Economic Research, 4,* (2): 1-6.

Okafor, M. C. (2016). *Handbook on audit practice and assurance services*. Umuahia: Jesse Printing & Publishing Co.

Okoye, E. I. (2016). *Anatomy of fraud and corruption in Nigeria: A search for the Pandora box.*

Okoye, E. I. & Gbegi, D. O. (2013). Forensic accounting: A tool for fraud detection and prevention (A study of selected ministries in Kogi State). *International Journal of Academic Research in Business and Social Sciences, 3* (3) ISSN: 2222-6990.

Okpara, J. O. (2009). Strategic choices, export orientation and export performance of SMEs in Nigeria. *Management Decision, 47* (8).

Okpara, J. O. & Kabongo, J. D. (2009). The entrepreneurial export orientation and performance of small firms in a developing economy. *International Journal of Globalization and Small Business, 3* (3).

Olaoye, C. O. & Dada, R. A. (2017). The roles of auditors in fraud detection and prevention in Nigeria Deposit money banks: Evidence from Southwest. *European Scientific Journal, 13* (31), 290.

Onodi, B. E.,Okafor, T. G & Onyali, C. I (2015).The impact of forensic investigative methods on corporate fraud deterrence in Banks in Nigeria. *European Journal of Accounting, Auditing and Finance Research, 3* (4) 69-85

Onodi, B. E.,Okoye, E. I & Egbunike, P. A (2017). Application of fraud box-key model in the determination of fraud risk factors: Evidence from selected banks in Nigeria. *Journal of Global Accounting, 5* (1) 99 - 113.

Osisioma, B. C. (2009). *Handbook on fraud management and forensic accounting*. Enugu; EL'DEMAK Publishers.

Ramaswany, V. (2005), 'Corporate Government and the Forensic Accountant. *CPA Journal, 10*(75): 63 – 68.

SAS 99 Consideration of fraud in a financial statement audit (Superseds SAS 82).

Transparency report (2015). Transparency reporting by Auditors of Public Interest Entities (PIEs) review of mandatory reports, March.

Wolfe, D. T & Hermanson, D. R. (2004). The Fraud diamond: Considering the four elements of fraud. *The CPA journal, December.* www.icai.org/resoures_pdf.

FINANCIAL PERFORMANCE AND MARKET PRICE PER SHARE VOLATILITY: NIGERIA CONSUMER GOODS MANUFACTURING FIRMS EXPERIENCE.

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Abstract
Accounting information is used by stakeholders, especially investors, to make investment decisions especially to evaluating the share price of listed companies. Many investors relied too much on the quality of financial information reported but series of corporate scandals have placed severe doubt on the quality of financial reports circulating in a corporate environment. Hence this study tends to ascertain the effect of earring per share, dividend per share and return on equity on market price per share of selected consumer goods manufacturing firms listed on Nigeria Exchange Group. Ex post facto research design is adopted for the study. The population of the study is made up of nineteen (19) consumer goods manufacturing firms listed Nigeria. Ordinary Least Square (OLS) multiple regressions were used to analysed data collected through R –View 10 statistic software. The study observed that earning per share has a significant and positive impact on share price movement while dividend per share has a positive but non-significant effect on share price movement of listed consumer goods manufacturing firms in Nigeria. The study recommends among others that managers should look into their dividend policy in order to attract more investors to their firms.
***Keywords**: earring per share; dividend per share; return on equity; market price per share*

Introduction
Financial reporting by companies is effected through the preparation and publication of financial reports and accounts. These financial reports and accounts are required to exhibit certain degree of quality in terms of their information contents. The users of the financial reports use the reports frequently in passing judgments (Olumide, Tanko & Nyor, 2016; Mahmoud & Adebisi, 2017) on the viability of a company.
The relevance of financial accounting reporting can be adduced from the ability of the financial information to summarize and explain measures in the stock market (Vishnami & Krishah, 2008). It is worthy to note that accounting information will only be used by an investor when evaluating the share price of a listed company, only if it has relevance. According to Beisland (2009), one of the major objectives of financial reporting is to provide equity investors with information relevant for estimating company value.

Stock prices serve as the basis for the valuation of whether a business enterprise is breaking even or not. These prices are relevant measurement of the returns accruing to the stakeholders, therefore the value attached to them serves as a major boost to both existing and prospective investors in the capital market (Glezakos, Mylonakis & Kafourous, 2012).

According to Ghofar & Saraswati (2008), investors in many cases are too dependent on the quality of financial information reported. However, events in previous years, especially the series of corporate scandals such as Enron, Worldcom, Parmalat and several Nigerian firms such as Cadbury Nigeria Plc in 2006, Afribank Nigeria Plc in 2009 and Intercontinental Bank Plc in 2009 have placed severe doubt on the quality of financial reports circulating in a corporate environment and their ability to meet the expectations and needs of the users (Jeroh, 2016).

Studies like Olugbenga and Atanda (2014), Ijeoma (2015) Jeroh (2016), have documented a relationship between financial reporting and stock prices in different parts of the world. However, the empirical findings of the studies differ from country to country and from one sector of the economy to another within the same country. While some are of the opinion that financial reporting quality is positively and significantly related to the share price movement, some others are of the opinion that financial reporting quality has no significant relationship with the share price volatility.

Furthermore, all the previous studies relate to different time frames in the past that may no longer be relevant with regard to the dynamic nature of accounting and the economy. The foregoing provides evidence of the existence of a knowledge gaps that need to be closed. Hence, this study to ascertain the effect of earring per share, dividend per share and return on equity on market price per share of selected consumer goods manufacturing firms listed on Nigeria Exchange Group.

This study will be guided by the following research hypotheses:

i. Earring per share does not significantly affects market price per share of selected consumer goods manufacturing firms listed on Nigeria Exchange Group.
ii. Dividend per share does not significantly affects market price per share of selected consumer goods manufacturing firms listed on Nigeria Exchange Group.
iii. Return on equity does not significantly affects market price per share of selected consumer goods manufacturing firms listed on Nigeria Exchange Group.

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of related Literature

Conceptual Reviews

Relevance of Accoutants Information

Vijitha and Nimalathasan (2014) examined the relevance of accounting information such as earning per share, net assets value per share, return on equity and price earnings ratio to investors investment decision in listed manufacturing companies in Colombo Stock Exchange, Sri Lanka. The study found that there is significant relationship between earning per share, price earnings ratio and investors investment decision.

Shehzad and Ismail (2014) study value relevance of accounting information in banking sector of Pakistan. The study focused on private banks for the period of 2008 to 2012. The study revealed that investors appreciate earning per share in making investment decision and it affects market share volatility.

Empirical Reviews

Uwuigbe, Olowe, and Godswill (2012) carry out a study about determinants of share prices in the Nigeria Stock Exchange Market. The study modelled the effects of financial performance, dividend pay-out, and financial leverage on the share price of listed firms in Nigeria. The study concludes that dividend pay-outs, and financial leverage are strong determinants of the market value of share prices, which thus influenced equity share investment decision making in the listed companies in Nigeria.

Oshodin and Mgbame (2014) focused on the relevance of accounting information in the Nigeria banking and Petroleum sectors for the period 2007-2011. The study revealed that the earnings per share information is the most considered by investors when deciding the share price and that the financial information in the oil and gas is more relevant compare to the financial information disclosed by companies in the banking sector.

Mgbame and Ikhatua (2013) examine accounting information and stock volatility in the Nigerian Capital Market. The study observed that the release of information on book values, earnings per share and dividend per share is found to be related to stock volatility among sample population.

Olugbenga and Atanda (2014) examine the relationship between earnings, dividends, cash flow and equity share investment decisions in Nigeria. The study observed that earnings, dividends, cash flow from operations, are statistically significant in explaining variations in equity share investors' behaviours.

Wang, Fu, and Luo (2013) study accounting information and stock price reaction of listed companies in Shanghai stock exchange. The study observed that there is no significant relationship between Inventory Turnover Ratio, Liquidity Ratio, Price to Earnings Ratio, and stock price; however, only Earning Per Share and Return on Equity have positive significant relationship with stock price.

Uniamikogbo, Ezennwa, and Bennee (2018) examine the effect of accounting information on stock price volatility in Nigeria. The study used cross sectional research design. The study covers selected twenty two listed firms in Nigeria for the period of 2013 to 2017. The study found that earnings per share and dividend per share have a negative and significant effect on stock prices while book value per share has a positive and significant effect on stock prices.

Olowolaju and Ogunsan (2016) examine Value relevance of accounting information in the determination of shares prices of quoted Nigerian Deposit Money Banks. The results showed that book value per share and dividend per share had a significant positive influence on market value of shares; while, EPS was positive but non-significant.

Eriabie and Egbide (2016) examine accounting information and share prices of listed food and beverage and conglomerate industry in Nigeria for the period of 2005 to 2014. The study found a positive but insignificant relation between earnings per share and market price per share for the conglomerate firms while there is positive significant relationship between earning per share and market price per share for food and beverage firms within the period under investigation in Nigeria.

Methodology

Ex post facto research design is adopted for the study. The population of the study is made up of nineteen (19) consumer goods manufacturing firms listed on the Nigerian Exchange Group (NGX) as at 31st December 2022. The study use purposive sampling technique to select the sample population. This sampling technique enable researcher to select firms that we can conveniently assess their data has been on the floor of Nigeria Exchange Group for the period of 2012 to 2022 and has their financial statements available either on their website or in the office of the Nigerian Exchange Group as at 31st December, 2022. Based on the above conditions, sixteen (16) listed consumer goods manufacturing firms was selected as sample population.

Model Specification

In order to achieve the objectives of this study and test of the hypotheses, This study adapts Vijitha and Nimalathasan, (2014), Olugbenga and Atanda,(2014) model stated as: $SPit = \beta0 + \beta1ATOit + \beta2DERit + \beta3DPSit + \varepsilon t$

They used variables such stock price as proxy for share price movement while Assets turnover ratio, Debt equity ratio and Dividend per share were used to proxy financial reporting quality. Our study modified the study as follows:

SPMit = β0 + β1EPSit + β2DPSit + β3ROEit ++Uit.
Where:
SPM = Share price movement
EPS = Earring per share
DPS = Dividend per share
ROE = Return on equity
β0= Intercept Coefficient
β1, β2, β3, = The slope of coefficient
t = Time dimension of the variant
i= (1, 2, . . 16) is the given Consumer goods manufacturing firms

Measurement of Variables

Independent variables (financial reporting quality)	
Indicators	**Measurement unit**
Earnings Per Share	Net income - Dividend on preferred stock Average outstanding Shares
Dividend per share	
Return on equity	Net Income/Shareholders
Dependent variables (share price movement)	
Share price value	Take the last updated value of the company share and multiply it by outstanding shares.

Source: Researcher, 2023

Method of Data Analysis

Ordinary Least Square (OLS) multiple regressions was adopted to examine the effect of financial reporting quality on share price movement of selected consumer goods manufacturing firms listed on Nigeria Exchange Group. E - View 10 statistical software will be used for data analysis. According to Lavrakas (2008), panel data analysis refers to the statistical analysis of data sets consisting of multiple observations on each sampling unit.

Data analysis and Discussion

Data analysis

Descriptive analysis

The descriptive statistical analysis of the study was carried out using mean, standard deviation, minimum and maximum values. The results of the analysis are presented in below.

Table 1 Presentation of Descriptive Statistics of the Variables

	SPV	EPS	ROE	DPS
Mean	102.9881	3.590125	7.366125	62.94813
Median	17.03000	0.980000	11.03000	36.78500
Maximum	1556.500	57.63000	187.2800	3013.880
Minimum	0.460000	-5.740000	-989.3800	-935.6300

Std. Dev.	302.3823	9.805584	88.82210	260.9439
Skewness	3.895635	4.020573	-9.315776	8.878198
Kurtosis	17.23640	19.32351	102.6316	105.1285
Jarque-Bera	1755.861	2207.447	68490.59	71636.84
Probability	0.000000	0.000000	0.000000	0.000000
Sum	16478.09	574.4200	1178.580	10071.70
Sum Sq. Dev.	14538171	15287.77	1254409.	10826585
Observations	160	160	160	160

Source: Eviews 10 output (2023)

The mean of Share Price Value is 102.9881, with a standard deviation of 302.3823. The minimum SPV value is 0.460000, while the maximum value is 1556.500. The skewness is 3.895635, indicating that the distribution of SPV is positively skewed, and the kurtosis is 17.23640, indicating that the distribution has a high degree of peakedness. The Jarque-Bera statistic is 1755.861, with a probability of 0.000000, indicating that the distribution is not normal.

The mean EPS value is 3.590125, with a standard deviation of 9.805584. The minimum EPS value is -5.740000, while the maximum value is 57.63000. The skewness is 4.020573, indicating that the distribution of EPS is positively skewed, and the kurtosis is 19.32351, indicating that the distribution has a high degree of peakedness. The Jarque-Bera statistic is 2207.447, with a probability of 0.000000, indicating that the distribution is not normal.

The mean ROE value is 7.366125, with a standard deviation of 88.82210. The minimum ROE value is -989.3800, while the maximum value is 187.2800. The skewness is -9.315776, indicating that the distribution of ROE is negatively skewed, and the kurtosis is 102.6316, indicating that the distribution has a high degree of peakedness. The Jarque-Bera statistic is 68490.59, with a probability of 0.000000, indicating that the distribution is not normal.

The mean DPS value is 62.94813, with a standard deviation of 260.9439. The minimum DPS value is -935.6300, while the maximum value is 3013.880. The skewness is 8.878198, indicating that the distribution of DPS is positively skewed, and the kurtosis is 105.1285, indicating that the distribution has a very high degree of peakedness. The Jarque-Bera statistic is 71636.84, with a probability of 0.000000, indicating that the distribution is not normal.

Test of Hypotheses

The model estimated was used to examine the effect of financial reporting quality on share price movement of selected consumer goods manufacturing firms in Nigeria. The output of the fixed effect regression is shown in **Table 4.1.2** below.

Table 4.1.2 Panel Regression Analysis Using Fixed Effect Model

Dependent Variable: SPV
Method: Panel Least Squares
Sample: 2012 2022
Periods included: 10
Cross-sections included: 16
Total panel (balanced) observations: 160

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	49.52882	6.579126	7.528176	0.0000
EPS	17.67009	1.124777	15.70986	0.0000
ROE	0.021355	0.054023	0.395302	0.6932
DPS	0.007284	0.017178	0.424019	0.6722

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.972313	Mean dependent var	102.9881
Adjusted R-squared	0.968556	S.D. dependent var	302.3823
S.E. of regression	53.62000	Akaike info criterion	10.91819
Sum squared resid	402514.6	Schwarz criterion	11.30259
Log likelihood	-853.4552	Hannan-Quinn criter.	11.07428
F-statistic	258.7669	Durbin-Watson stat	1.876186
Prob(F-statistic)	0.000000		

Source: Eviews 10 output (2023)

The regression results show the relationship between the share price value (SPV) and the independent variables earnings per share (EPS), return on equity (ROE), and dividend per share (DPS) of the listed consumer goods manufacturing firms in the sample.

The coefficient of determination, R-squared, is 0.972, which indicates that the independent variables in the regression model explain 97.2% of the variation in the dependent variable, SPV. The F-statistic of 258.7669 is significant, indicating that the overall regression model is a good fit. The Durbin-Watson statistic of 1.876186 is close to 2, indicating that there is no significant autocorrelation present in the residuals.

Hypothesis One

Earnings per share) has no significant effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

The coefficient of EPS is 17.67009, which means that for every one-unit increase in EPS, the expected change in SPV is an increase of 17.67009 units, while holding other independent variables constant. With a t-statistic of 15.70986 and a p-value of 0.0000 which is less than 0.05, we reject the null hypothesis and conclude that

Earnings per share (EPS) has a significant and positive effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

Hypothesis Two

Return on equity has no significant effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

The coefficient of ROE is 0.021355, which means that for every one-unit increase in ROE, the expected change in SPV is an increase of 0.021355 units, while holding other independent variables constant. However, with a t-statistic of 0.395302 and a p-value of 0.6932 that is greater than 0.05, we accept the null hypothesis and conclude that Return on equity has a positive but non-significant effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

Hypothesis Three

Dividend per share (DPS) has no significant effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

The coefficient of DPS is 0.007284, which means that for every one-unit increase in DPS, the expected change in SPV is an increase of 0.007284 units, while holding other independent variables constant. However, with a t-statistic of 0.424019 and a p-value of 0.6722 which is greater than 0.05, we accept the null hypothesis and conclude that Dividend per share (DPS) has a positive but non-significant effect on share price value (SPV) of listed consumer goods manufacturing firms in Nigeria.

Discussion of Findings

The findings suggest that earning per share has a significant and positive impact on share price movement of listed consumer goods manufacturing firms in Nigeria. This finding is in support of studies conducted by Olugbenga and Atanda (2014); Mgbame and Ikhatua (2013); Uniamikogbo, Ezennwa, and Bennee (2018); Dang, Tran, and Nguyen (2018) that observed positive significant relationship between earning per share and firm share value. This result is not surprising because EPS is a widely used indicator of a firm's profitability, and a high EPS generally reflects a company's ability to generate more profits from each share of its stock. As investors seek to invest in companies with high profitability, the higher EPS can attract more investment and drive up the share price.

The study also found that Return on Equity (ROE) has a positive but non-significant effect on share price movement of listed consumer goods manufacturing firms in Nigeria. The finding is in support of studies conducted by Eriabie and Egbide (2016); Dang, Tran, and Nguyen (2018); Olowolaju and Ogunsan (2016) that discovered that return on equity does not have significant effect on share price movement. This result implies that ROE, which measures a company's ability to generate a profit with the shareholder's investment, may not be as important as other factors in determining share price for consumer goods manufacturing firms in

Nigeria. It is possible that other factors, such as revenue growth or market share, may be more important in the eyes of investors.

Finally, the study found that Dividend per Share (DPS) has a positive but non-significant effect on share price movement of listed consumer goods manufacturing firms in Nigeria. The finding does not support some previous studies like Olugbenga and Atanda (2014); Mgbame and Ikhatua (2013); Vijitha and Nimalathasan (2014) who discovered positive relationship between Dividend per Share and share price movement. This result suggests that while investors may consider dividend payments in their investment decisions, other factors are more important in driving up the share price of consumer goods manufacturing firms in Nigeria.

Conclusion and Recommendations

The study concludes that earning per share has a significant and positive impact on share price movement because investors seek to invest in companies with high profitability; the higher earnings per share can attract more investment and drive up the share price. Return on equity which measures a company's ability to generate a profit with the shareholder's investment, may not be as important as other factors in determining share price for consumer goods manufacturing firms in Nigeria. However, while investors may consider dividend payments in their investment decisions, other factors are more important in driving up the share price of consumer goods manufacturing firms in Nigeria.

The study recommends that:

i. Managers should improve on their ability to generate more profit with the shareholders investment. This will leads to increase in return on equity.
ii. Managers should look into their dividend policy in order to attract more investors to their firms.

References

Beisland, L.A. (2009). A review of the value relevance literature. *The Open Business Journal*, 2 (3), 25 – 37.

Eriabie, S., & Egbide, B. (2016). Accounting Information and Share Prices in the Food and Beverage, and Conglomerate Sub-sector of the Nigerian Stock Exchange. *Journal of Accounting, Finance and Auditing Finance*,*2*(3), 292-306.

Glezakos, M., Mylonakis, J., & Kafouros, C. (2012). The impact of accounting information on stock prices: evidence from the Athens stock exchange. International Journal of Economics and Finance, 4(2), 56–68.

Ghofar, A. & Saraswati, E. (2008). *Problems in financial reporting: the analysis of quality of disclosure and the measurement system of the traditional accounting*. Retrieved on 17/04/2023 from http:// www. indonesiauniversity.edu.in/

Ijeoma, N. B. (2015). Value relevance of accounting information on share prices of listed firms. Social and Basic Sciences Research Review, 3(10), 328-344.

Jeroh, E. (2016). Effect of IFRS adoption on the determinants of share prices in quoted service firms in Nigeria. *Sahel Analyst: Journal of Management Science* 14(4): 1–12.

Mahmoud, I. & Adebisi, J. F. (2017). Performance characteristics and accrual metrics in Nigerian conglomerates companies. *Uniosun International Journal of Business Administration (UIJBA). 1* (1), 163-173.

Mgbame, C. O., & Ikhatua, O. J. (2013). Accounting information and stock volatility in the Nigerian capital markets: a GARCH analysis approach. International Review of Management and Business Research, 2.

Olowolaju, P. S., & Ogunsan, J. O. (2016). Value relevance of accounting information in the determination of shares prices of quoted Nigerian Deposit Money Banks. International Journal of Economics, Commerce and Management, 4(10), 128-147.

Olugbenga, A. A., &Atanda, O. A. (2014). The relationship between financial accounting information and market values of quoted firms in Nigeria. Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA),1 (1), 22 -39.

Olumide, A, Tanko, M. & Nyor, T. (2016). Firm structural characteristics and financial reporting quality of listed deposit money banks in Nigeria. *Journal of international business research*, 9(1), 1913 – 9004

Oshodin, E., & Mgbame, C. O. (2014). The comparative study of value relevance of financial information in the Nigeria banking and petroleum sectors. Journal of Business Studies Quarterly,6(1), 42-54.

Shehzad, K., & Ismail, A. (2014). Value relevance of Accounting Information and its Impact on Stock Prices: Case Study of Listed Banks at Karachi Stock Exchange. Journal of Economic Info, 3(1), 40-48, 2014

Uniamikogbo, E., Ezennwa, E. O., & Bennee, E. (2018). Influence of accounting information on stock price volatility in Nigeria. Accounting and Taxation Review, 2(4), 113-124.

Uwuigbe,U., Olowe,O.,& Godswill,A. (2012). An Assessment of the Determinants of Share Price in Nigeria. ACTA Universities Danubius; 8 (6), 56-78.

Vishnani S., Shah B.K. (2008). Value relevance of published financial statements- With special Emphasis on Impact of cash flow reporting, *International Research Journal of Finance and Economics,* Vol. 17, pp 84-90.

Vijitha, P. & Imalathasan, B. (2014) "Value relevance of published financial statements with special emphasis on impact of cash flow reporting". *International Research Journal of Finance and Economics*, 17(1), 1450-2887.

Wang, J., Fu, G., & Luo, C. (2013). Accounting information and stock price reaction of listed companies—empirical evidence from 60 listed companies in Shanghai Stock Exchange. Journal of Business & Management, 2(2), 11-21.

FINANCIAL INCLUSION DETERMINANTS AND PERFORMANCE OF MICRO, SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

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Abstract
The study examined financial inclusion determinants and performance of Micro, Small and Medium Enterprises (MSMEs) in Nigeria. The aim was to ascertain the impact of Financial Inclusion (FI) determinants namely: Business Plan (BP), Marketing Strategy (MS), Accounting System (AS) and Manpower Training (MpT) being the explanatory variables on profitability proxy for performance being the dependent variable. Data for the study were obtained from responses from 187 respondents made up of owners and employees of nine (9) MSMEs in Gombe and Adamawa states. Analysis of the data was done with Ordinary Least Square (OLS) regression and Johansen system co-integration test. Findings indicated that the explanatory variables have a significant impact on MSMEs performance. The study recommended that MSMEs should have in place the critical FI determinants/requirement of fund lenders to access finance for growth, expansion and profitability of the enterprises.
Keywords: Financial, Inclusion, Performance, Enterprises, Impact, Determinants

Introduction

The contribution of Micro, Small and Medium Scale Enterprises (MSMEs) to the economic growth of nations cannot be over-emphasized. The enterprises are the medium through which employment is generated for poverty reduction and improved standard of living across nations. MSMEs are meant for wealth creation and sources for innovation dynamism in local, regional, national and global economies that provide flexible lifestyles and considerable business autonomy (Williams & Nerl, 2009). The businesses, therefore, remain the pillars that support the economic growth of nations for their fundamental roles in boosting Gross Domestic Product (GDP), an indicator of economic growth.

The growth of the sector is therefore of interest to government and people in developing nations of Africa where microeconomic policies have always been tailored towards growth and poverty reduction in Africa society and improved standard of living.

In Nigeria, MSMEs accounted for about eighty-five (85%) of the total domestic employment creation and are seen as the sector to drive diversification, wealth creation and the nation's quest for technological innovations. Tade & Ubano (2019) opined that the sustainable contribution of MSMEs to employment creation, export, local value addition, technological advancement and GDP growth in Nigeria are catalytic economic transformation function critical to the development and if properly enabled, the sector is capable of pulling the nation on the industrialization map. The transformation functions of the sector according to Dele and Umoh (2020) are made possible due to inventions and adaptations and technological development that can emanate from these enterprises.

In Nigeria, there are about 43 million Micro Enterprises (MEs) and 75 million Small and Medium Enterprises (SMEs) (SMEDAN) National Survey on MSMEs, 2019 cited in Jefferson & Ugwu, 2020). With the evolution of these indigenous enterprises, there is every tendency for them to become feeders of large enterprises and source of production outpost for the latter. Similarly, with the critical roles of MSMEs in Nigeria, the businesses are expected to facilitate in a greater magnitude the growth and development of human and natural resources that richly abound in the country (Uche & Iwaifo, 2019). The harmonization of these resources towards economic growth and development of the nation is sacrosanct and would be faster with the support of the government.

Despite the critical role and valuable contributions of MSMEs to the growth of Nigeria economy, the sector is faced with a myriad of issues. One of such issues is the lack of inclusiveness of the enterprises in the financial equation of government and financial institutions (Egwuno & Acha, 2019). Lack of access t finance has been identified as a major limiting factor preventing businesses from achieving their full potentials to grow the Nigerian economy (Naladi & Mani 2019).

