CHAPTER ONE

INTRODUCTION

1.1 Background to the Study.

Over the years, it has been observed that Nigeria's fiscal policies are dynamic and her expenditure increases in response to the needs of the society while her revenue does not increase in the same proportion as a result of poor tax administration, (Phillips, 1977).

Tax is a compulsory payment made by the citizens for which there is no immediate commensurate return. It is a burden which every citizen must bear to sustain his government (Nwezeaku, 2005). According to Soyode and Kojola, (2006), "a tax is compulsory exaction of money by a public authority for public purposes".

Appah (2004) and Oyandonghan (2011) stated that tax is imposed to regulate the production of certain goods and services, protection of infant industries, control of inflation, stimulation of growth and development, income retribulation, and so on. Tosun and Abizadeh (2005), stated that "taxes are used as proxy for fiscal policy. They enumerated five possible mechanisms by which taxes affect economic growth. First, taxes can inhibit investment rate through such taxes like company income tax and personal income tax, Second, taxes can slow down growth in labour supply by disposing labour-leisure choice in favour of leisure. Third, tax policy can affect productivity growth through its discouraging effect on research

and development expenditure. Fourth, taxes can lead to a flow of resources to other sectors that may have low productivity. Finally, high taxes on labour supply can distort the efficient use of human capital high tax burdens even though they have high social productivity.

A system of taxation will vary from one country to the other because it is a socio/political and economic model representing society's social, political and economic needs and aspiration at any given time, (Soyode & Kajola, 2006). As a result of this, Nigerian tax system is dynamic and is continually changing to meet the needs of the constituents of the society, hence the need for tax reform in Nigeria. Tax is dynamic, so reforms are necessary to effect the required changes in the national economy, (Ola, 2001). Azubuike (2009) observed that tax reform is an ongoing process with tax policy makers and tax administrators continually adopting the tax systems to reflect changing economic, social and political circumstances in the economy.

Economic development is a qualitative process and refers to structural change of economic and social infrastructure in an economy, which allows an increase in the standard of living in a nation's population (htt://www.studymode.com/essays). It is also referred to as the quantitative and qualitative changes in the economy. Such actions can involve multiple areas including development of human capital, critical infrastructure, regional competitiveness, environmental sustainability, social inclusion, health, safety, literacy and other initiatives. Economic

development is a normative concept, that is, it applies in the context of people's sense of morality (right and wrong, good and bad). The definition of economic development given by Michael Todaro is an increase in living standards, improvement in self-esteem made and freedom from oppression as well as a greater choice (htt://www.diffen.com/difference/economicdevelopmentvseconomicgrowth). The main purpose of economic development is to raise the standard of living and the general well-being of the people in the economy.

Tax reform is operationalized in this study to mean changes put in the Nigerian tax system in order to increase total revenue base of the nation. They are reviews necessary to effect the desired changes in the nation's economy. The dependence on oil revenue by all tiers of government in Nigeria has made the federal government to reform the existing tax laws. The need to address the problem of over dependence on oil led to several tax policy reforms. The tax policy reviews of 1991 to 1993, 2002 – 2004, 2007, 2011 as well as the yearly amendments given in the annual budgets were geared towards addressing this issue.

The study was designed to investigate the effect of tax reforms on Nigeria's economic development from (1994 – 2014).

1.2 Statement of Problem

Governments of developing nations according to Falae & Olabiyi (2005); Gbateman (2009) have made several attempts either fiscal or monetary targeted at growing the economy. There are hitherto reforms across sectors basically with the objective of economic growth and overall development but, Ndadaye (2007) through his empirical work showed that the various macroeconomic parameters such as Gross Domestic Product, unemployment level, and so on that best describe the state of the economy are uninterestingly fluctuating and at best declining.

The importance of macroeconomic indicators such as Gross Domestic Product (GDP), infrastructural development, education, health sector development, youth and social development, transportation sector development and so on to a developing nation like ours cannot be over emphasized, as their deficit are some of the binding constraints to growth in the economy.

It is an established fact from Central Bank of Nigerian (CBN) Statistical Bulletins and Federal Inland Revenue Service records that tax revenue increases annually which may be due to various tax reforms and may not have reflected remarkably in the economy. After the broadening of the Nigerian tax system and the total revenue base of the nation, the economy did not reflect significantly the increase in total tax revenue as a result of various tax reforms. Omesi (2007) observed that "the role of taxation in promoting economic activities and development in Nigeria is not felt primarily because of poor administration as a result, the economy has

remained in deep slumber". Ogbonna (2009) notes that the administration of petroleum profits tax in Nigeria has mainly been focused on revenue generation to the detriment of stimulating economic growth and development. Osuala & Jones (2014) submit that, there have been wastages, some spending has been politicized and there has been high level of misappropriation, mismanagement and corruption. Hence one is poised to ascertain whether the increase in the total revenue base of the nation has really effected the economic development of Nigeria. Tax has been mentioned in the works of Olukoshi (2005) and Olabiyi (2005) but the ability of tax to stimulate economic growth results from the deliberately designed regimes that encourage compliance by all who should pay.

However, many studies have been carried out on taxation and tax reforms but most of them were carried out overseas such as Bonu & Motau (2009), Roshazia (2011), lee &Gordon (2005), Ferede &Dahly (2012) and Wang (2013) and their results may not apply generally to other countries especially Nigeria due to several peculiarities of our local environment. Most the tax reform studies that relate to Nigeria have to do with economic growth, revenue generation and investment as evident in the studies of Ogbonna & Appah (2012), Oriakhi &Ahuru (2014) and Nwokoye & Rolle (2015), undermining economic development. A situation where results of cross country researches in developed economies are generalized to developing countries often induce knowledge gap. Therefore, this study seeks to

close this gap in Nigeria by empirically investigating the effect of tax reforms on the economic development of Nigeria.

To the best of our knowledge, the latest of these previous studies on tax reforms and economic growth is Ogbonna & Appah (2012) who used time series annual data for their analysis which covered the period from 1994-2009, which in our thinking is not a recent study. Furthermore, most of these studies on taxation and tax reforms that relate to Nigeria used only gross domestic product (GDP) to proxy economic growth, but in this study we used gross domestic product (GDP) and infrastructural development to proxy economic development.

1.3 Objectives of the Study

The broad objective of this study was to investigate the effect of tax reforms on Nigeria's economic development. The specific objectives include to:

1. Investigate whether there is any significant relationship between petroleum profits tax and Gross Domestic product (GDP) in the pre-reform period.
2. Investigate whether there is any significant relationship between petroleum profits tax and Gross Domestic product in the post- reform period.
3. Investigate whether there is any significant relationship between petroleum profits tax and infrastructural development in the pre-reform period.
4. Investigate whether there is any significant relationship between petroleum profits tax and infrastructural development in the post- reform period.

5. Determine the impact of companies income tax on Gross Domestic product in the pre-reform period.
6. Determine the impact of companies income tax on Gross Domestic product in the post-reform period.
7. Determine the impact of companies income tax on infrastructural development in the pre-reform period.
8. Determine the impact of companies income tax on infrastructural development in the post-reform period.
9. Examine the effect of value added tax on Gross domestic product in the pre-reform period.
10. Examine the effect of value added tax on Gross Domestic product in the post-reform period.
11. Examine the effect of value added tax on infrastructural development in the pre-reform period.
12. Examine the effect of value added tax on infrastructural development in the post-reform period.

1.4 **Research Questions**

In view of the objectives of this study and statement of problem, an attempt was made to address the following research questions:

1. What is the relationship between petroleum profits tax and Gross Domestic product in the pre-reform period?

2. What is the relationship between petroleum profits tax and Gross Domestic Product in the post-reform period?
3. What is the relationship between petroleum profits tax and infrastructural development in the pre-reform period?
4. What is the relationship between petroleum profits tax and infrastructural development in the post-reform period?
5. What is the relationship between companies income tax and Gross Domestic Product in the pre-reform period?
6. What is the relationship between companies' income tax and Gross Domestic Product in the post-reform period?
7. What is the relationship between companies' income tax and infrastructural development in the pre-reform period?
8. What is the relationship between companies' income tax and infrastructural development in the post-reform period?
9. What is relationship between value added tax and Gross Domestic Product in the pre-reform period?
10. What is the relationship between value added tax and Gross Domestic Product in the post-reform period?
11. What is the relationship between value added tax and infrastructural development in the pre-reform period?
12. What is the relationship between value added tax and infrastructural development in the post-reform period?

1.5 Research Hypotheses

The following hypotheses were formulated for the study.

1. There is no significant relationship between petroleum profits tax and Gross Domestic Product in both the pre-reform and post reform periods.
2. There is no significant relationship between petroleum profits tax and infrastructural development in both the pre reform and post- reform periods.
3. There is no significant relationship between companies income tax and Gross Domestic Product in both the pre-reform and post-reform periods.
4. There is no significant relationship between companies tax and infrastructural development in both the pre-reform and post-reform periods.
5. There is no significant relationship between value added tax and Gross Domestic Product in both the pre-reform and post-reform periods.
6. There is no significant relationship between value added tax and infrastructural development in both the pre-reform and post-reform periods.

1.6 Significance of the Study

One basic importance of this study is that if filled the gap in literature by providing empirical evidence on the effect of tax reforms on the economic development of Nigeria. This study is intended to inform and educate adequately the beneficiaries of this study. These beneficiaries include researchers and, students of business and economics, the government and the general public.

The study will benefit students and researchers because it will serve as a reference point to them. It will also be useful to those who will want to carry out further study on the subject matter. More so, researchers and the students contemplating tax planning reforms will find this study valuable as it will provide basic background for proper understanding.

This study will also benefit the government (policy makers) in the area of tax planning or formulation. This is because the revelations from this study will help them in making conscious efforts in determining the amount of tax revenue that will be payable by taxpayers at a future date.

Finally on the part of the general public, this study will help individual and corporate tax payers to arrange their financial affairs in such a way as to avoid as far as possible the payment of tax without breaching the tax laws of this nation.

1.7 Scope of the Study

This study was restricted to Tax reforms and economic development in Nigeria from 1994-2014. In order to achieve the objective of the study, the researcher used petroleum profits tax, companies' income tax and value added tax to measure tax reforms while gross domestic product and the infrastructural development were used to proxy economic development.

1.8 Limitations of the Study

The major limitation of this study was the general limitation associated with research in Nigeria. It was very difficult to get the required secondary data from Central Bank of Nigeria (CBN), and Federal Inland Revenue Service (FIRS). But we were able to overcome by spending some amount of money to get the required information electronically.

1.9 Operational Definition of Terms

1. **Tax Reforms:** Tax reform means changes that are put in the Nigeria tax system in order to increase total revenue base of the nation. They are reviews necessary to effect the desired changes in the economy.
2. **Economic Development:** This means economic growth as well as the changes that take place in an economy which raise the standard of living and the general well-being of the people.
3. **Gross Domestic Product (GDP):** This is the market value of all final goods and services produced within a country in a given period without regard to the producers. Gross Domestic product (GDP) is one of the primary indicators to measure the economy of a country.
4. **Infrastructural Development:** These are basic structures, services and facilities needed for an economy to function well. They include technical structures that support a nation, such as roads, bridges, water management, solid waste management, and telecommunications. Others are energy, transportation, governance and other public utilities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In this section of the study, our related and relevant literature is presented in a way to justify the study, showing what is known and what remains to be investigated. It is our hope that the review of general literature on the topic, will definitely serve the purpose of this study.

Thus in this chapter, literature was reviewed, organised and presented under the following major headings: Conceptual framework, Theoretical framework, preliminary findings from literature and, summary and gap in literature.

2.2 Conceptual Framework

2.2.1 Meaning and Definition of Taxation

Anyanwu (1997) in Ogbonna and Appah (2012) defined taxation as the compulsory transfer or payment (or occasionally goods and services) from private individuals, institutions or groups to the government. Naiyeju (1996) in Kiabel (2011) defined a tax as "a compulsory payment levied on the citizens by the government for the purpose of achieving its goals". Tax was equally defined in the Australian case of Matthews V. Chicory Marketing Boards V (1938) in (ICAN, 2006) as "a compulsory exaction of money by a public authority for public purposes or taxation is raising money by means of contributions from individual persons".

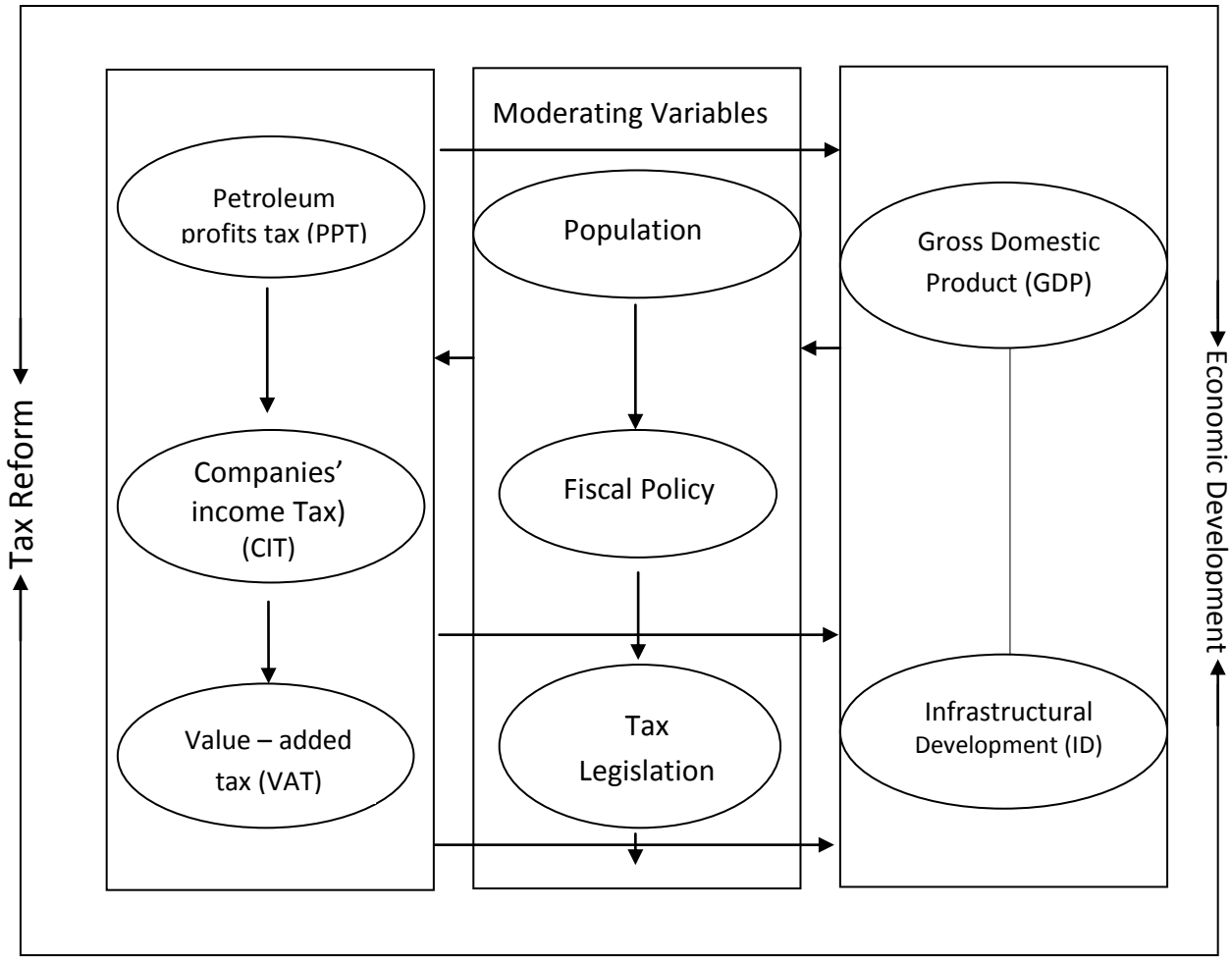
To tax is to impose a financial charge or other levy upon a taxpayer, an individual or legal entity, by a state or the functional equivalent of a state such that failure to pay is punishable by law. Taxes may be direct tax or indirect tax, and may be paid in money or as a labour equivalent (often but not always unpaid labour).

The main purpose of tax is to raise revenue to meet government expenditure and to redistribute wealth and management of the economy (Ola, 2001; Jhingan, 2007; Bhartia, 2009). According to Nzonta (2007), four key issues must be understood for taxation to function well in the society. First, a tax is compulsory contribution made by the citizens to the government and this contribution is for general common use. Secondly, a tax imposes a general obligation on the taxpayer. Thirdly, there is a presumption that the contribution to the public revenue made by the taxpayer may not equivalent to the benefits received. Finally, a tax is not imposed on a citizen by the government because it has rendered a specific services to him or his family. Thus, it is evident that a good tax structure plays a multiple role in the process of economic development of any nation which Nigeria is not an exempt (Appah, 2010). Musgrave and Musgrave (2006) noted that these roles include: the level of taxation affects the level of public savings and thus the volume of resources available for capital formation; both the level and the structure of taxation affect the level of private saving.

Aguola (2004) notes that a tax is a liability imposed upon the tax payers who may be individuals, groups of individuals or other legal entities. It is a liability to pay

an amount on account of the fact that the tax payers have income of minimum amount from certain specified source or that they own certain tangible or intangible property, or that they carry on certain economic activities, which have been chosen to be subject to taxation. Thus, a tax is a generalized exaction. It may be noted that a public levy containing an element of compulsion does automatically become a tax. Ifurueze and Ekezie (2014) see tax as a compulsory levy imposed on a subject or upon his property by the government to generate the needed revenue for the provision of basic amenities and creation of jobs.

Figure 2.1: **Researcher's Conceptual Framework Model**



Source: Conceptualized by the Researcher, (2015)

Following the review of the literature of the study and the identified gap, the study proposed a model known as Omesi's Tax Reform Model (2015). The framework model shows the relationship between tax reform which is the independent variable proxy by PPT, CIT and VAT and economic development as the dependent variable proxy by Gross Domestic Product (GDP) and Infrastructural Development (ID).

The model is therefore specified as:

$$GDP = F\ (PPT_{1t}) + F\ (CIT_{1t}) + F\ (VAT_{1t}) + F\ (PPT_{2t}) + F\ (CIT_{2t}) + F\ (VAT_{2t}) \ldots . (1)$$

Where $GDP =$ Gross Domestic Products

$PPT_1 =$ Pre Petroleum Profits Tax

$CIT_1 =$ Pre Companies Income Tax

$VAT_1 =$ Pre Value Added Tax

$t =$ time series

$PPT_2 =$ Post Petroleum Profits Tax

$CIT_2 =$ Post Companies Income Tax

$VAT_2 =$ Post Value Added Tax

In this model GDP is used to proxy economic development by PPT, CIT and VAT in the pre and post reform periods 1-3 over a time series (1994-2014). Each of these factors or variables are expected to have a positive effect on economic development in Nigeria.

$$\mathrm{ID} = \mathrm{F}\,(\mathrm{PPT}_{1t}) + \mathrm{F}\,(\mathrm{CIT}_{1t}) + \mathrm{F}\,(\mathrm{VAT}_{1t}) + \mathrm{F}\,(\mathrm{PPT}_{2t}) + \mathrm{F}\,(\mathrm{CIT}_{2t}) + \mathrm{F}\,(\mathrm{VAT}_{2t}) \ldots\ldots (2)$$

Where ID =Infrastructural Development

PPT_1 = Pre Petroleum Profits Tax

CIT_1 = Pre Companies Income Tax

VAT_1 = Pre Value Added Tax

t = time series

PPT_2 = Post Petroleum Profits Tax

CIT_2 = Post Companies Income Tax

VAT_2 = Post Value Added Tax

In this model ID is used to proxy economic development by PPT, CIT and VAT in the pre and post reform periods 1-3 over a time series (1994-2014). Each of these factors or variables are expected to have a positive effect on economic development in Nigeria.

