Economic Variables And Tax Revenue In Nigeria

Ajayi Oluwatobi & Leyira Christian, Micah

Department of Accounting, Faculty of Management Sciences, University of Port Harcourt, Choba, Rivers State, Nigeria
Email; leyira.micah@uniport.edu.ng,
Phone;234803-354-2244

ABSTRACT
The purpose of this research work is to examine the link between Economic Variables and Tax Revenue in Nigeria for the period 2005 to 2015. It investigates how the Human Development Index, Foreign Direct Investment and Gross Domestic Product in Nigeria impact on Tax Revenue. The approach adopted in this study was that of using annual time series data for the period. Multiple Regression analysis and Product Moment Pearson correlation coefficient technique was used to examine the impact and relationship between Economic Variables and Tax Revenue in Nigeria. The findings reveal that there is no significant relationship between Human Development Index, Foreign Direct Investment and Total Tax Revenue Collected while Gross Domestic Product has significant impact on Total Tax Revenue Collected. The study recommends that the government should strive to achieve sustainable price stability and fiscal discipline that channels funds to productive sectors to encourage private investors.

Keywords: Economic Variables, Tax Revenue, Human Development Index, Foreign Direct Investment, Gross Domestic Product

INTRODUCTION
Tax revenue mobilization as a source for financing development activities in Nigeria has been a difficult issue primarily because of various forms of resistance, such as evasion, avoidance and corrupt practices attending to it. These activities are considered as sabotaging the economy and are readily presented as reasons for the underdevelopment of the country. Government exists in order to effectively collect taxes from available economic resources and make use of same to create economic prosperity such that available and willing human and other resources are gainfully employed, infrastructures provided, essential public services (such as the maintenance of law and order) put in place. Tax resistance only makes these goods unattainable.
The role of taxation in influencing economic growth is not only a major concern of the economic policy makers, tax specialists and administrators but has long been of interest to academics. Indeed voluminous amounts of studies have been devoted to explore the role and impact of taxation towards the economic growth performance. The researchers have theoretically and empirically attempted to see the nexus between these variables, further support the existence of significance relationship between tax and economic growth (Herfindahl, 1957, Karran, 1985, Easterly et al., 1994). From the previous literature the discussions of this relationship can be divided into two groups. The first focuses on the impact of tax policy on economic growth. In this discussion the impact of policy changes towards economic growth is examined (Poulson and Kaplan, 2008, Koch et al., 2005, Lee and Gordon, 2005) and it can be summarize that tax distortion will reduce the growth potential. In other words there are negative relationship between tax policy and economic growth. Second, the analyses focus on empirical examination on the relationship between tax revenue and economic growth and the nature of relationship can be negative, positive or neutral depending on how important the role of revenue as an economic resources. Referring to supply side hypotheses, higher rates of taxation inhibit economic activity and economic growth. The most prominent studies which support the supply side hypotheses are Marsden (1983) and Koester and Kormendi (1989). Results show that countries with higher rate of tax results with the lower growth rate. However in this study the reverse becomes our main focus; that is, a country’s growth rate may induce a higher or lower tax revenue. Economic growth is a major driver of the level of tax revenue in the times when revenue are up, the economy is doing well when tax revenue are down, it is because the economy is doing poorly. For instance, in the United States, from the mid – 1980s through the later 1990s the economy grew steadily and tax revenues grow along with it. Conversely, between 2007 and 2009, total tax revenue in the US dropped from 26.9 percent of GDP to 23.3 percent of GDP. The drivers: the financial crisis and great recession. Thus, to maximize tax revenue, it is necessary to increase economic growth by limiting taxes on economic factors that drive economic growth, namely investment. This means reducing tax rates on businesses, limiting the double taxation of investment created by taxing corporate income at both entity level (corporate tax) and the shareholder level (Capital gains and dividend taxes), and moving toward full expensing (which would allow businesses to account for all their costs). In the long run, both cutting the corporate tax rate and moving to full expensing would lead to increased total federal tax revenue in the long term due to more jobs, higher wages, and move economic activity. In the end, we can maximize total revenue.

In Nigeria for instance, the broad objective of the national economic policy has been the desire to promote sustainable economic growth for the vast majority of Nigerians through the adoption of various monetary and fiscal policies. Unfortunately, her economic growth performance has been characterized by fits and starts and the prospects of her rapid economic growth appear unachievable as reflected in her inability to realize sustainable full growth potentials and to significantly reduce the rate of poverty in the economy.

Economic growth is a key policy objective of any government. In addressing the pertinent issues in economic management, experts and economic planners have had to choose between or combine some of the macroeconomic variables. Economic growth, proxies by Gross Domestic Product (GDP) confers many benefits which include raising the general standard of living of the populace as measured by per capita national income, making income distribution easier to achieve, enhance time frame of accomplishing the basic needs of man to a substantial majority of the populace. Conversely, economic stagnation can bring destabilizing consequences on the citizenry (Lewis 1978). Controversies that trail growth-related issues are many, but the present and more incontrovertible is the discourse on economic growth within the context of macro-economic behavior of the economy. This is in relation to how the economic policy goals could be achieved by the available policy instruments.

Furthermore, the Nigerian economy is basically an open economy with international transactions constituting an important proportion of her aggregate economic activity. Consequently, the economic prospects and development of the country, like many developing countries, rest critically on her international interdependence. Over the years, despite the considerable degree of her trade openness, her performance in terms of her economic growth has remained sluggish and discouraging, Odedekun (1997). Secondly, Nigeria’s trade policy since her independence in 1960 has been characterized by policy swings, from high protectionism to liberalism. The main objective of her trade policy is aimed at influencing trade
process that can promote sustainable economic growth but this objective has become very difficult to achieve at present, Yesufu (1996).