The issue of financial inclusiveness of MSMEs is so serious that the national Financial Inclusion Strategy (NFIS) of Nigeria meant to broaden financial inclusivity of MSMEs has not yielded many results (Ojo & Abatti, 2018). Alluding to Ojo & Abatti, (2018) Narudeen and Rasheed (2019) stated that close to 56 per cent of MSMEs operating in different parts of Nigeria are still excluded from financial services. It was for this continued financial exclusion of the businesses that the central bank of Nigeria (CBN), the driver of financial inclusion of MSMEs initiated the establishment of Micro Finance Bank (MFB) but efforts of operators of the businesses to access finance have been fraughted by so many challenges (Eguwuno & Acha, 2019) Nelson (2020) Identified four (4) critical issues that have continued to hinder financial inclusion and performance of the businesses in Nigeria. These are (i) Lack of proper bankable business plan (ii) lack of marketing strategy (iii) lack of effective and efficient accounting system and (iv) management problems that bother on required manpower and training, these issues have limited the inclusion of most MSMEs in Nigeria as banking services especially loan for enterprises to grow. (Uzor, 2019). In specific terms, Nelson (2020) observed that ability to start and grow businesses in Nigeria which gives people an opportunity through MSMEs functioning scheme of NFIs of Central Bank of Nigeria (CBN) has not yielded much result due to the inability of these businesses to access financial products and services, especially loans.

However, the extent to which the provision for the determinants can enhance the financial inclusion of the business for improved performance is still subject to debate. While Joko and Halfa (2019) argued that the determinants are endogenous issues that can be quickly addressed for access to financial services for the growth of businesses, on the other hand Nelson (2020) viewed that provision for financial inclusion determinants are a mere satisfaction of the financial institutions (banks) and government loans which may not contribute meaningfully to the growth of businesses in Nigerian environment characterized by insecurity and instability.

The contradictory opinions provided a basis for testing the measure of the impact of each of these FI determinants on the performance of MSMEs in Nigeria. Predicated on these issues, the researcher examined the following specific objectives:

1. To ascertain the impact of business plan on the performance of MSEs in Nigeria
2. To investigate the impact of marketing strategy on the performance of MSMEs in Nigeria.
3. To ascertain the impact of an effective accounting system on the performance of MSMEs in Nigeria
4. To ascertain the impact of adequate manpower and training on the performance of MSMEs in Nigeria.

In the light of these objectives, the following hypotheses were formulated to guide the study thus:

Ho₁: The business plan has no significant impact on the performance of MSMEs in Nigeria.
Ho₂: Marketing strategy has no significant impact on the performance of MSMEs in Nigeria.
Ho₃: Effective accounting system has no significant impact on the performance of MSMEs in Nigeria.
Ho₄: Adequate manpower and training have no significant impact on the performance of SMEs in Nigeria

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Conceptual Review

Financial Inclusion: The term Financial Inclusion (FI) is defined when an individual or group of individuals and a business(s) have access to a broad range of Financial services and products (Williams & Nerl, 2009). These broad categories of financial services and products include banking services including opening and operating bank accounts, loans, equity and insurance products etcetera. It means the availability and equal access to opportunities for businesses to financial services at appropriate, affordable and timely at a reasonable cost (Ken & Jethro, 2013). To businesses, FI is understood to go beyond mere opening a bank account. Thus, Estein (2019) stated that FI for businesses means opening and operating of account(s) and having the opportunity to access financial products of lending institutions, especially loans. To lenders FI of businesses opening of an account or accounts, operating it and having access to financial products of the lenders especially loan facility after satisfying.

The basic requirement of a business plan, marketing strategy, effective accounting system and required manpower and training also known as the determinants of FI are sacrosanct for MSMEs (Bolaji & Idowu, 2017). Listicka (2019) viewed FI of MSMEs as access to finance of lenders (government and financial institutions) with usual rigorous collateral requirement: FI has numerous advantages to Habilla & Dalia (2016), FI through access to an account savings and payment system empowers individuals or group of individuals and their businesses financially. Empowerment promotes investment and business expansion in the society with multiplier impact on job creation and poverty alleviation in the society (Aabilla & Dalia 2016).

Micro Enterprises: These are enterprises with assets excluding land and building less than ten million Naira (N 10,000,000) with a workforce not exceeding ten employees (SMEDAN report 2017, cited in Oboh & Abel, 2018).

Small Enterprises: These are enterprises with a total assets (excluding land and building) above ten million Naira (N 10,000,000) but not exceeding one hundred million Naira with a total work force of above ten but not exceeding forty nine (49) employees.

Medium Enterprises: These are enterprises with total assets (excluding land and building) above fifty million Naira (N 50,000,000) but not exceeding one billion Naira (N 1,000,000 000)with a total workforce of between 50 and 199 employees (SMEDAN) National Survey report cited in Joko & Halfa, (2019).

Performance: performance of a business refers to how an enterprise is carrying out its activities/operations and results compared with the set standards (Harry, 2009 and

Khanle & Murphy, 2012). Against the set standards, results/outcome of operations are compared to determine conformity of the results with the standards.

Business performance according to McNolly and Stan (2011) are three broad classes namely: (i) Finance Performance (FP) which has to do with the rate of return on investment (ii) Market Performance (MP) that has to do with ascertaining whether an enterprise has gained or lost its market share and (iii) Shareholder Value Performance (ShVP) that concerns how an enterprise is making the owners richer. ShVP according to Rennols & Karl (2012) is the ultimate measure of business performance as the amount distributed to shareholders to make them richer is a function of profitability. The ultimate essence of business existence (McNolly & Stan, 2011).

Empirical Reviews

Bassey, Amenawo and Enyeokpon (2017) studied financial inclusion and performance of MSMEs in Nigeria. The aim was to investigate the impact of financial inclusion on MSMEs performance in Nigeria. Data for the study were collected primarily through questionnaire distribution and responses there on. results of analysis using Pearson chi-square revealed that there is positive and significant impact of financial inclusion on growth of MSMEs.

Abdullahi and Fakun Moju (2017) did a study on financial inclusion and Small and Medium enterprises contribution to sustainable economic growth in Nigeria. The aim was to the examine the effect of financial inclusion. On SMEs contribution to economic growth between 1970 and 2015. Data obtained from CBN and NBS bulletins were analysed using OLS technique. The results revealed that there is high propensity for SMEs output to boost sustainable growth if all financial inclusion indicators are put in place by monetary authorities.

Anisiuba, Ezeaku and Emengini (2020) carried out a study on effect of financial inclusion on entrepreneurial growth in retain and wholesaler sub-sectors: Evidence from Nigeria: The aim was to ascertain the effect of financial inclusion on entrepreneurial growth. Data for the study were obtained from Statistical bulletin of CBN and quantity report of World Bank (WB). The analysis was done using correlation analysis and Error Correction approach. The results revealed that FI has significant positive effect on economic growth.

Ajiboye, Adeyonu, Faseyi, Lsitor and Dade (2018) did a study on impact of bank finance on the survival of small and medium enterprises in Nigeria. The aim was to examine the impact of bank finance on growth of SMEs in relation to GDP growth. Secondary data obtained from WB's development indicators from 1999-2013 was used for analysis. Results of multiple regression and co-integration model indicated that finance credit from private sectors, fiscal deficit and management accounting information have significant and positive effect on SMEs growth in Nigeria.

Rosemary, Musa, & Abdullahi, (2021) did a study on modeling the effect of financial inclusion on SMEs in Nigeria. The aim was to examine the effect of financial inclusion on SMEs in Nigeria from 1990-2019. The result of error correction model indicated a co-integration relationship between SMEs and Financial inclusion measures by access to financial institutions credit to SMEs.

Bonni, and Timothy (2021) carried out a study on financial inclusion and growth of small enterprises in Uyo, Akwa Ibom state Nigeria. The aim was to investigate the impact of FI on growth of small businesses in the state capital. Data for the study was obtained from the responses of 120 employees in five (5) cottage industries in Uyo. The responses were descriptively analysed using non-parametric statistics of measures and averages. Findings indicated that FI has played significant role in promoting growth of the businesses.

Betgila, Goshu, Maria and Zoltan (2018) did a study on determinants of financial inclusion in small and medium enterprises: Evidence from Ethiopia. The aim was to examine the factors that influence financial inclusion of SMEs in Ethiopia. The study used exploratory research design and mixed research approach. Data for the study were obtained from both primary and secondary sources. Findings revealed that market opportunity and collateral requirement have positive effect on access to finance by businesses.

Rabia, Sulaman, Igbal sajjad (2020) did a study on financial inclusion of SMEs in services in Pakistan. The role of digital micro-financial services. The aim was to examine the role of digital micro financial services in enhancing SMEs access to finance. Findings from exploratory review of the role suggested that digital financial services have greatly assisted SMEs in accession funds and managing their businesses.

Otiato (2016) conducted a study on the determinants of financial inclusion and performance of small and medium scale enterprises in Nairobi city country Kenya. The aim was to ascertain the determinants of financial inclusion among the SMEs in Nairobi city including access, quality and usage of various financial services; Results of regression analysis of products/services costs, volume/level traded and efficiency levels revealed that there is direct link between performance levels of SMEs and financial inclusion.

Marius, Fabian, Okello, Abanis and Gilbert (2020) did a study on financial inclusion and growth of small and medium enterprises in Uganda: Empirical evidence from selected district in Lango sub-region. The aim was to examine the role financial inclusion on the growth of SMEs. Data collected from responses of selected SMEs

in the region of Uganda were analyzed descriptively, findings revealed that financial inclusion supports the growth of SMEs in the region.
Corti, Robert and Fred (2019) carried out a study of financial inclusion and growth of Small and medium scale enterprises in Uganda. Data for the study were obtained from WB enterprises Survey. The results of the descriptive analysis showed that SMEs benefits from financial inclusion and supports the growth of enterprises.

Zhiqiang, JunJie and Jian (2020) carried out a study on bank concentration and SMEs financing availability. The impact of promotion of financial inclusion in China. The aim was to examine the relationship between bank concentration, financial inclusion and SMEs financing availability. Using firm-level data from 1509 listed in china from 2007-2017, the analysis was done with regression. Findings indicated that bank concentration and financial inclusion have positive impact on credit availability to listed SMEs.

Weidong and Xiaoliui (2021) did a study on financial inclusion in china: An overview. It was an exploratory study that examined the role of financial inclusion in the growth of SMEs in china. Evidence from literature indicated that financial inclusion had formed a unique and sustainable development path supporting the growth of SMEs in China.

Theoretical Framework
The study is anchored on special agent theory of financial inclusion. The theory argues that formal financial services should be developed to the excluded population/businesses by special agents. Under the theory, according to Ozili (2008), the special agent is expected to be (i) highly skilled and specialized (ii) understand the peculiarities of population or businesses that need financial services and (iii) identifies areas of improvement in service delivery through innovation. The specialized agent is considered to be competent, highly skilled and superior ability to bring access to businesses that need financial services.

The theory has two assumptions: (i) that there is an agent principal relationship. The principal is often the national government while the special agents are banks and special institutions created for the sole purpose of achieving specific financial inclusions and (ii) that government has high confidence in the special agents to deliver financial inclusion services.

The confidence government had in banks to deliver FI to business by way of gaining loans to businesses and the study on determinants of FI of businesses underscores the relevance of the theory to this study.

Methodology

It is a survey research that made use of questionnaire in collecting data from a sample of owners and employees of MSMEs in Gombe and Adamawa States

Study Population

The population of the study comprises of 4500 owners and staff of nine (9) MSMEs in Gombe and Adamawa states. It consists of 400, 1700 and 2400 owner and staff/employees in micro, small and medium scale enterprises respectively in these States.

Sampling procedure/sample size

Using proportional stratified sampling procedure, a sample size of 300 owners and employees in the enterprises was drawn as follows:

Micro businesses = $\frac{400}{4500} \times 300 = 27$

Small Scale businesses = $\frac{1700}{4500} \times 300 = 133$

Medium Scale businesses = $\frac{2400}{4500} \times 300 = 160$

Total: $27 + 133 + 160 = 300$

Data Collection Instrument

The study made use of primary data. Data were collected using questionnaires designed to reflect five (5) point likert scale. The questionnaires of construct covered the impact of each item of the determinants of FI on performance to responses on the extent to which they agree or disagree with each other statements of the questionnaires of the questionnaires distributed 193 were returned with 187 of them usually representing 64% and approximately 62% response and usable rate respectively.

Data Analysis

Data obtained were analyzed using multiple regression of Ordinary Least Square (OLS). The E-view version 10.0 was the tool used for the analysis

Model Estimation

The apriori expectation was that $\beta_1>0$, $\beta_2>0$, $\beta_3>0$, $\beta_4>0$ implying that each value of the explanatory variables will be greater than zero (O).

Model Specification

The econometric form of equation used for the analysis is as follows:

$$Prft = a + b_1Bp + b_2Ms + b_3AS + b_4MpT + \epsilon$$

Where:

Prft	=	Profit (proxy for performance) - dependent Variable
a	=	Intercept
Bp	=	Business Plan
MS	=	Marketing Strategy

AS = Accounting System
MP T = ManPower Training
ϵ = Error term

Reliability of the Instrument

Rehabiltiy test of the questionnaire construct was done using Cronbanch's Alpha with each construct on dependent and independent variables having Cronbanch's Alpha coefficient value greater than 0.6 is considered acceptable for reliability of item of questionnaire construct (Nunnally, 1994 cited in Othman & Mamman, 2019).

Results

Table 1: Ordinary Least Square

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.188959	2.103682	1.040537	0.3171
BP	0.303812	0.768088	0.395544	0.6989
MS	0.233363	0.769361	0.303320	0.7664
AS	0.820470	0.522934	0.468975	0.1407
MP_T	0.594149	0.439539	0.351753	0.1995

R-squared	0.851066	Mean dependent var	11.22222
Adjusted R-squared	0.805240	S.D. dependent var	13.37494
S.E. of regression	5.902570	Akaike info criterion	6.618786
Sum squared resid	452.9243	Schwarz criterion	6.866111
Log likelihood	-54.56907	Hannan-Quinn criter.	6.652889
F-statistic	18.57177	Durbin-Watson stat	2.029512
Prob(F-statistic)	0.000028		

Table 2: Johansen Co-integration Test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.998976	214.6699	69.81889	0.0000
At most 1 *	0.990559	104.5217	47.85613	0.0000
At most 2 *	0.618644	29.91774	29.79707	0.0484
At most 3	0.440763	14.49341	15.49471	0.0704
At most 4 *	0.277224	5.194494	3.841466	0.0227

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.998976	110.1483	33.87687	0.0000
At most 1 *	0.990559	74.60392	27.58434	0.0000
At most 2	0.618644	15.42433	21.13162	0.2603
At most 3	0.440763	9.298912	14.26460	0.2621
At most 4 *	0.277224	5.194494	3.841466	0.0227

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Finding and Discussion

The result of the regression analysis shows that the co-efficient of determination (R^2) has a value of 0.85. This implies that 85% variation in the dependent variable (prft) proxy for performance are explained by the independent variables of the study. The rest 15% variation are explained by other variables (exogenous) to what the entrepreneurs can do to access fund for expansion and profitability. The high value of R^2 is also reflected in the apriori expectation as all the explanatory variables have positive signs. This implies a direct relationship between the independent variables and the dependent variable. This result is consistent with the studies (Otiato, 2016; Bassey et'al, 2017; Ajiboye et'al 2018; Marius et'al 2020; Anisiuba et'al, 2020; Rosemary et'al, 2021 and Weidong & Xiaoliui, 2021) that FI has a relationship and significant impact on growth and performance of MSMEs.

Further, using the t-test criteria, a positive and strong relationship exist between the explanatory variables and the dependent variables at 5% level of significant with values of 0.395, 0.303, 0.468 and 0.351 for BP, MS, AS and MPT respectively. The F-test decision rule, if P-value (profitability) of F-statistics is lower than 0.05 reject the null hypotheses, the prob (F-statistics) of 0.000028 lower than 0.05 provides evidence for rejecting the null hypotheses of the study. The F-statistics null hypotheses rejection criteria is further validated by Johansen system co-integration test indicating 3 co-integrating equating at 0.005 level of significance denoting rejection of the hypothesis at 0.05% level, similarly the unrestricted Co-integration Rank Test (Maximum Eigen Value) indicating 2 co-integrating equations at 0.05 level of significance (MacKinnon-Haug-Michelis, 1999).

Further in testing the presence of serial autocorrelation (error), Durbin Watson (DW) statistics was used. The calculated DW value of 2.03 approximately greater than the upper value of Durbin Watson (DWu) of 1.883 indicates absence of serial autocorrelation. This shows the adequacy of fitness of the model of the study.

Conclusion and Recommendation

In nations especially the developing ones, MSMEs have been and will continue to remain the life wire of their economic growth. The growth rate to a large extent is a function of the amount of funds available for expansion. The fund is a combination of those generated from both within and those provided by finance providers. Unfortunately, a large proportion of

MSMEs in Nigeria are excluded from access to financial intervention of tenders due to lack of what it takes to access the formal sources of credit. Prominent among the financial inclusion requirements of lenders are entrepreneur's business plan, functional marketing strategy, proper recording keeping of financial transaction/accounting system and provision of manpower training programme. There are basic requirements for FI of which most businesses in Nigeria find them difficult to provide.

Through government intervention in providing funds for enterprises in Nigeria like tradermoni scheme and anchor borrower programmes can be helpful but, the ultimate success and profitability of the businesses rest squarely on the entrepreneurs themselves.
It is on this notes that the study recommended that the operators of MSMEs should make the sector more profitable worthy to access credit scheme of fund lenders, by having a good, strategic business, plan, marketing strategy keep verifiable records of their financial transactions/accounting systems and adequate training programme for their employees. These are basic requirements/determinants of FI of fund providers upon which access to funds, growth, expansion and profitability largely rotate.

References

Abdullahi, I.B & Fakunmoju, S.K. (2017). Financial inclusion and small and medium enterprises contributions to sustainable economic growth in Nigeria. *Journal of sustainable Development in Africa 19*(2), 52-64.

Ajiboye, B.O, Adeyonu, A.G, Faseyi, S.A, Isitor, S.U & Dada, J.O (2018). Impact of bank finance on the survival of small and medium enterprises in Nigeria. *Nigerian Journal of Technological Research 13*(1), 14-26.

Anisiuba, C.A Ezeaku, H.C & Emengini, E.S (2020). Effect of financial inclusion on entrepreneurship growth in retail and wholesale sub-sectors: Evidence from Nigeria. *The business and management review 11*(1), 295-309.

Bassey, I.I., Amenawo, I.O. & Enyeokpon, S.M. (2017). Financial inclusion and performance of micro, small and medium scale enterprise in Nigeria. *International Journal of Research 5*(3), 104-122.

Betgila,O, Goshu, D, Maria, F.F & Zoltan, (2018) Determinants of financial inclusion in small and medium scale enterprises: Evidence from Ethiopia. *Journal of Risk and Financial Management 3*(2), 96-108.

Bonni, A.A. & Timothy, P.O. (2021). Financial inclusion and linkages for enterprises. *Journal of Business Finance and Economics, 6*(2), 48-61.

Coti, P. L., Robert, M. & Fred, M. (2019). Financial inclusion and micro, small and medium enterprises growth in Uganda. *Journal of Innovation and Entrepreneurship, 15*(1), 49-61.

Dele, G.S. & Umoh, O. (2020). Determinants of financial inclusion for growth of businesses. The role of banks. *Journal of Business Studies and Finance 5*(2), 206-218.

Egwuno, U.C. & Acha, T.A. (2019). Examination of finance inducing factors to SMEs in Nigeria. *Journal of Finance and Economic Studies 3*(2), 79-92.

Estein, R.T (2019) Access to finance: A ventable factor for performance of SMEs. *Journal of Entrepreneurship Studies and Management, 2*(2), 133-146.

Habilla, D.S & Dalia, K (2016) Financial inclusion issues and inclusion of small and medium scale enterprises in Nigeria. *Journal of Finance, Economics and Management, 4*(1), 39-52.

Harry, R. T. (2009). Essentials of continuous auditing implementation in enterprise. *Journal of Innovative Research in Business 2*(1), 16-26.

Jefferson, V & Ugwu, N (2020) Determinants of financial inclusion of small and medium enterprises in Nigeria. *Journal Finance and Entrepreneurship Innovation, 1*(3), 88-101.

Joko, L.W & Haifa, O (2019) Micro, small and medium scale enterprises in Nigeria: An examination of the risks of financing the businesses. *Journal of management science and Innovation 2*(1), 25-37

Ken, N.G & Jethro, A.M (2013): Access to finance by micro enterprises: The demands side factor for financial inclusion of the business. *Journal of Entrepreneurship Research and Innovation 3*(1), 91-104.

Khanle, S.R & Murphy, E.G (2012). Continuous auditing versus traditional audit. *Journal of Entrepreneurship Studies 1*(2), 21-34.

Listicaka, N (2019). The dimensions of financial inclusion of micro, small and medium scale enterprises. *Journal of Financial Management and Entrepreneurship Studies 4*(3), 86-98

MacKinnon, J.G., Haug, A.A. & Michelis, L. (1999) Numerical Distribution Functions of Likelihood Ratio Tests for Cointegration. *Journal of Applied Econometrics, 14*, 563-577. http://dx.doi.org/10.1002/(SICI)1099-1255(199909/10)14:5<563::AID-JAE530>3.0.CO;2-R

Maladi, I,O & Mani,l K (2019) Financial inclusion usage by micro and small scale businesses in Nigeria: Demand barriers of supply constraints? *Journal of Business, Finance and Management, 1*(3), 31-44.

Marius, Fabian, M, Okello, O., Aban, T. & Gilbert, (2020) Financial inclusion and the growth of small, medium enterprises in Uganda: Empirical evidence from selected districts in Lango sub-region.

McNolly, C.T. & Stan, O. (2011) Continuous auditing: Advantages and Disadvantages of it's adoption. *Journal of Managerial Finance* 1(3), 93-106.

Nelson, K.P (2020) Financial inclusion of micro and small enterprises in Nigeria: A critical strategy for the growth of private businesses in Nigeria. *Journal of Management Studies and Innovation 1*(4), 43-55.

Oboh, A.A & Abel, B.O (2018) Access to finance and performance of Micro and Small businesses: Evidence from Nigeria. *Economics and Entrepreneurship Review, 3*(3), 71-83.

Ojo, T & Abatt, G (2018) Financial inclusion of micro businesses: A strategy for enhancing economic growth at the grass root. *Journal of Economic and management Research 5*(1), 21-34.

Otiato, E.H. (2016). Determinants of financial inclusion and performance of small and medium enterprises in Nairobi city country. *International Journal of Finance and Accounting 1*(3), 62-78.

Ozili, P.K (2018) Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review 18*(4), 329-340

Rabia, R. S., Igal, H. S. M. & Sajjad, N. I. (2020). Financial inclusion for SMEs: Role of digital Micro-financial service. *Review of Economics and Development Studies 5*(3), 571-585.

Rennol, N. & Karl, S. (2012). Impact of continuous on the effectiveness of internal auditors. *Journal of Auditing 16*(3), 150-158.

Rosemary, A.A., Musa, A.S. & Abdullahi, M.A. (2021). Modeling the effect of financial inclusion on SMEs in Nigeria. *AJEC*, *2*(1), 33-43.

Tade, F.O. & Ubano, A.A. (2019). Financial inclusion and growth of micro, small and medium scale enterprises in Nigeria. *Journal of Business Management Science and Innovative Research 7*(2), 127-139.

Uche, N. B. & Iwaifo, A. (2019). Empowering, Potentials of financial inclusion of micro, small and medium scale enterprises in Nigeria. *Journal of Management Science and Innovation*, *2*(1), 96-107.

Uzor, W. T. (2019). Financial inclusion: Issues for finance. *Journal of Economic and Entrepreneurial Research*, *2*(3), 103-116.

Weidong, C. & Xiaoliui, Y. (2021). Financial inclusion in China: An overview. *Frontier of Business Research in China*, *15*(4), 204-219.

Williams, E. S. & Nerl, P. R. (2009). Policy formation for financial Inclusion of Micro, small and Medium scale businesses: A global perspective. *Journal of Development and Economic Studies 10*(2), 231-247.

Zhiqiang, L., Junjie, W. & Jian, L. (2020). Bank concentration and SME financing availability: The impact of promotion of financial inclusiveness in China. *International Journal of Bank Marketing 13*(1), 108-120.

ELECTRONIC TAXATION AND THE PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES IN ANAMBRA STATE

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Abstract
This study investigated the effect of electronic taxation on the performance of small and Medium Scale Enterprises in Awka, Anambra State. It sought to ascertain the effect of electronic taxation on the mortality rate of SMEs, on the tax filing costs of SMEs and to ascertain the effect of electronic taxation on multi taxation of SMEs in Awka, Anambra State. Survey research design was employed for the study. Questionnaires were distributed to Small and Medium Scale Enterprise operators in Awka South area of Anambra State to generate data for the study. Statistical analysis of the collected data was carried out with the aid of Stata Statistical Software Version 22. The result showed that electronic taxation significantly affects the mortality rate of SMEs in Awka, Anambra State, it also indicated that electronic taxation significantly affects the tax filing costs and on multi taxation of SMEs in Awka, Anambra State. It was concluded that electronic taxation plays a very significant role on the overall performance of Small and Medium Scale Enterprises in Awka, Anambra State. The study recommends that more SMEs operators should be enlightened on the need to adopt the E-tax system. While those already adopting the electronic tax system should take relevant security measures to protect their database.
***Key words**: Electronic tax assessment, Electronic tax collection, SMEs mortality rate, SMEs tax filing costs, Multi taxation of SMEs.*

Introduction

Taxation is one of the major sources of revenue in many countries both developing and developed. According to the Organization for Economic Cooperation and Development (OECD), the United States Government revenue from taxes accounts for over 50% of all government revenue since the past decade. It has been ranked as a major source of revenue in countries like United Kingdom, France, Sweden, Norway and other high-income countries. In Nigeria, tax has been existing even before the amalgamation in 1914. It has been observed that in most countries where tax revenue significantly constitutes a major part of the economy's revenue there has been the implementation of electronic taxation for years. This therefore goes on to show that the adoption of electronic methods of tax administration is a necessary catalyst for countries where tax contributes a significant portion of their revenue. Since taxation has been seen to be one of the most reliable and major revenue sources of government, it is increasingly interested in devising better and reliable means for tax collection and administration in order to ensure proper accountability and increased distribution of revenue hence the need for e-taxation.