2.2.2 History of Tax Reforms in Nigeria

The Nigerian Tax system has undergone several reforms geared at enhancing tax collection and administration with minimal costs, (Asuquo, 2012). Tax reform in Nigeria dated back to the early part of 1990s and some of them are the following: Taskforce on tax administration (1978) headed by Alhaji Shehu Musa introduced withholding tax regime, imposition of 10 percent special levy on banks excess profits and imposition of 2.5 percent turnover tax on building and construction companies (Olajide, 2013). This was followed by a study on the Nigerian tax system and administration in (1992) headed by Emmanuel Edozien and, the thrust of the reform included: Establishment of Federal Inland Revenue Service (FIRS) as the operational arm of then Federal Board of Inland Revenue Service (FBIR) and the setting of the revenue services at other tiers of government (states and local), (Olajide, 2013).

These earlier tax reforms were preceded by two study groups. The first group was inaugurated on the 9th of January 1991 with respect to direct taxation. The group was assigned to take a critical examination of the Nigeria's tax system since independence, evaluate the possible changes that have been made and access the effectiveness of the system and proffer necessary recommendations (Oriakhi & Ahuru, 2014). According to (Olajide, 2013), the second group was on indirect taxation headed by Sylvester Ugoh whose thrust of the reform was policy shift from direct to indirect /consumption tax. This brought about the introduction of

value added tax (VAT) in 1993 by decree 102 but was implemented from 1st January 1994. VAT replaced the sales tax which was introduced in 1986 by decree No. 7. VAT is a consumption tax payable on the goods and services consumed by any person, government agencies, business organizations or individuals (Ugwa & Embuka, 2012).

Another important reform that preceded the above study groups was the introduction of Decree No. 21 of 1998. This decree assigned eight, eleven and twenty specific taxes to the federal, state and local governments. These assignments of a number of taxes to each tier of government was to stop the problem of duplication of taxes at the states and local government levels and discourage the incidence of multiple taxation. To this extent, the Joint Tax Board (JTB) was introduced to publish a list of various taxes at each of the government's level.

The current reform process commenced August 6, 2002 to 2003, after the receipt of many proposals by the Federal Ministry of Finance. A study group was inaugurated to examine the tax system and make appropriate recommendations on ways to entrench a better tax policy and improve tax administration in the country. The tax reform of 2004 was the outcome of the recommendations made by the study group (2002) and the working group (2003) which reviewed the work of the former. Both groups made wide consultations after which they came out with nine bills that were presented by Federal Executive Council (FEC) to the national

assembly for ratification. The bills were: the Federal Inland Revenue Service Bill, Personal Income Tax Bill, Petroleum Profits Tax Bill, Value Added Tax Bill, Education Tax Bill, Custom and Excise Tariff (Consolidation) Act Bill, National Sugar Development Act Bill and National Automotive Council Act Bill (Oriakhi & Ahuru, 2014).

Another Bill that was sent alongside the bills was the Tertiary Education Trust Fund (Establishment, etc) Bill. On April 16, 2007 four of the proposed bills were signed into law by President Olusegun Obasanjo. These were: the Federal Inland Revenue Service (Establishment) Act, 2007; Companies Income Tax (Amendment) Act, 2007; National Automotive Tax Act Council Amendment Act, 2007 and the Value Added Tax Amendment Act (VATA) 2007.

Another landmark in tax reform in Nigeria was the restructuring or establishment of a new Federal Inland Revenue Service Board (FIRSB) and Tax appeal tribunal in 2007 by Federal Inland Revenue Service (Establishment) Act, 2007 (Bassey, 2013). By this act, it became autonomy in the same year. Areas of autonomy granted to it by this Act include: Financial autonomy (Funding), administrative and capacity building autonomy. According to Oriakhi & Ahuru (2014) and Ajibola (2012), some of the newly created departments due to its new status were risk management department, Process operation department and Audit department. Others include Tax policy research and development, Regional coordination department and Modernization department.

2.2.3 **Tax Reform**

According to Oriakhi & Ahuru (2014), tax reform is simply the series of action by Nigerian's government to promote the tax system. Tax reform is the process of changing the way taxes are collected or managed by the government, (en.wikipedia.org/wiki/taxreform). Tax reformers have different goals. Some seek to reduce the level of taxation of all people by the government. Some seek to make the tax system more progressive or less progressive. Others seek to simplify the tax system and make the system more understandable or more accountable, (wikipedia,thefreeenclopedia). Numerous organizations have been set up to reform tax systems worldwide often with the intent to reform income taxes or value added taxes into something considered more economically liberal. (Wikipedia, the free enclopedia).

It is not novel as Nigeria has embarked on series of tax reforms. The several tax reforms were designed to broaden the tax base, reduce the tax burden on tax payers, restore the confidence of the tax payer on the tax system and prompt voluntary compliance on the part of the tax payer. On the whole, the ultimate goal of tax reform is the enhancement of revenue generation (Oriakhi & Ahuru, 2014). The essence of tax reform in both developed and developing countries of the world is the reduction or eradication of fiscal deficits through appropriate restructuring of the tax systems to attract higher revenue or to improve the revenue elasticity or buoyancy of the tax structure. Tax reform is therefore a deliberate

design to increase revenue, improve efficiency, and promote equity, (World bank, 1991). Institutional aspects of tax reforms involve the semi-autonomous revenue authority model, where a traditional line departments are separated from the ministry of finance and gradual legal status of semi-autonomous revenue authorities (Oriakhi & Ahuru, 2014).

The dependence on oil revenue by all tiers of government in Nigeria has made the Federal Government to reform the existing tax laws, (Ogbonna & Appah, 2012). Tax reform became imperative in Nigeria because of the nature of tax structure, which according to Anyanwu (1997) was complex, inelastic inequitable and unfair. Moreover, the country depended on import and export duties, where there were no opportunities to generate revenue through consumption based tax such as VAT. The dependency of the country on taxes relating to foreign trade activities had made the revenue base of the country to be very unstable (Oriakhi & Ahuru, 2014). In addition, the Nigeria's tax base was very narrow while the tax rate was very high.

According to Odusola (2006), the country's tax system is lopsided, and dominated by oil revenue. He also noted that it is characterized by unnecessary complex, distortionary and largely inequitable taxation laws that have limited application in the informal sector that dominates the economy.

In order to address this problem several tax policy reforms were made. The tax policy reviews of 1992, 1993 and 2003, as well as the yearly amendments given in the annual budgets, were geared towards addressing this issue. However, no remarkable achievement was recorded. Odusola (2006) noted the following as are some of the reasons for tax reforms in Nigeria:

First, there is a compelling need to diversify the revenue portfolio for the country in order to safeguard against the volatility of crude oil prices and to promote fiscal sustainability and economic viability at lower tiers of government.

Second, Nigeria operates on a cash budget system, where proposals for expenditure are always anchored to revenue projections. This facilitates determining the optimal tax rate for a given level of expenditure. Thus accuracy in revenue projection is vital for devising an appropriate framework for sustainable fiscal management, and this can be realized only if reforms are undertaken on existing tax policies in order to achieve some improvement.

Third, Nigerian tax system is concentrated on petroleum and trade taxes while direct and broad-based indirect taxes like the value added tax (VAT) are neglected. This is a structural problem for the country's tax system. Although direct taxes and VAT have the potential for expansion, their impact is limited because of the dominance of the informal sector in the country. Furthermore, the

limited formal sector is supported with strong unions that act as pressure groups to deter any appreciable tax increment from gross income.

Fourth, the widening fiscal deficit that over the years has threatened macro-economic stability and prospects for economic growth makes the prospect of tax reform very appealing. The ratio of deficit to GDP averaged 9.98 and 5.0 percent for the periods 1990 – 94 and 1999 – 2001, in 1993 it was 15.5 percent (Odusola, 2006).

Fifth, the study groups on the review of the Nigerian tax system in 1991 and 2003 highlighted the need to increase tax revenue and reduce expenditure as the major fiscal issues to be addressed. As such, the primary objective of the committees was to optimize revenue from various sources within the country. Finally, the necessity to improve the tax notification procedure was underscored in order to facilitate effective evaluation of the performance of the Nigerian tax system and to promote adequate planning and implementation.

The Nigerian tax system has experienced series of reforms since 1904 to date (Ogbonna & Appah, 2012). The effects of the various reforms in the country are as follows: introduction of income tax in Nigeria between 1904 and 1926; grant of autonomy to the Nigerian Inland Revenue Service 1945; the Raisman Fiscal Commission of 1957; Formation of Revenue Board in 1958; the promulgation of the Petroleum Profits Tax Ordinance No. 15 of 1959; the Promulgation of Income

Tax Management Act 1961; the tax force on tax administration of 1978 headed by Alhaji Shehu Musa which brought about the introduction of withholding tax regime; establishment of Federal Inland Revenue Service (FIRS) as the operational arm of the then Federal Board of Inland Revenue (FBIR); introduction of Value added tax (VAT) in 1993 and tax policy and administration reforms amendment 2001 and 2004 (Bassey, 2013).

The latest tax reforms embarked upon by government include the: the following enactments by the National Assembly: Capital Gains Tax Act, 2004; Companies Income Tax Act, 2004; Companies Income Tax (Amendment) Act 2007; Education Tax Act, 2004; Industrial Development Act, 2004; Personal Income Tax Act 2004 and Personal Income Tax (Amendment) Act, 2011. Others are Federal Inland Revenue Service (Establishment) Act, 2007; Petroleum Profits Tax Act, 2004; Stamp Duties Act, 2004; Value Added Tax Act, 2004; Value Added Tax (Amendment) Act, 2007 and National Information Technology Agency Act, 2007 (Bassey, 2013).

2.2.4 **Major Components of Tax in Nigeria**

2.2.4(a). **Companies Income Tax**

It was introduced in 1961. It is a tax imposed on profits or income of all registered companies operating in Nigeria, excluding petroleum profits tax. The original law (Company Income Tax Act) has been amended several times and it is currently codified as Companies Income Tax (Amendment) Act 2007, (Kiabel, 2011). It is a

Federal Law, hence the Federal Inland Revenue service is charged with the powers of assessment, collection of and accounting for the taxes which the Federal Government is empowered to collect (see Table 2.8) (Kiabel, 2011).

The study of Bonu and Motau (2009) revealed that company income tax affected economic growth and development of emerging economies. In their study, company income tax rates in selected emerging nations, such as Angola, Congo, Lesotho, Malawi, Maritius, Mozambique, Nambia, Sechelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe were used. In order to comparatively carry out this study, few developed nations such as China, Japan, Canada, UK and USA were randomly selected to determine the effect of company income tax on economic development in the emerging nations. Botswana was chosen for this purpose covering the period 1982 to 2002. Findings showed that top marginal company income tax rates varied from 5% to 20% at top marginal tax rate was charged by Mozambique and Canada among the developed nations. This indicated that developed nations charged higher company income tax rate than developing nations and that accounted for the rapid growth of the economies of those countries.

Adegbie & Fakile (2011), examined company income tax and Nigeria's economic development. Gross domestic product (GDP) was used to capture the Nigerian economy and petroleum profits tax (PPT), company income tax (CIT), customs and excise duties and value added tax (VAT) to measure company income tax.

Findings showed that there was significant relationship between company income tax and Nigerian economic development and that tax evasion and avoidance were the major hindrances to revenue generation.

In a similar study, Chude & Chude (2015) studied the impact of company income taxation on the profitability of companies in Nigeria. A study of Nigerian breweries. The study made use of secondary data and a time series econometric technique with an error correction model and tested the variables most likely to impact on profitability of companies in Nigeria. The study revealed that the company income tax has significant affect on the profitability of companies in Nigeria. Abiola (2010) worked on the recent developments in companies income taxation in Nigeria and analysed the variables with the use of quantitative survey method and found that the Nigerian tax system is usually unduely complex, skewed low revenue yielding poor administered anti-federalism largely inequitable and loaded with unduely large number of overlapping taxes which move nuisance value than revenue value.

2.2.4(b). **Value Added Tax**

Value Added Tax (VAT) was introduced into Nigeria to replace sales tax following the enactment of the Value Added Tax Act 1993 which repealed the Sales Tax Act of 1986 and came into force on 1st December, 1993. The operational date was shifted to 1st January, 1994 for administrative convenience.

An important landmark in tax reform in Nigeria was the adoption of value added tax to replace the sales tax. Since its introduction, more than 15 of the 42 sections haven been amended (Odusola, 2006). It is chargeable in Nigeria at the rate of 5% on the value of taxable goods and services. Taxable goods and services are those goods and services which are not included in the VAT exemption list in the first schedule to the Act.

Toder & Rosenberg (2010) examined the effects of imposing a valve added tax to replace payroll taxes or corporate taxes (in the US). The studies were conducted on the background that the United State of America are the only country in the developed economies that does not impose a broad based consumption tax. This is a typical form of broad based consumption tax used worldwide called a credit invoice value added tax (VAT). This is a subtraction method of VAT or business transfer tax (BTT), and a retail sales tax (RST) were all intended to tax the final consumption once at the retail level, but the collection system differs among the three taxes. The research result showed that VAT had administrative advantages over both BIT and RST.

Ariyo (1997) studied the productivity of the Nigerian system and reported a satisfactory level of the Nigerian tax system before the oil boom. Similarly, Olaoye (1999) studied the administration of VAT in Nigeria. The study was designed to seek ways of improving government revenue generation base in order to improve the economy. Owolabi & Okwu (2011) empirically worked on

the contribution of VAT to the development of Lagos state economy. The areas of development considered included infrastructural development, environmental management, education sector management, youth and social development and health sector development, agricultural development. Others are transportation development and agricultural development.

A meticulous study of tax literature and empirical studies revealed that over 136 countries with more than 50% being emerging economies had embraced VAT. Omesi (2014) noted that VAT revenue had positively contributed in the reduction of unemployment rate in Nigeria.

Rodriguez, Jordan & Sanz (2008) in their study used on AIDS noted to identify the welfare effect of VAT cut on cultural goods and found that the potential gain might be regressive.

2.2.4(c). **Petroleum Profits Tax (PPT)**

The Petroleum Profits Tax Act (1959) provides for the imposition of tax on the chargeable profits of companies that are engaged in petroleum operations in Nigeria. The objectives of petroleum taxation according to Nwete (2004) are numerous among which are: taxing in the petroleum industry is a way of achieving government's objective of exercising right and control over the public asset, government imposes very high tax as a way of regulating the number of participants in the industry and discouraging its rapid depletion in order to

conserve some of it for future generation. The second objective is that the high profit profile of a successful investment in the oil industry makes it a socio-political and economic obligations to the citizenry. The third objective is to make petroleum taxation an instrument for wealth re-distribution between the wealthy and industrialized economies represented by the multinational organizations, who own the technology, expertise and capital needed to develop the industry and the poor and emerging economies from where the petroleum resources are extracted. The main focus of petroleum profits tax (PPT) is the upstream sector of the petroleum industry, which deals with oil exploration, prospecting, development and production.

2.2.5 **Sources of Nigerian Tax Laws**

According to (ICAN, 2006), the sources of Nigerian tax laws are:

(a) **Customary Laws** - These are the Native Laws and Customs governing the taxation of incomes, goods and properties of persons or communities within an ethnic group. Included under this heading is the Islamic law which is the basis of Moslem laws that are usually applicable in the Northern part of Nigeria. Examples are:

(i) **Ishakole**: payable in Yoruba land to titular heads of communities or Obas on the produce from the farmland.

(ii) **Osusu-Mkwu**: Applicable in the Eastern part of Nigeria.

(iii) **Zakkat**: Tax payable by adherents of the Islamic faith on their wealth, which has been in the possession for a full year, such wealth includes money; properties, etc. The Islamic law provides the basis for determining the amount of tax payable and to whom payable.

(b) **Statue Laws** – These are tax legislations passed by Acts of the National and State Assemblies and by-laws by Local Government authorities in a democratic government or Decree or Edicts under a Military Government. These legislations confer necessary powers on the taxing authorities to impose tax on citizens, that is, individuals, companies, trusts, settlements, etc. Examples of such tax legislations are:

(i) The Personal Income Tax Act, 1993.

(ii) The Companies Income Tax Act, 1990.

(c) **Case Laws** – This is the doctrine of stare decisis, that is, judicial precedents. Under this doctrine, judgments pronounced by superior courts of records, namely; High Courts, Appeal Courts, and Supreme Court on principles of tax laws and their interpretations of the provisions of tax statutes are binding on the lower courts.

In view of the fact that Nigerian tax laws had their origin from the English tax laws, it would not be out of place to state that the principles of English common law pronounced upon by the Judges in England and interpreted by them also form another source of Nigerian tax laws. This position is buttressed by the decision in

the case of ADERAWOS TIMBER TRADING CO. LTD. V FEDERAL BOARD OF INLAND REVENUE (1966) LL.R 195, (1969) ALL NLR 247.

In the case, it was held that the decision of English Courts can be invoked for the purpose of interpreting Nigerian tax statutes where the expression and terms used are similar and substantially the same as those in English statutes.

2.2.6 **Tax Ofences and Penalties**

2.2.6(a) **Introduction**

Various penalties or punishments are imposed for contravention of the provisions of the Personal Income Tax Act. A person guilty of an offence against the Act may be liable to pay a fine or to imprisonment or to both fine and imprisonment. Penalties can be imposed to punish taxpayers and others for violating certain provisions of the tax Act or to deter them from non-compliance with the tax law. Imposing a penalty is intended to discourage taxpayers and others from breaking the tax law. If the penalty is significant enough, the taxpayers and others who might contemplate committing tax evasion and other infractions will think twice before embarking on such prohibited acts. Penalties in the form of fines and interest also yield revenue to the government.

The institution of proceedings for the imposition of a penalty, fine or term of imprisonment does not in any way cancel a person's liability to pay the tax for which he is liable. The provisions of PITA shall not affect any criminal proceedings under any other enactment.

An offence under PITA is deemed to occur in the state or at such other place as the relevant tax authority may decide.

No prosecution in respect of an offence under Part IX of PITA may be commenced except at the instance of the relevant tax authority.

Table 2.1: Specific Offences and Penalties
The offences specified in PITA and their penalties are stated hereunder.

	Offences	**Penalties**	**Sections**
A	Failure to pay income tax charged by assessment on the due date.	Penalty of 10% per annum of the amount of tax unpaid and interest on annual, basis at bank based lending rate on the tax due from the date when the tax becomes payable until it is paid.	76 & 77
B	Failure to deduct WHT or failure to pay WHT deducted to the RTA within 30 days from the date of deduction or the date the duty to deduct arose	Liable to a penalty of 10% of the amount of tax not deducted or remitted in addition to the amount of tax not deducted or remitted plus interest at the prevailing monetary policy rate of the CBN.	74(1)
C	Failure to make PAYE tax deduction from employees' emoluments or failure to account properly for the tax deduction	Liable to pay the PAYE tax due together with a penalty of 10% per annum of the amount of tax in addition to interest at the prevailing Commercial rate	82

Source: See page 35

Table 2.1: Specific Offences and Penalties. Cont'd.