There is also an implicit belief that the Nigerian economic environment has been unable to attract foreign direct investment to its fullest potentials, given the unstable operating environment, which is characterized by inefficient capital markets, high rate of inflation, unstable polity, stringent policies and fragile financial system, among others.

Another major problem is the element of fiscal dominance. A size of fiscal deficit has an implication for domestic savings and investment and ultimately economic growth. In Nigeria, the main factor underlying these outcomes is the volatility of government expenditure arising from the boom and burst cycle of government revenue which is derived mainly from single export commodity (oil), whose price is also volatile. To worsen the problem, these expenditures are not channeled to productive sectors of the economy, Yesuf (1996).

Availability of financial resources from exportation leads to more investment in infrastructure for the benefit of the society and improvement in living conditions of the people, in education, transportation networks, health conditions, water supply, sewage and sanitation conditions (SVBIC, 2014). The changes create the conditions for long-run economic growth by positioning the economy on a higher growth trajectory (Hadjimichael et al., 2014).

**Gap in Literature**

Several researches have been done on the impact of tax revenue on economic variable using Gross Domestic Product in Nigeria but there seem to be scanty study on the impact of economic variables on tax revenue in Nigeria. This motivated us to embark on this research.

**Statement of the Problem**

The relationship between economic variables and tax revenues is a debate that has existed for a long time in the living history. The discussion on the two variables has exhibit contentions from academicians and policy makers with one school holding on the view that taxation is bad for the economy while the other school believe that taxation is good for the economy. Valuable empirical literature exists that studies the relationship between economic variable and tax revenues though most of them analyze the variable at cross-country level.

In Nigeria there have been several tax reforms after which were other adjustments and improvements continuously which didn’t change the basic framework of today’s tax system. How do we evaluate these several tax reforms in an economic sense? What are the impacts of tax reform on the total amount of tax and structural changes? And how does it affect the relation-ship between taxation and economy? Researches on these issues prove helpful for mechanism of how economic variable like the Gross Domestic Product and tax reform affect total tax revenue and structure, and provide empirical test for how tax reform promotes economic growth and affects tax amount and structure. However, not much literature exists exploring the relationship between the two variables at country specific level. The object in this study was thus to fill in the literature gap in country specific studies by exploring the relationship between economic variables and tax revenues in Nigeria, and also determining causation between the variables. Against this background of sluggish and volatile rate of economic growth which is accompanied with declining productivity signals, and Nigeria being a developing economy characterized by significant debt burden, structural imbalance and uncertainties, an insight into economic variables as well as their contribution to tax revenue has become pertinent.

**Aim and objectives of the Study**

Based on the thinking above, the aim of this research is to examine how economic variables affect tax revenue in Nigeria from 2005-2015. Other specific objectives include:

i. To investigate the impact of Human Development Index on total tax revenue collection (TTRC) in Nigeria in Nigeria.
ii. To investigate the impact of Foreign Direct Investment on total tax revenue collection (TTRC) in Nigeria.
iii. To investigate the impact of Gross Domestic Product on total tax revenue collection (TTRC) in Nigeria.
Research Hypotheses
From the objectives of this study, the following hypotheses are formulated:

H0₁: Human Development Index has no significant impact on Total Tax Revenue in Nigeria.
H0₂: Foreign Direct Investment has no significant impact on Total Tax Revenue in Nigeria.
H0₃: Gross Domestic Product has no significant impact on Total Tax Revenue in Nigeria.

Scope of the Study
The scope of this study covers Economic Variables and Tax Revenue in Nigeria (2005-2015). The trend of Human Development Index, Foreign Direct Investment and Gross Domestic Product are examined for the period to determine their correlation with Tax Revenue in Nigeria. Total Tax Revenue Collected by the Federal Inland Revenue Service during the period of this research which include Companies Income Tax, Value Added Tax, Education Tax and Petroleum Profits Tax, Stamp Duties, Capital Gains Tax, Personal Income Tax and National Information Technology Development Fund (NITDF) are being used to proxy Tax Revenue. The focus will be based on data obtained at the Federal Inland Revenue Service (FIRS), World Bank, United Nations Development Programme (UNDP) reports, and World Data Alas (Knoema.com).

LITERATURE REVIEW
Underpinning Theories
The quest for the optimum taxation rate where tax revenues are maximized for social welfare and economic growth has been the essence of the various theories. Adam Smith regarded taxation as a means of sustaining the government. Ricardo provided justification for capital tax which as part of factors of production (labour and capital) is required (in part) to fund government activities. In its regulatory function, taxation provides a mechanism to redistribute national income. In its catalytic role, taxation is applied to increase the value of effective demand, stimulate investment and engender economic development. There are quite a number of theories underlining the concept of taxation including the decentralization theorem which deals with the division of public sector functions and finances among different tiers of government (Ozo-Eson, 2005).

The Benefit theory of taxation by Cooper (1994) suggests that the taxes are to be imposed on individuals according to the benefit conferred on them. In effect, the more benefits a person derives from the activities of the State, the more he should pay to the government, thus a “quid pro quo” is expected to subsist. However, it is impossible to implement precisely due to the difficulty of determining the amount of government benefits, including diffuse benefits such as military protection received by each resident and non-resident tax payer.

The contra theory to the benefit theory is the „Cost of service” theory of taxation which provides that the government should tax the citizens according to the cost of service rendered by it. The tax, an individual should bear, must be equal to the cost of benefit receives that is, cost-benefit postulation. Yet a complimentary theory, „Ability to pay” theory by Pigou (1920) suggests that every citizen should pay taxes according to his ability to pay, to meet the cost of Government expenditure. The Ability to pay theory of taxation is synonymous with the principle of equity or justice in taxation. People with higher incomes should pay more taxes than people with lower incomes, thus „no quid pro quo” subsist. It appears more reasonable and just that taxes should be levied on the basis of the taxable capacity of an individual. The major drawback inherent in this theory is the definition of one’s ability to pay.