E-taxation is not new globally. According to Ofurum (2018), E-tax was first introduced in United States of America in 1987 through its transformation programme. Canada commenced e-taxation in 1993 via e-filling. Netherlands and Uganda hosted electronic tax system in 2009. In 2013, Egypt digitalized their tax system to keep pace with the transnational trades concerning computerized payments systems, particularly for government services. In 2015, Nigeria initiated its own electronic tax system (Ofurum, 2018). The FIRS in alliance with Nigerian Inter - bank settlement system (NIBSS) digitalized Nigeria tax system with the aim of boosting monetary collection enabling the tax payers to operate from anywhere and at all times in as much as there is internet and computer to enhance tax compliance, reduce paper work and improve revenue base. It was also introduced in order to maintain a close nearness with the international trades towards automated payments systems, for the government. Electronic taxation also E-tax is an electronic self-service platform that enables taxpayers to file their tax returns and conduct other tax services online at their convenience irrespective of their location once internet is available. Electronic taxation System was introduced to automate all core processes from tax registration, payment, assessment, monitoring exercise, tax audit and investigation, taxpayers file management and returns filing. Prior to year 2008, there were virtually no automated systems in all Anambra State Government Ministries Departments and Agencies, including Anambra Internal Revenue Service. This situation bred corruption, slow workflow and poor record-keeping in the businesses of Government and governance. At Anambra Internal Revenue Service (AIRS), E-tax administration is in effect in the areas of Assessment and Collection of taxes assessed, performance reporting, audit trails and inter-staff/departmental internal mail communications. This automated system of tax administration was initialized in 2015 and AIRS has advanced plans to enable and encourage individuals and companies to do self-assessment using their electronic Tax Management System, although many SMEs in Anambra State have adopted this automated system of filing their tax returns, some others still adopt the manual tax filing and remittance system (AIRS, 2021). Financial performance and automated taxes are inseparable as taxes are levied based on the profits of a company.

E-taxation has attracted a lot of attention from many corporate and investors since it is a major revolutionary trend of the 21st century. The mortality rate of small and medium enterprises which make up 95% of the economy is 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 that are responsible for these untimely close-ups are tax related issues, ranging from taxations to numerous tax burdens etc. Therefore, in dealing with small and medium enterprises, these unique qualities need to be considered. Another problem faced with SMEs in Nigeria is the tax levies for these enterprises in particular, issues that need to be considered are how these tax policies can be designed to aid the growth of small businesses and the most effective ways to administer them. According to a study conducted by Bateman (2013), it was reported in a survey that 90% of business owners admitted that taxes were a big constraint to their businesses, as they claim taxes are quite high and do not allow new businesses especially SMEs to cover up initial cost.

A study by Onuiri, Faroun, Erhinyeme, and Jegede (2015) noted that the tax system in Nigeria is bounded by a myriad of problems which ranges from slight data availability on the history of tax revenues to taxpayers owing to an absence of good record keeping system. The problems associated with the manual taxation method still operated by many SMEs include high costs in computation and filing returns as well as the multiple tax rates and charges. Adopting E-taxation is of essence since it has an effect on company's performance although there are still some problems associated with the usage of this automated tax administration system such as network connectivity problems when assessing the portal for making the payment online as well as issues with incorrect Anambra Social Service Identification Numbers (ANSSID).

To this end, the following specific objectives were raised to help the investigation of the study.

1. Determine the extent to which electronic taxation affects the mortality rate of SMEs in Awka, Anambra State.
2. Assess the effect of electronic taxation on the high cost of computation and filing by SMEs in Awka, Anambra State.
3. Ascertain the effect of electronic taxation on the multi taxation of SMEs in Awka, Anambra State.

Predicated on these objectives stated above, the researchers formulated the following hypotheses to guide their investigation thus:

H1: Electronic taxation has no significant effect on the mortality rate of SMEs in Awka.

H2: Electronic taxation has no significant effect on the costs of computation and filing by SMEs in Awka.

H3: Electronic taxation has no significant effect on the multi taxation of SMEs in Awka. In order to examine the effect of E-taxation on the mortality rate of SMEs, the regression model below was deployed.

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Conceptual Review

E-taxation

Electronic or Automated taxation entails measuring, accumulating and administering the taxation process through an automated platform. Che-Azmi and Kamarulzaman (2014) asserts that E-taxation is one way among other ways through which governments around the world use information and communication technologies to advance the distribution of communal services and the distribution of public administration information to the general public. It is a web-enabled and secure application system that provides a fully-integrated and automated solution for administration of domestic taxes (Waweru, 2013) as cited by Chitom and Iyidiobi (2019). Wasao (2014), describes electronic tax system as an online platform whereby the taxpayer is able to access through the internet all the services offered by a financial authority such as the registration for a personal identification number, filing of returns and application for compliance certificate. E-taxation is the system of collection and administration of tax procedure through an electronic medium. It is an online network through which the taxpayers have license to the platform via the use of internet, in other to have entrée into the facilities provided by the tax expert such as the registration for a tax identification number, electronic tax filing of tax returns [Olaoye & Atilola, (2018); Okafor (2021)]. When these taxes are paid via the online platform, the taxpayer or firm can apply and process online the tax clearance certificate (TCC) without visiting the office of the tax authority [Olaoye & Atilola, (2018)]. Wasao (2014) further states that the E-taxation platform rolled out by the Federal Inland Revenue Service (FIRS) in Nigeria is a good example of the electronic taxation scheme.

The E-tax system by FIRS is supported by a centralized Information Communication Technology (ICT) department that provides support services to facilitate the digitalized payment system. Nigeria's Presidential Enabling Business Environment Council (PEBEC) in alliance with the Federal Inland Revenue Service (FIRS) hosted six key electronic solutions namely:

Table 1: Six Key Electronic Solutions.

E-Registration	E-Stamp Duty	E-Payments	E- TCC	E-Receipts	E- Filing

Source: Researcher's Conception (2022)

i. **E-registration:** for registration of new tax payers with F.I.R.S for the various taxes. With this service, taxpayers do not need to visit any tax office to register for tax purposes they just need to visit the F.I.R.S website and register.

ii. **E-stamp duty:** For payment of stamp duties on qualifying documents. This innovation will increase the ease of doing businesses in Nigeria. Physical stamping in the past was required to perform transactions that require stamping. With e-stamping, stamping can be done anywhere at any time online, one area in which this innovation is very useful is when a new company is being incorporated at the corporate Affairs Commission (CAC). From the CAC registration site, you can migrate to the FIRS e-service site and pay your stamp duties.

iii. **E-tax payment:** For payment of all Federal Government taxes and levies through any of the following platforms. Nigeria Inter-Bank Settlement (NIBSS), Remit and Interswitch. This brings payment of taxes to your doorstep as you can pay your taxes from the comfort of your home. To make payment through the Anambra State Internal Revenue Service Website, log on to https://www.quickteller.com/anambraigr input an email, then input your ANSSID (Anambra State Social Service Identification Number) then select the type of tax payment to make from the options.

iv. **E-receipt:** For receiving and verifying e-receipts generated for taxes paid through the new e-tax payment with this you receive instant notification acknowledging your payment of tax.

v. **E-Filling:** This enables tax payers to file their tax returns through the online portal. Electronic tax filing or e-filing is a process where tax documents or tax returns are submitted through the internet, usually without the need to submit any paper return. The E-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes.

vi. **Electronic Tax Clearance Certificates (E-TCC):** This platform enables taxpayers to apply for, receive and verify the authenticity of their E-TCC. Obtaining tax clearance certificate under the manual tax administration process is cumbersome. With E-TCC, a certificate is automatically sent to the email addresses of tax payers and its authenticity can be confirmed on the e-service website. These e-service initiatives combine innovation and technology in tax administration to make the F.I.R. S Services convenient, easy and available everywhere and at all times (vanguard newspaper, 2017). There is no comprehensive legislative framework for the operation of the electronic tax system in Nigeria, however, the National tax policy (NTP) encourages, the use of technology in the administration of tax laws. This is anticipated to make simpler tax administration processes. Taxpayers can now register online for businesses, extract tax identification numbers (TIN), file tax returns online, pay taxes online, pay E-stamp duty online and get the relevant E-receipts as well as obtain TCCs online.

Challenges of Electronic Tax system in Nigeria

The Electronic tax system in Nigeria is confronted with several challenges which include a low computer literacy level and the high cost of setting up on electronic tax system [Umenweke & Ifediora, 2016]. Also, its effectiveness is highly dependent on the availability of an efficient internet service. Several places in Nigeria at the moment do not enjoy an effective internet service, especially in rural areas. Although there is a steady rise in the number of people with access to the internet and improved connectivity, a lot still needs to be done as the percentage of people without access to the internet in Nigeria is approximately 50% of its population, considering that its estimated population is put at about 198 million in 2018 [NPC, 2018]. This challenge is further compounded by the unreliable electricity power supply in Nigeria. Another challenge of the electronic tax system in Nigeria is that only the FIRS, which is the Federal Tax Authority, has fully automated its processes. At the state level, many tax authorities are still using manual tax processes or combining the manual and electronic tax system. The situation inhibits effective collaboration between tax authorities at the Federal and State levels to prevent double taxation. There is urgent need for the state revenue authorities to automate their processes to provide the necessary synergy with the F.I.R.S. This will contribute positively to the rating of Nigeria on the ease of doing business index as investors will find it easy to fulfill their tax obligations to the federal and state governments through convenient and transparent electronic tax payment platforms and also assist tax authorities to easily share information on a tax payer and build up a comprehensive tax history of taxpayers. The greatest threat to electronic tax system in Nigeria is the activities of cyber criminals, who try to compromise the integrity of the tax revenue service portals. Electronic tax fraud (cyber tax crime) is a major challenge to the development and sustainability of electronic tax systems, especially as it concerns the Small and Medium Scale Enterprises.

Small and Medium Scale Enterprises

There is no consensus on the real definition of Small and Medium Scale business, as definitions differ from industry to industry and from country to country. Some have defined small and medium scale businesses based on the characteristics of the business, such as size, level of operations, type of industry, asset employed and number of employees, turnover, market management or control of businesses.

The difference amongst definitions in industries could be seen to be the differences in capital requirement of each business, while those among countries could arise as a result of difference in industrial organization by countries at different stages of economic development. What might therefore be defined as small scale business in a developed country can be regarded as large-scale business using partners as fixed investment and employment of labor force in a developing country. It is also important to recognize that definitions change over time and hence, even in a developing country what was previously classified as small-scale business could be regarded as large-scale industry when the quantities of production change [Usman, 2012].

In Nigeria, several attempts have been made to define and classify small scale business. The Center for Industrial Research and Development (CIRD) of the Obafemi Awolowo University Ile-Ife according to Obitayo (2001), defined a small-scale business as an enterprise with a working capital base not exceeding ₦250,000 and employing on full time basis, 50 workers or less. Austin, (2009) cited that, the Nigeria Bank for Commerce and Industry. (NBCI) adopted a definition of small-scale business as one with total capital not exceeding ₦ 750, 000 (excluding cost of land but including working capital). The federal Ministry of Industry’s guideline to NBCI defined Small Scale Business as one with a total cost of not exceeding ₦500, 000 (excluding cost of land but including working capital). The Small and Medium Industries Equity Investment Scheme (SMIEIS) in Nigeria, defines small and medium enterprises (SMEs) as enterprises with a total capital employed not less than N1.5 million, but not exceeding N200 million, including working capital, but excluding cost of land and/or with a staff strength of not less than 10 and not more than 300. The Nigeria Industrial Development Bank (NIDB) defined small scale business as an enterprise that has the investment and working capital not exceeding ₦ 750,000 while it defined medium scale enterprises as those operating within the range of ₦ 750,000 to N3 million.

The Nigerian Bank for Commerce and Industry as cited in Jimah (2011) defined a small-scale enterprise as one whose capital does not exceed N750,000. The above definition emphasized the capital requirement for the formation of the business, though capital is not the only consideration in determining whether a business venture is an SME or not. Agu (2006) defined SMEs as a business which is owned, led by one or a few persons, with direct owner(s) influence in decision making, and having a relatively small share of the market and relatively low capital requirement. Inegbenebor (2006) stated that in the current industrial policy of Nigeria, Small and Medium Scale Enterprises (SMEs) are now defined on the basis of employment. That is:

i. Micro/cottage industries (1 and 10 workers).
ii. Small– Scale Industries (11 and 100 workers).
iii. Medium Scale industries (101 and 300 workers).
iv. Large scale industries (301 and above).

Small and Medium Enterprises (SMEs) are the backbone of any major developed economy, as well as important contributors to employment, economic and export growth. Agwu (2014), opines that SMEs remain the foundation as well as the building block in the realization of any meaningful and sustainable growth in an economy and constitute the driving force in the attainment of industrial growth and development. This is basically due to their great potential in ensuring diversification and expansion of industrial production as well as the attainment of the basic objectives of growth. For sustainable economy, according to Udofot and Etim (2017), SMEs have been stressed as capable of helping in bringing about positive economic turn around and complementing the effort of the existing large scales industries. Peace and Ezejiofor (2017), opine that the recognition of the importance of the roles of the SMEs as the pillar of growth has prompted the increased attention and specific education on the method and approach to build and sustain a truly viable private sector dominated by small and medium scale enterprises (SMEs) not only in Nigeria but also in other developing and developed economies. The growth of SMEs is therefore an essential element in the development strategy of most economies and hold particular significance for Nigeria.

SMEs and E-taxation

According to the Nigeria Bureau of Statistics and the Small and Medium Enterprises Development Agency of Nigeria, about 41.5m Small and Medium Enterprises (SMEs) exist in Nigeria. Which account for 96% of businesses, 84% of employment and contribute 48% of the national GDP. However, a 2017 survey found that 80% of small businesses are not paying regular taxes to the government. While some SMEs pay taxes to local, state, and federal government agencies, many avoid paying structured taxes such as corporate and personal taxes. That is not for lack of obligations – many SMEs are expected to pay income tax, employment tax, sales tax, and self-employment tax. According to some polls carried out by African Business, some entrepreneurs don’t think their businesses can afford to pay taxes because the profit from the business is not even enough to reinvest into the business and cater for their daily needs. Others are of the opinion that government should provide an enabling environment for small businesses to thrive by providing grants and loans at little or no interest. If the government ensures this, small business owners will have it at the back of their minds to pay their taxes when due. The World Bank’s Doing Business 2020 index ranks Nigeria 131 out of 190 on overall ease of doing business, and a lowly 159 for paying taxes. Those who have survived a brutal business environment including the recession, Covid-19 lockdowns and government import bans, often struggle to understand why they should contribute to an administration which appears to throw frequent obstacles in their way. Nonetheless, SMEs improved performance cannot be disassociated with E-taxation since it alleviates the costs of the traditional or manual filing system. The compliance rate of SMEs as regards tax payment in Anambra State is quite commendable compared to the non-compliance rate. A lot of SMEs in Anambra State that are registered taxpayers operating with the automated taxation system have benefited from the usage of this tax administration system in terms of reduced costs and improved performance since there are more profits to reinvest into the business. The finance act 2020 which introduced various amendments to existing tax and regulatory legislations in Nigeria provided various tax incentives to SMEs to ensure their unalloyed compliance with respect to tax payment within the country and also reduce the amount of tax liability to be paid by them.

Theoretical Review

Expediency Theory

The first theoretical framework underpinning this study is rooted in expediency theory of taxation. The expediency theory of taxation was propounded by Buehler in 1936. The theory stated that every tax revenue collection system must pass the test of practicability, which must be the only consideration when government is choosing a revenue collection system. The assumption of this theory is that the economic and social objectives of the government should be treated as irrelevant, since it is useless to have a tax which cannot be levied and collected effectively. This theory is relevant to the study in that electronic tax system is expected by state board of internal revenue to enhance revenue collection by creating an enabling technological environment that facilitates efficient assessment and revenue collection process. The expediency theory is therefore linked to this study since it seeks to explain the influence of administrative set up, such as efficient electronic tax payment system, in revenue collection by the board of internal revenue.

Technology Acceptance Model

The Technology Acceptance Model (TAM) was developed by Fred Davis in 1986. The Technology Acceptance Model is an information systems theory that models how users come to accept and use a technology. The theory is based on the assumption that the acceptability of an information system is determined by two main factors, being Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance. Perceived Ease of Use (PEOU) is the degree to which a person believes that using a particular system would be free from effort. This theory is relevant to this study in the sense that the Technology Acceptance Model provides the bases for the adoption and implementation of the electronic tax system by the State Board of Internal Revenue Service based on the assumption of its perceived usefulness on both the tax payers and tax officials. The primary objective of the E-tax system is to solve the challenges of the traditional tax system which makes the State Board Internal Revenue Service the forerunner in the acceptance of the E-tax technology mainly because it has a direct positive effect on their job performance in terms of efficiency, timeliness, accuracy and reliability. As for the tax payers, the perceived usefulness of the E-tax system will be the general ease of paying taxes in terms of accuracy, simplicity, convenience and trust in the tax system which will in turn bring about voluntary compliance, hence solving one of the major problems of taxation in the state.

Empirical Review

Onyeka (2021) on Automated Taxation on Nigeria's Revenue and Economic Development Growth Pre and Post Analysis, the study x-rayed the influence of electronic taxation on Nigeria's revenue and economic growth. The study empirically investigated how the claim of E-taxation since 2015 has impacted tax revenue, Federally Collected Revenue and Tax-to-GDP ratio. The study made use of secondary data obtained from Federal Inland Revenue Service, and Central Bank of Nigeria Statistical and Economic Reports from 2010 to 2019. Data extracted were grouped into two: pre-electronics taxation period and post electronics taxation time. Also, statistical means of the paired data were equated using paired sample t-test. Based on the results, it was recommended amongst others that federal government and tax payers should align their skill to ICT tools especially skill on automated tax calculation and tendering of tax revenues and obtaining tax clearance certificate digitally. More awareness should be created on the existence of electronics taxation as a means of handling tax matters. Government should development modern apps of electronic taxation. This application should be made user friendly to be used on all mobile operating systems like android, IOS and windows for those that cannot afford laptop.

Akamelu and Iyidiobi (2019) on effect of E-taxation on revenue generation in Anambra state, the study specifically examined the effect of E-taxation on tax revenue generation in Anambra state determining whether the adoption of E-taxation reduced tax malpractice in Anambra state and ascertained whether the tax revenue improved based on the e-taxation adoption in Anambra state. To achieve the objectives of the study, survey design was employed, data collected were analyzed and one sample t-test was used to test the formulated hypotheses. The results showed that revenue generation improved based on the adoption of e-taxation in Anambra State. On the basis of the results, the researchers recommended among others that well-equipped database on tax payers should be established by the government with the aim of identifying all possible sources of income of tax payers for tax purpose.

Godswill, Onwka and Obinwanne (2019) investigated the impacts of taxation on the performance of SMEs in Aba, Abia State, Nigeria. The study utilized the survey approach research design while questionnaire was used as a data collection instrument. A randomly selected 162 employees and owners of 40 SMEs were used for the study. Collected data were analyzed using the multiple regression analysis and one sample t-test. Results indicated that significant and positive relationship exist between taxation and the performance of SMEs and that tax assessment, tax collection and tax utilization significantly influence the performance of SMEs in Aba. It was recommended among others that the Nigerian tax system must seek to protect and promote the SMEs for them to contribute meaningfully to economic growth and that they should identify the agents responsible for illegal, multiple tax collections that seek to frustrate SMEs and deal with them accordingly.

Olaoye, Akinleye and Adekanmbi (2019) examined the effects of electronic taxation on tax productivity in Nigeria. Specifically, the study evaluated the challenges of using electronic taxation system on tax productivity in Nigeria. To achieve the objectives of the study, they collection relevant data using questionnaires. The study targeted a sample of 120 respondents who were tax payers. Data from the field were analyzed using simple percentage and analysis of variance (ANOVA) as statistical tools. Results showed that electronic taxation had a significant impact on tax productivity in Nigeria. Based on the findings, it was recommended that Nigeria Tax Authorities should come up with an easy application that can make tax registration, filing and payment easy for the taxpayers.

Ofurum, Amaefule, Okonya and Amaefule (2018) investigated the impact of E-taxation on Nigeria's Revenue and Economic Growth: A pre – post Analysis from 2013 to 2016. The research utilized secondary data obtained from Federal Inland Revenue Service, and Central Bank of Nigeria Statistical and Economic Reports on quarterly basis from second quarter 2013 to fourth quarter 2016. Means of the two sets of data were related using a pre-post technique called paired sample t-test. The research discovered that the application of e-taxation has not improved tax revenue, federal collected revenue and tax-to-GDP ratio in Nigeria. Also, the result showed that Federally Collected Revenue and Tax-to-GDP ratio meaningfully diminished after electronic taxation system was executed. The study therefore suggested that federal government through the Federal Inland Revenue Services should conduct more enlightenment seminars across the country to upsurge the familiarity all electronic payment model.

Monica, Makokha and Namusonge (2017) investigated the effects of electronic tax system on tax collection efficiency in domestic taxes department of Kenya Revenue Authority (KRA). The study utilized a research design to create the impact of E-tax payment on revenue collection competence by KRA in Rift Valley region. The foremost data gathering tools were questionnaires administered to 130 respondents comprising employees and tax payers of KRA. Descriptive and inferential statistics were used to analyze the data. Findings of the study established that most tax payers strongly agreed that they were able to fully access and operate e-tax system. Employee capability was an important predictor of the tax collection efficiency. Based on the findings, the researchers recommended that the organization should introduce special electronic tax payment counters with extended certain hours at all branches to enable the public to submit their returns through e-filing and also provide incentives and services to encourage e-filing.

Methodology

The research design adopted is the survey method research design. This is important since it is the most appropriate for collecting and analyzing data from only a few people or items considered to be representative of the entire group. The area of study of this work is Anambra State but the study is restricted to the appraisal of SMEs performance in Awka South Local Government Area. Chikwado and Anekwe (2019) posit that are 548 registered SMEs in Awka Anambra state. Therefore these 548 registered SMEs will serve as the population to be used in the study. With the use of Taro Yamane, the sample size of 231 was drawn from the population of registered SMEs in Awka, Anambra State.

In this study, the researcher utilized both primary and secondary data. The primary source consisted of questionnaires while secondary sources comprise of review of textbook, projects, thesis, journal, magazines, periodicals as well as official documents. The instrument used to collect primary data for the study was questionnaires constructed by the researcher in accordance with the research questions. It has two main sections. Section A contains question on the respondents personal data while section B was arranged in 5 clusters comprising of strongly agree (SA), agree (A), undecided (U), strongly disagree (SD), and disagree (D) items based on the research questions that guided the study. The content was based on the effect of E-taxation on SMEs performance. Copies of these questionnaires were administered to the sampled population and collected in the same manner. The relevant variables of the study were effectively measured by the items contained in the questionnaire.

Validity of a research instrument assesses the extent to which the instrument measures what it is designed to measure [Robson, 2011]. The validity was based on face content construct. The Likert scale on dependent and independent variables were subjected to Cronbach Alpha test to ascertain the reliability of the research instrument. The table below shows the result of the Cronbach Alpha test.

Table 2: Cronbach Alpha Reliability Test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.846	.851	20

Source: *SPSS Output Version 22*

The result show that all the variables met the minimum threshold for acceptance since they were 0.846 or 84.6%. An instrument is deemed reliable if the Cronbach

Alpha test gives a result greater than 0.70 or 70%.The data collected were presented using Frequency and Percentages as tools for the analysis of the descriptive statistics while a regression equation was setup to investigate the hypothesized effect of Electronic taxation on SMEs performance.

The simple linear regression was used specifically to examine the independent variable; Electronic taxation and also the dependent variable proxies deployed in the study which were Mortality rate of SMEs, SMEs filing costs and Multi taxation of SMEs. Thus, the equation for simple linear regression:

$Y = \beta_0 + \beta_1 X + e$
Where:
β_0 = the Y intercept or constant
β_1 = the regression coefficient for the independent variable X
e = error term.
Y = the dependent/criterion variable (SMEs performance)
X = the independent/predictor variable (E-taxation) that influences the dependent variable.
Therefore, the direct effect research model for this study is of the form:
SP = f (ET).
Where: SP is SMEs Performance and ET is Electronic Taxation.
The econometric form of the equation when all the proxies are included is given as:

$Y = \beta_0 + \beta_1 X + e$ ....eqn (1)
Equation (1) can be transformed to get three models for the three hypotheses
$SM = \beta_0 + \beta_1 ET + e$ ....eqn (2)
$SFC = \beta_0 + \beta_1 ET + e$ .... eqn (3)
$MS = \beta_0 + \beta_1 ET + e$ ....eqn (4)

Where ET = Electronic taxation
SM = Mortality rate of SMEs
SFC = SMEs tax filing costs
MS = Multi taxation of SMEs.

Electronic taxation was measured by the electronic tax collection and electronic tax assessment. The proxies used to measure SMEs performance were Mortality rate of SMEs (SM), SMEs tax filing costs (SFC) and multi taxation of SMEs (MS). The hypotheses were tested at 0.05 level of significance. The null hypothesis is rejected if the probability at which the p-values of the tested construct is significantly less than the chosen level of significance (0.05), otherwise, the alternative hypothesis will be accepted.

1. If the calculated p-value < 0.05, we reject the null hypothesis, and accept the alternate hypothesis.
2. If the calculated p-value > 0.05, we accept the null hypothesis, and reject the alternative hypothesis.