D	Failure of any employer to file a return with the RTA of all emoluments paid to its employees not later than 3lst January of every year in respect of all employees in its employment in the preceding year.	Liable on conviction to a penalty of N500,000 in the case of a body corporate, and N50,000 in the ease of an individual.	81 (3)
E	Giving incorrect information to obtain a TCC or obtaining the certificate through misrepresentation, forgery, or falsification.	Liable on conviction to a fine of N50,000 plus twice the tax payable by him or to 3 years' imprisonment or to both such fine and imprisonment.	85(7)
F	Failure of a person be it a government organization or corporate entity to demand for a TCC as required by section 85(2) of PITA and to verify the genuineness by referring same to the issuing tax authority.	Liable on conviction to a fine of N5,000,000 or to imprisonment for 3 years or to both such fine and imprisonment.	85(9)
G	Failure of a person engaged in banking business to complete and deliver to the RTA any return specified in the notice from the tax authority, attend personally before an officer of the RTA, produce for examination any book, document, account and return which the RTA may deem necessary or give orally or in writing any other information specified in the notice from the RTA.	Liable on conviction to a fine of N500,000 in the case of a body corporate and N50,000 in the case of an individual in respect of each offence.	49(3)

Source: See page 35

Table 2.1: Specific Offences and Penalties. Cont'd.

H	Failure of a person engaged in banking business to prepare and deliver a return at the end of each month stating the names and addresses of new customers of the bank and failure to provide information including the name and address of any person specified in the notice from the RTA.	Liable on conviction to a fine of N500,000 in the case of a body corporate and N50,000 in the case of an individual in respect of each offence.	47(3)
I	Failure of a taxable person to keep books of accounts which, in the opinion of the RTA, are adequate for tax purposes.	Liable on conviction to a penalty of N50,000 for individuals and N500,000 for corporate entities.	52(1)(a)
J	Making an incorrect return by omitting or understating any income liable to tax or giving an incorrect information in relation to a matter or thing having effect on any taxpayer's liability to tax.	Liable on conviction to a fine of N20,000 and double the amount of tax undercharged or would have been undercharged as a result of the incorrect return or information.	95(1)
K	Knowingly making a false statement or false representation in a return, accounts, etc for the purpose of obtaining a deduction, set-off, relief or refund in respect of tax for himself or any other person or aiding, abetting counseling, inciting or inducing any other person to make or deliver a false return or statements or keep or prepare a false accounts or unlawfully refuse or neglect to pay tax.	Liable on conviction to a fine of N50,000 for individuals and N500,000 for corporate bodies or to imprisonment for not more than six months provided that where an offence under this section is committed by a person in relation to tax payable by, or repayable to him for a year of assessment, there shall be substituted for the amount of the fine as aforesaid, N10,000 or treble the tax chargeable on the person for that year, whichever is the greater.	96(1)

Source: See page 35

Table 2.1: Specific Offences and Penalties. Cont'd.

L	Failure of a person on whom a warrant is served to co- operate with the officer(s) executing the warrant or abusing or assaulting the officer(s).	Liable on conviction to a fine of N5,000 or to imprisonment for a term not exceeding 3 months or both such fine and imprisonment.	53(7)
M	Demanding more tax than the authorized tax assessment, misappropriating or embezzling a portion of the tax collected, rendering false return of tax collected and defrauding any person by an official appointed for the due administration of PITA or employed in connection with the assessment or collection of the tax or not.	Liable on conviction to a fine of N100,000 or to 3 years' imprisonment or to both such fine and imprisonment.	97
N	Collecting or attempting to collect personal income tax by an unauthorized person.	Liable on conviction to a fine of ₦100,000 or to 3 years' imprisonment or to both such fine and imprisonment.	97

Source: Bassey (2013)

2.2.7 **Other Offences and Penalties**

Section 94(1) of PITA 2004 provides that where a person is guilty of an offence under P1TA for which no penalty is specifically prescribed, he shall be liable on conviction to a fine of five thousand Naira. Where such offence is the failure to furnish a return, statement or information or to keep records required, a further sum of one hundred Naira is imposed for every day during which such failure continues, but if it is in default of payment, imprisonment for six months is

prescribed. The liability to such further sum shall commence from the day following the conviction or from such other day thereafter as the court may order.

Any person who fails to comply with the requirement of a notice served on him or without sufficient cause fails to attend in answer to a notice or summons served on him or having attended refuses to answer any question lawfully put to him is guilty of an offence against PITA. Nevertheless, a magistrate may dispense with the personal attendance of the defendant if he pleads guilty in writing or so pleads by a legal practitioner.

Where a person fails to comply with the requirements of a notice given by the relevant tax authority to file his return of income for the purposes of the income tax to be charged on the person for a year of assessment, the relevant tax authority may, in lieu of the institution of proceedings against the person, impose a penalty on him of an amount equal to the income tax chargeable on him for the preceding year of assessment. In that case, the relevant tax authority will serve a written notice of the penalty on the person. Where full payment of the penalty is not made within thirty days after service of such notice, the relevant tax authority may sue for and recover the penalty in a court of competent jurisdiction with full costs of action from the person as debt due to the federal government or relevant state. A certificate signed by an officer of the relevant tax authority setting out the name and address of the person, the date of service of the said notice and the amount of the penalty remaining unpaid, shall be sufficient authority for the court to give

judgment for that amount. The relevant tax authority may remit the whole or any part of such penalty, whether before or after judgment, for any reason which appears to it to be adequate.

2.2.8 General Penalties under FIRSA 2007

Where any person contravenes any provisions of FIRSA 2007 for which no penalty is specifically prescribed, he shall be liable on conviction to a fine not exceeding N50,000 or imprisonment for a term not exceeding six months or to both fine and imprisonment.

Where an offence under the Act is committed by a body corporate or firm or other association of individuals:

(a) every director, manager, secretary or other similar officer of the body corporate;

(b) every partner or officer of the firm;

(c) every person concerned in the management of the affairs of the association; or

(d) every person who was purporting to act in any capacity, commits an offence and shall be liable to be proceeded against and punished for the offence in like manner as if he had himself committed the offence, unless he proves that the act or omission constituting the offence took place without his knowledge, consent or connivance.

Table 2.2: Specific Offences and Penalties under FIRSA 2007.

Failure to complete and deliver to the FIRS any return required or failure to produce books, documents, etc for examination at the place and time stated in the notice, or failure to appear personally before an officer of FIRS for examination or failure to give orally or in writing further information required.	Liable on conviction in respect of each offence to a fine of 100% of the amount of the tax liability.
Failure of a bank to furnish, upon demand by the FIRS, quarterly returns on the names and addresses of all customers of the bank connected with all transactions involving N5 million and above in the case of an individual or N10 million and above in the case of a body corporate or failure to submit returns on the names and addresses of new customers of the bank or any other additional information about its customers required by the FIRS.	Liable on conviction to a fine not exceeding N500,000 on corporate customers and not exceeding N50,000 in the case of an individual customer.
Failure to pay tax within the period prescribed.	Penalty of 10% of the amount of tax payable and: (a) in the case of Naira remittances, an interest at the prevailing minimum rediscount rate of the CBN plus spread to be determined by the Minister;

Source: See page 41

Table 2.2: Specific Offences and Penalties under FIRSA 2007. Cont'd.

	(b) in the case of foreign currency remittances, an interest at the prevailing London Inter Bank Offered Rate (LIBOR) or the prevailing minimum rediscount rate of the CBN whichever is higher, plus spread to be determined by the Minister. The interest is on the tax due and runs from the date when the tax becomes payable until it is paid.
Failure to deduct withholding tax or failure to pay withholding tax deducted to the FIRS within 30 days from the date of deduction or the date the duty to deduct arose.	Liable on conviction to pay the tax withheld or not remitted in addition to a penalty of 10% per annum of the tax withheld or not remitted and interest at the prevailing CBN minimum re-discount rate and imprisonment for a period of not more than three years.
Unauthorized communication or attempt to communicate confidential information by any member or former member of the FIRS Management Board or any employee or former employee of the FIRS or Ministry of Finance.	Liable on conviction to a fine not exceeding N200,000 or imprisonment for a term not exceeding three years or to both such fine and imprisonment.

Source: See page 41

Table 2.2: Specific Offences and Penalties under FIRSA 2007. Cont'd.

(a) Obstructing or assaulting an authorized officer in the exercise of his function, (b) Impeding the carrying out of any search, seizure, removal or distriant (c) Rescuing, damaging or destroying anything liable to seizure, removal or distress. (d) Preventing the arrest of any person or rescuing any person so arrested.	Liable on conviction to a fine not exceeding N200,000 or imprisonment for a term not exceeding three years or to both fine and imprisonment.
Making, signing and delivering any declaration, notice, certificate or other document or making a statement for the purpose of tax which is untrue in any material particular.	Liable on conviction to a fine not exceeding N200,000 in addition to payment of the amount of tax unpaid or overpayment made in respect of any payment or to imprisonment for a term not exceeding three years or to both fine and imprisonment.
(a) Counterfeiting or falsifying any document required for tax purposes, (b) Accepting or using counterfeited or falsified document knowingly, (c) Attending any document after it is officially issued.	Liable on conviction to a fine not exceeding N200,000 or to imprisonment for a term not exceeding three years or to both such fine and imprisonment.
(d) Counterfeiting any seal, signature, initial or other mark of, or used by, any officer for the verification of such a purpose relating to tax.	
(e) An employee of FIRS conspiring or participating in the commission of any of the offences in (a) to (d).	

Source: See page 41

Table 2.2: Specific Offences and Penalties under FIRSA 2007. Cont'd.

Demanding more tax than the authorized tax assessment, misappropriating or embezzling a portion of the tax collected, rendering false return of the amount of tax collected, defrauding any person or using one's position to deal wrongfully with the FIRS, stealing or misusing the FIRS' documents or compromising on the assessment or collection of any tax by any person appointed for the due administration of FIRSA or employed in connection with the assessment and collection of a tax.	Liable on conviction to a fine equivalent to 200% of the sum in question or to imprisonment for a term not exceeding three years or to both fine and imprisonment.
Committing an offence under the Act while being armed with any offensive weapon.	Liable on conviction to imprisonment for a term not exceeding five years.
While armed with offensive weapon, causes injury to any officer of the FIRS in the performance of any function or duty under the Act.	Liable on conviction to imprisonment for a term not exceeding ten years.
Any person not being an authorized officer assuming the name, designation or impersonating the character of an authorized officer for the purpose of obtaining admission to any building or other place, or of doing or procuring to be done any act which he would not be entitled to do or procure to be done of his own authority or for any other unlawful purpose.	Liable on conviction to a fine not exceeding N200,000 or to imprisonment for a term not exceeding three years.

Source: Bassey (2013)

The FIRS has powers to employ its own legal officers. The legal officers have powers to prosecute any of the offences under FIRSA 2007 subject to the powers of the Attorney-General of the Federation.

The FIRS may compound any offence under FIRSA 2007 by accepting a sum of money not exceeding the maximum fine specified for the offence. An official receipt is to be issued by FIRS for any of such money received.

Table 2.3: Offences and Penalties under CITA 2004

Offences	**Penalties**
Failure to disclose information to the FIRS regarding the occurrence of certain events which should result in the withdrawal of investment allowance earlier granted. Such events include the sale or transfer or appropriation of asset on which investment allowance has been granted to another person or purpose other than a chargeable purpose within five years from the date of purchase of the asset.	Liable on conviction to a penalty not exceeding N100 plus the amount of tax lost as a result of granting the investment allowance.
Failure to file with the FIRS the company's audited accounts and returns within the stipulated time, that is, not later than 6 months after the close of the company's accounting year or in the case of a newly incorporated company, within 18 months from the date of incorporation or not later than 6 months after the end of its first accounting year, whichever	The penalty on the company is: (a) N25,000 in the first month in which the failure occurs; and (b) N5,000 for each subsequent month in which the failure continues. The penalty on any director, manager; secretary or other similar officers, servant or agent of the company who

Source: See page 44

Table 2.3: Offences and Penalties under CITA 2004

is earlier.	was a party, to the offence being committed is a fine of N100,000 or imprisonment for two years or both.
Failure to complete and deliver to the FIRS any return required or produce for examination any books, accounts, documents, etc that the FIRS may consider necessary or attend personally before an officer of FIRS for examination or give orally or in writing further information required.	Liable on conviction in respect' of each offence to a fine equivalent to the amount of the tax liability in addition to paying the tax due.
Failure of the principal officer, agent, factor or representative of a company on whom a warrant of search is served to co-operate with the officer(s) executing the warrant or engaging in acts resulting in abuse, physical assault or similar misbehaviour.	Liable on conviction to a fine of N10,000 or to imprisonment of not less than six months or to both such fine and imprisonment.
Failure to deduct withholding tax on interest, royalty, rent, dividend, etc. or failure to pay the tax deducted to the FIRS within 21 days from the date of deduction or the date the duty to deduct arose.	Liable to a penalty of 10% per annum of the tax not withheld or not remitted as the case may be in addition to the amount of tax deducted plus interest at the prevailing commercial rate.
Failure to pay any tax (i.e. provisional tax, self-assessment tax or tax charged by assessment) on the due date.	A penalty of 10% per annum of the amount of tax payable plus interest at bank lending rate on the tax due from the date when the tax becomes payable until it is paid.
(a) Knowingly making a false statement or false representation in a return, accounts or particulars for the purpose of obtaining any	Liable on conviction to a fine of N1,000 or to imprisonment for five years or to both such fine and imprisonment.

Source: See page 44

Table 2.3: Offences and Penalties under CITA 2004

deduction, set-off, relief or refund in respect of tax for any company.	
(b) Aiding, abetting, assisting, counseling, inciting or inducing any other person to make or deliver any false return or statements or keep or prepare any false accounts or particulars concerning any profits on which tax is payable or unlawfully refuse or neglect to pay tax.	(The FIRS may compound any offence under this section and with the leave of the court may before judgment stay or compound any proceedings).
Demanding more tax than the authorized tax assessment, misappropriating or embezzling a potion of the tax collected, rendering false return of the amount of tax collected, defrauding any person or using one's position to deal wrongfully with the FIRS by any person appointed for the due administration of CITA or employed in connection with the assessment and collection of the tax.	Liable on conviction to a fine of N600 or to imprisonment for three years or to both such fine and imprisonment.
Collecting or attempting to collect companies income tax by an unauthorized person.	Liable on conviction to a fine of N600 or to imprisonment for three years or to both such fine and imprisonment.

Source: Bassey (2013)

Any person guilty of an offence against the Companies Income Tax Act or any person who contravenes or fails to comply with any of the provisions of the Act or of any rule made thereunder for which no penalty is specifically prescribed is

liable on conviction to a fine of N20,000. Where such offence is failure to furnish a statement or information or to keep records required, a further sum of N2,000 is imposed for each and every day during which such failure continues, but if it is in default of payment, imprisonment for six months is prescribed. The liability for such further sum is to commence from the day following the conviction or from such day thereafter as the court may order (Bassey, 2013).

Any person who fails to comply with the requirement of a notice served on him or without sufficient cause fails to attend in answer to a notice or summons served on him or having attended refuses to answer any question lawfully put to him is guilty of an offence against CITA. A magistrate may dispense with personal attendance of the defendant if he pleads guilty in writing or so pleads by a legal practitioner (Bassey, 2013).

Where a company fails to comply with the requirements of any notice to file its audited accounts and returns or to provide fuller or further returns for the purpose of the tax to be charged upon the company for any year of assessment, the FIRS may in lieu of the institution of proceedings, impose a penalty of an amount equal to the tax chargeable on the company for the preceding year of assessment (Bassey, 2013). In that case, the FIRS will serve a written notice of penalty, on the company. Where full payment of the penalty is not made within 30 days after service of such notice, the FIRS may sue for and recover the penalty, in a court of competent jurisdiction with full costs of action from the company as debt due to

the government of the federation. The FIRS may remit the whole or part of such penalty before judgment for any reason which appears to it to be adequate (Bassey, 2013).

The institution of proceedings for, or the imposition of a penalty, fine or term of imprisonment does not in any way cancel a company's liability to pay the tax for which it is liable. The provisions of CITA shall not affect any criminal proceedings under any other enactment.

An offence under CITA is deemed to occur in the town where the registered office of the company is situated or at such other place as the FIRS may decide.

2.2.9 Legal Framework for Tax Audit and Investigation

The Federal Inland Revenue Service (FIRS) is empowered by the various tax Acts to conduct tax and investigations. Some of the relevant sections of the tax Acts are reproduced hereunder:

Section 29(1) of the FIRS (Establishment) Act, 2007

Notwithstanding anything to the contrary in any other enactment or law, an authorized officer of the service shall at all reasonable times have free access to all lands, buildings, places, books and documents, in the custody or under the control of a public officer, institution or any other person, for the purpose of inspecting the books or documents including those stored or maintained in computers or on digital, magnetic, optical or electronic media, and any property, process or matter

which the officer considers necessary or relevant enactment or law or for the purposes of carrying out any other function lawfully conferred on the service or considered likely to provide any information required for the purposes of any of those enactments or any of those functions and many, without fee or reward, make extract from, or copies of, such books or documents.

Section 35 of the FIRS (Establishment) Act, 2007

(1) The service shall employ special purpose Tax Officers to assist any relevant law enforcement agency in the investigation of any offence under this Act.

(2) Notwithstanding anything to the contrary in any other enactment or law, the service shall have the power to investigate or cause investigation to be conducted to ascertain any violation of any tax law whether or not such violation has been reported to the service.

(3) In conducting any investigation under subsection (2) of this section, the service may cause investigation to be conducted into the properties of any taxable person if it appears to the service that the life style of the person and extent of the properties are not justified by his source of income.

(4) Where any investigation under this section reveals the commission of any offence or an attempt to commit any offence, the service shall, pursuant to section 48 of this Act, undertake the prosecution of the offences.

Section 60(4) of the Companies Income Tax Act, Cap C21, LFN 2004 as amended by section 17 of the Companies Income Tax (Amendment) Act, 2007

Nothing in this section or in any other provision of this Act shall be construed as precluding the service from verifying by tax audit or investigation into any matter relating to any return or entry in any book, document, accounts, including those stored in a computer, digital or magnetic, optical or electronic media as may from time to time, be specified in any guideline by the service.

Section 66(1) of the Companies Income Tax Act, Cap. C21, LFN 2004

If the Board discovers or is of the opinion at any time that any company liable to tax has not been assessed or has been assessed at a less amount than that which ought to have been charged, the Board may, within the year of assessment or within six years after the expiration thereof and as often as may be necessary, assess such company at such amount or additional amount, as ought to have been charged, and the provisions of this Act as to notice of assessment, appeal and other proceedings shall apply to assessment or additional assessment and to tax charged thereunder:

Provided that where any form of fraud, willful default or neglect has been committed by or on behalf of any company in connection with any tax imposed under this Act or under the Companies Income Tax Act, the Board may at any time and as often may be necessary, assess such company at such amount or

additional amount as may be necessary for the purpose of making good any loss of tax attributable to the fraud, willful default or neglect.

Section 39 of the Value Added Tax Act, Cap. V1, LFN 2004

(1) An authorized officer may at any time enter without warrant any premises upon which he has reasonable grounds to believe that a person is carrying on business in order to ascertain whether this Act is being complied with (whether on the part of the occupier of the premises or any other person) and on entry he may carry out such inspections and make such requirements as may specified by the Board.

(2) Where an authorized officer enters any premises in exercise of the power conferred on him by subsection (1) of this section, he may take with him such persons as he considers necessary for carrying out his functions under this Act.

Section 24 of Stamp Duties Act, Cap. S8, LFN 2004

(1) Every persons having in his custody any rolls, books, records, papers, documents, or proceedings, the inspection whereof may tend to secure any duty, or to prove or lead to the discovery of any fraud or omission in relation to any duty, shall at all reasonable times permit any person thereto authorized by the commissioner to inspect the rolls, books, records, papers, documents and proceedings, and to take such notes and extracts as he deems necessary, without fee or reward, and in case of refusal, shall for

every such refusal be guilty of an offence and be liable on conviction to a fine of twenty Naira.