The sacrifice theory by Makinya (2000) attempts to determine the burden that rests upon an individual in virtue of his payment of taxes and how much of his or her income remains for purpose of his own subsistence. According to this theory payment of tax is a sacrifice that an individual makes towards the support of the government. The Ibn Khaldun’s (1332 to 1406) theory on taxation as espoused by Islahi (2006) identifies two different effects: the arithmetic and the economic effect which the tax rates have on revenues. The two effects have opposite results on revenue in case the rates are increased or decreased. According to the arithmetic effect, if tax rates are lowered, tax revenues will be lowered by the amount of the decrease in the rate and vice versa. The economic effect however proposed that lower tax rate positively impact on work, output and employment. The Ibn Khaldun’s proposition is validated by the optimum tax theory propounded by Mirrlees (1971). This theory seeks to stipulate a given rate of the tax
at which a given amount of government revenue can be raised, with minimum distortion in an economy. This is important in order to achieve social efficiency through a desired adequate income distribution or an improvement of welfare. These theories incorporate the various subsisting interconnection between taxation and economic growth, and development.

**Diffusion Theory of Taxation**

According to diffusion theory of taxation, under perfect competition, when a tax is levied, it gets automatically equitably diffused or absorbed throughout the community. Advocates of this theory, describe that when a tax is imposed on a commodity by state, it passes on to consumers automatically. Every individual bears burden of tax according to his ability to bear it. For instance, a specific tax is imposed on say, cloth. Manufacturer raises prices of commodity by the amount of tax. Consumers buy commodity according to their capacity and thus share burden of tax. In the words of Mansfield: "It is true that a tax laid on any place is like a pebble falling into a lake and making circles till one circle produces and gives motion to another". This quotation explains that just as a pebble gets diffused in a lake, similarly a tax imposed on a commodity is also absorbed and its burden is felt equally among various sections of community. Advocates of this theory assume perfect competition in the market but in world of reality, it is imperfect competition which prevails. If tax gets automatically diffused through the community, then most of worries of finance minister will be over. He will simply impose tax and collect money from people without worrying about final resting place of a tax. In actual practice we find that taxes do not get distributed equally. Some taxes remain where they are imposed first and some are partly or wholly shifted on to me consumers. Diffusion theory of taxation has however been criticised. The diffusion theory of taxation has never gained any importance in the world of reality. It has never been seen that a tax gets automatically equitably distributed among people. It is true that in some taxes, diffusion or absorption does take place but that too is not throughout the community. Accordingly, another criticism of the theory of taxation is that there are few taxes like income tax, inheritance tax, toll tax in which there is no absorption at all.

**Benefit Theory of Taxation**

According to this theory, the state should levy taxes on individuals according to the benefit conferred on them. The more benefits a person derives from the activities of the state, the more he should pay to the government. If, in accordance with the “benefits theory of taxation,” we conceive of taxes as payments in exchange for government benefits, perhaps states should be obliged to confer personal tax benefits on residents who contribute to their tax coffers. The benefits theory would imply that a resident should be able to collect personal tax benefits to the extent that her tax payments to the source state exceed the money value of any source state government benefits she already receives, including infrastructure, regulated labour and capital markets, and so on. Although intuitively attractive, the benefits theory of taxation suffers from several major drawbacks. First, it would be impossible to implement precisely due to the difficulty of determining the amount of government benefits, including diffuse benefits such as military protection received by each resident and non-resident taxpayer. Second, the benefits theory does not accord with modern understandings of income taxation. In a purely domestic context, states generally do not condition government benefits upon recipients’ payment of taxes. Indeed, taxpayers receiving the largest government benefits may be those who, due to their needy circumstances, pay the least taxes. Third, if the state maintains a certain connection between the benefits conferred and the benefits derived. It will be against the basic principle of the tax. A tax, as we know, is compulsory contribution made to the public authorities to meet the expenses of the government and the provisions of general benefit. There is no direct quid pro quo in the case of a tax. Fourth, most of the expenditure incurred by the state is for the general benefit of its citizens, it is not possible to estimate the benefit enjoyed by a particular individual every year. If we apply this principle in practice, then the poor will have to pay the heaviest taxes, because they benefit more from the services of the state. And if we get more from the poor by way of taxes, it is against the principle of justice.
ECONOMIC VARIABLES

Human Development Index

Over the centuries the world has changed. Globalization brought about technology which integrated people, markets and economies. Through research and development, the totality of human development was improved in areas of health, incomes, security and education.

The reported development contributed to increase in world population and as reported in the Human Development report (2016) over a 25 year period, world population was estimated at 7 billion people of which one in four of the world population are young.

The human development index developed by Ulhaq (1990) measures a country's overall achievements in social and economic dimensions based on health and life expectancy, educational attainment, and standard of living. The index became a composite measure of performance of human development in countries, and was later adopted by the United Nations Development Program (UNDP). Human development is important and necessary to the individual and the economy. To the individual, human development expands opportunities available, and gives freedom to improve the well-being of the person and it is the increase and welfare of human capital development that aids in the improvements of economies. Having the right, capable, educated and healthy workforce contributes to economic performance.

The Nigerian economy is large with an estimated population of over 184 million inhabitants, accounting for 47% of West Africa's population and one of the largest populations of youth in the world (World Bank, 2017). With the diverse multi-cultural and ethnic groups, there is abundance of natural and mineral resources; the country stands to be one of the biggest and largest exporters of oil and natural gas making the economy to have a record of increasing revenue. The Nigerian economic indicators were one which recorded improvements. Gross Domestic Product (GDP) grew to 3.23% as at June, 2017, unemployment rate was 14.2% as at December, 2016, interest rates were 14% September, 2017 and inflation rate was 15.98% as at September, 2017. The National Bureau of Statistics (2017) also adds that the inflation rate or Consumer Price Index (CPI) was an improved position recording a drop from the 16.01% recorded in 2016.