Presentation and Analysis of Data

Test of Hypothesis One

H1: Electronic taxation has no significant effect on the mortality rate of SMEs in Awka.

In order to examine the effect of E-taxation on the mortality rate of SMEs, the regression model below was deployed.

$SM = \beta 0 + \beta 1ET + e$

The hypothesis testing produced the following results:

Table 3: Regression Result of Hypothesis 1

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.204[a]	.041	.037	.50344	1.064

a. Predictors: (Constant), ET

b. Dependent Variable: SM

Table 3.1: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.509	1	2.509	9.898	.002[a]
	Residual	58.041	229	.253		
	Total	60.550	230			

a. Predictors: (Constant), ET

b. Dependent Variable: SM

Interpretation of data

Table 3.2: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.025	.154		19.642	.000	2.722	3.329
	ET	.126	.040	.204	3.146	.002	.047	.205

a. Dependent Variable: SM

The first regression analysis was conducted to determine the amount of variation in the Mortality rate of SMEs (SM) explained by electronic taxation (ET). The calculated value of R^2 is 0.041 which means that only 4.1% of the corresponding variation in SM can be explained by the changes in the independent variable Electronic taxation (ET). The rest 95.9% can be explained by other factors that are not in the model. The results of the analysis are shown in Table 3.

A one way analysis of variance (ANOVA) whose results formed a basis for tests of significance was used. The ANOVA for the linear model presented in Table 3.2 has an F value = 9.898 which is significant with p value = 0.002 < 0.05. By implication, the overall model is significant in predicting the Mortality rate of SMEs in Awka.
Analysis of the regression model coefficients show that Electronic taxation (ET) has a positive beta co-efficient of 0.204 as indicated by the co-efficient matrix with a p-value = 0.002 < 0.05. The constant value of SM is 3.025. Therefore, the predictor value contributes significantly to the model. The regression equation is presented as;
SM = 3.025 + 0.204 x ET + e
According to the decision rule of the study, if the p-value is greater than 5%, the null hypothesis is accepted and vice versa. The p-value of the test for the effect of E-taxation on SMEs Mortality rate is 0.002 < 0.05. Therefore, the researcher rejects the null hypothesis and confirms indeed that Electronic taxation has a significant effect on the Mortality rate of SMEs in Awka Anambra State at 5% level of significance.

Test of Hypothesis Two

H2: Electronic taxation has no significant effect on the costs of computation and filing by SMEs in Awka.
In order to examine the effect of E-taxation on the costs of computation and filing by SMEs, the regression model below was deployed.
SFC = $\beta 0 + \beta 1ET + e$
The hypothesis testing produced the following results:

Table 4: Regression Result of Hypothesis II

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.762a	.581	.579	.42853	1.068

a. Predictors: (Constant), ET

b. Dependent Variable: SFC

Table 4.1: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.307	1	58.307	317.509	.000[a]
	Residual	42.053	229	.184		
	Total	100.360	230			

a. Predictors: (Constant), ET

b. Dependent Variable: SFC

Table 4.2: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.318	.131		10.049	.000	1.059	1.576
	ET	.607	.034	.762	17.819	.000	.540	.674

a. Dependent Variable: SFC

Interpretation of data

The second regression analysis was conducted to determine the amount of variation in SMEs computation and E-tax filing costs (SFC) explained by electronic taxation (ET). The calculated value of R^2 is 0.579 which means that only 57.9 % of the corresponding variation in SFC can be explained by the changes in the independent variable Electronic taxation (ET). The rest 42.1% can be explained by other factors that are not in the model. The results of the analysis are shown in Table 4.

A one-way analysis of variance (ANOVA) whose results formed a basis for tests of significance was used. The ANOVA for the linear model presented in Table 4.1 has an F value = 317.509 which is significant with p value = 0.000 < 0.05. By implication, the overall model is significant in predicting the computation and tax filing costs of SMEs in Awka, Anambra State.

Analysis of the regression model coefficients show that Electronic taxation (ET) has a positive beta co-efficient of 0.762 as indicated by the co-efficient matrix with a p-value = 0.000 < 0.05. The constant value of SFC is 1.318 therefore the predictor value contributes significantly to the model. The regression equation is presented as; SFC = 1.318 + 0.762 x ET + e.

According to the decision rule of the study, if the p-value is greater than 5%, the null hypothesis is accepted and vice versa. The p-value of the test for the effect of E-taxation on SMEs tax filing costs is 0.000 < 0.05. Therefore, the researcher reject the null hypothesis and confirm indeed that Electronic taxation has a significant effect on the tax filing costs of SMEs in Awka at 5% level of significance.

Test of Hypothesis Three

H3: Electronic taxation has no significant effect on the multi taxation of SMEs in Awka. In order to examine the effect of E-taxation on the mortality rate of SMEs, the regression model below was deployed.

$MS = \beta 0 + \beta 1ET + e$

The hypothesis testing produced the following results:

Table 5: Regression Result Of Hypothesis III

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.941[a]	.885	.884	.29582	.890

a. Predictors: (Constant), ET

b. Dependent Variable: MS

Table 5.1: **ANOVA[b]**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.986	1	153.986	1.760E3	.000[a]
	Residual	20.040	229	.088		
	Total	174.026	230			

a. Predictors: (Constant), ET

b. Dependent Variable: MS

Table 5.2: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.116	.091		-1.277	.203	-.294	.063
	ET	.986	.024	.941	41.948	.000	.940	1.033

a. Dependent Variable: MS

Interpretation of data

The third regression analysis was conducted to determine the amount of variation in the Multi taxation of SMEs (MS) explained by electronic taxation (ET).
The calculated value of R^2 is 0.884 which means that only 88.4% of the corresponding variation in SM can be explained by the changes in the independent variable Electronic taxation (ET). The rest 11.6% can be explained by other factors that are not in the model. The results of the analysis are shown in Table 5.

A one-way analysis of variance (ANOVA) whose results formed a basis for tests of significance was used. The ANOVA for the linear model presented in Table 5.1 has an F value = 1.760E3 which is significant with p value = 0.000 < 0.05. By implication, the overall model is significant in predicting the Multi taxation of SMEs in Awka.

Analysis of the regression model coefficients show that Electronic taxation (ET) has a positive beta co-efficient of 0.941 as indicated by the co-efficient matrix with a p-value = 0.000 < 0.05. The constant value of MS is -0.116. Therefore, the predictor value contributes significantly to the model. The regression equation is presented as; MS = -0.116 + 0.941 x ET + e.

According to the decision rule of the study, if the p-value is greater than 5%, the null hypothesis is accepted and vice versa. The p-value of the test for the effect of E-taxation on the multi taxation of SMEs is 0.000 < 0.05. Therefore, the researcher reject the null hypothesis and confirm indeed that Electronic taxation has a significant effect on the Multi taxation of SMEs in Awka at 5% level of significance.

Discussion of Findings

The study examines the effect of electronic taxation on SMEs performance. The study was focused on SMEs in the Awka region of Anambra State. SMEs performance was decomposed into SMEs mortality rate, SMEs tax filing costs and Multi taxation of SMEs while electronic taxation was measured using electronic tax collection and assessment. Specifically, therefore the study examines the effect of electronic taxation on SMEs mortality rate, SMEs tax filing costs and Multi taxation of SMEs at 5% level of significance. The primary data that were collected for the study were descriptively analyzed using frequency and percentages. The hypotheses were tested using simple linear regression analysis.

The study revealed that electronic taxation significantly affects the mortality rate of SMEs in Awka. SM will have a constant value of 3.025 if the coefficients of the predictor variable is zero. However, the results show that an increase in electronic taxation by 1 unit will significantly increase SM by 0.204.

Also, the study revealed that electronic taxation significantly affects SMEs tax filing costs. The SFC will have a constant value of1.318 if the coefficients of the predictor variable is zero. However, the results show that an increase in electronic taxation by 1 unit will significantly and positively increase SFC by 0.762.

Finally, it was shown in the study that electronic taxation has a significant effect on multi taxation of SMEs in Awka. The MS will have a constant value of -0.116 if the coefficients of the predictor variable is zero. However, the results show that an increase in electronic taxation by 1 unit will lead to a significant increase in MS by 0.941.

The findings of the study agree with those of Godswill, Onwuka and Obinwanne (2019), and Olaoye, Akinleye and Adekanmbi (2019).

Summary of Findings

1. Electronic taxation has a significant effect on the mortality rate of SMEs in Awka, Anambra state
2. Electronic taxation has a significant effect on the tax filing costs of SMEs in Awka. Anambra state
3. Electronic taxation has a significant effect on the multi taxation of SMEs in Awka. Anambra state

Conclusion

Electronic taxation plays a very significant role on the overall performance of Small and Medium Scale Enterprises in Awka, Anambra State. It affects their growth in terms of improved profitability compared to manual tax filing system. From the study, it has been discovered that E-taxation has a significant effect on SMEs mortality rate by reducing the rate at which SMEs go out of business by improving their level of profitability.

Electronic taxation also has a significant effect on the tax filing costs of SMEs. A reduction in filing costs will increase the overall profitability for the business. Finally, it significantly affects the way SMEs are multi taxed by reducing the amount of taxes to be paid by SMEs still adopting the manual tax filing methods.

Recommendation

Based on the findings made from this study, the following recommendations are therefore made;

1. Small and Medium Scale Enterprises still adopting the manual tax filing system should be enlightened on the need to transit to the use of electronic tax system.

2. Small and Medium Scale Enterprises adopting the electronic tax system should endeavor to take relevant security measures to protect their database by installing firewalls and employing experienced technical persons to prevent access to their database through hacking.

3. The Anambra State revenue authority should endeavor to update and improve on their website to enhance E-filing and E-tax payment. Issues regarding generating tax identification number (TIN) as well as Anambra State Social Service Identification Number (ANSSID) online unsuccessfully should be resolved.

4. Better tax policies should be implemented by the government to reduce the amount of tax to be paid by start-ups. This in turn will reduce the mortality rate of SME startups.

References

Abdulrazaq, M. T. (2015). Principles and practice of Nigerian tax planning and management. Ilorin: Batay Publications Limited, 1, 57-59.

Adekunle, (2016). 10 Things you need to know about TSA.

Retrieved from https://www.vanguardngr.com/2016/12/10-things-didnt-know-remita/

Akakpo, V. K.A. (2009). *"Principles, Concepts and Practice Of Taxation"*, Accra: BlackMask Ltd, 3, 114-256.

Almajali, A. Y., Alamro, S. A., & Al-Soub, Y. Z. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, 4(2), 266-289.

Alworth, J., & Arachi, G., (2001). The Effect of Taxes on Corporate Financing Decisions: Evidence from a Panel of Italian Firms International Tax and Public Finance, 8(4), 353-376.

Agu, C.N. (2006). *Fundamentals of Small Business Management and Entrepreneurship Development*. Owerri: IO Publishers.

Agwu, M. O. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt city, Nigeria. *European Journal of Sustainable Development*, 3 (1), 101-114.

Agyei, A. (1983). *Principles of Personal Income Tax In Nigeria.* West African Book Publishers, 1(1), 1-221. Anambra State E-payment portal: https://www.quickteller.com/anambraigr

Anambra State Tax Calculator: https://selfportal.tms.tax/user/ext_tax_calc

Anyanwu, J.C. (1997). Nigerian Public Finance. Joanne Educational Publishers, Onitsha. *Journal of Modern Economy*, 7(12), 15-30.

Apelt, C. & Turner, L. (2004). Globalization, Innovation and Information Sharing in Tax Systems: The Australian experience of the diffusion and adoption of electronic lodgments. *Journal of Tax Research*, 13(1), 241-242.

Austin, N. (2009). The concept of small and medium enterprises. Retrieved from: http://thenationonlineng.net/web2/articles/24036/1

Babatunde, F. (2018 March 8). Voluntary Assets and Income Declaration Scheme (VAIDS). Retrieved from http://punchng.com/vaids-262-nigerians-paid-n20bn-ineight-months-says-fowler/.

Bateman, (2013). Keeping up (tough) appearances: the age of criminal responsibility, 92(1), 28-29.

Black, C. O. (1999). Black's Law Dictionary (Seventh Edition). West Group. Centers for Medicare and Medicaid Services Office of Information Service (2008, March 27). Selecting a development approach. United States Department of Health and Human Services (HHS).112.

Capital Gains Tax: https://taxaide.com.ng/2021/08/12/capital-gains-tax-what-you-need-to-know/

Che–Azumi A. & Ksmarulzaman, (2014). Adoption of Tax E – filling; *A conceptual paper African Journal of Business Management,* 10, 599-603.

Company Income Tax: https://www.mondaq.com/nigeria/tax-authorities/976992/brief-overview-of-company-income-tax-in-nigeria

Dickson, E. & Ahuru, R. (2014). The Impact of Tax Reform on Federal Revenue Generation in Nigeria. *Journal of Policy and Development Studies*, 9, 92-108.

Electronic tax payment portal, Anambra State: https://www.quickteller.com/anambraigr.

Federal Inland Revenue Service Tax Calculator: https://apps.firs.gov.ng/taxcalculator/

Gale, W. & Samwick, A. (2016). Effects of income tax changes on economic growth, Brookings Institution and Tax Policy Center, 1(1), 30-46.

Godswill, A., Onwka, O. & Obinwanne, A. (2019). Impact of taxation on the performance of SMEs in Aba. Archives of Business Research, 7(3), 1-15.

Inegbenebor, A.U. (2006). *You Can Be An Entrepreneur; The Fundamentals of Entrepreneurship* Benin: Mindex Press Limited, 1-14.

International Finance Corporation (2010); https:// www.ifc.org/ wps/wcm/ connect/publications_ext_content/ifc_external_publication_site/publications_listing_page /2010+printed+report+default+content

James, S., & Nobes, C. (1992). Taxation: Theory and practice. London, Prentice Hall, 6, 323-338.

Jimah, M.S. (2011). Establishing small and medium scale Enterprises: Problems and prospects. A paper presented at the Institute of Chartered Accountant of Nigeria (ICAN) Zonal conference held in Jalingo, Taraba, 1(1), 1-10.

John-Akamelu, C. R. & Iyidiobi, F.C. (2019). Effects of E-taxation on revenue generation in Anambra State. *International Journal of trend in scientific research and development (IJTSRD),* 3(3), 1624-1633.

Jones, L.M. (2003). Optional taxation in models of endogenous growth. *Journal of Political Economy*, 101(3), 485-517.

Kumi, J. A., Amaniampong, M., & Kumi, M. A. (2018). Effects of corporate income tax on the profitability of mining companies: evidence from Ghana Stock Exchange. *Journal of Business Managemen*t, 4(2), 55-64.

Monica, F., Makokha E. & Namusonge, G. (2017). Effects of electronic tax system on tax collection efficiency in domestic taxes department of Kenya Revenue Authority (KRA), Rift Valley Region. *European Journal of Business and Management*, 17(9), 23.

Moyi, E. & Ronge, E. (2006). Taxation and Tax Modernization in Kenya: A Diagnosis of Performance and Options for Further Reform, Institute of Economic Affairs, Kenya, 15-34.

Muita, R.N. (2011). Electronic commerce: Challenges on tax authority and tax payers; Discussion paper provided by R. N. Mattson. International business machines corporation, U.S. 25-29.

Mutinia, S. (2020). Effect of financial performance on corporate taxes among firms listed at the Nairobi Securities Exchange, 1-65.

National Bureau of Statistics (2017) -SMEDAN National Survey of Micro Small and Medium Enterprises (MSMEs).

Ndayisenga, E. & Jaya, S. (2016). Effect of electronics tax management system of tax collection of Rwanda. *International Journal of Business & Management*, 4(5), 13-24.

Neely, A. (1999) "The performance measurement revolution: why now and what next*?". International Journal of Operations & Production Management*, 77 University of Cambridge, UK: MCB University Press, 19(2), 205-228.

Nightingale, K. (2001). *Taxation: Theory and practice*. London, Prentice Hall, 4, 113.

Nwauzor, C. (2021). Automated Taxation on Nigeria's Revenue and Economic Development Growth Pre and Post Analysis, 1(1), 1-22.

Obitayo, K.M. (2001). Creating an enabling environment for Small Scale Industries. Bullion, publication of the CBN, 25(3), 5.

Ofurum, C.N., Amaefule, L.I., Okonya, B.E., & Amaefule, H.C. (2018). Impact of E–Taxation on Nigeria's Revenue and Economic Growth: A Pre–Post Analysis. *International Journal of Finance and Accounting*, 7(2), 19-26.

Okafor, G., Chukwunwike, O., Nnubia I., & Asogwa, O. (2021). Effect of E-taxation on revenue generation in Nigeria. A Pre-Post Analysis. *Academy of Enterpreneurship Journal*, 26(3), 12-15.

Okafor, G. T. (2012). Revenue generation in Nigeria through e-taxation. *European Journal of economics, finance and administrative sciences*, 49, 1450-2275.

Okoye, V.C., & Ezejiofor, R. (2014). The impact of electronic taxation on revenue generation in Enugu, Nigeria: *International journal of advanced research*, 2(2), 449 – 458.

Olaoye, Clement, O., Akinleye, G.T., Adekanmbi & John, A. (2019). Effects of Electronic-Taxation on Tax Productivity in Nigeria (2008-2018). *International Journal of Contemporary Applied Researches*, 6(12), 27-42.

Onuiri, E. E., Faroun, F., Erhinyeme, O., & Jegede, A. (2015). Design and development of an e-taxation system, *European Scientific Journal*, 11(15), 19-28.

Onyekwelu, S. (2018). Prospects for tax collection brighten as FIRS initiatives yield fruits.
Retrieved from: http:// www.businessdayonline.com /personalfinance/ taxes/ article/ prospects-tax-collection-brighten-firs-initiatives-yield-fruits/

Oraka, Azubike O., Okegbe, T.O., & Ezejiofor R. (2017). Effect of Value Added Tax on the Nigerian Economy. *European Academic Research*, 1(2), 1185–1223.

Organisation for Economic Co-operation and Development (OECD) (2017). Rising tax revenues are key to economic development in African countries. Retrieved from: http://www.oecd.org/tax/

Organization for Economic Co-operation and Development (OECD) (2019). Revenue statistics in Africa. Retrieved from: http://www.oecd.org/tax/

Osibanjo, Y., (2017). Executive Order No. 004. on the Voluntary Assets and Income Declaration Scheme.

Peace, N., & Ezejiofor, R. A. (2017). SME financing and economic development: Nigerian Government Incentives (1999-2015). *Scholars Journal of Economics, Business and Management*, 4 (8B), 548-554.

Personal Income Tax: https://www.firs.gov.ng/personal-income-tax-pit/

Ramayah, T., Romoo, V., & Amlmus, I. (2008). Profiling online and mammal tax filers: results from an exploratory study in penang, Malaysia. *Labuan e-journal of manmalat and society*, 2, 1 – 8.

Robert, B. C., (2004). Measuring Organizational Performance: An Exploratory Study, University of Georgia, 1, 111-309.

Robson, C. (2011). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*, Sussex, A. John Wiley and Sons Ltd, 2, 58-82.

SMEDAN (2017). Survey Report on Micro, Small and Medium Enterprises (MSMEs) In Nigeria: National MSME collaborative Survey.

Retrieved from: http:// smedan.gov.ng/ images/ collaborative%20survey%20 report.smedan-nbs/

SMEDAN (2018). SMEDAN and National Bureau of Statistics collaborative survey: Selected Findings.

Stamp Duty: https://www.firs.gov.ng/stamp-duty-sd/

Suárez S., Juan, C., & Owen, Z. (2016). 'Who Benefits from State Corporate Tax Cuts? A Local Labor Market Approach with Heterogeneous Firms', American Economic Review, 106(9), 2582-2624.

Tax Calculator: https://selfportal.tms.tax/user/ext_tax_calc

Udofot, P.O., & Etim, E.O. (2017). The Effect of Tax Revenue Components from SMEs on the Economic Growth of Nigeria from 1980-2015. Research Journal of Finance and Accounting, 8, 117-122.

Umenweke & Ifediora, (2016). The Law and Practice of Electronic Taxation in Nigeria. *Journal of International Law and Jurisprudence*,10(1), 105-117.

Usman, B.U. (2012). An evaluation of survival strategies of small and medium scale enterprises during the economic meltdown. Department of Business Administration, Usman Danfodio University Sokoto, 1-27.

Vanguard Newspaper (2017). FIRS introduces 6 online tax solutions.

Retrieved from: https://wwwvangurdngr.com/2017/06/firs introduces 6 – online – tax – solutions.

Value Added Tax: https://en.wikipedia.org/wiki/Value-added_tax

Wasao, U. O. (2014). Productivity of the Nigeria Tax System.1970-1990.AERC Research paper, Nairobi: African Economic Research Consortium, 67(1), 35-60.

Waweru, N. (2013). The Effect of Enterprise Risk Management Implementation on the Value of Companies Listed on the Nairobi Stock Exchange. *Journal of Applied Finance and Banking*, 3(3), 7-11.

PUBLIC ACCOUNTS COMMITTEE EFFECTIVENESS AND THE QUALITY OF AUDITOR-GENERAL'S REPORTS IN ANAMBRA STATE

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Abstract
This research work is on, 'Public Accounts Committee Effectiveness on the Quality of Auditor General's reports in Anambra State' To this end, the following specific objectives guided this study: First, to evaluate the effect of qualifications of Public Accounts Committee members on the quality of Auditor General's reports in Anambra State; secondly, to investigate the effect of constructive partisanship on the quality of Auditor General's reports in Anambra State; thirdly, to ascertain the effect of tenure of office on the quality of Auditor General's reports in Anambra State; fourthly, to evaluate the effect of public accounts committee's reports on the quality of Auditor General's reports in Anambra State; fifthly, to ascertain the effect of follow-up process on the quality of Auditor General's reports in Anambra State. Survey research design was adopted. Descriptive statistics and correlation matrix was employed alongside pooled Ordinary Least Square (OLS) regression in analyzing the data collected. The findings of the study revealed that; Qualifications of Public Accounts Committee members; Tenure of Public Accounts Committee members; Follow-up process by Public Accounts Committee Members have a significant effect on the Quality of Auditor General's Reports in Anambra State. The researcher recommends that; The States that want to improve the quality of their auditor general report should consider having PAC members dominated with highly qualified members with degree from related disciplines; they should also consider putting long tenure duration for their PAC members who are experienced to ensure continuity of their findings and recommendations; they should as well consider, establishing a good follow-up process for their PAC committee to enable them hold the executives accountable. Also, States that are considering the use of constructive partisanship level of PAC members and the use of PAC reports, to improve the quality of their auditor general's report should not do so as these were found to be not statistically significant in influencing the quality of auditor general's reports in Anambra State
Keywords: *Public Account Committee, Auditor Generals Report, Constructive Partnership, Tenure of Office, and Follow-up process*

Introduction
The need for a compact system for probity, accountability, and transparency is the fundamental principle of developed societies for efficient, effective and economic delivery of public services and usage of funds by the government officeholders as appropriated by the legislators. When this is done, the people's desire for proper governance and crusade against corruption would be a reality (Gee & Gaventa, 20I0; Haque, I994). The charge of the Office of the State Auditor General is to be a leader

in facilitating and promoting effective accountability through auditing for the taxpayers by raising and renewing the confidence of citizens of a state through the Auditor-General's report to the State House of Assembly (Nombembe, 200I). In a nation such as Nigeria, corruption has dug far into the fabric of all facets of its economy (TICI, 2002); the Auditor-General is required to report within a stipulated timeframe and present his report to the lawmakers promptly and accurately as possible.

In the light of this, Public Accounts Committee was created by sections 85(5) and 125(5) of the 1999 constitution as amended. The Public Accounts Committee (PAC) refers to a standing committee in the house of assembly that studies public audits, summon ministers, permanent secretaries, other ministry staff to the committee for interrogation and thereafter submit a report of their findings to the plenary and also to the State Governor or President at the Federal level after six months of receipt of Auditor General's report. The committee does its oversight functions using such oversight mechanisms as committee investigative hearings, public hearings, hearings in plenary sittings and public petitions. PAC discharges its roles through consideration and scrutinizing the Auditor General's reports and stating recommendations to the relevant authorities in the MDA's (Ministries, Agencies and Departments) on actions or sanctions to hold on erring government officeholders found culpable. The PACs principally need constructive partisanship in their work (Dea, 2015). It is the role of PAC to ensure follow up on the recommendations they issued and see that they were properly implemented.

The PAC also expects the Office of State Auditor General to prepare a user friendly, timely presented audit reports and form opinions that are defensible based on sufficient, objective, relevant, timely, verifiable and reliable evidence and also monitor its performance and report against key performance indicators and finally, distribution of Auditor General's reports to other stakeholders and attend calls for clarifications on reports from members of the State House and Public Accounts Committee (Abadom, 20I6).

The prior scandals of Tesco, Patisserie Holdings, and British Telecommunications have raised regulatory bodies' awareness and concern on financial reporting quality. These scandals caught people's interest that financial reporting quality needs further examination (Kalabeke, Sadiq, & Keong, 2019). Prior empirical studies on the PAC effectiveness and Auditor-General's reports present mixed results, for instance, Makhado, Masehela, and Mokhari (2012) concluded that the majority of PACs in South Africa heavily used information from Auditor-General's reports to carry out oversight and to hold the executive accountable. Onuorah and Appah (2012) found that level of accountability is very weak in Nigeria due to attributes of accountability, comprehensiveness, relevance, reliable and timely disclosure of social, economic and political facts about government activities are completely not available to citizens to evaluate the performance of government officers especially, the political officeholders. Khumalo (2007) found that the Auditor General’s findings are not taken seriously, that out of eleven sampled departments, constantly had the same recommendations repeatedly, to them yearly by Auditor General. Considering the present need for accountability and transparency of government financial transactions through PAC and the quality of audit report of Nigerian government bedevilled with corrupt practices, the researcher, therefore, sought to fill the gap in the literature by researching the nexus of public accounts committee effectiveness and the quality of the auditor-general’s reports in Anambra State. To this end, the following specific objectives guided this study:

1. To evaluate the effect of qualifications of Public Accounts Committee members on the quality of Auditor General’s reports in Anambra State.
2. To investigate the effect of constructive partisanship on the quality of Auditor General’s reports in Anambra State.
3. To ascertain the effect of tenure of office of PAC members on the quality of Auditor General’s reports in Anambra State.
4. To evaluate the effect of public accounts committee’s reports on the quality of Auditor General’s reports in Anambra State.
5. To ascertain the effect of follow-up process on the quality of Auditor General’s reports in Anambra State.