(2) Where such rolls, books, records, papers, documents or proceedings are in custody of any bank, such inspection shall first be made by a commissioner unaccompanied by any other person unless the commissioner decides that it is necessary for him to have assistance in determining whether any fraud or omission in relation to any duty has taken place.

Section 3(1) of Petroleum Profits Tax Act, Cap. P13, LFN 2004

The due administration of this Act and the tax shall be under the care and management of the Board who may do all such acts as may be deemed necessary and expedient for the assessment and collection of the tax and shall account for all amounts so collected in a manner to be prescribed by the Minister.

Section 2(1) of the Education Tax Act. E4, LFN 2004

The provisions of the act relating to the collection of companies income tax or petroleum profits tax shall, subject to this Act, apply to the tax due under this Act.

2.2.10 **Selection of Companies for Tax Audit or Investigation**

According to the Companies and Allied Matters Act 1990 (CAMA), every company is required by law to prepare and deliver at least once every year to the Federal Inland Revenue Service (FIRS) its tax returns which include, inter alia; the audited accounts, tax and capital allowance computations, a true and correct

statement of the amount of profit from each source, a duly completed self-assessment form, etc. When these returns are received in the office, they should be subject to desk audit or examination. As we have already mentioned in this study, desk audit is conducted in the tax office and it should be a routine exercise. The tax official may raise queries on the returns or request for further information to facilitate his examination and the taxpayer is expected to respond within the time specified. The tax official may also carry out a field audit. This is done outside the tax office by physically conducting the exercise in the taxpayer's premises. It is not expected to last for many days although it is more comprehensive than the desk audit. Given the resources of the Federal Inland Revenue Service (FIRS), it is not practicable to carry out a field audit on every company every year. The desk and field audits may lead to certain discoveries which may call for an in-depth audit or special investigation of certain companies.

The selection of companies for tax audit or investigation is to be done by the management of the Federal Inland Revenue Service (FIRS). Some of the circumstances that may trigger off a tax audit or investigation are:

(a) A claim for tax refund.

(b) Failure to respond to tax queries from desk examination.

(c) Referrals from desk examination (i.e. the outcome of a desk examination may indicate that there is need to conduct an in-depth audit or investigation).

(d) Referrals from other regulatory agencies (e.g. EFCC).

(e) Information resulting from tax audit and investigation of other taxpayers. For example, in a group of companies the examination of one company may lead to certain revelations or discoveries about other companies in the group which may also call for tax audit or investigation of those companies.

(f) Information from the intelligence unit or other departments of the tax authority, newspaper publications, third parties, tip-off, etc. For example, an employee or ex-employee of a company who has become "a born-again" or who was offended by his employer might send a petition to the tax authority to disclose cases of tax fraud committed by the company that he knew about.

(g) Directive from higher government authority, for example, the Federal Government may direct that the audit or investigation be carried out on some multinational companies.

(h) Transfer pricing/thin capitalization arrangements. Suspicion of inter-group transactions by companies within the same group not being made at arm's length.

(i) Non-filing of tax returns.

(j) Filing of tax returns which show poor performance (loss situation) repeatedly or extraordinary performance when compared with companies within the same industry. The tax authority should be put on enquiry if a

company has reported heavy losses in its tax returns and accounts for several years.

(k) Companies making unusual request or taking extraordinary decisions, for example, mergers, acquisitions, re-organizations, centralization of previously decentralized operations.

(l) Random sampling (i.e. company is randomly selected without using any particular criteria).

(m) Suspicion or discovery of the existence of tax fraud or evasion.

2.2.11 **Economic Development**

In strictly economic terms, development has traditionally meant achieving sustained rates of growth of income per capita to enable a nation to expand its output at a rate faster than the growth rate of its population. Levels and rates of growth of real per capita gross national income (GNI) (monetary growth of GNI per capita minus the rate of inflation) are then used to measure the overall economic well-being of a population – how much of real goods is available to the average citizen for consumption and investment (Todaro & Smith, 2011).

As time went on and with an increasing number of economists and policymakers who clamored for more attacks on wide-spread absolute poverty, increasingly inequitable income distributions and rising unemployment. Economic development during the 1979s was redefined in terms of the reduction or

elimination of poverty, inequality, and unemployment within the context of a growing economy.

According to Todaro & Smith (2011), economic development is "an increase in living standards, improvement in self-esteem needs and freedom from oppression as well as a greater choice". The most accurate method of measuring development is Human Development Index which takes into account the literacy rates and life expectancy which affects productivity and could lead to economic growth (htt:/www.diffen.com/difference/economicdevelopmentvseconomicgrowth).

Economic development is a qualitative process and refers to structural change of economic and social infrastructure in an economy.

There are at least three basic components or core values that serve as a conceptual basis and practical guidelines for understanding the inner meaning of development. These core values are sustenance, self-esteem, and freedom. These core values represent common goals sought by all individual and society. Todaro and Smith (2011) see sustenance to mean ability to meet basic needs, self-esteem to mean to be a person; a sense of worth and self respect, of not being used as a tool by others for their own ends, while freedom from servitude means to be able to choose.

According to Todaro & Smith (2011), the following are the objectives of development every society must have. They are:

(a) To increase the availability and widen the distribution of basic life sustaining goods such as food, shelter, health and protection;

(b) To raise levels of living, including in addition higher incomes, the provision of more jobs, better education and greater attention to cultural values, all of which will serve not only to enhance material well being but also to generate individual and national self-esteem; and

(c) To expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-states but also to the forces of ignorance and human misery.

The importance of taxation to the economic development of Nigeria cannot be over emphasized, as the evidence presented in the work of Azaiki & Shagarri (2007), which states that Nigeria gained an extra ₦390 billion in oil-related fiscal revenue between 1971 and 2005 or 4.5 times in 2005 Gross Domestic Product (GDP). Unfortunately, the economy has been bedeviled by sustained under-development evidenced by poor human development and economic indices including poor income distribution, militancy and oil violence in the Niger Delta, endemic corruption, unemployment, relative poverty (Nwekeaku, 2010). Irrespective of Nigeria's huge oil wealth, the country has remained the poorest in the world. In particular, the Niger Delta which produces the oil wealth that account for the bulk of Nigeria's earnings has also as one of the most

environmentally degraded regions in the world evidenced from the World Wildlife Fund report revealed in Ekaette (2009) cited in Jibrin, Blessing & Ifurueze (2012).

However, the problems with the Nigerian economy have been traced to failure of successive government to use the oil revenue and excess crude oil income effectively in the development of other sectors of the economy. Over all, there has been poor performance on national institutions such as power, energy, road, transportation, politics, financial systems, and investment environment have been deteriorating and inefficient (Nafziger 2003).

According to Odularu (2008), outside of the energy sector, Nigeria's economy is highly inefficient. Moreover, human capital is underdeveloped. Nigeria ranked 151 out of 177 countries in the United Nations Development Index and non-energy-related infrastructure is inadequate (Todaro & Smith, 2011). Nigeria's economy is struggling to leverage the country's vast wealth in fossil fuels in order to displace the devastating lack that affects about 57 percent of its population (Jibrin et al, 2012). In 2009, persistent inflation and environmental degradation led to deprivation of means of livelihood and other socio-economic factors to the people of the Niger Delta which is the major oil producing region in Nigeria. Despite the fact that the crude oil has been the source of Nigeria economy, the economy is faced with high rate of unemployment, wide spread oil spillage, increasing poor standard of living as a result of decreasing gross domestic product,

per capita income and high rate of inflation which has led to the effect of economic development (Nwezeaku, 2010).

Bawa & Mohammed (2007) noted that, "Nigeria with all its oil wealth has performed poorly, with GDP, per capita today not higher than that at independence in 1960". This meant that an average Nigerian was better off before independence in 1960. Bawa & Mohammed acknowledged poor performance of Nigeria's economy but did not provide any empirical evidence or percentage of figures by way of hypotheses testing and thereby confirming the fact that some of their works must have been based on assumptions that cannot be statistically verified and generalized, (Baridam 2008) and Eromosele (2004). Tax revenue which includes petroleum profits tax and value added tax, major generators of Nigerian revenue are supposed to be a source of finance for economic development but has turned to be a bone of contention between many interest groups, precisely the government and the multinational oil and gas companies. Dominant theories of economic growth have suggested that significant relationship exists between national income and economic growth. This implies that, when income is invested in an economy, it results in the growth of that economy. For example, Harrod & Domar models stated that growth is directly related to saving (unspent-income). In support of this view, Azaiki & Shargari (2007), suggest that income from a nation's natural resources (e.g. petroleum) has a positive influence on economic growth and development. Bawa & Mohammed (2007) also supported the argument that

increase natural resources income does not results in economic growth but result in vicious development cycle (i.e. violent and adverse development). According to them, increase in natural resources income (petroleum profits tax) encourages rent-seeking in the economy whereby all economic units, whether public and private, domestic and foreign have overwhelming incentives to seek links with the state in order to share in the resource pie. This incentive for rent-seeking penalizes productive activities, distorts the entire economy and hinders economy growth. In theory, proponent of oil-led development such as Azaiki & Shagari (2007), believes that countries lucky to realize huge sums of revenue from petroleum profit tax, can base their development on this source. They stated that, potential benefits of enhanced economic growth and the creation of jobs, increases government avenues to finance poverty alleviation, the transfer of technology, the improvement of infrastructure and the encouragement of related industries. But the experience of almost all oil-exporting countries to date, especially Nigeria illustrates few of these benefits. According to Nafziger (2003), a Nigeria's case is increasingly degenerating to a state of chaos as petroleum income is brazenly mismanaged while the basic national institutions such as electricity, energy, road, transportation, political financial systems, and investment environment have been decreasing and inefficient in Nigeria, infrastructure is still poor; talent is scarce. Poverty, famine, and disease afflict many nations, including Nigeria (Chironga, et al, 2011).

It is quite clear from the opinions expressed in the foregoing theories that tax reform which is always aimed at increasing the revenue base of the country concerned can cause an increase in economic growth and development of a nation, depending on the type of theory, policy and practical implementation the government in power adopts.

2.2.12 **Economic Development Variables**

2.2.12(a) **Infrastructural Development**

Infrastructure refers to resource systems that have been harnessed for the development of a society. Such systems include telecommunication, energy, transport, governance, and other public utilities, (Akinwale, 2010 & Frischmann, 2007). It can also be defined as the physical components of interrelated systems providing commodities and service essential to enable, sustain or enhance societal living conditions (Firzli, 2012).

According to Anumba (1998), infrastructure system include both the fixed assets and the control systems and soft required to operate, manage and monitor the systems, as well as any necessary buildings, plants, or vehicles that are part of the system. Also included are flects of vehicles operating according to schedule such as public transit buses and garbage collection as well as basic energy or communication facilities that are not usually part of a physical network, such as oil refineries, radio, and television broadcasting facilities. Usman (2006) notes that

infrastructure includes energy, transport, water management and communication. According to him, others are solid waste, economic, social and governance.

There are linkages between infrastructure and economic growth as provided in the endogenous growth theories. Canning and Petroai (2004) investigated the long run impact of infrastructure provision on per capital income in a panel of countries over the period 1950 to 1992 and provided evidence that in majority of cases infrastructure stimulate long run growth effects. Udjo, Semelane & Booysen (2000) also identified infrastructure as having both direct and indirect impact on the growth of an economy. Infrastructure is said to add to economic growth and development by raising efficiency and providing facilities which enhance the quality of life Babatude, Afees & Olasunkani (2012). Infrastructure as defined by Akinyosoye (2010) in Babatude, Afees & Olasunkani (2012) is the unpaid factor of production which tends to raise productivity of other factors while serving as intermediate inputs to production. The services engendered as a result of an adequate infrastructure base will translate to an increase in aggregate output.

However, the present infrastructural deficit in Nigeria had been identified by Sanusi (2012) as the major constraint towards achieving the nation's vision of becoming one of the 20 largest economies in 2020. He further provided that about 10% of the 193,000 kilometers of roads in the country is in poor condition; that enterprise surveys showed that the power outrages the nation's experiences amount to over 320 lost days, with over 60% of the population lacking access to

electricity with over $13 billion spent annually to fuel generations and that Nigeria which had one are of the most extensive railway systems in Africa, could now barely boost of the functional route either for passengers or freight.

Infrastructural is a broad term for many activities usually referred to social head capital by development economist. Infrastructure refers to a network of transport, communication and public (social) services: all functioning as a system or a set of interrelated and mutually beneficial services provided for the improvement of the general well-being of the population, (Ogbolozode, 1997). Public or Social services refer to those services or facilities meant for the common goods of the people. They are water supply, health care delivery, education, postal and telecommunication facilities electricity, etc. Sufficient infrastructural services are indispensable for economic development. They adequacy of infrastructure helps to determine a country's success or failure in diversifying production, coping with population growth, reducing poverty improving environmental conditions, etc. (Olaseni & Alade 2012).

Socio-economic development can be facilitated and accelerated by the presence of infrastructure (Olaseni and Alade, 2012). According to them, if these facilities and services are not in place, development will be very difficult and in fact can be likened to a very scarce commodity that can be secured at a very high price and cost. Adequate access to social welfare services such as medical services,

education, portable water supply, roads, electricity, employment opportunities, etc are strong indices of development (Adeyemo, 1989).

Canning and Pedroni (2004) investigated the long run consequences of infrastructure provision on per capita income in a panel of countries over the period 1950-1952. The results provide clear evidence that if the vast majority of cases of infrastructure (telephone, electricity generating capacity and paved roads) does induce long run growth affects. In developed economies, Japan and United states of America for example, Ogbuozobe (1997) observed that telecommunications, electricity used in the production process of nearly every sector, and transport is an input for every commodity.

Road infrastructure has been found that by Cesar & Surhid (1992) to be a significant factor of economic growth and development.

Word Bank (1994) in a study employed an empirical approach to explore the association between road infrastructure and economic development. The study showed that there were consistent and significant association between economic development, in terms of per capita gross national product (GNP), and road infrastructure, in terrors of per capital length of paved road network. The study also revealed that road conditions seems to be associated with economic development. It is imperative to note that good infrastructure raises productivity and lowers production cost. Therefore, it is clear that infrastructural development is a function of economic development.

Education and health constitute what is known as social infrastructure which can have profound effect on economic development of any nation. Olaseni & Alede (2012) note that education has been considered as a very important source of economic growth. According to them, even though education may be a social investment, it is also an economic investment since it enhances the stock of human capital (Dension, 1962). Aigbokhan (1999) found that human capital components of infrastructure appear to have impact on growth. For instance, he observed that expenditure on health care and education record statistically insignificant impact on growth and suggested that if efficiently applied public spending on the services was capable of impacting positively and strongly on growth. He gave example of physical infrastructure as public utilities such as power, telecommunication, piped water supply, sanitation and sewage, solid waste collection and disposal and piped gas as well as public works which include roads, major dams and canal works for irrigation and drainage and other transport projects like urban and interurban railways, urban transport, seaports and waterways and airport. According to Aigbokhan (1999), physical infrastructural has "played a very significant positive note in the growth performance of countries in recent times". Where development of economic infrastructure has followed a rational, well-coordinated and harmonised path, growth and development has received a big boost. Examples are Korea, Japan, (Familoni, 2000). Where the growth of infrastructure has not followed such rational and coordinated path, growth and development has been

stumped. Example can be found in most African countries and other less developed countries (LDS).

2.2.12(b) **Gross Domestic Product (GDP)**

Gross Domestic Product is the market value of all final goods and services produced within a country in a given period. It is internationally recognized indicator for measuring the size of an economy in a given period of time, (http:www.thidraylivercomparticles/GDP-rebasing/175578). The most common measure of the amount of stuff produced in the economy is termed Gross Domestic Product, (ECON, 2006). Gross Domestic Product is total currency value of final goods and services produced in an economy over some time period/year. For example U.S GDP in 2005 was $12,000 trillion while the GDP per capital (per person) was $12 trillion/300 million = $40,000, (Chioma, 2009).

The Gross Domestic Product (GDP) of Nigeria is made up of the following sectors: Agriculture, industry, building and construction, wholesale and retail trade and services. Small scale enterprises (SSE) occupies a significant percentage of each sector of the GDP of Nigeria, (Anyanwu, Offor, Adesope & Ibekwe, 2013). The Gross Domestic Product (GDP) of Nigeria is broken down into consumption expenditure, investment, government spending and export. On the other hand, consumption expenditure is composed of consumer spending on goods and services, which is often divided into spending on durable goods, non-durable goods and services, (Chioma, 2009). Per capital GDP of an economy is obtained

by dividing the total GDP in a year by the population of that economy in the same year.

However, looking at the GDP per capital of Nigeria, it grew by 132 percent between independence in 1960 and 1969, and rose to a peak growth of 238 percent between 1970 and 1979. Then the country had high inflation, high unemployment rate and fiscal imbalance. The problems were so severe that restructuring of the economy became imperative. Therefore, a comprehensive economic reform was introduced in 1986. The period 1988-1997 the nation had structural adjustment and economic liberalization programmes which made the gross Demestic Products (GDP) to respond to economic adjustment policies and grew at a positive rate of 4 percent. The real growth rate then in 2006 was 7 percent, (Babatunde, Afees & Olasunakanuni, 2012). Besides, statistics from the National Burean of statistics (NBS, 2010) further showed that on an aggregate basis, the economy when measured by the real Gross Domestic product (GDP0), grew by 7.87% in 2010, National Bureau of Statistics (NBS), various years and Central Bank of Nigeria (CBN) various years).

A meticulous examination of the macro economy reveals that there exists a positive relationship between the growth rate of Goss Domestic Product (GDP) and the growth of the economy. Meaning that the higher the growth rate of GDP, all things being equal, the more favorable it is for the stock market, (Chandra, 2004). Hamilton (1982) at Berkeley, found a negative correlation between oil

prices and Gross Domestic Product (GDP), which proved that recessions in the USA economy and the oil stock during the sample period. Up till today oil price and Gross Domestic Product (GDP) were investigated from many different points of view by many researches, (Aaron, 2000). Finding from International Energy Agency, showed that recent estimates that 10$ oil price increase would lop 0.5 percent off, global Gross Domestic product (GDP), creating $225 billion losses over several years, another perspective, the relationship between infrastructure and economic development is further established that by the correlation between a nation's Gross Domestic Product (GDP) and how level of urbanization as demonstrated by the world Bank studies, (Yunusa, 2011).

2.3 Theoretical Framework

This work is based on one theory of taxation and it is:

2.3.1 Social Political Theory

This theory of taxation states that social and political objectives should be the major factors in selecting taxes. The theory advocated that a tax system should not be designed to serve individuals, but should be used to cure the ills of a society as a whole. According to the proponent of the theory, Adoph Wagner (1880), each economic problem should be looked at in its social and political contexts and appropriate solution found thereof.

2.3.2 **Theoretical Basis of the Study**

The study is based on social political theory of taxation. The reason is that taxation is inherently social-political in nature. This means that we cannot separate taxation from human society and politics of the people if they must develop and succeed. Human societies must be administered by their leaders, whether political or religious and this can only be possible with money which must be raised from the people through imposition of various taxes and levies. Besides, taxation provides one of the links between the state and its citizens and it is an integral part of development of every nation.

2.4 **Review of Empirical Literature**

Many empirical evidences or studies have been conducted on the effect of taxes on economic growth and development. The empirical studies of Korester & Kormendi (1989), Engen & Skinner (1996), Ajakaiye (1999), Tosun & Abizadeh (2005); Lee & Gordon (2005) and Ogbonna & Appah (2012) provided different revelations and explanations of taxes on economic growth and development.

Korester & Kormendi (1989) in their study detected no statistical significant relationship between taxes and economic growth. They constructed a measure of average and marginal income tax rates by regressing tax revenue on Gross Domestic Product (GDP) and then used those measures in a growth regression. Their result showed neither tax rates seem to have a negative impact on the growth rate though the marginal tax rate has a negative effect on the level of activities.