The human development index calculates in depth inequalities in life expectancy, education, security and per capita incomes and makes a comparison between countries. Life expectancy increases with availability of health services. Measurability of health outcomes covers immunization, infant breast feeding, child malnutrition, mortality rates, HIV prevalence in Adults, physicians available per 10,000 people and public health expenditure.

Education is a key to development. Basic education should be available and it is expected that much importance should be attached to the availability of basic education. The expected number of years an individual spends in education explains to a large extent, the level of development of an economy. Over the years enrolment rate of school children especially in countries that are regarded as poor and some developing countries have not been encouraging. Low enrolment rate in schools can be attributed to either poverty or lack of interest in acquiring Western education, but more towards poverty levels. It becomes necessary that in the 21st Century, availability of basic and quality education should be the responsibility of nations.

Foreign Direct Investment

Foreign direct investment could come to the capital-importing country as a subsidiary of a foreign firm. It could also come by means of formation of a company in which a firm in the investing company has equity holding or the creation of fixed assets in the other country by the nationals of the investing country (Obadan 2004:65). In such investment, the foreign firm exercises de facto or de jure control over the assets they have created. The objective of the investors is to acquire a lasting interest and effective control in the management of the enterprise in which direct investment takes place. They may not necessarily have major shareholding, but having an effective voice in the management means that the foreign investor has the potential to influence or participate in the management of an enterprise. Thus, it is the element of influence and control that distinguishes direct investment from portfolio investment (OECD 1983).

Foreign direct investment poses a lesser risk than external debt for the borrowing country, although the latter promises higher return. Indeed, FDI has the advantage that it does not add to a country’s contractual
debt service obligation. If an investment financed by external borrowing turns out badly, the country faces the same external cline as if the investment had turn out well. But if the FDI proves unprofitable, the recipient country shares the same loss with the investor. In the same way, if the investment financed by FDI is successful, the country will have to share some of that good fortune with the foreign investor (Obadan, 2004:65).

A number of studies have analyzed the relationship between FDI inflows and economic growth, but the issue is far from settled in view of the mixed findings reached. The center-piece of the neo-liberal School otherwise known as the Pro-Foreign Investment School is that FDI can provide crucial help in modernizing the industrial order for the developing countries. They also believed that Trans-national Corporations (TNCs), through their FDI, could provide much of the ‘motor’ needed for economic growth in developing countries (Penrose, 1961 and Chenery and Stout, 1966). As opposed to the claim of the dependency theorists that FDI leads to transfer of economic control and wealth to foreign powers ultimately leading to economic marginalization of the FDI host countries, neo-liberals argue that FDI provides vast benefits to recipient firm and host economies of TNCs affiliates (Matzner, 1996).

Firstly, they believe that FDI brings crucial western knowledge and value in the form of superior Western management qualities, business ethics, entrepreneurial attitudes, better labour/capital ratio, and production techniques. Secondly, FDI makes possible industrial grading by tying firms of developing countries hosting TNCs affiliates into global research and development (R&D) networks, and thus resulting in technology transfer as well as providing a greater deal of investment fund (Fisher and Gelb 1991). Thirdly, FDI leads to the growth of enterprises by providing access to Western markets. This growth in turn provides a source of new jobs and stimulates demand for input from domestic suppliers. And so, FDI introduces new market entrant beyond the domestic economies hosting TNCs affiliates (Apter, 1965). In contrast to this submission by the pro-foreign investment school, the dependency theory advocates see FDI as the advanced guard for a new diplomacy of economic imperialism (Bailey, 1995; Inziet, 1994; Aslund, 1995; Ake, 1996; Landsburg, 1979; Hejidra, 2002). To them, foreign investors’ penetration into a host economy would result in ‘disarticulated development’. They also believe that the integration of developing countries’ economy into the world of capitalist system result in their underdevelopment in a sort of what Wolf (1974), referred to as “dependence causes underdevelopment”.

According to Aremu (2005), dependency theory maintains that, developing countries are poor because they have been systematically exploited through: imperial neglect; overdependence upon primary products as exports to developed countries; foreign investors’ malpractices, particularly through transfer of price mechanics; foreign firm control of key economic sectors with crowding-out effect of domestic firms; implantation of inappropriate technology in developing countries; introduction of international division of labour to the disadvantage of developing counties; prevention of independent development strategy fashioned around domestic technology and indigenous investors; distortion of the domestic labour force through discriminatory remuneration; and reliance on foreign capital in form of aid that usually aggravated corruption and dependency syndrome (Amin, 1976).

**Gross Domestic Product (GDP)**

The most comprehensive measure of the total output or performance of an economy is the Gross Domestic Product. Although, GDP is the most widely used measure of national output of an economy, two other concepts are frequently cited, Net Domestic Product and Gross National Product (GNP). GDP’s popularity as an economic indicator in part stems from its measuring of value added through economic processes. For example, when a ship is built, GDP does not reflect the total value of the completed ship, but rather the difference in values of the completed ship and of the materials used in its construction. Measuring total value instead of value added would greatly reduce GDP’s functionality as an indicator of progress or decline, specifically within individual industries and sectors. Proponents of the use of GDP as an economic measure tout its ability to be broken down in this way and thereby serve as an indicator of the failure or success of economic policy as well.