The paper is organised as follows’ the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Review of Related Literature Review

Conceptual Reviews

The Public Accounts Committee

The majority of legislatures affiliated with the British legislature rely on public account committees to follow up on the findings of public audits. Since the creation of the Public Accounts Committee in the Gladstonian Reforms of 1861, PACs have become common throughout the Commonwealth (Wikipedia). In Nigeria, Public Accounts Committees are established by the provision of section 85(5) and 125(5) of the 1999 constitution as amended, which states that the Auditor-General should within 90 days of getting off the Accountant-General’s financial statement, issue his reports under this section to the House of Assembly and the House shall cause the reports to be considered by a committee of the House of the National/State Assembly in charge of public accounts. PAC is to make specific inquiries into issues of interest arising from audited financial report findings and recommendations reported to the relevant authorities (Ahmed & Wakili, 2012). The report of the PAC is the primary accountability product of the committee. Based on their findings, PACs do make recommendations to government ministries pointing out that they adopt certain policies and procedures to enhance their functions (Dea, 2015).

Ideally, the executive is expected to report back to the legislature on PAC recommendations within a specified period, usually 2 to 6 months. The committee prioritizes these reports using various criteria including consideration for the seriousness of impacts or implications of audit findings, public interests, risks, social impacts, critically unresolved issues and disputes materiality and opportunities to promote accountability (Vic.gov.au 2018). Zaman and Salem (2003), find that regular reports by PAC curtail poor accountability by public officers. Thus, by making reports of PAC public; the system, procedures, methodologies and checks and balances will ensure accountability and good governance to operate with due regard to economy, efficiency and effectiveness (Pellizo, 2011).

The Auditor-General's Report

According to Ayine (20I7), the fundamental duty of the Auditor General is the protection of citizens through a detailed objective examination, evaluation and timely reporting to the legislature to enable it to establish how the resources given to government officeholders had been utilized through independent audits to achieve accountability and ensure that public funds were in keeping with appropriations made, to achieve economic, efficient and effective utilization of such funds through the Auditor-General's reports. According to the Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities, issued by the International Public Sector Accounting Standards Board (2013), prescribes the qualities of relevance, reliability, comparability, verifiability, timeliness, and understandability. Materiality is a renowned characteristic that provides relevance; while, faithful representation is characterised by completeness, neutrality and absence of errors in the quality of audit reports. According to Kuznietsova (2014), understandability, relevance, reliability, trustworthiness, validity, neutrality, prudence, completeness, comparability, timeliness, cost-effectiveness (efficiency) are the qualities of a good audit report. Authors, such as Kuznietsova (2014), Shahwan (2008), listed the quality criteria to include; reliability, proof of credibility, impartiality, relevance, appropriateness, unbiased and exactness, operativeness, rate of occurrence, comparability, targeting, efficiency, understandability, trustworthiness, validity, neutrality, prudence, transparency, high quality, internal consistency, verity and true view or truthful representation, sincerity.

The audit standards require auditors to carry out audits to ascertain reasonable assurance as to if the financial statements are free of substantial misstatements and to express an opinion about a true and fair view of the financial statements (PCAOB, 2010). The quality of the audit performed is a determinant of the extent to which financial statement users can rely on an audit report. A high-quality audit report gives extra value to the financial statement in the financial report, from where investors make use of the information for decision making (Salleh & Jasmani, 2014).

1. **Report on the comments of the Auditor General (AG) on the annual audited accounts of parastatals:** The Auditor General (AG) has no power to audit the accounts of parastatals of government instead the parastatals are needed to have their accounts audited annually by an external audit firm and the audited accounts are presented to the Auditor General for his comments. In line with section 85(3b) and 125(3b) of the constitution of the Federal Republic of Nigeria (as amended) the AG's comment is presented to the legislature for PAC consideration.
2. **Report on the Annual Report of the Auditor General on the accounts of the State Government:** Section 85(2) (5) and 125(2)(5) of the 1999 constitution of the Federal Republic of Nigeria as amended, mandates the AG of the States to examine the accounts of government, ministries, departments and agencies annually and to submit his/her report to the legislature for consideration by PAC. After consideration, PAC would submit a report of its findings to the State House for consideration.

Qualifications of Public Accounts Committee Members

The difficulty of the Committee to acquaint itself with needed skills ranging from information technology, financial management and public administration to help in all dimensions of their roles is a serious drawback in enhancing public financial accountability (Pimpong, 2018)**.** According to Ogbanu (1991), the absence of personnel with required skills, literacy and experience in finance-related issues were lacking in most PACs as established laws and guidelines on the appointment of members were not in place.

Constructive Partisanship

Proper cooperation between the PAC and executive is the challenge of partisanship. There is enough evidence to suggest that some resolutions reached by PAC are often influenced by political inclinations and factions within the PAC and such decisions at times don't protect the interest of the citizen. Such tendencies compromise proper oversight and financial accountability work (Pimpong, 2018). Teamwork has been integral to the formation of this sense of togetherness on PAC, with an instance of this collective approach being seen when a PAC member showed public disagreement with a member of their own party during a Plenary debate on the role of PAC, showing the length to which members are willing to forgo the expected party-politics in favour of having an effective committee (Hansard, 2013). That committee was able to produce an agreed report on any topic is arguably a testament to the ability of individuals to work as committee members with a common goal as against working for the good of individual political parties (Wilford, 2003). Gee (2002) stated that having an opposition chairman is essential for the good functioning and success of the PAC as it makes it active.

Tenure of Office

Since the PAC mostly deal with issues that have taken place in post-financial years, institutional memory from members and support staff thus becomes important for the effectiveness of the Committee. When members and support staff are being transferred out, Committees tend to lose vital facts, knowledge and skills which could serve as a "tool" to make strong follow-ups and to continuously pursue compliance to its resolutions. A member of the PAC stated that, consequent upon recent elections in 2016 and the subsequent change in government, more than five experienced committee members had to be replaced with new inexperienced ones (Pimpong, 2018).

Follow-up Process

Ideal PAC puts in place, guidelines to help them see that committees recommendations were implemented (Pelizzo, 2011). The guidelines place expectations for SAIs to follow up on the findings and recommendations contained in the SAI's reports and issue reports on the output. ISSAIs 10, 12 and 20 specifically refer to follow-up. According to Gee (2002), devising effective follow-up mechanisms is crucial to PAC to see that audit findings and recommendations were implemented to enhance government expenditures and administration in general. Through the reports of Auditor-Generals to the lawmakers, PAC ensures that lack of adherence is shown to the public so that corrective action can be taken, public confidence increases and fundamental values of the society are maintained (Kusi, 2004).

Theoretical Framework

Agency Theory

According to Ingram (2009), in an agency relationship, someone called an agent takes decisions and act in place of someone else, called the principal. The agency theory seeks to find and solve problems from dealings between a principal and agent. Agency roles are seen in financial management because of the future of such a sector. Agents are expected to act towards meeting the principal's goals, which is the primary function of such a relationship. The principal should be aware of their agents' decisions and actions and the agents are always clear and guided by their principal's priorities. For instance, in a shareholder executive relationship, an executive may wish to take over strong companies to secure market share with a price reduction but this idea may be considered very risky by most shareholders. Several agency relationships are fiduciary in financial matters. This implies that agents are legally required to work on behalf of their principals. It is believed that fiduciary roles formalize agency agreements and provide better protection to the principals. For example, a financial planner that has power of attorney for a client can carry out financial transactions for the individual without his permission. Here, the financial planner is legally required to make decisions solely for the good of his client, rather than doing things with his client's money for his gains. The work is anchored on the agency theory.

Empirical Review

Nwokeji and Kaneme (2019) studied the effect of public accounts committee on the accountability of Nigerian public financial management. Specifically, investigated the effect of PAC functionality, independence, report and composition of accountability of financial management in the Nigerian public sector. They used descriptive statistics, multiple regression with binary logit for analysis. They found out that, 'Independence and composition have a positive effect on accountability on public sector financial management while PAC report has an effect on accountability but not significant'.

Oyadonghan and Ogun (2017) assessed the duties of internal auditors in preventing and detecting financial misappropriation in the public sector and also evaluated the legal responsibilities of internal auditors in the public sector with a motive to establish the relationship between the occurrence of financial misappropriation and the duties of internal auditors to detect, prevent and report such acts. They used the Econometric view and Mann Witney test for their analysis. They got 46 responses out of 50 questionnaires shared. They found out that, internal audit has a responsibility to detect and prevent financial misappropriation in the public sector and that the internal auditors in the state civil service are not independent which affects their freedom to report such acts of financial misappropriation to the legislative arm for proper action.

Mbombo and Nweze (2016) worked on the perception of stakeholders on the effectiveness of Audit Committees in Nigeria. They evaluated the effectiveness of the audit committee concerning reporting function and determining factors that affect the effectiveness of the audit committee. They used mean to analyse the questionnaires. The responses indicated generally that, the role of audit committees in financial reporting is fairly performed in the Nigerian banks concerning their functions over financial reporting processes and that audit committee members in Nigerian banks have not been properly trained.

Uguru (2016) studied on the instrument of control and accountability of Ebonyi State Local Government Councils of Nigeria. He used the Binary Logit Regression Technique in his analysis and used 374 senior staff of 13 LGA in Ebonyi State as

his sample size. The study found that 'there is a strong effect of the instrument of control on public accountability in Ebonyi State Local Government Councils'.
Maimako (2016) studied on the mandate of financial control institutions in enhancing financial accountability in the public sector in Plateau State and specifically studied on importance of public budget as a tool of legislative control over government funds in Plateau State, he determined whether the reliance on the Auditor General on the monetary data supplied by the executive enhances his audit work and evaluated the quality of legislative oversight function on State Audit performance. He used Chi-square and percentage in his analysis and used 160 treasury staff and office of the State Auditor-General as his sample size. He found out that, 'The public budget is not significant as an instrument of legislative control over public finance in Plateau State; that the quality of legislative financial oversight has a significant effect on the State Auditor General and qualifications of State treasury staff is independent on the number of financial records kept by them. Also that the reliance of the Auditor General on the financial statements prepared by the executive arm of government does not significantly influence his performance.

Ayapere and Orueze (2015) studied the functional impact of PAC on public accountability over financial crimes in Nigeria. They used Chi-square in their analysis and found out, 'That the function of PAC to a reasonable level has an effect on public accountability over financial crimes in Nigeria and that there is a significant impact of PAC function on transparency and accountability in Nigeria; so also, that there is a great significance of PAC function for public accountability over financial crimes in Nigeria'.
Sharif (2015) researched on the effectiveness of PAC in enhancing accountability and transparency in public sector organizations in Zanzibar and concluded that; there is little contribution from PAC in ensuring accountability and transparency in the public sector, government auditors have not fully covered the audit mandate, there is a delay in submission of annual audit reports due to accountability of budget cycle and PAC challenge is lack of skills that can cover all aspects of accountability and transparency in public sector organizations.

Akinbuli (2013) studied an assessment of accountability in the public sector of Nigeria. He worked on these specific objectives: To determine the duty of trust placed on the public officers in Nigeria; to examine the extent to which these officers render their stewardship to the citizenry and to examine the legal framework for the performance, policies and monitoring of public accountability in Nigeria. He used Chi-square for his hypothesis analysis and found out that: 'That public accountability in Nigeria is still poor; that budget performance is not published at year-end for public comments thereby inhibiting public accountability and that MDAs do not prepare financial statements and are not audited as and when due'.

Appah and Bariwani (2012) examined the effectiveness of auditing of local government financial reports in Bayelsa State, Nigeria with specific objectives; to provide information useful to investors and creditors for predicting, comparing and evaluating potential cashflows. To provide users with information for comparing and evaluating enterprise earning power. To supply information useful in judging management ability. They used descriptive statistics and spearman's correlation coefficient in their analysis of data from 246 respondents and found out that; auditing of local government accounts ensures the proper accountability and stewardship reporting of local government officials. Secondly, it shows administrative interference and influence of true and fair view of auditing of local government account in Bayelsa state. Lastly, it shows inadequate qualified manpower and audit of local government accounts in Bayelsa state of the Office of Comptroller and Auditor-General of Bangladesh in ensuring accountability of auditee organizations and found out that due to lack of follow-up in system, the efforts resulted in less successful output.

Methodology

The researcher adopted a survey research design for this study This design enabled the researcher to gather opinions on the Public Accounts Committee effectiveness as it affects the quality of Auditor-General's reports in Anambra State.

Table 1: Population of the Study

Description	The number of staff
Auditors from 11 registered audit firms with the State Auditor-General	33
Auditors with Office of the Local Government Auditor-General	54
Auditors with the Office of the State Auditor-General	123
Legislators that were Public Accounts Committee members	10
Total Population of the study	220

Source: Author's Compilation

Sample Size

The Taro Yamane sample size determination formula was used to calculate the sample as shown below:

$$n = N/ (1+N (e)^2)$$

Where:
n = signifies the sample size
N = signifies the population under study
e = signifies significant level of error
n = 220/ (1+220(0.05)2)

n = 220/ (1+ 220(0.0025)
n = 220/ (1+0.555)
n = 220/1.55
n = 141.93
n= 141

The respondents were selected in line with the ratio of the population category which is 10:123:54:33 for Public Accounts Committee: State Auditors: Local Government Auditors: Consultant External Auditors. The sample distribution is therefore 6:79:34:21 making a total of 141 as the sample size. In the selection of the respondents, the researcher adopts a simple random sampling technique to select the respondents to give any member of the population equal chances of being selected.

Sources of Data

The data for the study were collected through the primary source of data which is a majorly 36-item questionnaire titled "Public Accounts Committee Effectiveness on the Quality of Auditor-General's Reports in Anambra State (PACOEQAGR)" The questionnaire was structured on a five-point Likert scale close-ended format of Strongly Agree (SA) 5 point, Agree (A) 4 point, Undecided (U) 3 point, Disagree (DA) 2 points, and Strongly disagree (SD) 1 point. The instrument was then administered by the researcher to the auditors. The data collected was analyzed using mean statistics while a t-test was adopted in testing the hypotheses that guided this study. The instrument was validated by two lecturers from the Department of Accountancy, Faculty of Management Science Chukwuemeka Odumegwu Ojukwu University, Igbariam on the face and content validation of the instrument before the collection data. The administration of the instrument was done by the researcher and one assistant trained for the purpose.

Methods of Data Analysis

The descriptive statistics and correlation matrix were employed alongside pooled Ordinary Least Square (OLS) regression. However, to examine the impact relationships between the dependent variables (reliability, relevance, timeliness, verifiability and objectivity of Auditor-General's reports) and independent variables (qualifications of Public Accounts Committee members, Constructive partisanship, tenure of office, public accounts committee's reports and follow-up process) and to also test the formulated hypotheses, the researcher used an Ordinary Least Square (OLS) regression analysis to test the hypotheses.

Decision Rule:

The mean statistics was accepted at a point above 3.0 above the agreed region, while point below 3.0 was rejected, the decision rule will be as follows:
t-calculated > t-critical value (0.10) Accept the null hypothesis
t-calculated < t-critical value (0.10) Reject the null hypothesis

Model Specification

The following model approach was employed to analyse the objectives of this study:
Audit Quality (Y) = F(X_1, X_2, X_3, X_4, X_5)
Model:

QAGR= a+B_1 QUPAC+B_2COPAC+B_3TENOF+B_4PACREPT +B_5FPROC + e
Where:

a	= Intercept
e	= Standard Error of the Estimate
B	= Beta Coefficient of the Independent Variable
QUPAC	= Qualifications of public accounts committee members (X_1)
COPAC	= Constructive partisanship(X_2)
TENOF	= Tenure of office (X_3)
PACREPT	= Public accounts committee reports(X_4)
FPROC	= Follow up process(X_5)
QAGR	= Quality of Auditor-General's Reports (i.e., Reliability; Relevance; Timeliness; Verifiability; Objectivity)

Data Analysis

Table 2: Descriptive statistics of the study variables

	QAGR	QUPAC	COPAR	TENOF	PACREPT	FPROC
Mean	3.484615	3.764615	3.069231	3.253846	3.080000	3.296923
Median	3.600000	3.800000	3.200000	3.200000	3.200000	3.400000
Maximum	4.600000	4.600000	4.400000	4.800000	4.400000	4.400000
Minimum	1.600000	2.400000	1.400000	1.400000	1.200000	1.600000
Std. Dev.	0.667224	0.506984	0.692243	0.665327	0.679991	0.648067
Skewness	-0.544739	-0.299215	-0.458156	-0.428387	-0.305270	-0.477808
Kurtosis	3.025884	2.405401	2.575485	3.172721	2.744423	2.628551
Jarque-Bera	6.433001	3.854855	5.524140	4.137758	2.372931	5.693873
Probability	0.040095	0.015522	0.063161	0.026327	0.305299	0.058022
Sum	453.0000	489.4000	399.0000	423.0000	400.4000	428.6000
Sum Sq. Dev.	57.42923	33.15723	61.81692	57.10308	59.64800	54.17877
Observations	131	131	131	131	131	131

Source: Researcher's computation (2020)

Table 2 shows the mean (average) for each of the variables, their maximum values, minimum values, and standard deviation and Jarque-Bera (JB) statistics (normality test). The result provides some insight into the nature of the selected variables used in this study. Firstly, the table reveals that 3.48 of our respondents, of our respondents, are fully aware of what Auditor general report and Public Accounts Committee (PAC) is in Anambra State. This revelation is encouraging and completely overwhelming as it helps to increase the researcher's confidence level that our data is reliable as a high number of respondents is not ignorant of PAC in Anambra. Also, the table shows that the average value of qualification of public accounts committee members (QUPAC) stood at 3.76 which is relatively above the average value of 2.5. This implies that a higher number of our respondents believed that QUPAC members affect the quality of the Auditor General's report in Anambra state. This justifies the need for this study as we expect that the Public Accounts Committee (PAC) dominated by highly qualified members will positively influence the quality of the Auditor general's report of that particular state. Similarly, the table also shows large differences between the maximum and minimum values of Tenure of office of PAC members (TENOF) shows that most of our respondents believed that long tenure will effectively affect the quality of auditor general's report than tenure of approximately short duration. This further justifies the need for this study as we assume that the auditor general's report quality will be affected negatively by the lack of tenure of PAC members in the office in Anambra State. In addition, the table shows an average value of 3.07, which is an indication that approximately 60% of our respondents thought that the level of constructive partisanship of PAC members (COPAR) affect the quality of the Auditor general's report in Anambra State. This result is quite encouraging as it is above average and thus, justifies the need for this study as we expect that the level of constructive partisanship involvement of PAC members will influence the quality of auditor general reports in Anambra state. Similarly, the table shows an average value of 3.08, which is an indication that about 60% of our respondents believed that the PAC committee report (PACREPT) affects the quality of the Auditor general's report in Anambra State. This result is seen to be above average and thus, justifies the need for this study as we expect that the PAC committee report will influence the quality of auditor general reports in Anambra state. Lastly, in Table 2, the Jarque-Bera (JB) test for normality or the existence of outlier or extreme values among the variables shows that most of our variables are normally distributed at 5% levels of significance, except PACREPT and as such, the result could be generalized. This also implies that a least square regression can be used to estimate the pooled regression models. The Kurtosis and skewness of our variables also shows that the variables used in this study were normally distributed

Analysis of Research Questions

In this section, the data related to the research questions formulated in our questionnaire to measure our research objective formulated were presented and analyzed in the table below.

Table 3: Qualifications of PAC members in Anambra State

S/N	QUESTIONS	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Are there established laws and guidelines for appointment of PAC members.	15	66	17	26	7	131	3.4274	Accept
2	Are PAC members at home with civil service rules, financial regulations and other public documents to point out non-compliance were noticeable.	27	61	6	24	13	131	3.4961	Accept
3	Do Anambra PAC needs to be more competent, effective and efficient in order to achieve their goals.	87	38	4	Nil	1	130	4.5801	Accept
4	Does lack of knowledge and skills from PAC members contribute to abuse of public resources in Anambra State.	59	52	6	8	6	131	4.1450	Accept
5	Do PAC members attend requisite trainings and workshops to boost their capacity to deliver appropriately on their job in Anambra State.	23	46	16	23	23	131	3.1755	Accept
	Total	211	263	49	81	50	654		
	Percentage	32%	41%	7%	12%	8%	100%		

Source: Researchers computation (2020)

The table above shows that under Qualification of PAC Members, the overall opinion of our respondents shows that 211(32%) of our respondents strongly agree that Qualification of PAC Members Affects the Quality of Auditor General's Report in Anambra State, 263(41%) agreed, 49(7%) were undecided, 81(12%) disagreed while 50(8%) strongly disagreed.

Table 4: Constructive partisanship among PAC members in Anambra State

S/N	QUESTIONS	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Are PAC members partisan, nepotic or selective in their oversight functions in our MDA's.	10	36	11	43	31	131	2.6259	Reject
2	Is there political will to halt continued abuse of public resources by PAC members in Anambra State	26	54	5	31	14	131	3.3358	Accept
3	Does the working environment for PAC members demonstrates effective leadership, enthusiastic acceptance of responsibility and high level of motivation	13	55	15	29	16	128	3.0839	Accept
4	Is there constructive partisan working relationship amongst the PAC members in Anambra State	4	46	12	51	16	129	2.7328	Reject
5	Is the executive selective in enforcing the laws on officers found culpable of embezzling or misappropriating government funds	26	57	14	32	1	130	3.5496	Accept
	Total	79	248	57	186	78	649		
	Percentage	12%	38%	9%	29%	12%	100%		

Source: Researchers computation (2020)

The table above shows that under Constructive Partisanship of PAC Members, the overall opinion of our respondents shows that 79(12%) of our respondents strongly agree that Constructive Partisanship of PAC Members Affects the Quality of Auditor General's Report In Anambra State, 248(38%) agreed, 57(9%) were undecided, 186(29%) disagreed while 78(12%) strongly disagreed.

Table 5: Tenure of office of PAC members in Anambra State

S/N	QUESTIONS	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Does lack in tenure of office by PAC members discourages checks and balances in Anambra State.	15	47	4	45	20	131	2.9389	Reject
2	Does lack of continuity of office by PAC members delay sanctions and penalties to erred officials.	32	71	3	15	19	131	3.83206	Accept
3	Does lack of continuity of office by PAC members leads to poor administration, waste, abuse, arbitrary behaviours or unconstitutional conduct.	28	50	9	32	11	130	3.3740	Accept
4	Do lack of continuity of office by PAC members leads to poor consideration of the content of public petitions in the course of their oversight functions in Anambra State	10	34	12	44	31	131	2.60305	Reject
5	Does constant changing of PAC members and lack of experienced PAC members with good understanding of government processes affect their work.	44	47	9	13	15	128	3.63358	Accept
	Total	129	249	37	149	96	651		
	Percentage	20%	38%	5%	23%	14%	100%		

Source: Researchers computation (2020)

The table above shows that under Tenure Of Office Of PAC Members In Anambra State, the overall opinion of our respondents shows that 129(20%) of our respondents strongly agree that Qualification Of PAC Members Affects The Quality Of Auditor General's Report In Anambra State, 249(38%) agreed, 37(5%) were undecided, 149(23%) disagreed while 96(14%) strongly disagreed.

Table 6: PAC reports in Anambra State

S/N	QUESTIONS	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Does PAC reports satisfy public accountability criteria through the adequacy of its content in Anambra State.	12	34	9	33	33	131	2.4580	Reject
2	Are there annual parliamentary debate on the work of PAC in Anambra State House of Assembly.	15	58	7	32	20	131	3.14503	Accept
3	Are there major changes noted after previous years oversight functions.	23	57	29	14	6	128	3.54198	Accept
4	Are the State Governor's actions on PAC recommendations beyond PAC such that they can't oversee the executive on financial matters through their reports.	12	39	25	37	19	131	2.93129	Reject
5	Do the executive arm of government dispose the PAC reports and amounts involved without consideration.	26	54	7	26	18	130	3.33587	Accept
	Total	88	242	77	142	96	651		
	Percentage	14%	37%	12%	22%	15%	100%		

Source: Researchers computation (2020)

The table above shows that under Public Accounts Committee Reports in Anambra State, the overall opinion of our respondents shows that 88(14%) of our respondents strongly agree Public Accounts Committee Reports in Anambra State affects the Quality Of Auditor General's Report In Anambra State, 242(37%) agreed, 77(12%) were undecided , 142(22%) disagreed while 96(15%) strongly disagreed.

Table 7: Follow-up Process by PAC members in Anambra State

S/N	QUESTIONS	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Have there been punishments continually meted to deter would be offenders and abusers of public resources.	18	68	6	33	6	131	3.45038	Accept
2	Are issues of arrest, prosecution, recoveries, sanctions, naming and shaming offenders beyond PAC members in Anambra State.	8	52	2	37	32	131	2.74809	Reject
3	Has PAC follow-up process led to financial discipline and prudent management of resources in Anambra State.	59	42	4	15	11	131	3.9389	Accept
4	Do PAC organize workshop on audit queries, responses and resolutions as a follow-up mechanisms to guarantee financial accountability.	11	23	26	48	22	130	2.6183	Reject
5	Do PAC respond timely to Auditor-General's recommendations by embarking on timely oversight functions to MDA's to forestall impunity.	43	49	11	18	9	130	3.73282	Accept
	Total	**139**	**234**	**49**	**151**	**80**	**653**		
	Percentage	**21%**	**36**	**8%**	**23%**	**12%**	**100%**		

Source: Researchers computation (2020)

The table above shows that under Follow-up Process by PAC Members in Anambra State, the overall opinion of our respondents shows that 139(21%) of our respondents strongly agree that Follow-up Process by PAC Members in Anambra State affects the quality of Auditor General's Report in Anambra state, 234(36%) agreed, 49(8%) were undecided, 151(23%) disagreed while 80(12%) strongly disagreed.