Engen & Skinner (1996) conducted their study of taxation and economic growth of US economy using evidence from micro level studies of labour supply, investment demand and productivity growth. The result of their study suggests that the economic growth rate responds to major reform with about 0.2 to 0.3 percent difference. Tosun & Abizadeh (2005) in their study of economic growth of tax changes in Organization for Economic Cooperation and Development (OECD) countries from 1980 to 1999 showed that economic growth measured by Gross Domestic Product (GDP) per capita has a significant effect on tax mix of GDP per capita. It is shown that while the shares of personal and property taxes have responded positively on economic growth, shares of the payroll and goods and services taxes have shown a relative decline.

Anastassiou & Dritsaki (2005) examined the relationship between tax revenue and the rate of economic growth of Greece, testing for unit root and co-integration between time series of variables used. Their findings showed that tax revenue and economic growth have a casual relationship. Michaelis & Birk (2004) in their study of employment and growth effect of tax reforms in Germany reveal that payroll tax is found to be neutral and cut in the capital income tax financed by an increase in the payroll tax will increase both equilibrium employment and growth rate. They stated also that a cut in the capital input tax combined with a higher payroll tax boosts growth but has an ambiguous effect on employment. According

to them, a switch from capital income to capital input taxes is good in terms of both growth and employment.

Ogbonna & Appah (2012) examined the impact of tax reforms on economic growth in Nigeria from 1994 to 2009. They used relevant descriptive statistics and econometric models such as white test, Ramsey reset test, Brueusch Godfrey test, Jacque Berra test, Augmented Dickey Fuller test, Johansen test and Granger Causalty test. The result showed that tax reforms is positively and significantly related to economic growth and that tax reforms granger cause economic growth. Jibrin, Blessing & Ifurueze (2012) in their study of the impact of petroleum profits tax on economic development of Nigeria used the ordinary least square method to analyze their data. Their research findings include the following: Petroleum profits tax impact positively on Gross Domestic Profit (GDP) of Nigeria and that it was statistically significant. Also that oil revenue impact positively on Gross Domestic Profit of Nigeria and that it was statistically significant.

Aniechebe (2013) study of the impact of tax on economic growth in Nigeria between 1986 to 2011, applied econometric model finds out a significant relationship between composition and economic growth. Decomposing the impact into direct and indirect tax and total tax revenue component, finds a significant positive relationship between direct, indirect and economic growth and a negative relationship between total tax revenue and economic growth. Umoru & Anyiwe, (2013) examined the effect of tax structure on economic growth in Nigeria,

employed a co-integration and error correction methods of empirical estimation with an empirical strategy of disaggregation. Their result indicates that while the policy of direct taxation is significantly and positively correlated with economic growth, indirect taxation proved to be insignificant with its negative impact on economic growth.

Afuberoha & Okoye (2014) studied the impact of taxation on revenue generation in Nigeria. They made use of primary data and the data obtained were analyzed with regression analysis computed with the aid of SPSS 17.0. Their findings show that taxation has a significant contribution to revenue generation and taxation has a significant contribution on Gross Domestic Product (GDP). Oriakhi & Ahuru (2014) studied the impacted on tax reform on federal revenue generation in Nigeria, tested for unit root using the Augmented Dickey fuller and adopted the Johansen's co-integration test to determine the relationship between tax reform and federally collected revenue. Coefficient of the Error correction model was also adopted. The result showed that tax reform revenue generation by improving the tax system and reducing tax burden enhances the ability of the government to generate more revenue.

However, Djankor, Mccliesh, Ramalho and Shteiter (2009) found strong negative effect of personal income tax on output growth. Scarlett (2011) established empirically that increase in the share of taxes from personal taxable income has

the greatest harm on per capital gross domestic product (GDP) over time and correction to equilibrium from such an impact would take up to nine years.

Ajakaiye (1999) worked on the impact of VAT on key sectors and macroeconomic aggregates using a computable general equilibrium (CGE) model considered suitable for Nigeria. The study developed three scenarios. In order to approximate the presumed Nigerian situation, the study assumed that government pursued an active fiscal policy involving the reinjection of the VAT via increases in government final consumption expenditure in combination with a pressured non-cascading treatment of the VAT. Two other simulations considered an active fiscal policy combined with a cascading treatment of VAT and a passive fiscal policy combined with a non-cascading treatment. As it turned out, the scenario of the cascading treatment of VAT with an active fiscal policy not only had the most deleterious effects on the economy, it was also the one that most closely approximate the situation in Nigeria. VAT revenue under this scenario are more than 30% lower than the first scenario, the general price index increases by 12% and wage and profit income fall by 8.54% and 12.27% respectively. Overall, the GDP declines by 11.34, such a situation, as observed by the researcher poses a great threat to the sustainability of VAT.

A related study is the one undertaken by Enofe & Ibgbinovia (2014) in a study titled: Value-added tax and economic development in Nigeria. They examined value-added tax (VAT) as it affects economic development in Nigeria, employed

the Vecto Auto-regressive (VAR) model, quarterly data covering the period 1994Q1 to 2012Q4 were analysed. The major analysis involved the estimation of the dynamic patterns of the adjustment in economic development with respect to VAT, as well as the responses of some aggregate demand components (consumption, domestic private investment and government capital expenditure) to innovations in VAT within the VAR context using the Impulse Responses Function and the Forecast Error Variance Decomposition. The study revealed that VAT has an indirect relationship with a weak impact and an extensive indirect impact on economic development (proxy by Real GDP per capita –RGDPPC) in Nigeria. They also found that VAT has extensive impacts on consumption, domestic private investment and government capital expenditure which are propellers of economic development.

Similarly, Owolabi and Okwu (2011), employed an OLS-base simple regression analytical technique to evaluate the impact of value-added tax on development expenditure in Lagos between 2001 and 2008, the state economy was disaggregated into seven strategic economic sectors in the development process and a model constructed for each sector. The result showed that VAT revenue contributed positively to development process in Lagos state. Unegbu and Irefin (2011), examined the relationship between VAT and economic and human development of emerging nations, using Adamawa state in Nigeria as their scope. Using a regression discriminate analysis and Annova, it was discovered that VAT

allocation alone counts for 91.2% of the variations in expenditure patterns of Adamawa state but data obtained from primary sources suggested minimum VAT impact.

Another related study is Holmoy & Vennemo (1995). They employed a dynamic general equilibrium model to analyse and evaluate the reform in capital taxation in Norway. The underlying aim of the study was to ascertain the welfare gain induced by the reform and the distribution of this gain between different groups of households. The reform's guiding principle is to level the playing field with regard to investments. The key aspects of the reform are that the corporate tax on factors, debt, retention and dividends are to be equal and depreciation allowances are to be lowered in an effort to approach a system of true economic depreciation. One other aspect of the reforms is the elimination of write-offs and special regional provisions. They identified multiple sources of distortion in both the pre and post reform systems of capital taxation. The whole analysis revolves around 17 private industries and 14 household groups who distinguished by socio-economic status. Household utilities are measured in terms of money metric utility functions of the linear expenditure system. The study finds that it is the household with larger number of members that gain most in absolute terms. The percentage gain is found to be fairly distributed. Wage income does not, however, contribute to increased welfare, households without children suffer the most from lower wages while the elderly (mainly non-working) are the least affected.

Eltony (2002) used a time series and cross – sectional country data for the period 1994 -2000 for 16 Arab countries to examine the determinants of tax effect in an economy. The results showed that the main determinants of tax revenue share in gross domestic product (GDP) were per capital income, agriculture output- GDP ratios and mining –GDP ratio. The share of export, import and outstanding foreign debt were among other variables found to be important. Also, country specific factors such as the political system, attitudes towards government, the quality of tax administration and other institutions of government appeared to be important determinants of tax –GDP ratio.

Worlu & Nkoro (2012) examined tax revenue and economic development of Nigeria, focused on its impact on infrastructural development from 1980 to 2007. They employed the three sage least square estimation technique in the analysis of the data. The results show that tax revenue stimulates economic growth through infrastructural development. The study further revealed that tax revenue has no independent effect on growth through infrastructural development and foreign direct investment, but just allowing the infrastructural development and foreign direct investment to positively respond to increase in output. Imegi & Worlu (2012) investigated the relationship between companies income tax and economic growth and development in Nigeria for the period 1994-2008. They employed Pearson's product – moment correlation coefficient in testing the data. The results

showed significant relationship between companies income tax and, economic growth and development.

Akintoye & Tasie (2013) examined the effect of tax compliance on economic growth and development in Nigeria. In order to achieve this objective they proxy tax compliance by willingness of the citizens to pay tax. A comparative analysis of the willingness to pay by citizens in two large states of federation: Lagos and Ondo were presented. Primary data was collected through the questionnaire to self-employed in each senatorial district in Lagos and Ondo were presented. Primary data was collected through the administration of questionnaire to self-employed in each senatorial district in Lagos and Ondo state. Frequencies and percentages were used to measure the difference between willingness and pay of citizens in Lagos and Ondo states. Findings show that many Nigerians are complying with tax payment and that the willingness of citizens to pay tax in Lagos state is significantly higher than that of Oyo state.

Furthermore, the list of factors that were tested for are trustworthiness of government, provision of infrastructural amenities, tax accountability, level of government delivery, income, moral ethics, tax knowledge, tax rate and the system of tax payment were found to influence the wiliness to pay tax.

In another study by Ferede & Dahly (2012) on the impact of tax cuts on economic growth utilizing panel data covering 1977 to 2006 and regression analysis in Canadian provinces found that a higher provincial statutory corporate income tax

rate is associated with lower private investment and lower economic growth. The result also indicated that switching from a retail sales tax to a sales tax, that is harmonised with the federal value added sales tax boosts provincial investment and growth. Wang (2013) studied the impact of the 2009 value added tax reform on enterprise investment and employment in China used the national tax survey enterprise data to assess the impact of China's nation wid VAT reform of 2009 on enterprise fixed assets investment and employment. The main finding of the study is that the reform significantly increased business investment in fixed asset, but had no obvious effect on employment. Furthermore, the reform promoted corporate investment mainly by encouraging machinery and equipment, but not plant and building investment.

Marwia & Ngomoi (2013) in their empirical investigation of tax buoyancy in Kenya used a time series approach to estimate tax buoyancy for Kenya for the period 1999/2000 to 2010/2011. Tax buoyancy were computed for income, import, excise, value added tax (VAT) and total taxes. Specifically, the paper examined the buoyancies of tax revenues to change in economic growth (GDP) proxy using quarterly data instead of annual data of Gross Domestic product (GDP) and tax revenues and their bases. They also analysed the tax buoyancy of Pay As You Earn, other income tax, as components of income tax and local and import VAT as components of total VAT. This was done to ascertain the responses of these taxes to their bases. Empirical evidence showed that the total

tax was buoyant with a buoyancy value of 2.58 while the individual taxes were not buoyant except the excise duty which was buoyant with respect to the base. Tax bases were found to respond well to economic changes with buoyancy values greater than unity, with an exception of excise duty base to income buoyancy co-efficient being less than unity.

In a similar study by Steenekamp (2012) on the progressivity of personal income tax in South Africa since 1994 and directions for tax reform. The study examined the impact of personal income tax reforms since 1994 on the tax structure and its scope in South Africa. The study finds that in South Africa, direct taxes as a percentage of total revenue increase is important between 1993/94 and 2010/2011. The personal income tax burden for wage earners in South Africa has remained fairly constant since 1995. The personal income tax structure is progressing, but there was declining trend in progressivity between 1994 and 2009.

Osuala & Jones (2014) worked on the impact of fiscal policy on economic growth of Nigeria using the ordinary least square method of multivariate regression in analysing the log lineared model. The Augmented Dickey-Fuller unit root test was employed to establish the stationary of the variables while the general to-specific approach to Autoregressive Distributed Lag (AROL) model was used for testing for the existence of long-run and short-run equilibrium conditions. The findings were that, there is evidence of long-run equilibrium relationship between fiscal policy and economic growth in Nigeria during the period studied. The adjusted R^2

value of 0.6850 showed that about 68.6% if the independent variables included in the model. Specific fiscal policy variables that have significant and positive impact on economic growth in Nigeria are government recurrent and capital expenditures. Non-oil taxes and government total debts have no significant impact on real GDP.

Olabisi (2009) employed a well structured questionnaire survey to assess the relationship between tax incentives and economic development in Nigeria. The study was undertaken primarily to evaluate the effectiveness of tax incentive in developing the Nigerian economy. It was found that tax incentive would enhance economic growth and development in Nigeria, if such incentives are well focused and extended to all deserving companies in the country.

Also, in another study, Ogbonna & Appah (2012a) used time series data from year 2000 to 2009 to investigate the casual link between petroleum income and Nigerian economic growth. They used simple regression model to analyze the data and found significant positive relationship between petroleum income and Gross Domestic Product (GDP) at 5% level of significance.

Abdul – Rahamoh, Taiwo & Adejare (2013) examined the effect of petroleum profits tax on Nigerian economy for the period 1970-2010 and posited that petroleum profits tax has a significant effect on the economic growth of Nigeria with an adjusted R^2 of 86.3%. They utilized multiple regression and correlation to analyze the time series data collected.

Another related study was undertaken by Jones, Ihendinihu & Nwaiwu (2015) who investigated total revenue and economic growth in Nigeria. They employed time series data ranging from 1986 to 2012 of total revenue and gross domestic product were collected from the Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS). The ordinary least square of multivariate regression method and the Error Correction method were used to analyze the data. The finding shows that total revenue has long and short equilibrium relationship with economic growth in Nigeria.

In a similar study by Okafor (2012) on tax revenue generation and economic development of Nigeria (1981-2007) using multiple correlation and regression methods, she argued that there exists significant relationship between the Gross Domestic Product (GDP) used as the dependent variable and the independent variables (petroleum profits tax, companies income tax, customs and excise duties, and value added tax). She claimed that 99 percent of changes in the total GDP were influenced by changes in the total independent variables (petroleum profits tax, companies income tax, customs and excise duties, and value added tax).

In order to empirically investigate the effects of economic growth and income inequality, Ramot & Masaru (2012) in Japan investigated how tax systems affect a country's economic growth rate and distribution of income through the use of panel dataset of cross-national data consisting of 65 countries during the period 1970-2006. They used the top statutory corporate and personal income tax rate and

estimated the impact of the structures on economic growth and income equality. They employed the ordinary least square, random effect and fixed effect estimations. The result shows that statutory corporate income tax rates are strongly negatively associated with economic growth and inequality by controlling for various other determinants of growth and income distribution. According to them, personal income tax rates have no impact on the economic growth and on income inequality. In addition, they maintained that by classifying the countries into groups tax group based on their average top statutory corporate income tax rates, the study further found that high top companies income tax (CIT) rates, above 40%, corresponded with lower income inequality. On the other hand, they claimed that, lower companies income tax rates (CIT), those below 40% were not significant in reducing income inequality.

In an empirical work titled "Value Added Tax (VAT) and economic growth in Nigeria", Adereti, Sanni & Adesira (2011) employed both simple regression analysis and descriptive statistical method. Findings showed that the ratio of VAT Revenue accounts for as much as 95% significant variations in GDP in Nigeria. A positive and significant correlation exists between VAT Revenue and GDP. Both economic variables fluctuated greatly over the period though VAT Revenue was more stable. No causality exists between the GDP and VAT Revenue, but a lag period of two years exists.

Another interesting study on taxation is the one undertaken by Adegbie & Fakile (2011), who worked on company income tax and Nigeria's economic development. They used the GDP to capture the Nigeria economy and petroleum profits tax (PPT), companies income tax (CIT). Customs and excise duties and value added tax (VAT) to measure company income tax. Findings revealed that there is a significant relationship between company income tax and Nigerian Economic Development and that tax evasion and avoidance are the major hindrances to revenue generation.

Edame & Okoi, (2014) investigating the impact of taxation on investment and economic development in Nigeria used time series data which were sourced from the Central Bank of Nigeria statistical bulletin and National Bureau of statistics (NBS). The ordinary least square method of multiple regression analysis was used to analyze the data. The result showed that taxation is negatively related to the level of investment and the output of goods and services (GDP) and is positively related to government expenditure in Nigeria.

Roshaiza (2011) investigated the effect of economic growth on government tax revenue for Malasia within the period 1970 to 2009. Regression analysis was the statistical tool used to analysis the data. Findings show that unidirectional relationship exists between economic growth and total government revenue with 21% speed of adjustment on the short run to reach equilibrium level in the long run.

Bonu & Motau (2009) in their study of the impact of companies income tax on economic growth and development of developing countries selected companies income tax rates in developing nations such as Angola, Congo, Lesotho, Malawi, Mauritius, Mozambique, Nambia, Seychelles, South Africa, Swaziland, Zambia and Zimbabwe. In order to carry out a comparative study, few developed nations were randomly selected such as USA, UK, China, Japan and Canada for the study of the effect of companies income tax on economic development in the developing nations. Botswana was chosen for this purpose covering the period from 1982-2002. The results of their analysis showed that top managerial tax rates vary from 5% to 20% top marginal tax rates charged by Mozambique and Canada (29%) among developed nations. This indicates that developed nations charge higher company income rate than developing nations and that accounts for the rapid growth of the economies of those countries.

Lee and Gordon (2005) in their work, tax structure and economic growth, explored how tax policies affect a country's growth rate, using a cross-country data during 1970-1997. The used regression analysis in the analysis of their data. Their findings revealed that statutory corporate tax rates are significantly negatively correlated with cross-sectional difference in average economic growth rates, controlling for various other determinants of economic growth, and other standard tax variables. And also, that in fixed-effect regression increases in corporate tax rates lead to lower future rates within countries.

In a related study, Ifuerueze & Ekezie (2014), examined the Nigerian Tax system and economic growth. They used time series data obtained from the Central Bank of Nigeria (CBN) and Federal Inland Revenue Service. Regression analysis was used to ascertain the relationship between the variables. The study finds a linear relationship between economic growth and tax revenue. The analysis result also shows that indirect tax contribution to total tax revenue and economic growth glucoses more than direct tax over the period under review.

Musa (2009) in his study titled, "tax planning and economic and social development in Nigeria", employed regression analysis in analyzing the data of the study, opined that economic and social development laws and policies provide the basis for effective state action that lifts society from underdevelopment, improves the standard of living and facilities for the realization of the millennium development goals.

Omesi (2007) studied the contributions of value added tax (VAT) to Nigeria's economic development covering a period of 1998 to 2012. He used regression analysis to analyze the secondary data collected from the Central Bank of Nigeria (CBN) and National Bureau of statistics to ascertain the relationship between the independent variable and the dependent variables. The analysis result shows that VAT revenue has contributed positively to the Nigerian economy especially in the reduction of unemployment rate in the country. The study suggested that the value

added tax rate should be increased from the present rate of 5% to at least 10% considering the drastic reduction in the total revenue of the country.

Nwokoye & Rolle (2015) examined the investment implication of the series of tax reforms in Nigeria, particularly the tax reforms of 2003 and National tax policy of 2012. Annual time series data spanning the years (1981-2012) were utilized. Preliminary diagnostic test was conducted to examine whether the estimated model satisfies the ordinary least square (OLS) assumptions made. These were found to be satisfied. The result of the estimated OLS model shows that tax reforms as represented by VAT and CIT, both positively and significantly stimulate investment in Nigeria.