**Economic Growth and Tax Revenue**

In Nigeria, Naiyeju advised that deregulating key sectors of the economy and improving tax collection could improve government’s revenue base. He also advised the Federal Government to hand off the exploration of mineral resources in the country to encourage more private sectors’ participation.
Irrespective of these views, Minister of Finance Kemi Adeosun assured Nigerians that the Federal Government’s drive for enhanced revenue generation would not be a burden to Nigerians. She said the administration of President Mohammadu Buhari was firmly committed to turning this economy around by mobilising capital for investment in the essential infrastructure which would drive economic growth. (www.vanguardngr.com/2016/08)

The minister said the revenue focus would not burden Nigerians but would ensure that all revenue due to Nigeria’s government, irrespective of the source, was collected with a high degree of efficiency. She, nonetheless, expressed the determination of the Federal Government to work with the private sector when necessary to maximise the nation’s revenue potential. “The ease of doing business has been cited as one of the key drivers of economic growth and Nigeria has already set targets for improvement in this regard.

“Accordingly, in our drive for revenue, we must look for opportunities for cooperation and synergy through the three tiers of government. “Single collection of multiple levies must be pursued where possible to maximize the convenience and efficiency of our collections,”” she said.

In whatever methods chosen to improve the nation’s revenue base, observers plead with the Federal Government to tread carefully in its quest to boost non-oil revenue generation through tax. According to them, in as much as government needs money to take care of the people, the underlining word is people who should not be burdened with unfriendly tax regime. (NAN Features)

Udoma explained that it was for the purpose of shoring up liquidity levels, and ensuring the continuous provision of critical services and obligations pending improvement in revenue flows that the Federal Government in 2016 initiated a series of programmes with the states.

Represented at the workshop by his Special Adviser, Bassey Akpanyung, the Minister said he was glad about the relative fiscal stability that the interventions had so far brought to the states; noting however that a lot still needs to be done, which made the workshop imperative.

In order to gain further traction on the achievements made so far, he urged states and councils to exploit areas of their comparative advantage, to promote economic diversification for enhanced revenue generation, job creation and improved livelihood for the teeming populace. He argued that these two levels of government have diverse but untapped opportunities to generate significant internal revenues through economic diversification. Agriculture, solid minerals, tourism, entertainment, arts and culture, and ICT are all emerging sectors that hold immense potential for them, he pointed out.

Beyond ramping up internal revenue generation capacity, Udoma also advised the states and councils to equally pay attention to efficient resource utilization. “The ideals of fiscal sustainability, accountability, and transparency demand that we avoid wasteful spending of our scare resources, plug all identified leakages from our system, and channel the funds properly towards delivering the common goods to the people. “The 2018 half year revenue performance report of the Federal Inland Revenue Service (FIRS) has shown that tax revenue improved by 42 per cent when compared to the same period in 2017.

A revenue performance report for the first half of the year submitted by the service to the Ministry of Finance, showed that the Service had already realized 75 per cent of its total target for 2018. Dr Patricia Auta, an economic expert, told the News Agency of Nigeria (NAN) on Sunday that the improvement was the results of the present administration’s policies of expanding the Nation’s tax base and blocking revenue leakages.

“In July, 2017, the Federal Government launched the Voluntarily Assets and Income Declaration Scheme (VAIDS). “Figures from the FIRS shows that through the scheme, it has succeeded in growing the country’s tax base from 13 million in 2015 to 19.3 million in 2018.

“The performance report for the first half of 2018, when compared to the same period in 2017, shows clearly, the impact of the government’s strategy in improving the non-oil revenue,” she said. Multinationals and HNIs do not need any special attention from the tax authority before getting them to contribute their quota to the country’s tax base. Most multinationals and HNIs already pay tax but it must be stressed that some of them do not pay the correct amount of taxes. This is because some of these multinationals and HNIs take advantage of the loopholes inherent in the tax laws and administration of taxes generally. Such loop holes should be blocked through legislative action. More importantly, the government needs to take a long term view and find means to broaden the composition of each of the components that make up the tax bracket. Broadening the tax base can be achieved through concerted
effort by government at all levels to bring as many people as possible within the tax bracket. As a starting point, there is a need to focus on the informal sector of the economy. The IMF had in 2017, valued Nigeria’s informal enterprises at about 65 per cent of GDP. This means that the government cannot shy away from evolving a smart strategy to formalize a lot of these enterprises and bring them under the tax net. This is a pool of about $263billion of productivity. This is critical to achieving the tax to GDP objectives, which will see the government more than double taxes collected within the next two years, discounting the rate of GDP growth.

There is also a need to ensure that the personal income tax bracket is broadened. There are at least 67 million taxable income types in the formal sector for starters. At the current minimum wage of N18, 000 per month, which comes across as pessimistic, given the large number of incomes, we have an annual pool of about N14trillion in taxable income. Averaging personal income tax of 18 per cent, this adds about N2.5trillion to the current tax base, minimum. In a bid to bring more people within the tax net, government across all levels should undertake significant enlightenment and sensitization campaigns (radio jingles, talk shows, road walk etc.,) to provide information to the citizenry on the need to pay their tax. A major constraint, however, is that all our tax laws are written in English Language, which many of the people in the informal sector do not understand. There is therefore the need to provide the laws to the people in their local languages through translation of the tax laws, particularly the Personal Income Tax Act. A cue can be taken from the Republic of South Africa, where some of the country’s tax laws have been translated to local languages to reach a larger percentage of the population.

Noting that change usually came through tough choices and decisions, Udoma said Nigeria making such choices with regard to the country’s economic survival had become imperative. South Africans must not become complacent with current gross domestic product growth levels, and all stakeholders must make the effort to ensure sustainable economic growth. This will boost the tax revenue needed to fund services for society’s most vulnerable, Finance Minister Malusi Gigaba.

He was addressing the 2017 Tax Indaba in Sandton. Gigaba said that although GDP rebounded 2.5% in the second quarter of the year, now is not the time to be complacent. The revised economic outlook will be announced at the mini budget on October 25.