Table 8: Quality of Auditor-General's Reports in Anambra State

S/N	Item Description	SA(5)	A(4)	U(3)	D(2)	SD(1)	Total	Mean	Decision
1	Are there improved performance by Auditors to produce reliable reports after pre issuance reviews on their reports by the Auditor-General.	26	51	14	27	12	130	3.374045	Accept
2	Has implementation of Auditor-General's reports led to reduction in public corruption and criminal acts in Anambra State	26	47	9	20	29	131	3.160305	Accept
3	Timeliness of Auditor-General's reports led to prevention of waste of public funds as offenders were caught before they moved on, die, retire or transferred.	45	49	9	10	18	131	3.709923	Accept
4	Were on the site independent verification done on periodic basis through physical inspection by reviewing risky areas	8	33	36	42	10	129	2.85496	Reject
5	Auditors advocating personal or auditee's interest led auditors to compromising professional judgments and not being objective.	82	32	3	7	7	131	4.335877	Accept
	Total	187	212	71	106	76	652		
	Percentage	29%	32%	11%	16%	12%	100%		

Source: Researchers computation (2020)

The table above shows that under Quality of Auditor-General's Reports in Anambra State, the overall opinion of our respondents shows that 187(29%) of our respondents strongly agree that Public Accounts Committee effectiveness do affect the Quality of Auditor General's Report in Anambra State, 212(32.%) agreed, 71(11%) were undecided, 106(16%) disagreed while 76(12%) strongly disagreed.

Correlation Analysis

To examine the association among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in Table 9

Table 9: Pearson correlation matrix of the explanatory variables and dependent variable

	QAGR	QUPAC	COPAR	TENOF	PACREPT	FPROC
QAGR	1.00					
QUPAC	0.01	1.00				
COPAR	0.58	0.08	1.00			
TENOF	0.18	0.14	0. 03	1.00		
PACREPT	0.06	0.11	0.08	0.00	1.00	
FPROC	0.14	0.13	0.15	0.03	0.02	1.00

Source: Researcher's computation (2020)

The use of a correlation matrix in most regression analyses is to check for multi-collinearity and to explore the association between the explanatory variables and the dependent variable. Table 9 focuses on the correlation between QAGR and the independent variables which include, QAPAC, COPAR, TENOF, PACREPT and FPROC. The findings from the correlation matrix table show that all our explanatory variables were positively and moderately correlated with our dependent variable, (QAGR, QUPAC=0.01: QAGR, COPAR=0.58; QAGR, TENOF =0.18; QAGR, PACREPT = 0.06 and QAGR, FPROC = 0.14). This implies that the variables are not in any way related or associated with one another. However, no two explanatory variables are perfectly correlated, which would have resulted in the dropping of one of such explanatory variable. Therefore, in checking for multi-colinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is the absence of a multi-colinearity problem in our model. Multi-colinearity between explanatory variables may result in wrong signs or implausible magnitudes in the estimated model coefficient, and the bias of the standard errors of the coefficients.

Test of Hypotheses

To examine the impact of the relationship between the dependent variables (QAGR) and our independent variables and to also test our formulated hypotheses, we used an Ordinary Least Square (OLS) regression analysis. The OLS results are presented and discussed below in table 10:

Table 10: Quality of Auditor General's Report (QAGR) Model

Dependent Variable: QOAGR
Method: Least Squares
Date: 03/30/20 Time: 21:50
Sample: 1 131
Included observations: 131

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.409850	0.640837	5.320935	0.0000
QUPAC	0.012387	0.118473	0.104554	0.0919
COPAR	0.019770	0.086005	0.229874	0.8186
TENOF	0.176862	0.088581	1.996623	0.0481
PACREPT	0.063812	0.086614	0.736741	0.4627
FPROC	0.141876	0.092084	1.540736	0.0129

R-squared	0.205227	Mean dependent var	3.484615
Adjusted R-squared	0.107131	S.D. dependent var	0.667224
S.E. of regression	0.661484	Akaike info criterion	2.056393
Sum squared resid	54.25759	Schwarz criterion	2.188741
Log likelihood	-127.6656	Hannan-Quinn criter.	2.110170
F-statistic	1.449691	Durbin-Watson stat	1.630521
Prob(F-statistic)	0.211227		

Source: Researchers computation (2020)

In testing for the cause-effect relationship between the dependent and independent variables in QAGR model, we reported the OLS pooled regression results in Table 10. In table 10, we observed that from the QAGR result, the R-squared and adjusted R-squared values were 0.205227 and 0.107131 respectively. This indicates that all the independent variables jointly explain about 11% of the systematic variations in Quality of Auditor General's Report in Anambra State. Using Durbin Watson (DW) statistics which we obtained from our regression result in table 10, it is observed that DW statistic is 1.630521 which is approximately 2, agreeing with the Durbin Watson rule of thumb. Showing that our data is free from autocorrelation problems and as such fit for the regression result to be interpreted and the result relied on. Akika Info Criterion and Schwarz Criterion which are 2.056393 and 2.188741 respectively further strengthen the fitness of our regression result for reliability as they confirm the goodness of fit of the model specified.

Discussion of Findings

In addition to the above, the specific findings from each explanatory variable are provided as follows:

1. **Qualification of Public Accounts Committee Members (QUPAC) and Quality of Auditor General's Report(QAGR),** based on the t-statistics value of 0.104554 and p-value of 0.09 was found to have a positive influence on the quality of auditor general's report and this influence is statistically significant at 10% since its p-value is within 0.10. This, therefore, suggests that we should reject our null hypothesis one (Ho_1) which states that Qualifications of Public Accounts Committee members do not have any significant effect on the quality of Auditor General's reports in Anambra State. This means that on the basis of the use of qualification of PAC members to determine the quality of auditor general's report, PAC committee members dominated with members with high qualification levels, and are knowledgeable as well as constantly being exposed to workshop training performs better than PAC committee dominated with low level qualified members. In other words, States that want to improve the quality of their auditor general report should consider having PAC members with higher degree qualifications as well as knowledgeable members.

2. **Constructive Partisanship of Public Accounts Committee Members(COPAR) and Quality of Auditor General's Report(QAGR),** based on the t-statistics value of 0.229874 and p-value of 0.82 was found to have a positive influence on the quality of auditor general's report but this influence is not statistically significant since its p-value is more than 0.10. This therefore suggests that we should accept our null hypothesis two (Ho_2) which states that Constructive partisanship does not have any significant effect on the quality of the Auditor General's reports in Anambra State. This means that on the basis of the use of constructive partisanship level of PAC members to determine the quality of auditor general's report should not hold as this was found to statistically not significant in influencing the quality of auditor general's report in Anambra State.

3. **Tenure of Office of Public Accounts Committee Members(TENOF) and Quality of Auditor General's Report(QAGR),** based on the t-statistics value of 1.996623 and p-value of 0.05 was found to have a positive influence on the quality of auditor general's report and this influence is statistically significant at 5% since its p-value is within 0.05. This, therefore, suggests that we should reject our null hypothesis three (Ho_3) which states that tenure of office of PAC members does not have any significant effect on the quality of Auditor General's reports in Anambra State. This implies that based on the use of tenure of office of PAC members to determine the quality of auditor general's report, the result shows that PAC committee members dominated by members that have served longer tenure, performs better than PAC committee dominated by those that are serving short term tenure. This might be true because, by implication, the study shows that for PAC members to influence the quality of auditor general's report,

the committee dominated by members who are there for a long time will perform better than members who are there for a very short period, as they must have acquired enough experience on the job, fully understand the rules and regulation as well as internalize their functions as PAC members, due to their long period of service in the committee. In other words, States like Anambra State where there is a lack of tenure of office for PAC members if they want to improve the quality of their auditor general's report should appoint PAC members that are experienced as a result of their serving for a long period of time in such committee.

4. **Public Accounts Committee Members Report (PACREPT) and Quality of Auditor General's Report(QAGR),** based on the t-statistics value of 0.736741 and p-value of 0.46 was found to have a positive influence on the quality of auditor general's report but this influence is not statistically significant since its p-value is more than 0.10. This, therefore, suggests that we should accept our null hypothesis four (Ho_4) which states that the public accounts committee's reports do not have any significant effect on the quality of the Auditor General's reports in Anambra State. This means that based on the use of reports generated by the PAC committee to determine the quality of the auditor general's report should not hold as this was found to be statistically not significant in influencing the quality of auditor general's report in Anambra State. Hence States that want to use the quality of their PAC report to improve their auditor general's report should not do so as this was found not to be significant in influencing it.
5. **Follow-up Process of Public Accounts Committee Members(FPROC) and Quality of Auditor General's Report(QAGR),** based on the t-statistics value of 1.540736 and p-value of 0.01 was found to have a positive influence on the quality of auditor general's report and this influence is statistically significant at 5% since its p-value is within 0.05. This, therefore, suggests that we should reject our null hypothesis five (Ho_5) which states that the follow-up process does not have any significant effect on the quality of the Auditor General's reports in Anambra State. This implies that on the basis of the use of follow-up process of office of PAC members to determine the quality of auditor general's report, the result shows that good follow up process of PAC committee members significantly influences the quality of auditor general's report. This might be true because by implication, it means that for PAC committee with a good follow – up process after issuing their reports influences auditor general's report qualitatively as they serve as monitoring committee to auditor general of the State than PAC committee where there is no good follow-up process, thereby ensuring that quality reports are issued by the Auditor General of the State. Therefore, States that want to improve their auditor general's report through the establishment of a good PAC follow-up process should do so as this was found to have a significant effect on the quality of the auditor general's report.

Conclusion and Recommendations

The study, therefore, concludes that there is a nexus between public accounts committee effectiveness and the quality of auditor general's reports in Anambra State. The study specifically found support for the qualifications of Public Accounts Committee members but rejected the effect of constructive partisanship on the quality of Auditor General's reports in Anambra State. The effect of tenure of office of PAC members and follow-up process were positive and significant; while, the effect of public accounts committee's reports on the quality of Auditor General's reports in Anambra State. Based on the findings, the researcher, therefore, recommended that;

1. The States that want to improve the quality of their auditor general report should consider having PAC members dominated with highly qualified members with a degree from related disciplines than those ones with minimum qualification as this was found to be statistically significant in influencing the quality of auditor general report in Anambra State. This can be achieved by such States reviewing their minimum qualification of PAC members to be at least higher degree holders than first school leaving certificate or West African Examination Certificate (WAEC) for better performance.
2. Also, States that are considering the use of constructive partisanship level of PAC members and the use of PAC report, to improve the quality of their auditor general's report should not do so as these were found to not to be statistically significant in influencing the quality of auditor general's report in Anambra State.
3. The study also recommends that States that want to improve the quality of their auditor general's report should consider putting tenure duration for their PAC members who are experienced to ensure continuity of their findings and recommendations; as lack of tenure of PAC members can affect the implementation of findings and recommendations made. Such States should ensure that PAC members are dominated by members who are experienced as a result of their serving for a long period of time in such committee as the tenure of office of PAC members was found to be statistically significant in improving the quality of auditor general's report.
4. The States that want to improve the quality of their auditor general report should consider having PAC members that can work and deliver their PAC reports to the Speaker and their State Governor's respectively annually than being dominated with unpatriotic and unaccountable members as this was found **w**hen tested, to have a positive but statistically insignificant effect on the quality of auditor general's report in Anambra State.
5. Finally, a good follow-up process of the PAC committee was found to statistically improve the auditor general's report in Anambra State. Therefore, States that want to achieve a quality auditor general's report should consider establishing a good follow-up process for their PAC committee to enable them

to hold the executives accountable by implementing the content of the follow-up process as approved by the Governor to sanction erring officers for an effective result.

References

Abadom, A.O. (2016). Audit stakeholders forum – Auditor General's keynote address on strengthening oversight and audit functions in Anambra State.

Ahmed, .I. & Wakili, I. (2012). Nigeria Auditor General's should take charge in auditing public accounts. Daily Trust.

Akerlof, G. A. (1970). The market for lemons. Quality uncertainty and the market mechanism. *Quarterly Journal Of Economics, 84* (3).

Alexander, D., Britton A., & Jorissen, A. (2003), International financial reporting and analysis. London.

Al-sraheen., Dea'a, A., Omar, N. (2014). The relationship between corporate governance mechanisms and company attributes and accounting conservatism of Jordanian listed companies. University of Utara, Malaysia.

Appah, E., & Bariwani, B. (2012). In their examination of the effectiveness of auditing of local government financial reports in Bayelsa State, Nigeria: *Internal Journal Of Innovative Research And Development, 5*(7).

Aruwa, S.A.S. (2002). Empirical investigation of the information content of published government financial statements (MSC Accounting And Finance thesis, ABU, Zaria).

Audit accountability foundation in conjunction with Canadian PAC advisory group. (2006). Attributes of PAC effectiveness and its enablers.

Augsustine, E. A. (2012). Accountability and financial reporting in Nigeria public financial management : An empirical exploration. Knowledge review 26(3).

Ayine, A. M.(2017). www.oaugf.ng.

Baberton, C. (2000). *Transparency and participation in budget process in South Africa*. A country's Report IDASA : Cape Town.

Bahtiri, L. (2015). Issue of non addressed recommendations from Auditor General in Kosovo. ritscholarworks@rit.edu.

Bill, W., Vinody, S., & Frederick, S. (2002). Scrutinizing public expenditures: The role of public accounts committee *International Journal on Governmental Financial Management,* 13(2), 2018.

Christensen, B. E. (2016). Understanding audit quality: insights from Audit Professionals and Investors. *Contemporary Accounting Research*, 33 (4), 1648–1684.

Chukwunedu, O., & Okafor, G. O. (2011). The Challenges of public sector audit as an effective accountability tool in PPP arrangements in Nigeria. Government & Nonprofit Accounting eJournal. DOI:10.21.39/ssm.1970070.

Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities. (2013).[Online]Available:http://www.ifac.org/sites/default/files/publications/files/Public%20Sector%20Conceptual%20Framework%20Ch%20%2014%20Jan%20%2011%202013%20FINAL.pdf (29 May 2015).

David, I. (2009). Seven pillars institute. Agency theory resources MIT Sloan school of management, Robbert Gibbons. Agency Theory.

Diamond, D. & Verrecchia, R. (1991). Disclosure, liquidity and the cost of capital. *Journal of Finance, 46* (4), 1325–1359.

Ehigiamusoe, Uyi, K., & Umar, A. (2013). Legislative oversight and budget performance in Nigeria: Issues and policy options. *International Journal Of Innovation And Economic Development*, 3(2), 7-17.

Ellen, M. C. (2013). Communicating the audit findings, PAC recommendations and treasury minute . A case study of outreach by the Office of the Auditor General. University of Zambia.

Erskine, M. (1983). Best practices of public accounts committees. Assessed from http: //www.international budget.org/wp-content/uploads/Best-practices of Public Accounts Committee.pdf

Framework for assessing public financial management, PEFA Secretariat, Washington,D.C., pp 83, https://pefa.org/sites/default/files/PEFA%20Framework_English.pdf

Francis, J. R. (2004). What do we know about audit quality? British Accounting Review, *36*(4), 345 – 368

Gary, T. J. (1992). Financial reporting in Apostolou, G., & Crumbley, D. L. (Eds .). Handbook on governmental accounting and finance. New York: Wiley & Sons, Inc.

Ghana Anti Corruption Coalition. (2014). Implementation of Public Accounts Committee recommendations on Auditor General's reports . Info@ Ghana anti corruption .org

Gray, G.L., Turner, J. L., Coram, P.J., & Mock, T. J. (2011). Perceptions and misperceptions regarding the unqualified auditor's report by financial statement preparers, users, and auditors. *Accounting Horizons*, *25*(4), 659-684.

Hansard, (2013). Official reports - parliamentary debates. Tuesday 12thNovember 2013, 89(4).

Haque, M. S. (1994). The emerging challenges to bureaucratic accountability. In Parazmad, A.C (Ed.), Handbook of bureaucracy. New York. Marcel Dekker Inc.., 265-285.

Hedger, E., & Blick, A. (2008). Enhancing accountability for the use of public sector resources. How to improve the effectiveness of Public Accounts Committees, London. Werseas Development Institute.

Hoag, M., Myring, M., & Schroeder, J. (2017). Has Sarbanes-Oxley standardized audit quality? *American Journal Of Business*, *32*(1), 2-23.

Horgan, A., Brieier, B., Hollyman, G., & Chambers, R .F. (2012). The Role of Auditing in Public Sector Governance, 2nd edition.

INTOSAI. (2011). Principles of transparency and accountability. Retrieved from www.issai.org

Oyadonghan, J. K., & Ogoun, S. (2017), Financial misappropriation in the Nigerian public sector. A determination of the role of the internal auditor. *International Journal Of Innovation And Economic Development,* 3(2), 7-17.

Kaufman, O. (2005). Myths and realities of governance and corruption . World bank Governance Programme, Washington DC.

Okpala, K. E. (2013), https: //www. researchgate.net/publication/2403006. *International Journal Of Business Management* 8(13). Canada. Canadian Center of Science Education.

Khadja, B. S. (2015). Effectiveness of public accounts committee in enhancing accountability and transparency in public sector organizations. *Journal Of Accounting And Economics, 42* (3), 439–458.

Kusi, N. (2004). Improving performance and accountability on public sector. *IPFA journal*.

Legislative Assembly Public Accounts Committee (New South wales) https://www.parliament.nsw.gov.au/committees/listofcommittees/Pages/committee-details.aspx?pk=183

Lennox, C., & Park, C. (2006), The informativeness of earnings and management's issuance of earnings forecasts. *Journal Of Accounting And Economics*, *42* (3), 439–458.

Gee, M . C. (2002). The Overseers. Public Accounts Committees and Public Spending, London: Pluto Press.

Makhado, R. A., Masehela, K.L., & Mokhari R.W. (2012). Effectiveness and efficiency of Public Accounts Committee in enhancing oversight and accountability in public sector. SALSA Development seminar. Eastern Cape, South Africa.

Erskine, M. (1983). Treatise on the Law , Privileges, Proceedings and Usage of Parliament, 20th edition. London (Butterworth).

Mbobo, E.M., & Nweze, A. (2016). The perception of stakeholders on the effectiveness of audit committee in Nigeria. *Internal Journal Of Innovative Research And Development*, 5(7).

Quail, M. C., & Windehl, D. S. (1995). Communication models for the study of Mass Communication 2nd Edition. Longman.

Zakir, M, H. (2011). Effectiveness of the Office of the Comptroller and Auditor-General in ensuring accountability of auditee organizations. *European Journal Of Business And Management*, 4(21), 171-180.

Mildred, T .K. (2014). An investigation of the efficacy of the Office of the State Auditor General in ensuring public financial accountability in the Gauteng Province. MPA research 3(4) pdf.

News @ parliament.vic.gov.au (2018)

Ngome, M. M. (1998). The potential impact of Public Accounts Committee and Public Investment Committee on National accountability and transparency under the new changes on the standing order.

Nombambe, T. (2001). Auditing in the Public Sector: Role of the External Auditor. *IPFA Journal. 1*(4).

Nwokeji-Emeka, N.A., & Kaneme, C. J. (2019). Effects of Public Accounts Committee on accountability of Nigerian public financial management. *International Journal For Innovative Research In Multi-Disciplinary Field, (5).*

Nyor, T. (2013). Financial reporting ouality of Nigeria firms, Users' perception. *International Journal Of Business And Social Science*, 4(13).

O'Dea, J. (2015). Making a Public Accounts Committee Effective: A Chair's perspective from the State of New South Wales, Australia, printed in Making, government accountable The role of public accounts committees and national audit offices, 158-169

Ogbanu, C. (1991). Public Accounts Committee in Nigeria: How effective? Nigerian Accountants.

Okoh, L,. & Ohwoyibo, O. (2010). Public accountability, vehicle For Socio Economic Development Of Nigeria. *Internal Journal Of Investment And Finance*, 3(1&2), 145-149.

Okpala, K. E. (2012a). Fiscal accountability dilemma in Nigeria public sector: A warning model of economic retrogression. *Journal Of Finance And Accounting*, 3(6), 113-131.

Okpala, K. E. (2012b). Strategic budgeting system and management of public resources: A Nigeria review. *European Journal Of Business And Management*, 4(21), 171-180.

Omodero, C. O., & Okafor, M. C. (2016). Efficiency and accountability of public sector revenue and expenditure in Nigeria (1970-2014), *European Journal Of Accounting, Auditing And Finance Research*, 23-42, (www.eajournals.org)

Onochie. V.O. (2002). *Managing public enterprises for sustainability, privatisation and commercialisation options.* Institute of Chartered Accountant of Nigeria, Members Continuing Professional Education at Abuja.

Onuorah, A. C. & Appah, E. (2012). Accountability and public sector financial management in Nigeria. *Arabian Journal of Business and Management Review*.

Patrick, O. K. (2011), Tracking the Implementation of Public Accounts Committee on recommendations of Auditor-General's reports. By Ghana Anti-Corruption Coalition, 2014. Info @ Ghana anti-corruption.org

Pelizzo, R. (2011). Public Accounts Committees in the Commonwealth, oversight effectiveness and governance. Commonwealth and Comparative Politics, 49(4) 528-546.

Pere, A., & Osain, O. (2005). Functional impact of Public Accounts Committee on public accountability over financial crimes in Nigeria. *An International Peer Review Journal*, 8.

Pimpong, S. (2018). Public Accounts Committees: Do they really enhance public financial accountability in Africa. *International Journal on Governmental Financial Management, Nigerian Journal of Legislative Affairs,* 18(2).

Public Company Accounting Oversight Board (PCAOB). (2010). Release No. 2010-004. Evaluating Audit Results. Auditing Standards No.14 Washington, D.C: PCAOB

Riccardo, P., & Aminu, U. (2014). A Appraisal of Nigeria's PAC in global perspective. (2014 http: //works. Bepress,com/riccardo-pelizzo 86)

Salawu, R..O., & Agbeja, O. (2007), Auditing and accountability mechanism in the public sector. *The International Journal of Applied Economics and Finance*, 1(1), 45-54.

Salleh, K., & Jasmani, H. (2014). Audit Rotation and Audit Report. Empirical Evidence from Malaysian PLCs over the Period of Ten Years. Procedia - Social and Behavioral Sciences. Elsevier, 145, 40–50

Seddi, S. M. (2005). The role of financial control institutions in promoting financial accountability in public sector in Plateau State in democratic regimes. irepos.unijos-edu.ng>Jspui>bitstream.

Shahwan, Y. (2008). Qualitative characteristics of financial reporting: a historical perspective. *Journal of Applied Accounting Research,* 9(3), 192-202. doi.org/10.1108/09675420810919748, http://dx.doi.org/10.1108/09675420810919748 (1 August 2015).

Sylvester, F. A. (2013). An assessment of accountability in public sector of Nigeria. *Arabian Journal of Business and Management Review (Nigerian chapter),* 1(3)

TICI (2002). Transparency International Corruption Perception Index. Nigeria Rate at the Corruption Table. Retrieved from http://www.Nigeria law org/constitution.

Uguru, L. C. (2016). Instrument of Control and Accountability in Ebonyi State Local Government Councils, Nigeria. IOSR *Journal of Economics and Finance 7*(5), 21-27. www. Iosrjournals.org.

Uremadu, S.O. (2004). Financial Management, Concepts, Analysis and Applications, Precision Publishers Limited.

Verrecchia, R. (2001). Essays on disclosure. *Journal of Accounting and Economics, 32*, 1–3, 97–180.

Visser, C. B. & Erasmus, P.W. (2002). The Management of Public Finance. Oxford University Press: Cape town.

http://www.wikipaedia.com Concept of Public Accounts Committee.

Wilford, R. (2003). A Route to Stability. The Review of the Belfast Agreement. Democratic Dialogue. Available at http://cain.ulst.ac.uk/dd/papers/dd03agreview.pdf

Wisdom, K., Mohammad, S., & Keong, C. O. (2019). Auditor's tenure and financial reporting quality, evidence from a developing country. I*nternational Journal of Asian Social Science.*

Zaman, S. & Salem, P. (2003). The role of the public accounts committee in enhancing government accountability in Malaysia.

Davis, L. R., Soo, B., & Trompeter, G.(2003). *Audit tenure, auditor's independence and earnings management.* Working Paper, Boston College.

ENTERPRISE RISK MANAGEMENT AND BOARD EXPERTISE OF BANKS IN NIGERIA

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Abstract
This study investigated the association between Enterprise risk management and board expertise of banks in Nigeria, spanning from 2011 to 2020 financial years. The objective was to ascertain the degree of board expertise as an attribute of the board to determine efficiency in enterprise risk management. Ex post facto research design was used while panel data was collected through the means of content analysis from the financial statements of the seven banks chosen using judgemental sampling technique. Data generated was analysed using descriptive statistics, correlation and panel regression analysis. Fixed effect result was used in making inferences as specified by the outcome of Hausman test. The result indicates that board expertise has statistical significant effect on enterprise risk management at 5% level wherein it recommends that adequate board members with account and finance knowledge should be included in board appointments for better corporate risk administration.
Keyword: Enterprise Risk Management, Board Expertise, Risk Appetite

Introduction

Risk is an important component of business world. That's why risk-return rule in finance claims that the higher the risk the higher the expected return therein. As the world of business changes to complex business structure, advanced usage of technology, and aggressive competitive approach, the risk facing the enterprise becomes multifaceted (Odubuasi, Ofor & Okoye, 2020). Management of risks has been on the approach of silo based or piecemeal perspective, where risks were treated at departmental or sectional concerns. But it became obvious by the changes in nature of risks that the traditional silo based approach can no longer arrest the emerging risks of the complex business world and that led to the emergence of enterprise risk management (Moeller, 2011; Gordon, Loeb, & Tseng, 2009).