Alberto and Silva (2010) examined some episodes of fiscal consolidation in efforts to reduce deficits and fiscal stimuli, and in the process estimate how tax policy affects growth. They covered some episodes occurred in OCED countries between 1970-2007. Their study revealed that fiscal stimuli based upon tax cuts are more likely to increase growth than those based upon spending increases. They also found that fiscal consolidation based upon spending cuts and no tax increases are more likely to succeed at a reducing deficits and debts and less likely to create recession as compared to fiscal consolidations based upon tax increases.

2.5 Preliminary Findings from Literature

Ndadaye (2007) in his empirical work showed that the various macroeconomic indications such as GDP, unemployment rate, etc. that best describe the state of the nations are uninterestingly fluctuating and at best declining.

Engen & Skinner (1996) in their study of taxation and economic growth in US found a modest effect in the order of 0.2 to 0.3 percentage points in growth in response to major reforms. According to them, such small effects can have a large accumulated impact on living standards. Tosun & Abizadeh (2005) in their study of economic growth of tax changes in Organization for Economic Cooperation and Development (OECD) countries showed that economic growth measured by Gross Domestic Product (GDP) per capita has a significant effect on the tax mix of GDP per capita.

In the work of Jibrin, Blessing & Ifurueze (2012) on the impact of petroleum profit tax on economic development of Nigeria, it was found that petroleum profit tax impacts positively on Gross Domestic Product and was found to be statistically significant.

Enofe & Igbinova (2014) in their study of value added tax and economic development in Nigeria used the vector Auto-regressive (VAR) model to analyze quarterly data covering the period 19994Q1 to 2012Q4. The major analysis involved the estimation of the dynamic patterns of adjustment in economic

development with respect to VAT, as well as responses of some aggregate demand components (consumption, domestic private investment and government expenditure) to innovations in VAT within the VAR context using the impulse response function and the Forecast Error Variance decomposition. The study revealed that VAT has an indirect relationship with a weak impact and extensive indirect impact on economic development proxy by real gross domestic product per capita in Nigeria. They also found that VAT has extensive impacts on consumption, domestic private investment and government expenditure which are propellers of economic development.

Similarly, Owolabi & Okwu (2011) evaluated the impact of value added tax (VAT) on development expenditure in Lagos, employed an ordinary least squares based on simple regression analytical technique to their data. The result showed that VAT revenue contributed to positive development process in Lagos State. Imegi & Worlu (2012) investigated the relationship between companies' income tax and economic growth and development in Nigeria for a period 1994 to 2008. Peason's product-moment correlation coefficient was used to analyze the data obtained. The results showed significant relationship between companies' income tax and economic growth and development.

Eltony (2002) studied 16 Arab countries examined the determinants of tax effort in the economy. In order to achieve this objective, he used a series and cross-sectional-country data for the period 1994 to 2000. The results show that the main

determinants of tax revenue share in Gross Domestic Product (GDP) were per capital income agriculture output-GDP ratio and mining-GDP ratio. He also found that the share of export, import and outstanding foreign debt were among other variables found to be important. The study revealed country specific factors such as the political system, attitudes towards government, the quality of tax administration and other institutions of government were found to be important determinants of tax-GDP ratio.

Nwokoye & Rolle (2015) in their study of tax reforms and investment in Nigeria examined the investment implication of the series of tax reforms in Nigeria, particularly, the tax reforms of 2003 and National tax policy of 2012. They made use of annual time series data spanning the years (1981-2012) and did the analysis with the ordinary least square. The findings show that tax reforms positively and significantly stimulate investment in Nigeria.

Musa (2009) investigated tax planning and economic and social development in Nigeria, analyzed the time series data with regression analysis opined that economic and social development laws and policies provide the basis for effective state action that lifts society from underdevelopment, improves standard of living and facilities for the realization of the millennium development goals. Lee and Gordon (2005) studied tax structure and economic growth, employed regression analysis to analyze their cross-country data which covered a period of 1970 to 1997. Their findings revealed that statutory corporate tax rates are significantly

negatively correlated with cross-sectional difference in average economic growth rates, controlling for various other determinants of economic growth, and other standard tax variables.

Jibrin, Blessing & Ifurueze (2012) studied the impact of petroleum profits on economic development (2000-2010) using the ordinary least square method of analysis and posited that petroleum profits tax has significant and positive impact on the Gross Domestic Product (used as proxy for economic growth) of Nigeria.

In another study by Ferede & Dahly (2012) in Canada, investigated the impact of tax cuts on economic growth. They utilized a panel data covering 1977 to 2006. They used regression analysis to analyze their data. They found that a higher provincial statutory corporate income tax rate is associated with lower private investment and lower economic growth. The result also revealed that switching from a retail sales tax to a sales tax that is harmonized with the federal added sales tax boosts provincial investment and growth.

Wang (2013) investigating the impact of the 2009 value added tax reform on enterprise investment and employment in China, employed the national tax survey enterprise data to assess the impact of china's nationwide VAT reform of 2009 on enterprise fixed assets investment and employment. The study revealed that the reform significantly increased business investment in fixed assets, but had no obvious effect on employment.

Also, in another study, Ogbonna & Appah (2012a) used time series data from year 2000 to 2009 to investigate the causal link between petroleum income and Nigerian economic growth. They used simple regression model to analyze the data and found significant positive relationship between petroleum income and Gross Domestic Product (GDP) at 5% level of significance.

2.6 Summary and Gap in Literature

This section of the dissertation primarily, as set out to meticulously scan the literature on theoretical and empirical studies carried out on the most important variables of the study: tax reforms and economic development. Theoretical and empirical researches have been conducted on tax and economic growth and development and their results have been reported in different directions under different focus.

However, it is important to note that most of the previous studies on taxation and tax reforms were carried out overseas such as Bonu & Motau (2009), Roshazia (2011), Lee and Gordon (2005), Ferede & Dahly (2012) and Wang (2013), we cannot generalize their results to other countries especially Nigeria due to several peculiarities of our local environment. Few of the tax reform studies that relate to Nigeria were tied to economic growth, revenue generation and investment (Ogbonna & Appah (2012), Oriakhi & Ahuru (2014) and Nwokoye & Rolle (2015), undermining economic development.

To the best of our knowledge, the latest of these studies on tax reforms and economic growth was Ogbonna & Appah (2012) whose study covered a period from 1994-2009, which in our thinking is not a recent study, hence the need for a recent study that should be based on the social political and economic realities on ground in our local environment. Furthermore, most of these previous studies on this subject matter used only gross domestic product to proxy economic growth, but in this study we used gross domestic product and infrastructural development.

Finally, a situation where the results of studies carried out in developed economies are generalized to emerging economies often induce a knowledge gap and that is what this study stands to close.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section of the study examines the various processes involved in obtaining and collecting necessary data for the study. The focus of this chapter is on the following sub-headings:

(i) Research design

(ii) Population of the study

(iii) Sample Size and Sampling Technique

(iv) Methods of data collection

(v) Measurement of variables

(vi) Methods of data analysis.

3.2 Research Design

The research design adopted in this study was ex-post facto designed. The reasons for the choice of this design are the following: The study made use of data of events that have already taken place: that is time series data. The study was a non-experimental in which the phenomena of interest have already occurred and cannot be manipulated.

3.3 Population of the Study

The population of this study is one hundred and forty million, four hundred and thirty-one thousand, seven hundred and ninety (140,431,790) people, (NPC, 2006). This figure was used because the study covers the entire economy, hence the researcher felt that the population of this study is the population of the entire country.

3.4 Sample Size and Sampling Technique

The sample size of this study is one hundred and forty million, four hundred and thirty-one thousand, seven hundred and ninety people (140, 431, 790) people, (NPC, 2006). This is because the entire population was used. This is also because the study is macro in nature, hence sampling technique was not used.

3.5 Methods of Data Collection

Considering the objective of this study and the macro nature of the study, secondary source of data collection was adopted. The data were collected from Central Bank of Nigeria (CBN) and Federal Inland Revenue Service (FIRS).

3.6 Measurement of Variables

There are two basic variables in this study. The independent and dependent variables. The study has tax reform as its independent variable while economic development is the dependent variable. A critical look at the variables in their conceptual form showed that it was difficult measuring them unless they were operatonalized. In a bid to accomplish this task of measurement, tax reforms was

made measurable using pre and post periods of tax revenue of each of the major tax reforms identified by the researcher that were carried out within the period under review. See table 3.1.

In the case of economic development, it was measured using pre and post periods of Gross Domestic Product (GDP) and infrastructural development levels.

3.7 Methods of Data Analysis

The statistical tool adopted in this study is the Chow test model. The choice for this statistical tool is based on the nature of the data of the study. The nature of the data in this study is such that has to do with break points. In this study, the break points are the pre-reform period data and post reform period data. Another reason for the choice of this statistical tool is because it is used to test break points or structural changes in a model. *The formula is*

$$F\ (K, N_1 + N_2 - 2K) = \frac{[SSEP - (SSE_1 + SSE_2)^{-}]/K}{SSE_1 + SSE_2/(N_1 + N_2 - 2\mathrm{K})}$$

Where

SSE_P= sum of squared error term for pooled model

SSE_1= sum of squared error term for group 1

SSE_2 = sum of squared error term for group 2

K = No of estimate parameters (including constant)

N_1+ N_2 = No of observations in the two groups

Table 3.1: Major Tax Reforms showing Pre and Post Periods

1. Petroleum profits tax was introduced in 1959, reformed in 1967 and was last reformed in 2004- see PPTA 2004.

Pre PPT reform period 1994- 2003	Post PPT reform period 2005- 2014

2. Companies income tax was reformed last in 2007

Pre CIT reform period 1999- 2006	Post CIT reform period 2007- 2014

3. VAT was introduced in 1993 and bacome operational from 1st January 1994 and was reformed last 2007

Pre VAT reform period 1999- 2006	Post VAT reform period 2007- 2014

Source: FIRS – A Comprehensive Tax History of Nigeria 2013

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter deals with the presentation of analyzed data as well as the results or answers to the research questions and hypotheses stated in this study. The data and result of each research question are presented on the different tables.

Presentation of data - see Appendices 1- 4 (pages 141-164)

4.2 Analysis of Research Questions

RQ1: What is the relationship between Petroleum Profits Tax and Gross Domestic Product in the pre-reform period?

Table 4.1: Pooled Regression Result for Pre-PPT (Reform Period 1) on Gross Domestic Product (GDP) of Nigeria 1994-2003

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 11:12
Sample: 1994-2003
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1438247944.2565	376732537.3784	3.8177	0.0623
X	0.02327	0.0095	2.4521	0.1337

R-squared (r^2)	0.7504	Mean dependent var	2084441250.37
Adjusted R-squared	0.6256	S.D. dependent var	8846.3093
S.E. of regression	538453543.4434	Akaike info criterion	43.3532
Sum squared resid	5.7986	Schwarz criterion	43.0464
Log likelihood	-84.7063	Hannan-Quinn criter.	42.6798
F-statistic	6.0130	Durbin-Watson stat	2.1729
Prob (F-statistic)	0.1337		

Source: Data Analysis 2015
Equation: GDP = 1598550898.89 + 0.0226037355142*PPT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.1, R-squared (r^2)-value of 0.7504 shows a very high contribution of pre reform PPT period to Gross Domestic Products (GDP) in Nigeria in the two partitions of 1994-1998 and 1999-2003. From the regression equation (**GDP = 1598550898.89 + 0.0226037355142*PPT)**, any positive increase in the value of pre reform PPT will yield a resultant or concomitant increase in the value of Gross Domestic Products (GDP) in Nigeria. The r^2-value of 0.7504 indicates roughly the contribution of 75.4% to Gross Domestic Products (GDP) of the independent variable, pre reform PPT. Furthermore, the p-value of .1337 indicates that there is no significant relationship between pre reform PPT period and Gross Domestic Products (GDP) in Nigeria when partitioned into 1994-1998 and 1999-2003.

RQ2: What is the relationship between Petroleum Profits Tax and Gross Domestic Product in the post-reform period?

Table 4.2: Pooled Regression Result for Post-PPT (Reform Period 1) on Gross Domestic Product (GDP) of Nigeria 2005-2014

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 11:27
Sample: 2005-2014
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17511834.4474	1938376.6160	9.0343	0.01201
X	3.3659	1.9208	1.7523	0.2218

R-squared (r^2)	0.6056	Mean dependent var	19522620.2025
Adjusted R-squared	0.4084	S.D. dependent var	6.0209
S.E. of regression	3124443.8189	Akaike info criterion	33.0543
Sum squared resid	19524298355154.81	Schwarz criterion	32.7474
Log likelihood	-64.1085651	Hannan-Quinn criter.	32.3809
F-statistic	3.0706	Durbin-Watson stat	1.4391
Prob (F-statistic)	0.2218		

Source: Data Analysis 2015
Equation: GDP = 19394371.3119 + 2.38085883258e-07*PPT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.2, R-squared (r^2)-value of 0.6056 shows a high contribution of post reform PPT period to Gross Domestic Products (GDP) in Nigeria in the two partitions of 2005-2009 and 2010-2014. From the regression equation (**GDP = 19394371.3119 + 2.38085883258e-07*PPT)**, any positive increase in the value of post reform PPT will yield a concomitant increase in the value of Gross Domestic Products (GDP) in Nigeria. The r^2-value of 0.6056 indicates roughly the contribution of 60.1% to Gross Domestic Products (GDP) of the independent variable, post reform PPT. Furthermore, the p-value of .2218 indicates that there is no significant relationship between post reform PPT period and Gross Domestic Products (GDP) in Nigeria when partitioned into 2005-2009 and 2010-2014.

RQ3: What is the relationship between Petroleum Profits Tax and Infrastructural Development in the pre-reform period?

Table 4.3: Pooled Regression Result for Pre-PPT (Reform Period 1) on Infrastructural Development (ID) of Nigeria 1994-2003

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 11:38
Sample: 1994-2003
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Є	94467873872.31276	18349986066.3774	5.1481	0.0357
X	2.6478	0.4622	5.7287	0.0292

R-squared (r^2)	0.9426	Mean dependent var	168000000000.66
Adjusted R-squared	0.9138	S.D. dependent var	89349501024.5714
S.E. of regression	26227134742.1606	Akaike info criterion	51.1250
Sum squared resid	1.3757	Schwarz criterion	50.8180
Log likelihood	-100.2497	Hannan-Quinn criter.	50.4515
F-statistic	32.8180	Durbin-Watson stat	2.8027
Prob (F-statistic)	0.0292		

Source: Data Analysis 2015
Equation: ID = 128473783068 + 2.50678782011*PPT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.3, R-squared (r^2)-value of 0.9426 shows a high contribution of pre reform PPT period to Infrastructural Development (ID) in Nigeria in the two partitions of 1994-1998 and 1999-2003. From the regression equation (**ID = 128473783068 + 2.50678782011*PPT)**, any positive increase in the value of pre reform PPT will yield a resultant or concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.9426 indicates roughly the contribution of 94.3% to Infrastructural Development (ID) of the independent variable, pre reform PPT. Furthermore, the p-value of .0292 indicates that there is significant relationship between pre reform PPT period and Infrastructural Development (ID) in Nigeria when partitioned into 1994-1998 and 1999-2003.

RQ4: What is the relationship between Petroleum Profits Tax and Infrastructural Development in the post-reform period?

Table 4.4: Pooled Regression Result for Post-PPT (Reform Period 1) on Infrastructural Development (ID) of Nigeria 2005-2014

Dependent Variable: ID
Method: Least Squares
Date: 12/01/15 Time: 16:40
Sample: 2005-2014
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	586925080970.574	82157585782.9805	7.1439	0.0190
X	0.0185	0.0081	2.2735	0.1509

R-squared (r^2)	0.7210	Mean dependent var	697500000000.5076
Adjusted R-squared	0.5815	S.D. dependent var	204711992809.5896
S.E. of regression	132428733901.8409	Akaike info criterion	54.3634
Sum squared resid	3.5075	Schwarz criterion	54.0565
Log likelihood	-106.7267	Hannan-Quinn criter.	53.6900
F-statistic	5.1688	Durbin-Watson stat	1.9371
Prob (F-statistic)	0.1509		

Source: Data Analysis 2015
Equation: ID = 734930252282 + 0.010764998534*PPT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.4, R-squared (r^2)-value of 0.7210 shows a very high contribution of post reform PPT period to Infrastructural Development (ID) in Nigeria in the two partitions of 2005-2009 and 2010-2014. From the regression equation (**ID = 734930252282 + 0.010764998534*PPT)**, any positive increase in the value of post reform PPT will yield a resultant or concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.7210 indicates roughly the contribution of 72.1% to Infrastructural Development (ID) of the independent variable, post reform PPT. Furthermore, the p-value of .1509 indicates that there is no significant relationship between post reform PPT period and Infrastructural Development (ID) in Nigeria when partitioned into 2005-2009 and 2010-2014.

RQ5: What is the relationship between Companies Income Tax and Gross Domestic Product in the pre-reform period?

Table 4.5: Pooled Regression Result for Pre-CIT (Reform Period 2) on Gross Domestic Products (GDP) of Nigeria 1999-2006

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 16:49
Sample: 1999-2006
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	996509367.0622	2502812520.7187	0.3982	0.7588
X	0.05662	0.0441	1.2854	0.4209

R-squared (r^2)	0.6230	Mean dependent var	4167075667.08667
Adjusted R-squared	0.2459	S.D. dependent var	845722220.0279
S.E. of regression	734410896.5135	Akaike info criterion	43.9018
Sum squared resid	5.3936	Schwarz criterion	43.3008
Log likelihood	-63.8526	Hannan-Quinn criter.	42.6938
F-statistic	1.6522	Durbin-Watson stat	2.9029
Prob(F-statistic)	0.4209		

Source: Data Analysis 2015
Equation: GDP = 58056625.8667 + 0.0764429358167*CIT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.5, R-squared (r^2)-value of 0.6230 shows a high contribution of pre reform CIT period to Gross Domestic Products (GDP) in Nigeria in the two partitions of 1999-2002 and 2003-2006. From the regression equation (**GDP = 58056625.8667 + 0.0764429358167*CIT)**, any positive increase in the value of pre reform CIT will yield a resultant or concomitant increase in the value of Gross Domestic Products (GDP) in Nigeria. The r^2-value of 0.6230 indicates roughly the contribution of 62.3% to Gross Domestic Products (GDP) of the independent variable, pre reform CIT. Furthermore, the p-value of .4209 indicates that there is no significant relationship between pre reform CIT period and Gross Domestic Products (GDP) in Nigeria when partitioned into 1999-2002 and 2003-2006.

RQ6: What is the relationship between Companies Income Tax and Gross Domestic Product in the post-reform period?

Table 4.6: Pooled Regression Result for Post-CIT (Reform Period 2) on Gross Domestic Products (GDP) of Nigeria 2007-2014

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 17:00
Sample: 2007-2014
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17137186346.22473	4389547139.59419	3.9041	0.1596
X	0.0136	0.0095	1.4344	0.3876

R-squared (r^2)	0.6730	Mean dependent var	23249294667.2067
Adjusted R-squared	0.3459	S.D. dependent var	2258481682.6866
S.E. of regression	1826588705.069882	Akaike info criterion	45.7240
Sum squared resid	3.3364	Schwarz criterion	45.1231
Log likelihood	-66.5861	Hannan-Quinn criter.	44.5161
F-statistic	2.0576	Durbin-Watson stat	2.9244
Prob (F-statistic)	0.3876		

Source: Data Analysis 2015
Equation: GDP = 10259431975.8 + 0.0310678444492*CIT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.6, R-squared (r^2)-value of 0.6730 shows a high contribution of post reform CIT period to Gross Domestic Products (GDP) in Nigeria in the two partitions of 2007-2010 and 2011-2014. From the regression equation (**GDP = 10259431975.8 + 0.0310678444492*CIT)**, any positive increase in the value of post reform CIT will yield a resultant or concomitant increase in the value of Gross Domestic Products (GDP) in Nigeria. The r^2-value of 0.6730 indicates roughly the contribution of 67.3% to Gross Domestic Products (GDP) of the independent variable, post reform CIT. Furthermore, the p-value of .3876 indicates that there is no significant relationship between post reform CIT period and Gross Domestic Products (GDP) in Nigeria when partitioned into 2007-2010 and 2011-2014.