“We must increase the revenue base by growing the economy on a faster and on a sustainable basis,” he said. Both government and business have committed to playing their respective parts in ensuring inclusive growth. Gigaba said South Africa offers investors many opportunities. Structural reforms must be implemented in the economy to encourage investment. The 14-point plan announced in June should encourage business confidence by providing the policy certainty investors seek, he explained.
There needs to be a level of decisiveness by government and greater cooperation between business and government for the economy to grow better. Government is planning to continue investing in infrastructure development, as this will draw in needed investment from the private sector. Fiscal and monetary policies should encourage consumer confidence to boost spending. Improved consumption confidence will increase household consumption, he said. The latest tax ombud report on the systems at the South African Revenue Service also indicates what must be done to instill confidence in taxpayers, he said.

He also highlighted opportunities to invest in value-adding sectors, such as manufacturing and agro-processing.

The topic of taxation will always be high on the agenda for taxpayers of all types, regardless of where we find ourselves in the economic cycle. Yet with the past few years of below par growth and the need for government to raise additional revenues, greater interest has been taken in tax policy and the changes required to meet those revenue requirements. Although the flexibility of the tax system is key to achieving a sustainable fiscal position, higher economic growth must remain as the main objective to reach the levels of social development that this country deserves.

Yet government cannot do this alone, and the positive actions of business, labour, communities and individuals will be vital to setting the country on an improved growth path for the benefit of all. Such positive actions would not only be reflected through additional investment or improved productivity, but also through appropriate taxpayer behaviour. The tax revenues that are collected keep this country running, paying for social upliftment and poverty alleviation through grants and the multitude of services that the government provides, much of which benefits the most vulnerable in our society. The social cohesion in the country rests on the ability of government to provide these benefits from the taxes collected, and the willingness of taxpayers to pay their taxes is a crucial part of gathering sufficient resources to keep that social cohesion intact. Tax morality plays a significant role in the success of a country and government recognizes that tax morality is closely linked to the efficient use of resources and a reduction in corruption.

Government needs to do its part in showing that the taxpayers’ money is used wisely, that efforts are taken to reduce wasteful expenditure and that taxpayers are treated fairly.

Several studies including Former President Thabo Mbeki’s High-Level Panel on Illicit Financial Flows, reports by Global Financial Integrity and the Panama Papers demonstrate how African countries lose billions of dollars per year to trade mispricing, illegal offshoring by the wealthy for tax evasion, as well as by criminals and corrupt persons.

National Treasury, the South African Reserve Bank and SARS are tightening controls in these areas. Our signing of the Financial Intelligence Centre Amendment Act in June this year was an important step in enhancing our ability to combat corruption, money laundering and illicit financial flows. Accordingly, government is eager for all taxpayers to be compliant and pay their fair share, as was shown through the introduction of the Special Voluntary Disclosure Programme which came to an end on 31 August.

The regular Voluntary Disclosure Programme will continue to be available through SARS and any remaining non-compliant taxpayers should genuinely consider their options before SARS begins to receive individual taxpayer information from other countries through the Automatic Exchange of Information that begins this month. We encourage you as tax professionals to help us send the message that individuals and businesses should obey the law, disclose their offshore assets, and pay their fair share, before they are caught out. Unfortunately, as long as taxpayers either remain non-compliant or move to reduce their tax burdens, there will need to be corresponding tax policy amendments to uphold the integrity of the tax system.

RESEARCH METHODS

Research Design

This study adopts the Ex-post facto method of research. This is because data needed for analysis already exists. The study will cover Nigeria’s economy with time series rather than cross-sectional data being used. Data relating to Total Tax Revenue collected by Federal Inland Revenue Service during the period of this study which comprise of Companies Income Tax, Education Tax, Value Added Tax, Petroleum...
Profits Tax, Human Development Index, Foreign Direct Investment and GDP will be collected for the years 2005-2015. The study uses multiple regression analysis and product moment Pearson correlation coefficient technique to examine the impact and relationship between Economic Variables and Tax Revenue in Nigeria.

Methods of Data Collection
The data for this study will be obtained mainly from secondary sources. The secondary data that relates to relevant information in relation to this research will be collected from United Nation Development Programme, Knoema.com, Central Bank of Nigeria Statistical Bulletin and Federal Inland Revenue Service (FIRS). The data is made up of Total Tax Revenue collected by Federal Inland Revenue Service which comprises of Companies Income Tax, Education Tax, Value Added Tax and Petroleum Profits Tax collection, Stamp Duties, Capital Gains Tax, Personal Income Tax and National Information Technology Development Fund (NITDF) for 2005-2015 while the data for Economic Variables covers the same period and captures Human Development Index, Foreign Direct Investment and Gross Domestic Product of Nigeria.

Data Analysis Techniques
Basically, this study will involve the use of multiple regression analysis and product moment Pearson correlation coefficient method of analysis.

Model Specification and apriori expectation
In order to examine the impact of Economic Variables on Tax Revenue in Nigerian a multiple linear model is built. The model captures the contribution of Human Development Index, Foreign Direct Investment and Gross Domestic Product to Total Tax Revenue Collected during the scope of this study which comprise of Companies Income Tax, Education Tax, Value Added Tax, Stamp duties, Capital Gain Tax, Personal Income Tax, Petroleum Profits Tax and National Information Technology Development Fund (NITDF). This is presented in the following function:

\[ \text{Tax Revenue} = (TTRC) \]
\[ \text{Economic Variable} = (\text{HDI}, \text{FDI}, \text{GDP}) \]
\[ TTRC = F(\text{HDI, FDI, GDP}) \]
\[ TTRC = \beta_0 + \beta_1 \text{HDI} + \beta_2 \text{FDI} + \beta_3 \text{GDP} + \epsilon \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \]

Where \( TTRC \) is Total Tax Revenue Collected,
HDI: Human Development Index
FDI: Foreign Direct Investment
GDP: Gross Domestic Product
\( \beta_1, \beta_2, \beta_3 \), are the coefficient of the parameter estimate. \( \epsilon \) is the error term.