ERM is defined as the process of identifying and analyzing risk from an integrated, company-wide perspective (Lai & Samad, 2011), they continued that it is a structured and disciplined approach in aligning strategy, processes, people, technology and knowledge with a purpose of evaluating and managing the uncertainties facing the enterprise as it creates value for firms and shareholders. Seeing how deeply structured the ERM is, Altanashat, Dubai and Alhety (2019) maintained that ERM can no longer be a choiced decision, rather be a necessity for all firms to implement. Pertinently, the inclusion of enterprise risk management by international rating agencies as one the bases of assessment and rating stocks further increased the demand for implementation of ERM model to many organisations (Shoter, 2016). For example, in October 2005, Standard & Poor's announced that with the emergence of ERM, risk management will become a separate, major category of its analysis. Hence, ERM has widely been investigated by researchers as well as applied by practitioners to mitigate the risks of firms and improve their performances. Notably, ERM is a component of corporate governance targeted to ensure that interest of the shareholders and other stakeholders are protected in the hands of the management (Demidenko & McNutt, 2010).on that vein, Quon, Zenghal and Maingot (2012) opine that corporate governance and risk management are mutually related and dependent on each other. More so, the stability and improvement of performance of companies are highly dependent on the interplay of corporate governance and risk management (Sobel & Reding, 2014). It's also provided in literature that board of directors is an important component of corporate governance therefore, the attributes of board members especially, members expertise would determine its ability to monitor, control, disclose and provide risk information as well as counsel managers on the best practice to mitigate the risks of the firms (Carter, D'souza, Simkins and Simpson, 2010). However, it has been noted that most corporate failures were as a result of inefficient risk management alongside poor corporate governance. Thereto, it becomes imperative to ascertain if the expertise knowledge of board members would be instrumental to maximising firm performance by reducing its enormous surrounded risks. This study result will guide the appointment of board members to risk management committee having in mind the role that expertise members play in risk management function. It is in the light of these argument, that the researchers formulated below mention hypothesis to help their investigation:

Hypothesis testing

$H0_1$: Board of directors with account and finance expertise knowledge have no significant effect on enterprise risk management of banks in Nigeria.

$H0_2$: Board expertise knowledge have no significant effect on Enterprise risk management of banks in Nigeria.

The study is structured in a way that section one contains introduction, literature review is contained in section two, methodology is contained in section three, data analysis and interpretation comes next, while conclusion and recommendation come last.

Conceptual Reviews

Board expertise

Board of directors are appointed by the shareholders to represent and protect their interest from the management. And Nigerian code of corporate governance 2011 directs that the members appointed to the board shall be of great diversity to accommodate all necessary skills and experience for an effective function of the board. However, board expertise explains the skills and educational knowledge acquired by members of the board, which is a big plus for understanding and administrative competence of the board. This is why finance companies have separate risk management committee composed of directors with the required skills to monitor risks facing companies and ensure safeguards put in place to mitigate the risks are adequate (kallamu, 2015). Moreover, board expertise gained from experience and or background will give the members opportunity to have a better understanding of risk, monitor and manage risk policies efficiently for improved performance of the firm (Yatim, 2009).

However, special competence and skill acquired in field of accounting and finance will enforce and determine the strength of the board to deter, detect, mitigate, prosecute, manage and legislate risk policies of the enterprise. Pertinently, Raber (2003) emphasised the need for directors to acquire certain levels of financial literacy which shall enable them understand the operations of financial institutions and their peculiar risk factors that challenge them. Roberts, McNulty and Stiles (2005) toe the same line by saying that qualifications will enable board members understand their risk challenges and boast the operations to mitigate them. In addition, Akhtaruddin and Haron (2010) maintain that board expertise will reduce information asymmetry. However, board expertise is measured in literature as the number of board of directors with special (account and finance) knowledge to the total number of directors in the board. Hence this study will measure board expertise in the same way.

Enterprise Risk Management (ERM)

Enterprise risk management is a paradigm shift from the silo based risk management that handled risk in piecemeal, to a more comprehensive approach that looks at risk holistically and comprehensively across the whole enterprise. Lam (2000) defines enterprise risk management as an organised, reliable, and consistent process across the whole entity for identifying, evaluating, manipulating and reporting on opportunities and threats that impact on the attainment of organization’s objective. But the more generally accepted definition of ERM is the one given by The Committee for Sponsoring Organizations of the Trade way Commission as “A process, affected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives''. Hence, it is a risk management approach that spans through the entire organisation touching every personnel, every structure and harnessing the entire activities as well as rooted in the goal of the entity. Serious attention was drawn to ERM after the global effect of financial meltdown of 2008 (Coskun, 2013). Though numerous studies like (Al-Tamimi & Al-Mazrooei, 2007; Husaini & Saiful, 2017; Rao, 2018) have presented empirical evidence that ERM is vital for efficient operation of corporate governance.

However, ERM has been measured in diverse ways in literature. Rao (2018); Husaini and Saiful (2017) measured ERM as a dummy variable, where they use search words like Chief Risk Officer, Risk Management Committee, Enterprise Risk Management, Corporate Risk Management, Holistic Risk Management and Strategic Risk Management, whose presence denote existence or operation of enterprise risk management, they therein assign 1 if otherwise 0. Again, the other set of researchers used questionnaire constructed from the eight functions of ERM (Alawattegama, 2018; Altanashat, Dubai & Alhety, 2019). Finally, another group of researchers measured ERM by formulating ERM index on the bases of the four objectives of ERM (Ramlee & Ahmad, 2015; Gordon, Loeb & Tseng, 2009). In line with the above narratives, this study will measure ERM using dummy variable.

Board expertise and ERM

It's disclosed in literature that enterprise risk management is a corporate governance function performed by the board of directors (COSO, 2004; Sobel & Reding, 2004). It indicates that board that is composed of members, expertized in accounting or finance will have the capacity to detect and deter risk presented as a threat in any form to the enterprise and improve performance. Wherefore, kallamu (2015) say that committee expertise and competence in accounting is a robust instrument for managing risks of firms for improved performance. Hence, Yatim (2009) opine that directors with expertise knowledge will have more skills to monitor risk and enforce risk management policies and procedures because of their background and expositions. Raber (2003) found that directors with financial literacy get to understand the products and operations of financial institutions with the attendant risks that face them easily than directors without such expertise. Furthermore, Dionne and Triki (2005) discovered a significant relationship between the level of director's financial knowledge and their ability to manage a firm's risk. Hence, the study formulated its testable hypothesis as presented thus;

Empirical review

Ugwuanyi and Ibe (2012) investigated the relationship between enterprise risk management and financial performance of firms in brewery sector of Nigerian economy. The study employed survey research design where the population is six thousand (6,000) top management and middle management level staff of the three selected brewing firms including their factories and depots located in southern and northern parts of Nigeria. However, Taro Yamane formula was used to ascertain the sample size of three hundred and seventy five (75) respondents to whom questionnaires were given. They however collected three hundred and fifty questionnaires well filled and returned which represented 93% of total distributed. Descriptive and Z-test statistics were applied to analyse the collected data. They found out that enterprise Risk Management enhances the performance of firms in the Brewery industry in Nigeria.

Kallamu (2015) examined the relationships existing among the risk management variables and performance of firms listed on Malaysian stock exchange. Risk management committee is measured with committee composition, independent committee chair, expertise director, prior experience, executive membership and interlock of director on subcommittees. They sampled thirty seven (37) finance firms listed on the stock exchange and the study covered four years from 2007 to 2011. Secondary data were collected from annual reports of the firms which were analysed with descriptive statistics and regression analyses. The result indicates that independent directors affects firm value positively and affects firm performance negatively, independent committee chair affects firm performance positively, prior executive experience of directors enhances both firm performance and firm value. Again, presence of executive member in the risk management committee has a negative significant effect on firm performance.

Gordon, Loeb and Tseng (2009) conducted investigation on the contingency perspective of enterprise risk management and firm performance on the 112 firms listed on US stock exchange, a cross sectional study for 2005 fiscal year. They argued that enterprise risk management cannot enhance firm performance unless there is a match (congruency) between ERM and some firm specific factors that include environmental uncertainty, industry competition, firm size, firm complexity and board of directors monitoring. They extracted secondary data from the annual report of the firms that were confirmed to have implemented ERM through search for key words. The data were tested using descriptive statistics, correlation and regression analysis and found out that ERM cannot guarantee improved firm performance unless there is a congruency, adequate match of the five firm specific characteristics investigated.

Odubuasi, Ofor and Okoye (2020) examined the effect of risk management committee on the financial performance of banks listed on the Nigeria stock exchange, spanning from 2009 to 2018. They employed ex-post facto research design on the study and collected data from annual report of the banks sampled, analyses of data was done using descriptive statistics, correlation and regression estimation. Their results show that risk committee components relating to composition and size have no statistical effect on performance of banks in Nigeria, though found also that risk committee diversity has the potential to enhance banks performance statistically at 1% level.

Husaini and Saiful (2017) on the other hand assessed the potency of ERM and corporate governance in the mission to improve shareholders value. They sampled 110 firms listed on the Indonesian stock exchange from 2010 to 2013 financial years and collected secondary data from the annual report of the firms. Corporate governance was proxy with board size, independent board, audit committee independent, audit committee financial expertise, audit committee size, audit committee meetings and managerial ownership, while Tobin's Q was used for firm value. The analyses of data was done using descriptive statistics, multiple regression analysis, the outcome provide that ERM, board size, board independent positively affect the value of firms sampled.

Mohd-Sanusi, Motjaba-Nia, Roosle, Sari, Harjitok (2017) examined the effect of corporate governance structures on enterprise risk management practices in Malaysia. The structure of corporate governance that was studied includes Risk Management Committee (RMC), board independence, auditor quality and institutional ownerships while ERM was measured using aggregate ERM score. Extracted data were regressed with regression analysis which provided the results that show that the establishment of RMC provided greater awareness of ERM within particular organization. On the other hand, other governance structure as studied made little contribution to the risk management awareness practices within the firms studied.

Methodology

The study adopted ex post facto research design and used panel data generated through content analysis from the annual report of the firms. This study covers the fourteen deposit money banks listed the Nigerian Stock Exchange Group, and spanned from 2010 to 2020 financial years. Although only seven of the banks that have their annual report with bio data of the board members published for the ten years period of review made the sample list. Descriptive statistics was used to determine the normality of data distribution. Panel regression analysis was applied to know the reaction of the independent variable on the dependent variable. The following regression model was estimated for the study;

$ERM_{it} = \alpha_0 + \beta_1 BEx_{it} + \beta_2 FS_{it} + \beta_3 LEV_{it} + \mu_{it}$----------------equ (1)

Where, ERM = enterprise risk management, BEx = board expertise, FS = firm size, LEV = firm leverage, μ = error term, α = intercepts, β_{1-3}.

Table 3.1 Variable specification

Variables/ specifications	Expected signs	Measurements	Authors
Enterprise Risk Management (ERM)	+	Strategy + Operation + Reporting + Compliance STRATEGY= (Sales $_{i}$ - µSales) $_{i}$ / σ Sales. where Sales $_{i}$ = Sales of firm i in year 1; µSales = Average industry sales in year 1 and σ Sales = standard deviation of sales of all firms in the same industry OPERATION= Sales / Total assets. REPORTING= Material weakness + Qualified Auditor Opinion + Restatement. ***Material Weakness***: if the firm disclosed any material weakness in its annual report 1, otherwise 0. ***Qualified Opinion***: Firms with unqualified auditor's opinion is set 0, otherwise 1. ***Restatement:*** if the financial statement is restated 1, otherwise 0. COMPLIANCE= Auditor fees /Total assets.	Zou, Isa and Rahman, (2017); Gordon, Loeb and Tseng (2009)
Board Expertise (BExp)	+	The proportion of directors with financial expert to the total directors on the board.	Dionne and Triki (2005)
Firm size	+	Log of total assets	Rao (2018)
Leverage	-	Total Debt divide by total equity	Andersson and Wallgren (2018)

Source: Researchers' compilation (2021)

The decision rule is to accept the null hypothesis if the computed value is higher that critical value at 0.05, otherwise the alternate hypothesis is accepted.

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Descriptive statistics

```
. tabstat ERM BExp FS LEV, statistics( mean max min sd count )
```

stats	ERM	BExp	FS	LEV
mean	.33332	.4386281	27.675	.9511896
max	2.9129	1	29.35	9.720489
min	-1.1094	.125	25.68	.4249669
sd	1.011459	.1973482	.9912072	1.06642
N	70	70	70	70

Source: Researchers' Computation (2021)

The descriptive statistics in the table 4.1 above gave a description of the distribution of data and variables of the study. The Statistics used are mean, maximum, minimum, and standard deviation. The mean depicts the average and standard deviation represents the degree of dispersion. Enterprise Risk Management (ERM) had an average value of 0.333, a maximum value of 2.91 and a minimum value of –1.11. The standard deviation of 1.01 indicates that a wide variation exist among the banks on their capacity to harness Enterprise Risk Management. On the average, 43.8% of the risk management committee members had account and finance knowledge, the minimum account and finance membership of risk committee is 12.5% while some other banks filled their risk committee with only expertise members. Firm size (FS) measured by natural logarithm of total assets has average value of 27.665, maximum of 29.35 and minimum of 25.68. Whereas Leverage (LEV) has a mean value of 0.95, maximum value of 9.72 and minimum of 0.42.

Table 4.2 Correlation Matrix

```
. correlate ERM BExp FS LEV
(obs=70)
```

	ERM	BExp	FS	LEV
ERM	1.0000			
BExp	-0.2247	1.0000		
FS	0.6904	-0.0133	1.0000	
LEV	0.0946	0.1487	0.0260	1.0000

Source: Researchers' computation (2021)

From the correlation matrix table 4.2 above, it is seen that Enterprise Risk Management has negative and weak association with Board expertise (ERM/BExp = -0.224). It shows again that there is existence of positive and strong relationships between Enterprise Risk Management has and Firm size = (ERM/FS = 0.69), and very weak and positive association between Enterprise Risk Management and Leverage (ERM/LEV = 0.09). The result shows that no serious correlation exists amongst the variables as none has an association greater than 0.8.

Table 4.3 Variance Inflation Factor

```
. estat vif
```

Variable	VIF	1/VIF
LEV	1.02	0.977106
BExp	1.02	0.977593
FS	1.00	0.999022
Mean VIF	1.02	

Source: Researchers' Computation (2021)

The rule of VIF is to place a benchmark mean of 10 for acceptance level. Hence it is assumed that any result that produces mean VIF above 10 has a case of high correlation of the independent variables. Since our result in table 4.3 above shows a mean VIF of 1.02, which is far lesser than acceptable level of 10, we then conclude that there is no presence of multicollinearity in our data.

Table 4.4 Heteroscedasticity Test

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

         chi2(1)      =    1.19
         Prob > chi2  =   0.2751
```

Source: Researchers' computation (2021)

The table 4.4 above indicates the probability value of 0.275 which is greater than the critical value of 0.05. Therefore, we conclude that there is no heteroscedasticity, which means there is a constant variance.

Table 4.5 Omitted Variable Test