RQ7: What is the relationship between Companies Income Tax and Infrastructural Development in the pre-reform period?

Table 4.7: Pooled Regression Result for Pre-CIT (Reform Period 2) on Infrastructural Development (ID) of Nigeria 1999-2006

Dependent Variable: ID
Method: Least Squares
Date: 12/01/15 Time: 17:06
Sample: 1999-2006
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	392270983213.6426	653402369739.249	0.6004	0.6558
X	-0.0108	11.4992	-0.0009	0.9994

R-squared (r^2)	8.8067	Mean dependent var	391666666667.0767
Adjusted R-squared	-0.1000	S.D. dependent var	135574087986.2578
S.E. of regression	191730629510.5465	Akaike info criterion	55.0313
Sum squared resid	3.6761	Schwarz criterion	54.4304
Log likelihood	-80.5470	Hannan-Quinn criter.	53.8234
F-statistic	8.8067	Durbin-Watson stat	2.9029
Prob (F-statistic)	0.9994		

Source: Data Analysis 2015
Equation: ID = 476823475680 - 1.60036538022*CIT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.7, R-squared (r^2)-value of 8.8067 shows a very low contribution of pre reform CIT period to Infrastructural Development (ID) in Nigeria in the two partitions of 1999-2002 and 2003-2006. From the regression equation (**ID = 476823475680 - 1.60036538022*CIT)**, any positive increase in the value of pre reform CIT will not yield a concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 8.8067 indicates roughly the contribution of 8.8% to Infrastructural Development (ID) of the independent variable, pre reform CIT. Furthermore, the p-value of .9994 indicates that there is no significant relationship between pre reform CIT period and Infrastructural Development (ID) in Nigeria when partitioned into 1999-2002 and 2003-2006.

RQ8: What is the relationship between Companies Income Tax and Infrastructural Development in the post-reform period?

Table 4.8: Pooled Regression Result for Post-CIT (Reform Period 2) on Infrastructural Development (ID) of Nigeria 2007-2014

Dependent Variable: ID
Method: Least Squares
Date: 12/01/15 Time: 17:16
Sample: 2007-2014
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	322779079736.5911	138493411038.8076	2.3307	0.2580
X	1.4073	0.2983	4.7176	0.1330

R-squared (r^2)	0.9570	Mean dependent var	957000000000.6567
Adjusted R-squared	0.9140	S.D. dependent var	196517174822.2105
S.E. of regression	57630204730.7489	Akaike info criterion	52.6272
Sum squared resid	3.3212	Schwarz criterion	52.0263
Log likelihood	-76.9408	Hannan-Quinn criter.	51.4193
F-statistic	22.2558	Durbin-Watson stat	2.9244
Prob (F-statistic)	0.1330		

Source: Data Analysis 2015
Equation: ID = 654597608842 + 0.562740121225*CIT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.8, R-squared (r^2)-value of 0.9570 shows a very high contribution of post reform CIT period to Infrastructural Development (ID) in Nigeria in the two partitions of 2007-2010 and 2011-2014. From the regression equation (**ID = 654597608842 + 0.562740121225*CIT)**, any positive increase in the value of post reform CIT will yield a concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.9570 indicates roughly the contribution of 95.7% to Infrastructural Development (ID) of the independent variable, post reform CIT. Furthermore, the p-value of .1330 indicates that there is no significant relationship between post reform CIT period and Infrastructural Development (ID) in Nigeria when partitioned into 2007-2010 and 2011-2014.

RQ9: What is the relationship between Value Added Tax and Gross Domestic Product in the pre-reform period?

Table 4.9: Pooled Regression Result for Pre-VAT (Reform Period 3) on Gross Domestic Product (GDP) of Nigeria 1999-2006

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 20:08
Sample: 1999-2006
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	268893798.1665	9535179.4713	28.2002	0.0226
X	0.1000	0.0001	6.9700	0.0907

R-squared (r^2)	0.9800	Mean dependent var	332785000.4933
Adjusted R-squared	0.9597	S.D. dependent var	22622207.2472
S.E. of regression	4543814.9827	Akaike info criterion	33.7312
Sum squared resid	2064625459716 7.64	Schwarz criterion	33.1302
Log likelihood	-48.5967	Hannan-Quinn criter.	32.5232
F-statistic	48.5745	Durbin-Watson stat	2.8462
Prob (F-statistic)	0.0907		

Source: Data Analysis 2015
Equation: GDP = -4683259212.03 + 0.087643989637 1*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.9, R-squared (r^2)-value of 0.9800 shows a very high contribution of pre reform VAT period to Gross Domestic Product (GDP) in Nigeria in the two partitions of 1999-2002 and 2003-2006. From the regression equation (**GDP = -4683259212.03 + 0.0876439896371*VAT)**, any positive increase in the value of pre reform VAT will yield a resultant or concomitant increase in the value of Gross Domestic Product (GDP) in Nigeria. The r^2-value of 0.9800 indicates roughly the contribution of 98.0% to Gross Domestic Product (GDP) of the independent variable, pre reform VAT. Furthermore, the p-value of .0907 indicates that there is no significant relationship between pre reform VAT period and Gross Domestic Product (GDP) in Nigeria when partitioned into 1999-2002 and 2003-2006.

RQ10: What is the relationship between Value Added Tax and Gross Domestic Product in the post-reform period?

Table 4.10: Pooled Regression Result for Post-VAT (Reform Period 3) on Gross Domestic Product (GDP) of Nigeria 2007-2014

Dependent Variable: GDP
Method: Least Squares
Date: 12/01/15 Time: 20:14
Sample: 2007-2014
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13384732.7240	4026811.3691	3.3239	0.1860
X	2.4785	9.9690	2.4863	0.2434
R-squared (r^2)	0.8606	Mean dependent var		23249295.54
Adjusted R-squared	0.7215	S.D. dependent var		2258481.9333
S.E. of regression	1191845.0377	Akaike info criterion		31.0546
Sum squared resid	1420494593992	Schwarz criterion		30.4537
Log likelihood	.568	Hannan-Quinn criter.		29.8467
F-statistic	-44.5819	Durbin-Watson stat		2.9981
Prob (F-statistic)	6.1816			
	0.2435			

Source: Data Analysis 2015
Equation: GDP = 4677278.35067 + 4.83637811986e-05*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.10, R-squared (r^2)-value of 0.8606 shows a very high contribution of post reform VAT period to Gross Domestic Product (GDP) in Nigeria in the two partitions of 2007-2010 and 2011-2014. From the regression equation (**GDP = 4677278.35067 + 4.83637811986e-05*VAT)**, any positive increase in the value of post reform VAT will yield a concomitant increase in the value of Gross Domestic Product (GDP) in Nigeria. The r^2-value of 0.8606 indicates roughly the contribution of 86.0% to Gross Domestic Product (GDP) of the independent variable, pre reform VAT. Furthermore, the p-value of .2434 indicates that there is no significant relationship between pre reform VAT period and Gross Domestic Product (GDP) in Nigeria when partitioned into 2007-2010 and 2011-2014.

RQ11: What is the relationship between Value Added Tax and Infrastructural Development in the pre-reform period?

Table 4.11: Pooled Regression Result for Pre-VAT (Reform Period 3) on Infrastructural Development (ID) of Nigeria 1999-2006

Dependent Variable: ID
Method: Least Squares
Date: 12/02/15 Time: 11:15
Sample: 1999-2006
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	368794202790.8204	401250816546.5521	0.9191	0.5268
X	0.3561	5.9046	0.0603	0.9617

R-squared (r^2)	0.0036	Mean dependent var	392057666667.3333
Adjusted R-squared	-0.9928	S.D. dependent var	135450606622.0557
S.E. of regression	191208721088.1498	Akaike info criterion	55.0259
Sum squared resid	3.6561	Schwarz criterion	54.4249
Log likelihood	-80.5388	Hannan-Quinn criter.	53.8179
F-statistic	0.0036	Durbin-Watson stat	2.8462
Prob (F-statistic)	0.9617		

Source: Data Analysis 2015
Equation: ID = 433838608324 - 0.782248135833*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.11, R-squared (r^2)-value of 0.0036 shows a very low contribution of pre reform VAT period to Infrastructural Development (ID) in Nigeria in the two partitions of 1999-2002 and 2003-2006. From the regression equation (**ID = 433838608324 - 0.782248135833*VAT)**, any positive increase in the value of pre reform VAT will not yield a concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.0036 indicates roughly the contribution of 0.4% to Infrastructural Development (ID) of the independent variable, pre reform VAT. Furthermore, the p-value of .9617 indicates that there is no significant relationship between pre reform VAT period and Infrastructural Development (ID) in Nigeria when partitioned into 1999-2002 and 2003-2006.

RQ12: What is the relationship between Value Added Tax and Infrastructural Development in the post-reform period?

Table 4.12: Pooled Regression Result for Post-VAT (Reform Period 3) on Infrastructural Development (ID) of Nigeria 2007-2014

Dependent Variable: ID
Method: Least Squares
Date: 12/02/15 Time: 11:25
Sample: 2007-2014
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	72110555054.06445	432686035360.5279	0.1667	0.8949
X	2.3612	1.071	2.2043	0.2711

R-squared (r^2)	0.8293	Mean dependent var	1011859000000.167
Adjusted R-squared	0.6587	S.D. dependent var	219193984938.1604
S.E. of regression	128065274700.2103	Akaike info criterion	54.2242
Sum squared resid	1.6401	Schwarz criterion	53.6233
Log likelihood	-79.3363	Hannan-Quinn criter.	53.0163
F-statistic	4.8590	Durbin-Watson stat	2.9981
Prob (F-statistic)	0.2711		

Source: Data Analysis 2015
Equation: ID = 755888447370 + 0.50961161008*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.12, R-squared (r^2)-value of 0.8293 shows a very high contribution of post reform VAT period to Infrastructural Development (ID) in Nigeria in the two partitions of 2007-2010 and 2011-2014. From the regression equation (**ID = 755888447370 + 0.50961161008*VAT)**, any positive increase in the value of post reform VAT will yield a resultant or concomitant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.8293 indicates roughly the contribution of 82.9% to Infrastructural Development (ID) of the independent variable, post reform VAT. Furthermore, the p-value of .2711 indicates that there is no significant relationship between post reform VAT period and Infrastructural Development (ID) in Nigeria when partitioned into 2007-2010 and 2011-2014.

4.3 **Test of hypotheses**

H_{o1}: There is no significant relationship between Petroleum Profits Tax and Gross Domestic Product in both the pre-reform and post-reform periods.

Table 4.13: Pooled Regression Result for Pre-PPT (1994-2003) and Post-PPT (2005-2014) reform periods on Gross Domestic Product (GDP) of Nigeria

Dependent Variable: GDP
Method: Least Squares
Date: 12/02/15 Time: 12:10
Sample: 1994-2003 2005-2014
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2245057829.558	561007781.542	4.0018	0.0052
X	0.0088	0.0029	3.0316	0.0191

R-squared (r^2)	0.5675	Mean dependent var	3384422555.9833
Adjusted R-squared	0.5057	S.D. dependent var	1776745834.9192
S.E. of regression	1249179569.390	Akaike info criterion	44.9225
Sum squared resid	1.0923	Schwarz criterion	44.9663
Log likelihood	-200.1513	Hannan-Quinn criter.	44.8279
F-statistic	9.1842	Durbin-Watson stat	1.5302
Prob (F-statistic)	0.0191		

Source: Data Analysis 2015
Equation: GDP = 2091552386.1 + 0.0112059355215*PPT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.13, R-squared (r^2)-value of 0.5675 shows a relatively high contribution of pre (1994-2003) and post (2005-2014) PPT reform periods to Gross Domestic Product (GDP) in Nigeria. From the regression equation (**GDP = 2091552386.1 + 0.0112059355215*PPT)**, any increase in the pre and post PPT reform periods will yield a resultant increase in the value of Gross Domestic Product (GDP) in Nigeria. The r^2-value of 0.5675 indicates roughly the contribution of 56.8% to Gross Domestic Product (GDP) of the independent variable, pre and post PPT reform periods. Furthermore, the p-value of .0191 indicates that there is significant relationship between the PPT and Gross Domestic Product (GDP) in both the pre (1994-2003) and post (2005-2014) reform periods in Nigeria. The null hypothesis was therefore rejected. This means that the pre (1994-2003) and post (2005-2014) PPT reform periods contributed to the increase in Nigeria's Gross Domestic Product (GDP).

H_{o2}: There is no significant relationship between Petroleum Profits Tax and Infrastructural Development in both in the pre-reform and post-reform periods.

Table 4.14: Pooled Regression Result for Pre-PPT (1994-2003) and Post-PPT (2005-2014) reform periods on Infrastructural Development (ID) of Nigeria

Dependent Variable: ID
Method: Least Squares
Date: 12/02/15 Time: 12:35
Sample: 1994-2003 2005-2014
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	221168326383.7981	58396682874.1913	3.7873	0.0068
X	0.4155	0.3008	1.3812	0.2099

R-squared (r^2)	0.2141	Mean dependent var	275222222222.6911
Adjusted R-squared	0.1019	S.D. dependent var	137209491087.1939
S.E. of regression	130030180626.2301	Akaike info criterion	54.2131
Sum squared resid	1.1836	Schwarz criterion	54.2569
Log likelihood	-241.9588	Hannan-Quinn criter.	54.1185
F-statistic	1.9078	Durbin-Watson stat	1.7564
Prob (F-statistic)	0.2097		

Source: Data Analysis 2015

Equation: ID = 231508511224 + 0.250399899786*PPT

Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.14, R-squared (r^2)-value of 0.2141 shows a very low contribution of pre (1994-2003) and post (2005-2014) PPT reform periods to Infrastructural Development (ID) in Nigeria. From the regression equation (**ID = 231508511224 + 0.250399899786*PPT)**, any increase in the pre (1994-2003) and post (2005-2014) PPT reform periods will yield a resultant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.2141 indicates roughly the contribution of 21.4% to Infrastructural Development (ID) of the independent variable, pre (1994-2003) and post (2005-2014) PPT reform periods. Furthermore, the p-value of .2097 indicates that there is no significant relationship between the PPT and Infrastructural Development (ID) in both the pre (1994-2003) and post (2005-2014) reform periods in Nigeria. The null hypothesis was therefore retained. This means that the pre (1994-2003) and post (2005-2014) PPT reform periods did not contribute to the increase in Nigeria's Infrastructural Development (ID).

H_{o3}: There is no significant relationship between Companies Income Tax and Gross Domestic Product in both the pre-reform and post-reform periods.

Table 4.15: Pooled Regression Result for Pre-CIT (1999-2006) and Post-CIT (2007-2014) reform periods on Gross Domestic Product (GDP) of Nigeria

Dependent Variable: GDP
Method: Least Squares
Date: 12/02/15 Time: 12:56
Sample: 1999-2006, 2007-2014
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-982057484.34426	607958044.4257	-1.6153	0.1672
X	0.0906	0.0058	15.5602	1.9916

R-squared (r^2)	0.9798	Mean dependent var	7697706286.1586
Adjusted R-squared	0.9757	S.D. dependent var	4105170714.4327
S.E. of regression	639664492.5575	Akaike info criterion	43.6257
Sum squared resid	2.0459	Schwarz criterion	43.6103
Log likelihood	-150.6901	Hannan-Quinn criter.	43.4347
F-statistic	242.1208	Durbin-Watson stat	2.5805
Prob (F-statistic)	1.9916		

Source: Data Analysis 2015

Equation: GDP = -31399462.1822 + 0.0792799713206*CIT

Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.15, R-squared (r^2)-value of 0.9798 shows a very high contribution of pre (1999-2006) and post (2007-2014) CIT reform periods to Gross Domestic Product (GDP) in Nigeria. From the regression equation (**GDP = -31399462.1822 + 0.0792799713206*CIT)**, any increase in the pre (1999-2006) and post (2007-2014) CIT reform periods will yield a resultant increase in the value of Gross Domestic Product (GDP) in Nigeria. The r^2-value of 0.9798 indicates roughly the contribution of 98.0% to Gross Domestic Product (GDP) of the independent variable, pre (1999-2006) and post (2007-2014) CIT reform periods. Furthermore, the p-value of .9916 indicates that there is no significant relationship between the CIT and Gross Domestic Product (GDP) in both the pre (1999-2006) and post (2007-2014) reform periods in Nigeria. The null hypothesis was therefore retained. This means that the pre (1999-2006) and post (2007-2014) CIT reform periods did not contributed to the increase in Nigeria's Gross Domestic Product (GDP).

H_{o4}: There is no significant relationship between Companies Tax and Infrastructural Development in both the pre-reform and post-reform periods.

Table 4.16: Pooled Regression Result for Pre-CIT (1996-2006) and Post-CIT (2007-2014) reform periods on Infrastructural Development (ID) of Nigeria

Dependent Variable: ID
Method: Least Squares
Date: 12/02/15 Time: 13:04
Sample: 1999-2006, 2007-2014
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	326411929535.1581	117905144361.402	2.7684	0.0394
X	0.4801	1.1287	0.4254	0.6883

R-squared (r^2)	0.0349	Mean dependent var	372428571429.0143
Adjusted R-squared	-0.1581	S.D. dependent var	115276272699.9933
S.E. of regression	124054176154.696	Akaike info criterion	54.1608
Sum squared resid	7.6947	Schwarz criterion	54.1454
Log likelihood	-187.5628	Hannan-Quinn criter.	53.9698
F-statistic	0.1809	Durbin-Watson stat	2.1123
Prob (F-statistic)	0.6883		

Source: Data Analysis 2015
Equation: ID = 288957361189 + 0.924036107406*CIT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.16, R-squared (r^2)-value of 0.0349 shows a very low contribution of pre (1999-2006) and post (2007-2014) CIT reform periods to Infrastructural Development (ID) in Nigeria. From the regression equation (**ID = 288957361189 + 0.924036107406*CIT)**, any increase in the pre (1999-2006) and post (2007-2014) CIT reform periods will yield a resultant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.0349 indicates roughly the contribution of 3.5% to Infrastructural Development (ID) of the independent variable, pre (1999-2006) and post (2007-2014) CIT reform periods. Furthermore, the p-value of .6883 indicates that there is no significant relationship between the CIT and

Infrastructural Development (ID) in both the pre (1999-2006) and post (2007-2014) reform periods in Nigeria. The null hypothesis was therefore retained. This means that the pre (1999-2006) and post (2007-2014) CIT reform periods did not contributed to the increase in Nigeria's Infrastructural Development (ID).

H_{o5}: There is no significant relationship between Value Added Tax and Gross Domestic Product in both the pre-reform and post-reform periods.