RESULT AND DISCUSSION
Table 4.1: Model Summary

<table>
<thead>
<tr>
<th>Mode</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.931a</td>
<td>0.868</td>
<td>0.779</td>
<td>534.91929</td>
</tr>
</tbody>
</table>

The “model Summary” table 1 above, provides information about the regression line’s ability to account for the total variation in the dependent variable.

R represent the square root of R-square and this measures the correlation between the observed and predicted values of dependent variable. According to the table, \( R = 0.931 \) as the overall coefficient. This is an indication of a strong positive relationship between Total Tax Revenue Collected and HDI, FDI and GDP.

R-Square also called coefficient of determination is the percentage of the response variable variation that is explained by a linear model. In other words, it is an overall measure of the strength of association and does not reflect the extent to which any particular independent variable is associated with the dependent variable.

In the table above, R-square is 0.868. This means that 86.8% of the changes in Total Tax Revenue Collected can be explained by HDI, FDI and GDP.
Table 4.2: ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.124E7</td>
<td>4</td>
<td>2810924.554</td>
<td>9.824</td>
<td>0.008a</td>
</tr>
<tr>
<td>Residual</td>
<td>1716831.859</td>
<td>6</td>
<td>286138.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.296E7</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2, ANOVA, the F-value (9.824) calculated at 0.008 significance level is greater than the table value (4.53). Hence, we reject the null hypothesis and the alternate hypothesis is accepted. Thus, Ho3: Is rejected. Hence, Gross Domestic Product has significant impact on Total Tax Revenue Collected.

Table 4.3: Coefficients (a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(constant)</td>
<td>-23613.044</td>
<td>20073.613</td>
<td>-1.176</td>
<td>0.284</td>
</tr>
<tr>
<td>FDI</td>
<td>-0.693</td>
<td>0.716</td>
<td>-0.158</td>
<td>0.968</td>
</tr>
<tr>
<td>GDP</td>
<td>0.001</td>
<td>0.028</td>
<td>0.035</td>
<td>0.964</td>
</tr>
<tr>
<td>HDI</td>
<td>54544.293</td>
<td>43355.181</td>
<td>0.992</td>
<td>0.255</td>
</tr>
</tbody>
</table>

Table 3, coefficients, shows the predictor variables (constant, FDI, GDP, HDI). The constant is the predicted value of the nation’s GDP when all other variables are 0. In other words, there will be no Total Tax Revenue Collected in the absent of FDI, GDP, HDI.

The coefficient for Foreign Direct Investment (FDI) is -0.693 which implies that for every unit decrease in FDI, a 0.693 unit decrease in Total Tax Revenue Collected is predicted, holding all other variables constant.

GDP AND HDI both have a positive coefficients with Total Tax Revenue Collected. GDP (0.001) and HDI (54544.293) means that Total Tax Revenue Collected will increase by 0.001 unit for every unit increase in GDP and 54544.293 increase for every unit increase in HDI.

The OLS line can now be estimated as follows:

\[ \text{TTRC} = -23613.044 - 0.693\text{FDI} + 0.001\text{GDP} + 54544.293\text{HDI} \]

Decision rules:

Using test-statistic at 0.05 level of significance,

If \( F_c < F_t \), accept \( H_0 \) and reject \( H_1 \)

If \( F_c > F_t \), accept \( H_1 \) and reject \( H_0 \)

Using p-value at 0.05 level of significance,

If \( p > 0.05 \) accept \( H_0 \) and reject \( H_1 \)

If \( p < 0.05 \) accept \( H_1 \) and reject \( H_0 \)

Test of hypotheses

**H01**: Human Development Index has no significant impact on Total Tax Revenue Collected in Nigeria.

From table 3 above, HDI \( (p=0.255 >0.05) \), this means that HDI is not significant. Hence, H01 is accepted.

Thus, Human Development Index has no significant impact on Total Tax Revenue Collected in Nigeria.

**H02**: Federal Direct Investment (FDI) has no significant impact on Total Tax Revenue Collected in Nigeria.

From table 3 above, FDI \( (p=0.371 >0.05) \), this means that FDI is not significant. Hence, H02 is accepted.

Foreign Direct Investment has no significant impact on Total Tax Revenue Collected in Nigeria

**H03**: Gross Domestic Product has no significant impact on Total Tax Revenue Collected

Table 2, ANOVA, the F-value (9.824) calculated at 0.008 significance level is greater than the table value (4.53). Hence, we reject the null hypothesis and the alternate hypothesis is accepted.

Thus, Ho3: Is rejected. Hence, Gross Domestic Product has significant impact on Total Tax Revenue Collected.
Table 4.4: Correlations

<table>
<thead>
<tr>
<th></th>
<th>FIRS Pearson correlation</th>
<th>FDI Pearson correlation</th>
<th>GDP Pearson correlation</th>
<th>HDI Pearson correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIRS</td>
<td>FDI</td>
<td>GDP</td>
<td>HDI</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>-0.046</td>
<td>0.905</td>
<td>0.910</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.894</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>FDI</td>
<td>-0.046</td>
<td>1</td>
<td>0.017</td>
<td>0.069</td>
</tr>
<tr>
<td></td>
<td>0.894</td>
<td>0.959</td>
<td>0.840</td>
<td>11</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>GDP</td>
<td>0.905</td>
<td>1</td>
<td>0.978</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>HDI</td>
<td>0.910</td>
<td>0.069</td>
<td>0.978</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td>0.840</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 4. Correlations, the result of this analysis shows the strength and direction of linear relationship between the dependent and the independent variables. It ranges from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all. According to the table, the correction coefficient between TTRC and GDP is 0.905 which is statistically significant. This is a strong positive relationship. There is also a higher positive relationship between TTRC and HDI with an impressive coefficient of 0.910 which is also statistically significant. FDI was not statistically significant with TTRC.