```
. estat  ovtest


Ramsey  RESET  test  using  powers  of  the  fitted  values  of  ERM
       Ho: model has no omitted variables
                  F(3, 63) =      0.96
                  Prob > F =      0.4167
```

Source: Researchers' computation (2021)

From the table 4.6 above that tests for variable miss specification, we found that the model has no omitted variable since its probability value is higher than the critical value of 0.05. The test was done using Ramsey RESET Test.

Table 4.6 Summary of Regression Analysis

	ERM Model (OLS result)	ERM Model (Fixed Effect Result)	ERM Model (Random Effect Result)
C	-18.57 (0.000)***	-0.051 (0.991)	-7.876 (0.031)**
BExp	-1.189 (0.008)***	-0.679 (0.207)	-1.036 (0.041)**
Fs	0.698 (0.000)***	0.021 (0.084)*	0.309 (0.020)**

Lev	0.105 (0.194)	0.0995 (0.114)	0.109 (0.092)
F-statistics	25.33 (0.0000)***	9.41 (0.249)	10.18 (0.0171)**
R-squared	0.53	0.22	0.49
Hausman Test		Prob>chi2 = 0.16	

Source: Researchers' Computation (2021)
*Notations: *, **, *** means – statistical significance at 10%, 5% and 1% level respectively.*

*Brackets () – represents P-values***.**

Since the Hausman test probability is not significant (Prob>chi2 = 0.16), the rule of thumb says that random effect model is preferred. Hence we base our hypothesis testing on the random effect result. The F-statistics and its corresponding P-value 10.18 (0.017) for random effect model which points out that the random effect model is valid for drawing inference since it is statistically significant at 5% level. The overall goodness of fit of the models measured with R-squares were shown as 49%. This value indicates that 49% of the systematic variations in the banks' Enterprise risk management is explained by all the variables in the model while 51% of the changes in the enterprise risk management is explained by factors outside our model.

From the random effect result Colum in the summarized regression result of table 4.6, Board Expertise (BExp) was seen to have a coefficient of -1.036, which means that, Board Expertise has inverse effect on the Enterprise Risk Management of banks. And the p-value of BExp shows 0.041 that is lower than critical value of 0.05, which means that BExp is statistically significant at 5% level in determining enterprise risk management (ERM). The empirical result therefore leads to the conclusion that board expertise (BExp) has negative and statistical significant effect on Enterprise risk management (ERM) of banks in Nigeria. This result corroborates with the empirical findings that maintain that board expertise has significant effect on risk management policies of firm (Yatim, 2009; Dionne & Triki, 2005).

Moreover, the control variables used, Firm size has coefficient 0.309, which means that FS has positive effect on Enterprise Risk Management, and a P-value of 0.02 that signifies that Firm size has significant effect on ERM. This result indicates that large firms have the capacity to gainfully implement ERM. Finally, Firm leverage has coefficient and P-value of 0.109 and 0.092 respectively. The results show that firm leverage has positive and significant effect on ERM at 10% level. An indication that the more leverage a firm is, the better they enforce comprehensive risk management approach for overall risk reduction.

Conclusion and Recommendations

Using samples of banks listed on the Nigerian Exchange Group to investigated the effect of board expertise on enterprise Risk management, and working on the understanding that corporate governance specifically, its mechanism of Board of Directors is the major tool to ensure efficient adoption of enterprise risk management system, this study therefore analysed an important board attribute which is board account and finance expertise to ascertain its impact on enterprise risk management. The empirical result provide evidence that expertise of board members in account and finance is significant in determining the workability of the implemented Enterprise Risk Management. The study therefrom recommends that sufficient members with account and finance knowledge should be engaged at the board composition to facilitate maximization of the benefits of enterprise risk management.

References

Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees' effectiveness, and corporate voluntary disclosures. *Asian Review of Accounting 18*, 245-259.

Alawattegama, K.K. (2018). The effect of enterprise risk management (ERM) on firm performance: Evidence from the diversified industry of Sri Lanka. *Journal of Management Research, 10*(1), 75 – 93.

Al-Tamimi, H.A.H. and Al-Mazrooei, F.M. (2007). Banks' risk management: A comparison study of UAE national and foreign banks. *The Journal of Risk Finance, 8*(4), 394-409.

Altanashat, M., Dubai, M., & Alhety, S. (2019). The impact of enterprise risk management on institutional performance in Jordanian public shareholding companies. *Journal of Business and Retail Management Research, 13* (3), 256 – 269.

Carter, D. A., Rogers, D. A., & Simkins, B. J. (2010). Does hedging affect firm value? Evidence from the US airline industry. *Financial Management, 35*, 53–86. https://doi.org/10.1111/j.1755-053X.2006.tb00131.x

Coskun, Y. (2013). Financial engineering and engineering of financial regulation: Guidance for compliance and risk management. *Journal of Securities Operations & Custody, 6*(1): 81-94.

COSO (2004) Enterprise risk management —Integrated framework: Executive summary, New York, 3(September), 1–16. doi: 10.1504/IJISM.2007.013372

Dionne, G., & Triki, T. (2005). Risk management and corporate governance: The importance of independence and financial knowledge for the board and the audit committee. 1-79. Doi:10.2139/ssrn.730743

Gordon, L.A., Loeb, M.P., & Tseng, C.Y. (2009). Enterprise risk management and firm performance: A contingency perspective. *J. Account. Public Policy, 28*(2009), 301 – 327.

Husaini, & Saiful. (2017). Enterprise risk management, corporate governance and firm value: Empirical evidence from Indonesian public listed companies. *International Journal of Advances in Management and Economics, 6* (6), 16 - 23.

Kallamu, B.S. (2015). Risk management committee attributes and firm performance. *International Finance and Banking, 2*(2), 1-24.

Lai, F.W., Azizan, A. & Samad, F. (2010). A theoretical appraisal of value maximizing enterprise risk management. *International Journal of Accounting Information Science and Leadership,* 3(6), 23-41.

Lam, J. (2000). Enterprise-wide risk management and the role of the chief risk officer. *White Paper, Erisk. Com,* March, 25.

Moeller, R. R. (2011). COSO enterprise risk management: Establishing effective governance, risk and compliance processes.

Mohd-Sanusi, Z., Motjaba-Nia, S., Roosle, A.N., Sari, R.N, & Harjitok, A. (2017). Effects of corporate governance structures on enterprise risk management practices in Malaysia. *International Journal of Economics and Financial Issues,7*(1), 6-13.

Odubuasi, A.C., Ofor, N.T., & Okoye, P.V. (2020). Risk management committee attributes and financial performance: Empirical evidence from listed Nigeria banks. *Journal of Accounting, Business and Social Sciences, 3*(3), 106-115.

Quon, T.K., Zeghal, D., & Maingot, M. (2012). Enterprise risk management and firm performance. *Procedia-Social and Behavioral Science, 62*(2012), 263 – 267.

Raber, R. W. (2003). The role of good corporate governance in overseeing risk. *Corporate Governance Advisor, 11*(2), 11-16.

Ramlee, R., & Ahmad, N. (2015). Panel data analysis on the effect of establishing the enterprise risk management on firms' performances. Proceedings of 4th European Business Research Conference 9-10 April, Imperial College, London, UK.

Rao, A. (2018). Empirical analysis of joint impact of enterprise risk management and corporate governance on firm value. *International Review of Advances in Business, Management and Law, 1* (1), 34 – 52.

Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal ofManagement 16*, 5-26.

Shoter, M. (2016). The determinants of enterprise risk management and its effect on firm's value: Evidence from firms listed in Amman stock exchange. *Unpublished thesis,* Yarmouk University.

Sobel, P. J., & Reding, K. F. (2004). Aligning corporate government with enterprise risk management. *Management Accounting Quarterly, 21*(5), 1-9.

Ugwuanyi, U. B., & Ibe, I.G (2012). Enterprise risk management and performance of Nigeria's brewery industry. *Developing Country Studies, 2*(10), 60-67.

Yatim, P., (2009). Audit committee characteristics and risk management of Malaysian listed firms. *Malaysian Accounting Review 8*, 19-36.

Comparative Analysis of Internal Generated Revenue in Kogi State Pre and Post Implementation of Treasury Single Account.

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Abstract

The adoption of treasury single account (TSA) by the federal and some state governments is perceived by many as being aimed at promoting transparency, unifies all government accounts, block financial leakage, prevent revenue loss and mismanagement by revenue generating agencies. However, despite all this, state and federal governments are still finding it difficult fund their budgets, some still go to borrowing. Against this background, this study compares the internally generated revenue before and after the implementation of the Treasury Single Account in Kogi State. The study employs secondary data obtained from the Kogi State Board of Internal Revenue covering a Ten (10) years period spanning from 2010 – 2019. The data were diagnosed with Paired samples statistics, paired samples correlations, while, the hypotheses were tested by paired samples test. The results reveal that there is a significant positive difference between the internally generated revenue (IGR) collected pre and post TSA implementation in Kogi state. The results further reveal that the implementation of TSA has a significant impact on the internally generated revenue in Kogi state. This study recommends that Kogi state government should strengthen its internal control system and also engage in the training and retraining of public servants to be acquainted with the TSA system rather than contracting companies to implement the system.

***Keywords**: Internally Generated Revenue, Pre and Post TSA Periods and Treasury Single Account.*

Introduction

The adoption and full implementation of Treasury single account by any government especially in a dwindling economy cannot be over-emphasized, this is due to the fact that a treasury single account is primarily to ensure accountability of government revenue, enhance transparency and avoid misappropriation of public funds. The maintenance of a treasury single account helps to ensure proper cash management by eliminating idle funds usually left with different deposit money banks and in a way enhance reconciliation of revenue collection and payment.

The constitution of Nigeria gives power to the government to harness the resources of the Nation to promote national prosperity, efficient, dynamic and self-reliant economy. Section 162 (1) specifically say "The federation shall maintain a special account to be called "The federation account" into which shall be paid all revenues collected by the government of the federation". In this vein, government banking arrangements are an important factor for efficient management and control of government's cash resources, such banking arrangement should be designed to minimize the cost of government borrowing and minimize the opportunity cost of cash resources. This requires ensuring that all cash received is available for carrying out government's expenditure programs and making payments in a timely fashion, many emerging market and low-income countries have fragmented systems for handling government receipts and payments.

Before the introduction of treasury single account in Nigeria, Ministries, Department and Agencies which normally generates revenue have numerous accounts in commercial banks, they use part of the generated to fund their various operations and remit the excess to the federation account. Most of these agencies pay whatever they deem fit to the government account; it is evident that most of these agencies, ministries or departments are even richer than the government.

The outcome of the above occurrences leads to financial leakages, the embezzlement of public funds; this made states and federal government of Nigeria to prepare budget using false projection. Therefore, the above situation led to the commencement of the treasury single account implementation by the federal government of Nigeria in April, 2012, with the e-payment component.

Internally generated revenue (IGR) has taken the second position in sources of revenue when Nigeria put heavy reliance on oil. Many states and local government depend on monthly statutorily allocations from the federal government to carry out their business. Internally generated revenues (IGR) are revenues generated by states within the Nigeria Federation, independent of their share of revenue from the federation account. With the lingering economic struggles, there have been renewed calls for the Nigeria government to diversify the economy away from the oil and gas sector. Unfortunately, Nigeria's dependence on the oil sector is so critical and the effect of Nigeria's dwindling oil revenue is damaging with reverberations beyond the federal government, state governments who depend primarily on the statutory allocation from the federation account have found their ability to deliver the most basic public services (education, health, and others) to the citizenry hampered significantly. Some state governments are genuinely edger to grow their IGR base, there seems to be a general dearth of innovative ideas and a lack dearth of innovative ideas and a lack of political will to harness available opportunities for revenue diversification. Many legitimate sources of revenue remain unexploited, while procedures for collecting, remitting and accounting for the existing revenue source often fall short of expectations, given room for avoidable leakages.

The sources of IGR available to states are broadly classified as:

a) Tax revenue, for example, Pay As You Earn (PAYE) which is deducted directly from employees' earnings, direct assessment tax on self-employed individuals and informal sector, road tax, other taxes / levies.

b) Non tax revenue which include revenue generated by state owned ministries, departments and agencies (MDAs) during the course of providing various services.

Statement of Problem

Treasury single account as part of public finance management reform (PFM) was aimed at increasing the revenue inflow in the purse of the government as well as places it in a better stead to adequately meet its financial obligations to the citizens of the country (Oyedele, 2015).Therefore, the available literature reviewed has shown that scholars including Ivungu *et al*. (2020) and Ofurum *et al.* (2018) maintain that the implementation of Treasury Single Account has not reduce corruption and has not significantly improve transparency, accountability and revenue generation in public sector but the gross domestic product of Nigeria has improved. On a different ground of argument, Ejoh (2020), Ibrahim *et al*. (2019),

Ajibada*et al*. (2018) report that Treasury Single Account has reduced corruption and has significantly improve transparency, accountability and revenue generation as well as reduce financial (revenue) leakages in Nigeria in Public Sector. These different position indicates that a common ground is yet to be attained and also all the reviewed literature fail to include 2019 data thereby opening up opportunity for further studies which this researcher keyed into, to study: Comparative Analysis of Internally Generated Revenue in Kogi State Before and After Implementation of Treasury Single Account using data from 2010 to 2019 which is being obtained from Kogi State Board of Internal Revenue, Lokoja, with the aim to evaluate the performance of internally generated revenue before or after the implementation of treasury single account in Kogi State.

Objectives of the Study

The main objective of this study is to evaluate the differences in internally generated revenue before and after the implementation of treasury single account in Kogi State. The specific objectives are to:

i) analyse the differences in the internally generated revenue (IGR) between five (5) years pre and five (5) years post implementation of treasury single account in Kogi state;

ii) ascertain if the introduction of treasury single account has any significant impact in the internally generated revenue in Kogi State.

Statement of Hypotheses

The study has two hypotheses in line with the above objectives.

Ho_1: There is no significant difference in the internally generated revenue pre and post the Implementation of treasury single account in Kogi State; and

Ho_2: Implementation of treasury single account does not have significant impact on internally Generated revenue in Kogi State.

Scope of the Study

The scope of this study is limited to the actual revenue generated internally in Kogi State and covers 10 years (2010 – 2019) period. The study period will be divided on quarterly basis: (Q1 – 2010 to Q4 – 2014) covering five (5) years before the implementation of treasury single account and (Q1 – 2015 to Q4 – 2019) for five (5) years after the implementation of treasury single account in Kogi State.

Review of Related Literature

Conceptual Review

Treasury Single Account

Treasury single account (TSA) is a financial policy used in several countries all over the world. It was introduced by the Federal government of Nigeria in 2015 to consolidate all inflows from all agencies of government into a single account at the Central Bank of Nigeria. The introduction of treasury single account is as a result of numerous corrupt practices that exist in Nigeria, such as lack of transparency and accountability (Kanu, 2016). The policy was introduced to reduce the proliferation of bank accounts operated by Ministries, Departments and Agencies (MDAs) and also to promote transparency and accountability among all organs of the governments to ascertain the amount that is accruing to its accounts on a daily basis. It is a financial tool that unifies all government accounts in a single pool for effective cash management (Odewole, 2016).

Treasury single account is a public accounting system under which all government revenue, receipt and income are collected into one single account, usually maintained by the country's central bank and all payments done through this account as well. This is one of the financial policies implemented by the federal government of Nigeria to consolidate all revenue from all the Ministries, Departments, and Agencies (MDAs) in the country by way of deposit into commercial bank traceable into a single account at the central bank of the country. Chekwu (2015) posits that Treasury single account is a network of subsidiary accounts that are linked to a main account such that, transactions are effected in the subsidiary accounts but closing balances on these subsidiary accounts are transferred to the main account, at the end of each business day.

Bashir (2016) avers that Treasury single account through Remita payroll module can be used to pay salaries of workers. Kanu (2016) and Emme and Chukwurah (2015) note that the central objectives behind the introduction of Treasury single account were to engender accountability of governments funds, and to avoid undue misappropriation of fund. With this new arrangement, unspent budgetary provision as allocation to MDAs would now be automatically brought over to a new year instead of being shared by the corrupt workers of such MDAs.

Internally Generated Revenue

Revenue generation is one of the core drawers of modern development is key to developing modern economies. Revenue is defined as the total amount of earnings that accrues to an organization to assist in financing its activities (Hamid, 2018; Adam, 2006). Hepwort (1976) declares that revenue is a pay or funds rising resource comprises of licenses, charges, sales of government properties, tax collections and fines, among others. Therefore, from definitions stated above, it can be concluded that revenue is the entire amount of income a state is able to raise from various source under its territory within a definite period. Every modern state or country requires a great deal of revenue to have the capacity to give and keep up basic services to her citizens.

Adesoji and Chike (2013) state that there are two types of revenue that state government can rise: Internally generated revenue and statutory allocation. Internally generated revenue which are revenue gotten within the state’s territory and from various sources which includes: Taxes such as PAYE, Road Taxes, Direct Assessment, Fines, licensing, Interest on Investments, Rent from Government Properties, and Fees. Whereas, statutory allocation is from the federation account, according to revenue allocation formula. Many of the states in Nigeria get their maximum revenue from statutory allocation to finance their expenditures. Therefore, internally generated revenue (IGR) is revenue generated by state within the Nigerian federation independent of their share of revenue from the federation account. Abiola and Ehigiamusoe (2014) denote internally generated revenue as the revenue that the federal, state, and local government generates within their respective areas of jurisdiction. Internally generate revenue for state government has also been described as revenue that are derived within the state from various sources such as taxes (Pay as You Earn, Direct assessment, Capita gain taxes, etc.) and motor vehicle license, among others (Adesoji & Chike, 2013). According to Abiola and Ehigiamusoe (2014), economic development and sustainability of states in Nigeria depend on the ability of such state to generate revenue internally to supplement the revenue allocation from federation account. In other words, federal allocations are not sufficient to guarantee economic development of states and local governments; hence the emphasis on local government generation of revenue to sustain the economy of the nation locally and at the federal level. Internally generated revenue (IGR) serves as the major tool for social contract and infrastructural development within a state. It helps the government to be responsible and required decisions needed to satisfy the basic needs of the people.

Wada (2012) affirms that the demanding need by the Kogi State government to source more revenue internally notwithstanding the statutory allocations from the federation account has turned out to be progressively practical. This is because of the consistently developing need of the residents as far as fundamental administration conveyance notwithstanding the geometric involvement in the basic capital projects to be executed in the state. The payments of workers' salaries which are the major aspect of recurrent expenditures have become a serious challenge in the state due to low revenue generation from the state internal revenue sources and over dependence on the external sources of revenue which has not been stable due to dwindling crude oil price at the international market. Internally generated revenue is important to any state government because it serves as a veritable instrument for enhancing socio-economic and political development.

Theoretical Review

A number of different theories of socio-economic accounting were borrowed to form sound foundation to substantiate Treasury single account adoption and implantation by federal government in ensuring that revenue collected by her agency are remitted to the appropriate designated account. Thus, the most relevant theory to this study is discussed below:

The Adopted Theory

The ability to pay theory is relevant to this study as it related to internally generated revenue because people should be made to pay their taxes based on their taxable capacity. This could appear to be more just, fair and equitable. What then is the measure of a man's ability to pay? Deweet*et al*. (2005) argue that income remains the single best test of a man's ability to pay. But even in the case of income, the tax will be in proportion to faculty, if there is a minimum exemption to allow for a reasonable subsistence, and finally, if the principle of progression is applied by taxing the rich at a higher rate. Besides, there is need to consider "the ability to pay" not merely of the individual taxpayer but of the community as a whole. In this light, it is necessary that the tax system as a whole is not oppressive. It should not discourage saving or retard accumulation of capital. Also, it should not in any manner impair the productive capacity of the community by hampering the development of trade and industry in the country (Dewett, 2005).

Empirical Review

Ivungu *et al*. (2020) examine the effect of treasury single account (TSA) on corruption in the Nigeria public sector using data obtained from transparency international from 2012 to 2018 which was divided into two that is 2012 to 2014 (before treasury single account adoption) and 2016 to 2018 (after treasury single account adoption) with 2015 as the base year. Data obtained were analyzed using descriptive statistic and paired sample t test statistics was used to test hypothesis. The study findings revealed that there is no significant difference in the mean of corruption perception index (CPI) before and after treasury single account adoption in Nigeria. The study concluded that the treasury single account has not significantly reduced corruption in the Nigerian public sector. The study recommends that the federal government should strengthen the judiciary, police, anti-graft agencies and the media in the country to tackle the issues of corruption and ensure transparency, probity and timeliness in handling corruption related cases.

Ejoh (2020) evaluates the implication of treasury single account (TSA) on government revenue control among federal government parastatals in Nigeria. Specifically, the study examined the impact of treasury single account policy an aggregate government cash control, ideal government cash balance in several banks and availability of fund for capital projects. The descriptive survey research design was adopted and questionnaire administered on 240 staff selected from the Central Bank of Nigeria, office of the Accountant General of the Federation and office of the Auditor General of the Federation, Abuja. The data were analyzed using SPSS 25, and hypotheses were tested by way of uni-variate regression models. The results of the test indicated that treasury single account has significant and positive impact on cash monitoring and control (aggregate cash control) and adequate fund flows for government project implementation. On the other hand, treasury single account significantly reduces idle government cash balance with other banks. The paper concluded that treasury single account policy enhances government revenue control and administration in Nigeria. Hence, it was recommended that government should monitor and evaluate the extent of implementation of the treasury single account policy in all the Ministries, Departments, and Agencies and Parastatals at the Federal, State and Local Government levels to ensure complete adoption and implementation of the policy.

Ibrahim *et al*. (2019) investigate the treasury single account as an antidote to corruption in Nigeria. A structural questionnaire was used to collect data from sample of one hundred and fifty-four (154) accountant and auditors drawn from federal, state and local government establishments. Data collected were analyzed using descriptive statistics, Pearson product moment correlation (PPMC) and ordinary least square method with the aid of statistical package for social science (SPSS), window 23. The findings show that there is a relationship between the antidote to corruption in Nigeria and treasury single account measured as financial accountability and transparency, cash management, elimination of monopoly and discretion, facilitates revenue collection and payments as well as frauds prevention were significantly positive with (r=0.657**; 0.714**, 0.520**, 0.672** and 0.713**), all at 0.01 significant level. The result also shows that the treasury single account is significantly influenced remedy to corruption in Nigeria with (R^2= 0.791; P<0.05). The study concluded that the antidote to corruption in Nigeria depends on the effective treasury single account. They recommend that government should ensure that there are effective procedures for transferring revenue to the treasury single account and streamlined through the banking system. Financial institutions should similarly be enhanced through and electronic fund transfer system (EFT) as treasury single account depends on the technology. The federal government should demonstrate the political will to ensure the sustainability of the treasury single account policy and purse the implementation of treasury single account by state and local governments.

Ajibade*et al*. (2018) examine the impact of treasury single account on public Fund Management in Nigeria with specific objective to determine the impact of treasury single account on accountability of public funds; to determine the impact of treasury single account on transparency of public funds. In order to achieve these objectives, the survey research design was adopted using primary data with the aid of a questionnaire distributed to selected federal government parastatals in Bayelsa state. Purposive sampling technique was used in selecting the federal government parastatals used. Regression analysis and the sample percentage were used to analyze the questionnaire obtained. The study adopted three (3) proxies of public fund management which are accountability, transparency and financial leakages. It was discovered, based on the findings of the study that, treasury single account has significant relationships with public fund management proxies combined. This is represented by the p-value which gave 0.000, 0.001 and 0.003 for accountability, transparency and financial respectively. This is less than a 5% level of significance adopted for this study. The study concluded that treasury single account expectedly improves accountability and transparency and as well reduce leakages in the financial system and also has a significant positive relationship to public fund. Hence, they recommended that, the adoption of treasury single account should be encourage by immense public enlightenment and clarification around the significance of the policy in other to nurture its success, the government should also shelter as soon as possible the appropriate statutory support to aid the appropriate regulatory atmosphere which will drive the effective implementation of treasury single account.

Ndubuaku (2017) analyses how the introduction of Treasury single account has affected bank credit to private sector, deposit mobilization, and loans and advances in their study "Impact of Treasury single account on the performance of the banking sector in Nigeria". The study employed descriptive and ex post facto research design. The population of the study was made up of 24 commercial banks in Nigeria. The time series data used for the study were obtained from central bank of Nigeria statistical bulletin for the period 2010-2015. OLS regression and correlation analysis were used to analysis the data. The study concludes that the introduction of Treasury single account significantly reduced credit to private sector, deposit mobilization, and loans and advances. The study recommends that the banks should avoid over-reliance of government funds and source for fund from other sectors of the economy.

Igbekoy and Agbaje (2017) assess of the Implication of Treasury Single Account Adoption on Public Sector Accountability and Transparency with the objective to assess the implication of adoption of Treasury Single Account on Accountability and Transparency in the Nigeria Public sector with a view to find out if the policy is capable of promoting government accountability function. The study consists of all Ministries, Departments and Agencies involved in revenue generation selected using purposive sampling technique. Survey research design was use to obtain information and data were collected from primary sources through the use of structured questionnaire distributed to the target respondents. The hypotheses were tested using regression analysis (ANOVA). The finding of the study showed that, treasury single account has significantly positive impact on financial leakages, transparency and curb financial misappropriation. Hence, considering the findings of this study, its recommended that government should continue to sustain the adoption of the policy and enact laws that will extend it to state and local government.

Salman and Adeseye (2017) study the treasury single account and fund management in Nigeria: A perception of Accounting Practitioners in Ado-Ekiti metropolis, the study investigates the role of operationalized treasure single account in fund management by eliciting the opinion of accounting practitioners in Ado-Ekiti metropolis. Primary data was used for the study and was collected from 50 respondents. Descriptive and Inferential statistics were used to analyzing the data for the study. The study reveals that operationalized treasury single account reduces mismanagement of public fund and boost government revenues. It therefore recommended that the government political will in enforcing the treasury single account operation be sustained to fully harness it benefits.

Yusuf (2016) studies the effect of Treasury single account on public finance management in Nigeria with the aim of examine the extent to which Treasury single account can block financial leakages, promotes transparency and accountability in the public financial management. Both primary and secondary data were employed; the populations of the study are Ministries, Departments and Agencies within Bauchi metropolis using a sample of 72 respondents through judgment sampling. The data were analyzed using the Pearson correlation techniques. The findings reveled that adoption of a Treasury single account is capable of plugging financial loopholes, promoting transparency and accountability in the public financial system. The researcher recommends that for the success of this policy government should promulgate more legislation to make it mandatory for all the three ties of government in Nigeria.

Gap in Literature

Despite the fact that some studies have been conducted on Treasury single account and how its effect its revenue generation, the following gaps were identified from the above reviewed literatures relating to this study: It was revealed that most of the researchers uses only questionnaire even the research conducted in 2020. For instance, studies conducted in 2020 by Ejoh, in 2019 by Ibrahim *et al*., in 2018 by Ajibade *et al*., in 2017 by Igbekoyi and Agbaje; Salman and Adeseye *et al*. and in 2016 by Yusuf, all of them administered only questionnaire except for Ofurum *et al*., 2018 who only uses data obtained from Central Bank of Nigeria Statistical bulletin and Economic reports. Additionally, none of the reviewed literatures includes data for 2019 even studies conducted by Ivungu *et al*. (2020) and Ejoh (2020). This study feels 2019 data is important for this study, the inclusion of 2019 data which all of the reviewed studies fails to capture provide the gap this study fills in literature.

Methodology

The thrust of this study is to examine the effect of TSA implementation on internal generated revenue in Kogi State. The study employs secondary data obtained from the Kogi state board of internal revenue, Lokoja and adopted a comparative approach by comparing internally generated revenue between the periods before and after TSA implementation. The Pre-TSA period takes from Q3:2010 – Q1:2015 while the Post TSA period is from Q3:2015 – Q4:2019. Data analysis was conducted using Paired Samples Statistics which compares the different period's means, standard deviation and standard error means, paired samples correlations that reveals the extent of correlation and paired samples test which was used to estimate the hypotheses formulated.

Results and Observations

Paired Samples Statistics

Table 3.2 below compares the means, the standard deviation and standard error means of the internally generated revenue (IGR) for the two different periods before (pre) and after (post) implementation of Treasury Single Account in Kogi state.

Table 3.1 Paired Sample Statistics

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre_TSA	1.5264	20	7.5038	1.6779
	post_TSA	5.2713	20	5.4955	1.2288

Table 3.1 above reveals the results from a paired sample statistics of the internally generated revenue collected in a five (5) years period pre and post Treasury Single Account implementation in Kogi state. The mean of the IGR collected 4 years before TSA and 4 years after TSA system were 1.5264 and 5.2713 respectively. The result shows that the average internally generated revenue collected within these periods were not consistent with one another as the mean of post TSA internally generated revenue is higher with a positive mean difference of approximately

3.7449 indicating that IGR collected after the implementation of TSA was higher than that before TSA implementation in Kogi State.

The table also displays the standard deviation of 7.5038 and 5.4955 for pre TSA and post TSA periods respectively, connoting that the pre TSA internally generated revenue was more widely dispersed and higher standard error mean 0f 1.6779 compared with the post TSA period revenue standard error mean od 1.2288.

Paired Samples Correlations

Table 3.2 below presents the paired samples correlation of the internally generated revenue (IGR) for the 4 years each for the pre and post Treasury Single Account implementation in Kogi State.

Table 3.2 Paired Samples Correlation.

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 pre_TSA & post_TSA	20	-.347	.134

Source: SPSS 16 output, 2021.

Table 3.2 above reveals the paired samples correlations for pre and post TSA implementation's internally generated revenue in Kogi state to be -0.347 with a p- value of 0.134 which is higher than 0.05 and insignificant at all levels of significance. The result means that the average IGR during the pre and post TSA periods are insignificantly related sharing approximately only 35% similarity in their pattern of collection.

Paired Samples Test

Table 3.3 below presents the paired sample test which was used to test the null hypothesis formulated.

Table 3.3 Paired Sample Test

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Pre_TSA – post_TSA	9.9930	1.0723	2.3989	4.9721	1.5014	4.166	19	.001

Source: SPSS output, 2021.

Test of Hypotheses
Hypothesis One (Ho_1)

Table 3.3 above shows the paired samples test for internally generated revenue collected five (5) years before and five (5) years after the implementation of Treasury Single Account in Kogi State System. At 95% confidence interval of the difference between the pre and post TSA revenue periods range from 4.9721 –1.5014. The p. value of 0.001 (< 0.05) obtained at a degree of freedom of 19 and a t value of 4.166 indicate that there is a significant difference between pre and post TSA internally generated revenue in Kogi state. This result means that the null hypothesis one which states that there is no significant difference between the pre and post TSA internally generated revenue in Kogi state is rejected.

Hypothesis Two (Ho_2)

From the positive mean difference of 3.7449 in Table 3.1 and the 0.001 significant difference between the internally generated revenue collected during the pre and post TSA in Kogi state, it becomes clear that implementation of Treasury Single Account in Kogi state has a significant impact on the state IGR This implies that the null hypothesis Two is rejected.

Discussion of Findings

Ho_1: There is no significant difference in the internally generated revenue pre and post the implementation of treasury single account in Kogi State.

This study finds that the is a significant (0.001) difference between pre and post TSA implementation internally generated revenue (IGR) in Kogi state with a t. value of 4.166, which mean that the implementation of TSA in Kogi state about an increase in IGR. This finding tallies with that of Ofurum, Oyibo and Ahuche (2018) and Igbekoy, and Agbaje (2017) who documented that there is significant difference between IGR in the pre and post TSA implementation.

Ho_2: Implementation of treasury single account does not have significant impact on internally Generated revenue in Kogi State.

This study also reveals that Treasury single account (TSA) has significant impact on Kogi state internally generated revenue with a positive mean difference of 3.7449 and the significance (0.001) positive difference between the pre and post TSA revenue generated having a positive t. value of

4.166. This finding is in agreement with those of Salman and Adeseye (2017) and Yusuf (2016) who observed that TSA has a significant impact on internally generated revenue.

Summary of Findings

Hypothesis	Statement	Decision
Ho_1	There is on significant difference between internally Generated revenue during the pre and post treasury single account implementation in Kogi state,	Rejected
Ho_2	The implementation of Treasury single account has no significant impact on internally generated revenue in Kogi state.	Rejected

Source: Researcher' Compilation, 2021.

Conclusion and Recommendation

Based on the findings of the study, it is therefore concluded that the implementation of TSA in Kogi State has increased IGR. It is therefore recommended that Kogi state government should strengthen its internal control system and also engage in the training and retraining of public servants to be acquainted with the TSA system rather than contracting companies to implement the system

REFERENCES

Abiola, G. A., &Ehigiamusoe, U.K. (2014). Analysis of internally generated revenue and its implications on fiscal viability of states governments in Nigeria. *Journal of Empirical Economics, 2*(**3**), 216-228

Adam. (2006). *Public sector accounting and finance*. Lagos Nigeria: corporate ventures Publishers.

Adesoji, A. A., &Chike, F.O. (2013). The effect of internal revenue generation on infrastructural development: A study of Lagos state internal revenue service. *Journal of educational and social research,*3(2), 419-436.

Ajibade, A.T., Oyedokun G.E., & Dosumu, O.S. (2018) Treasury Single Account and public fund Management: A Study of selected federal government parastatals in Bayelsa State. *International Journal of Scientific and Engineering Research, 9*(12), 113-121.

Bashir, Y. M. (2016). Effect of treasury single account on public finance management in Nigeria. *Research Journal of finance and accounting,7*(6, 164-166.

Chukwu, J. (2016). *Treasury single account: Giving life to Jonathan's dead policy directives*. Guardian newspapers August 16, 2015. http://www.ngrguardiannews.com/2015/08/treasurysingle-account- giving-

Dewett, K. K., Navalur, M. H., & Janmejoy, K. (2005). Modern economics theory. Chand and Company Ltd.

Ejoh, N. O. (2020). Treasury single account implications on government revenue control among federal government Parastatals in Nigeria. *Journal of economics and Finance, 11(I), 18-25. www.iorjournals.org.*

Emme, O. I., &Chukwurah, D. C. (2015): Analysis of pros and cons of treasury single account policy in Nigeria. *Arabian Journal of business and management review (OMAN Chapter) 5(4), 20-29.*

Hamid, K.T. (2008). SWOT analysis on sources of revenue at state government level. Kano: Tahir guest palace

Hepworth, N.P. (1976). *The Finance of local government*. Gorge Allen.

Ibrahim, J., Odunayo, K.O. H., &Tijani, O.F. (2019) Treasury single account as an antidote to corruption in Nigeria. *International Finance and Economics Research, 7*(2), 43-50.

Igbekoyi, O.E and Agbaje W.H. (2017). An assessment of the implication of treasury single account adoption on public sector accountability and transparency. *European Journal of Accounting Auditing and Finance, 5*(8), 1-11.

Ivungu, J. A., Ganyam, A. I., Agbo. A. J., & Ola, P.O. (2020). Effect of treasury single account (tsa) on corruption in the Nigerian public sector. *International Journal of Academic Research in Business and Social Science, 10*(3), 43-53.

Kanu, C. (2016). Impact of treasury single account on the liquidity. *ABC Journal of Advanced Research, 5*(1), 43-51.

Odewole. P.O. (2016). Treasury single account: A tool for effective cash management in Nigeria. *Journal of finance and accounting, 4*(6), 328-335.https://doi.org/ 10.11648/j.jfa.20160406.13.

Ofurum, C.N., Oyibo, P.C., &Ahuche, Q.E. (2018). Impact of treasury single account on government revenue and economic growth in Nigeria: A pre-post design. *International Journal of Academic research in Business and Social Sciences, 8*(5),283-292.

Salman, R.T., &Adeseye, M.A. (2017). Treasury single account and fund management in Nigeria: A perception of accounting practitioners in Ado-Ekiti metropolis. *Kampala International University (KIU) Journal of Humanities. 2*(1), 19-32.

Wada, I. I (2012). Draft *Budget Speech Presented by the then Governor of Kogi State to Kogi State House of Assembly, Lokoja*. 4th December,2012.

Yusuf, I. A. (2015). Treasury single account. Available atwww.thenationonlineng.net/counting-cost-of-treasury-single: The Nation Newspaper.

Yusuf, M. B. (2016). Effects of treasury single account on public finance management in Nigeria. *Research Journal of finance and accounting, 7*(6), 1-8.