SUMMARY
The research work focuses on Economic Variables and Tax Revenue in Nigeria (2005-2015). The first chapter began with providing a background on the Nigerian tax system and the changes that it has gone through as well as providing details of tax revenue in an economy. It was stated Government exists in order to effectively collect taxes from available economic resources and make use of same to create economic prosperity.

The main problem that necessitated this research work was deduced from past studies which focused mainly on Tax Revenue and Economic Variable like the GDP. There has been little or no study on the effect on Economic Variables such as GDP, Human Development Index and Foreign Direct Investment on Tax Revenue.

The aim and objectives of this research work is to critically investigate the impact of Human Development Index, Foreign Direct Investment and Gross Domestic Product on Total Tax Revenue Collection in Nigeria for the period of 2005-2015.

The main significance of this study lies in the fact that the study serves as an update on the scanty work done on developed and developing economies. Nigerian economy is the main focus of this study.

In chapter two, diverse literatures were reviewed and some economic variables used in this study was also discussed. The researcher also made frantic efforts to discuss some of the various taxes that form the dependent variables of this research work. Also in discussing about this research in chapter two, Naiyeju, (2016) advised that deregulating key sectors of the economy and improving tax collection could improve government’s revenue base. He also advised the federal government to hand off the exploration of Mineral resources in the country to encourage more private sectors participation.

In chapter three, efforts were made to describe different tools or techniques that were employed in analyzing the result of the functional test carried out on the hypothesis. This study adopts the Ex-post facto method of research. This is because data needed for analysis already exists. The study covered Nigeria’s economy with time series rather than cross-sectional data being used. Data relating to Total Tax Revenue Collected, Human Development Index, Foreign Direct Investment and Gross Domestic Product will be collected for the years 2005-2015. The study uses multiple regression analysis and product
moment Pearson correlation coefficient technique to examine the impact and relationship between Economic Variables and Tax Revenue in Nigeria. In chapter 4 which is the analysis and interpretation of data, the chapter presents data used to empirically investigate Economic Variables and Tax Revenue in Nigeria. Time series data was used to capture the trends of Human Development Index, Foreign Direct Investment and Gross Domestic Product in Nigeria and its contribution to Total Tax Revenue Collected during the period of this research. The data were analyzed with SPSS 16.0. The findings reveal that there is no significant relationship between Human Development Index, Foreign Direct Investment and Total Tax Revenue Collected while Gross Domestic Product has significant impact on Total Tax Revenue Collected.

CONCLUSION
The findings of this study contribute towards a better understanding of Economic Variables and Tax Revenue in Nigeria. Economic Variables such as Human Development Index, Foreign Direct Investment and Gross Domestic Product were developed to test which of the economic variables has a significant impact on Total Tax Revenue Collected in Nigeria for the period of 2005-2015. The result shows Human Development Index and Foreign Direct Investment has no significant impact on Total Tax Revenue Collected while Gross Domestic Product shows a significant impact on Total Tax Revenue Collected. The implication of our findings is pointing majorly at policy makers, especially the Federal Government as the GDP showed a positively significant relationship.

RECOMMENDATIONS
The significance of the findings obtained from the study poses a serious challenge to the economic and policy makers. Based on these findings, the study recommends that the government should strive to achieve sustainable price stability, fiscal discipline that channels funds to productive sectors to encourage private investors. Economic efficiency driven by infrastructural support and enhanced technological capabilities, strong institutional and economic reforms can increase production capacity. In addition, stable polity, to promote trade, domestic and foreign investments, should also be highly emphasized. There is also need for the policy makers to take cognizance of the policy lag effect and design policies in line with the expected magnitude of expected changes. Strategies for poverty eradication in addition to prudential and effective management of government expenditure can also lead to increased savings specifically through the oil revenue. These will eventually lead to a high Total Tax Revenue collection.

REFERENCES


APPENDIX 1:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL TAX REVENUE COLLECTION (=N= BILLION)</th>
<th>FOREIGN DIRECT INVESTMENT (=N= BILLION)</th>
<th>GROSS DOMESTIC PRODUCT (=N= BILLION)</th>
<th>HUMAN DEVELOPMENT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,304.40</td>
<td>654.21</td>
<td>14,738.21</td>
<td>0.47</td>
</tr>
<tr>
<td>2006</td>
<td>3,054.10</td>
<td>624.76</td>
<td>18,716.81</td>
<td>0.48</td>
</tr>
<tr>
<td>2007</td>
<td>1,753.30</td>
<td>759.20</td>
<td>20,939.56</td>
<td>0.48</td>
</tr>
<tr>
<td>2008</td>
<td>2,274.40</td>
<td>971.30</td>
<td>24,655.67</td>
<td>0.49</td>
</tr>
<tr>
<td>2009</td>
<td>1,909.00</td>
<td>1,273.82</td>
<td>25,235.77</td>
<td>0.49</td>
</tr>
<tr>
<td>2010</td>
<td>2,557.30</td>
<td>905.74</td>
<td>55,470.09</td>
<td>0.50</td>
</tr>
<tr>
<td>2011</td>
<td>3,639.10</td>
<td>1,360.65</td>
<td>63,367.37</td>
<td>0.51</td>
</tr>
<tr>
<td>2012</td>
<td>3,635.50</td>
<td>1,113.51</td>
<td>72,600.23</td>
<td>0.51</td>
</tr>
<tr>
<td>2013</td>
<td>4,468.90</td>
<td>875.04</td>
<td>81,004.20</td>
<td>0.52</td>
</tr>
<tr>
<td>2014</td>
<td>4,086.10</td>
<td>738.42</td>
<td>90,163.93</td>
<td>0.53</td>
</tr>
<tr>
<td>2015</td>
<td>4,572.20</td>
<td>601.94</td>
<td>92,557.13</td>
<td>0.53</td>
</tr>
</tbody>
</table>