Table 4.17: Pooled Regression Result for Pre-VAT (1999-2006) and Post-VAT (2007-2014) reform periods on Gross Domestic Product (GDP) of Nigeria

Dependent Variable: GDP

Method: Least Squares
Date: 12/02/15 Time: 13:13
Sample: 1999-2006, 2007-2014
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5937147605.4841	1628976648.2552	-3.6447	0.0148
X	0.1056	0.0132	8.0305	0.0005

R-squared (r^2)	0.9280	Mean dependent var	6054438857.6186
Adjusted R-squared	0.9137	S.D. dependent var	5861071218.7092
S.E. of regression	1722251006.9850	Akaike info criterion	45.6066
Sum squared resid	1.4831	Schwarz criterion	45.5912
Log likelihood	-157.6232	Hannan-Quinn criter.	45.4156
F-statistic	64.4884	Durbin-Watson stat	2.5517
Prob (F-statistic)	0.0005		

Source: Data Analysis 2015
Equation: GDP = -5939018466.51 + 0.10560643986*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.17, R-squared (r^2)-value of 0.9280 shows a very high contribution of pre (1999-2006) and post (2007-2014) VAT reform periods to Gross Domestic Product (GDP) in Nigeria. From the regression equation (**GDP = -5939018466.51 + 0.10560643986*VAT)**, any increase in the pre (1999-2006) and post (2007-2014) VAT reform periods will yield a resultant increase in the value of Gross Domestic Product (GDP) in Nigeria. The r^2-value of 0.9280 indicates roughly the contribution of 92.8% to Gross Domestic Product (GDP) of the independent variable, pre (1999-2006) and post (2007-2014) VAT reform periods. Furthermore, the p-value of .0005 indicates that there is significant relationship between the VAT and Gross Domestic Product (GDP) in both the pre (1999-2006) and post (2007-2014) reform periods in Nigeria. The null hypothesis was therefore rejected. This means that the pre (1999-2006) and post (2007-2014) VAT reform periods contributed to the increase in Nigeria's Gross Domestic Product (GDP).

H_{o6}: There is no significant relationship between Value Added Tax and Infrastructural Development in both the pre-reform and post-reform periods.

Table 4.18: Pooled Regression Result for Pre-VAT (1996-2006) and Post-VAT (2007-2014) reform periods on Infrastructural Development (ID) of Nigeria

Dependent Variable: ID
Method: Least Squares
Date: 12/02/15 Time: 13:20
Sample: 1999-2006, 2007-2014
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	337283252997.1913	118090195837.1777	2.8562	0.0356
X	0.3133	0.9532	0.3287	0.7557

R-squared (r^2)	0.0212	Mean dependent var	372862714286.0571
Adjusted R-squared	-0.1746	S.D. dependent var	115198378129.0022
S.E. of regression	124851979255.484	Akaike info criterion	54.1736
Sum squared resid	7.7940	Schwarz criterion	54.1582
Log likelihood	-187.6077	Hannan-Quinn criter.	53.9826
F-statistic	0.1080	Durbin-Watson stat	2.0883
Prob (F-statistic)	0.7557		

Source: Data Analysis 2015
Equation: ID = 290708834751 + 0.81475493865*VAT
Decision rule: *S= Significant when p<.05, else NS= Not Significant when p>.05.*

From the data on table 4.18, R-squared (r^2)-value of 0.0212 shows a very low contribution of pre (1999-2006) and post (2007-2014) VAT reform periods to Infrastructural Development (ID) in Nigeria. From the regression equation (**ID = 290708834751 + 0.81475493865*VAT)**, any increase in the pre (1999-2006) and post (2007-2014) VAT reform periods will yield a resultant increase in the value of Infrastructural Development (ID) in Nigeria. The r^2-value of 0.0212 indicates roughly the contribution of 3.5% to Infrastructural Development (ID) of the

independent variable, pre (1999-2006) and post (2007-2014) CIT reform periods. Furthermore, the p-value of .7557 indicates that there is no significant relationship between the CIT and Infrastructural Development (ID) in both the pre (1999-2006) and post (2007-2014) reform periods in Nigeria. The null hypothesis was therefore retained. This means that the pre (1999-2006) and post (2007-2014) CIT reform periods did not contributed to the increase in Nigeria's Infrastructural Development (ID).

4.4 **Discussion of Findings**

The following findings were gathered from the outcome of the study.

The study revealed on table 4.13 that there was a significant relationship between petroleum profits tax and gross domestic products in both the pre-reform and post-reform periods under review (1994-2014), as $P<0.05$. The implication of this result is that tax reforms contributes positively to the economic growth and development of Nigeria. This finding agrees with Ogbonna & Appah (2012) who found that tax reforms is positively and significantly related to economic growth and that tax reforms granger cause economic growth. Also in line with this finding is Jibrin, Blessing & Ifurueze (2012) who found that petroleum profits tax impacted positively on gross domestic product of Nigeria and was statistically significant. This is supported by Myles (2000) who empirically found that direct taxation policy is a stimulant to economic growth.

From table 4.14, it was revealed that there is no significant relationship between petroleum profits tax (PPT) and infrastructural development (ID) in both the pre-reform (1994-2003) and post-reform (2005-2014) periods in Nigeria. This finding is

corroborated by Koester & Kormendi (1989) who in their study detected no statistical significant relationship between taxes and economic growth. Another study that is in agreement with this finding is Arisoy & Unlukaplan (2010), who studied the effect of direct and indirect tax on economic growth of Turkey within the period of 1968-2006. Their study shows that the real output is positively related to indirect tax revenue while direct tax has no significant effect.

The study indicated on table 4.15, that there was no significant relationship of the joint contribution of the pre and post companies income tax reform periods (1999-2006) on gross domestic product. This result is not corroborated by Imegi & Worlu (2012) who investigated the relationship between companies income tax and economic growth and development in Nigeria from 1994-2008. Their results showed significant relationship between companies income tax and economic growth and development. Another study that is not in agreement with this finding is Adegbie a Fakile (2011), who worked on companies income tax and Nigeria's economic development. They found that there is a significant relationship between companies income tax and Nigeria's economic development and stated that tax evasion and avoidance are the major hindrances to revenue generation. This finding seems to agree with Tosun Abizadeh (2005) who reported that corporate income taxes are the most harmful to growth as well as personal income taxes.

The study also indicated on table 4.16, that there is no significant relationship between companies' income tax and infrastructural development in both the pre and post periods.

This finding is in line with Arnold (2008) who found that companies' income tax (CIT) and petroleum profits tax (PIT) rates could reduce the economic performance of a country. This is supported by Arisoy & Unlukaplan (2010) who tested the effect of direct-indirect composition on economic growth in Turkey. The empirical finding of their study holds that direct taxes have no significant effect on economic growth.

Worlu & Okoro (2012) disagreed with Arnold (2008) and Arisoy & Unlukaplan (2010) when they found that tax revenue stimulates economic growth through infrastructural development. The study also reveals that tax revenue has no independent effect on growth through infrastructural development and foreign direct investment but just allowing the infrastructural development and foreign investment to positively respond to increase in output.

From table 4.17, it was revealed that a significant relationship exists between value added tax and gross domestic product in both the pre-reform and post-reform periods in Nigeria. This result is corroborated by Adereti, Sanni & Adesina (2011) who found that a positive and significant correlation exists between value added tax (VAT) revenue and gross domestic product (GDP). Omesi (2007) supports this finding when he found that value added tax revenue has contributed positively to the economic growth of Nigeria especially in the aspects gross domestic products and reduction of unemployment rate in the country. Ajakaiye (1999) did not agree to this result when he found that value added tax (VAT) has a negative effect on economic growth of Nigeria. Also not in agreement with this finding is Basila (2010) who concluded that value added tax is not an effective

revenue earner in the sense that a significant part of gross domestic product (GDP) which represents aggregate national income is not collected as value added tax (VAT).

Finally, table 4.18, revealed that value added tax (VAT) has no significant relationship with infrastructural development in both the pre-reform period and post-reform period within the period under review (1999-2006). The implication of this finding is that the positive contribution of value added tax (VAT) to Nigeria's economic growth and development as indicated in the works of Omesi (2007) and Adereti, Sanni & Adesina (2011) was not extended to infrastructural development which acts as a catalyst to economic development of every nation.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This is the concluding part of the study where the research findings were summarized, conclusion was drawn and possible recommendations were made.

5.1 Summary of Findings

The following findings were gathered from this study.

1. The results of the relative contribution of the three (3) reform periods via Petroleum Profit Tax (PPT), Companies Income Tax (CIT) and Value Added Tax (VAT) reform periods on Gross Domestic Product (GDP) and Infrastructural Development (ID) in Nigeria indicated that:
    a. In Pre and Post PPT/GDP reform period 1, there was a non-significant impact of PPT on Gross Domestic Products (GDP) in both the Pre (1994-2003) and Post (2005-2014) reform periods, as $p > 0.05$.
    b. In Pre and Post PPT/ID reform period 1, there was a non-significant impact of PPT on Infrastructural Development (ID) in Nigeria, in both the Pre (1994-2003) and Post (2005-2014) reform periods, as $p > 0.05$.
    c. In Pre and Post CIT/GDP reform period 2, there was a non-significant impact of PPT on Gross Domestic Products (GDP) in both the pre (1999-2006) and post (2007-2014) reform periods, as $p > 0.05$.

d. In Pre and Post CIT/ID reform period 2, there was a non-significant impact of CIT on Infrastructural Development (ID) in Nigeria, in both the Pre (1999-2006) and Post (2007-2014) reform periods, as $p > 0.05$.

e. In Pre and Post VAT/GDP reform period 3, there was a non-significant impact of VAT on Gross Domestic Products (GDP) in both the pre (1999-2006) and post (2007-2014) reform periods, as $p > 0.05$.

f. In Pre and Post VAT/ID reform period 3, there was a non-significant impact of VAT on Infrastructural Development (ID) in Nigeria, in both the Pre (1999-2006) and Post (2007-2014) reform periods, as $p > 0.05$.

2. The results of the joint contribution of the Pre and Post reform periods via Petroleum Profit Tax (PPT), Companies Income Tax (CIT) and Value Added Tax (VAT) reform periods on Gross Domestic Product (GDP) and Infrastructural Development (ID) in Nigeria indicated that:

a. There was a significant relationship between the joint contribution of the Pre and Post PPT reform period (1994-2014) on Gross Domestic Product (GDP), as $p < 0.05$.

b. There was no significant relationship between the joint contribution of the Pre and Post PPT reform period (1994-2014) on Infrastructural Development (ID), as $p > 0.05$.

c. There was no significant relationship between the joint contribution of the Pre and Post CIT reform period (1999-2006) on Gross Domestic Product (GDP), as $p > 0.05$.

d. There was no significant relationship between the joint contribution of the Pre and Post CIT reform period (1999-2006) on Infrastructural Development (ID), as $p > 0.05$.

e. There was a significant relationship between the joint contribution of the Pre and Post VAT reform period (1999-2006) on Gross Domestic Product (GDP), as $p < 0.05$.

f. There was no significant relationship between the joint contribution of the Pre and Post VAT reform period (1999-2006) on Infrastructural Development (ID), as $p > 0.05$.

5.2 Implications of Findings

From the findings, the following implications were arranged in two sections. Section one has to do with the analysis of research questions while section two dealt with research hypotheses testing.

Apart from table 4.11 where the independent variable (pre-reform VAT) made a very low contribution to infrastructural development in the pre-reform period and there was no significant relationship between the independent variable and dependent variable. The rest of the results as indicated on tables 4.1 to table 4.12 showed a very high contribution of the independent variables to the dependent variables without any significant relationship between the independent variables and the dependent variables.

A meticulous examination of tables 4.13 to table 4.18 which dealt with results of the hypotheses testing, reveals that petroleum profits tax (PPT) and value added tax (AT) were the only independent variables that made a very high contribution to their respective dependent variables as well as had significant relationship with their dependent variables in both the pre-reform period and post-reform period.

The findings further revealed that companies' income tax (CIT) and value added tax (VAT) made a very high contribution to infrastructural development in both the pre-reform and post-reform periods without contributing to the expansion of infrastructural development in the period under review. The findings also revealed that petroleum profits tax made very low contribution to infrastructural and did not contribute to its expansion in both pre-reform and post-reform periods, (see table 4.14).

Finally, the findings revealed that companies income tax (CIT) made a very high contribution to the dependent variable (that is GDP) in both the pre-reform and post-reform periods but there was no significant relationship between companies income tax (CIT) and gross domestic product (GDP) in both the pre-reform and post-reform periods.

In summary, one of the implications of the findings is that, if more revenue is collected from Petroleum profits tax and Value added tax, it will enhance Gross Domestic Product (GDP) and improve the general standard of living of Nigerians. Another implication of the findings is that if more tax revenue is invested in

infrastructural development (capital expenditure), it will also enhance the Gross Domestic Product (GDP), reduce unemployment, etc.

5.3 **Conclusion**

The importance of taxation and tax reforms to resources mobilisation (that is revenue generation), consumption, domestic investment, public infrastructural development and overall economic development course in emerging nations like ours is very imperative. Consequently, a lot of measures with regard to public finance reforms aimed at bridging the gap between national development needs and funding of the needs need to be put in place. This is essential especially at this period of global drop in the price oil which has remained our main source of revenue mobilization.

One of such measures that need to be adopted to ensure rapid economic development is corrupt free and efficient tax system that should broaden the tax base of our nation.

However, the study has established that tax reforms has impacted positively to Nigerian economy within the period under review in both the pre-reform and post-reform periods as indicated in chapter four of this study.

5.4 **Recommendations**

Based on the findings of this study, the following recommendations were made.

1. Tax reforms should be upheld and carried out every four years in order to increase the total revenue base of the nation especially at this time of global drop in the price of oil, since the study has established that it impacts positively on the economy of Nigeria.
2. Infrastructural development is one aspect of the economy the study has identified to have not been impacted positively by tax reform (tax revenue) in both the pre-reform and post-reform periods within the period under review. Consequently, government should increase its budget for capital expenditure and ensure its implementation in order to improve upon it to further increase gross domestic product of Nigeria.
3. Government should encourage production and service sectors of the economy since it is established by the study that tax reforms have positively impacted on the economy in both the pre-reform and post re-reform periods especially in the area of gross domestic product.
4. Government should investigate none significant relationship between the joint contribution of the pre and post petroleum profits tax (PPT) reform on infrastructural development within the period under review in order to know what the problem is.

5. None significant relationship between the joint contribution of the pre and post-reform of companies' income tax on infrastructural development should also be investigated.
6. Value added tax rate should be increased from five percent (5%) to fifteen percent (15%) since the study has established that there was a significant relationship between the joint contribution of the pre and post-reform periods of Value added tax reform and gross domestic product.

5.5 Contribution to Knowledge

The study was able to modify the measurement of economic development by using two macroeconomic indicators to measure it unlike what previous researchers did. The study expanded the existing contemporary literatures, empirical reviews and updated the data of the study that will enable researchers and scholars to use it for future studies. The study also filled the gap in knowledge by providing empirical evidence on the subject matter of this study. Consequently from the results, this study has contributed to knowledge by discovering that tax reforms impacted positively on the Nigerian economy in both the pre-reform and post-reform periods within the period under review.

Besides, the study also has contributed to knowledge by providing pre-reform and post-reform models that can be used for further studies in the future for similar studies to be conducted.

5.6 **Suggestions for Further Study**

Based on the findings and contributions of the study, the following suggestions are made.

1. The study can also be extended by increasing the number of macroeconomic indicators to proxy economic development in Nigeria
2. The study can also be extended by evaluating more tax reforms in order to determine whether better results will be obtained.
3. This study can be repeated to ascertain why some of the independent variables did not positively impact the economy.
4. Furthermore, a comparative study of the impact of tax reforms on Nigeria's economy with some other African countries should be undertaken in order to see whether a common trend can be established.

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Appendix 1

Tax Revenue and its major components

Petroleum Profits Tax (Reform 1)

Pre-reform period	Revenue (₦ M/B)	Post-reform period	revenue (₦ B/T)
1994	42,802,000.7	2005	1,352,000,000,000.2
1995	42,857,000.9	2006	1,352,000,000,000.5
1996	47,000,000,000.5	2007	1,132,000,000,000.0
1997	64,000,000,000.3	2008	20,060,000,000,000.9
1998	24,000,000,000.6	2009	939,000,000,000.4
1999	71,000,000,000.1	2010	1,480,000,000,000.4
2000	334,000,000,000.5	2011	3,070,000,000,000.6
2001	407,000,000,000.1	2012	3,201,000,000,000.3
2002	224,000,000,000.4	2013	2,666,000,000,000.4
2003	438,000,000,000.0	2014	2,271,000,000,000.1

Companies Income Tax – (Reform 2)

Pre-reform period Revenue (₦ /B)		**Post-reform period Revenue** (₦ B/**Tri.)**	
1999	46,000,000,000.2	2007	332,000,000,000.4
2000	53,000,000,000.3	2008	420,000,000,000.6
2001	69,000,000,000.4	2009	600,000,000,000.6
2002	89,000,000,000.1	2010	666,000,000,000.06
2003	114,000,000,000.8	2011	715,000,000,000.43
2004	130,000,000,000.8	2012	846,000,000,000.59
2005	170,000,000,000.2	2013	998,000,000,000.44
2006	246,000,000,000.7	2014	1,173,490,700,000.0

3. Value Added Tax (Reform 3)

Pre-reform period revenue (₦ B)		Post-reform period revenue (₦ B)	
1999	47,000,000,000.80	2007	312,000,000,000.60
2000	58,000,000,000.00	2008	401,000,000,000.70
2001	91,000,000,000.70	2009	481,000,000,000.40
2002	108,000,000,000.60	2010	564,000,000,000.89
2003	136,000,000,000.40	2011	659,000,000,000.16
2004	163,000,000,000.30	2012	710,000,000,000.56
2005	192,000,000,000.70	2013	802,000,000,000.69
2006	232,000,000,000.70	2014	616,000,000,000.90

Appendix 2

Economic Development represented by Gross Domestic product (GDP)

1. Gross Domestic product (GDP) Reform I

Pre-reform period (₦ M)		Post-reform period (₦ M/B)	
1994	899,863.22	2005	14,572,239.12
1995	1,933,211.55	2006	18,564,594.73
1996	2,702,719.13	2007	20,657,317.67
1997	2,801,972.58	2008	24,296,329.29
1998	2,708,430.86	2009	24,794,238.66
1999	3,194.014.97	2010	33,984,754.13
2000	4,582,127.29	2011	37,543,654.70
2001	4,725,086.00	2012	40,544,000,000.10
2002	6,912,381.25	2013	42,396,000,000.77
2003	8,487,031.57	2014	35,809,000,000.72

2. Gross Domestic Product (GDP) (Reform 2)

Pre-reform period (₦ M)		Post-reform period	(₦ M/B)
1999	3,194,014.97	2007	20,657,317.67
2000	4,582,127.29	2008	24,296.329.29
2001	4,725,086.00	2009	24,794,238.66
2002	6,912,381.25	2010	33,984,754.13
2003	8,487,031.57	2011	37,543,654.70
2004	11,411,066.91	2012	40,544,000,000.10
2005	14,572,239.12	2013	42,396,000,000.77
2006	18,564,594.73	2014	28,528,000,000.00

3. Gross Domestic Product (GDP) (Reform 2)

	Pre-reform period (₦ M)	Post-reform period	(₦ M/B)
1999	312,183.48	2007	20,657,317.67
2000	329,178.74	2008	24,296,329.29
2001	356,994.26	2009	24,794,239.66
2002	6,912,381.25	2010	33,984,754.13
2003	8,487,031.57	2011	37,543,654.70
2004	11,411,066.91	2012	40,544,000,000.10
2005	14,572,239.12	2013	42,396,000,000.77
2006	18,564,594.73	2014	35,809,000,000.72

Appendix 3

Economic Development represented by Infrastructural Development (ID).

1. Infrastructural Development (reform 1)

	Pre-reform period (₦ B)	Post-reform period	(₦ B)
1994	70,000,000,000.92	2005	519,000,000,000.47
1995	121,000,000,000.14	2006	552,000,000,000.39
1996	212,000,000,000.93	2007	759,000,000,000.28
1997	269,000,000,000.65	2008	960,000,000,000.89
1998	309,000,000,000.02	2009	1,152,000,000,000.80
1999	498,000,000,000.03	2010	883,000,000,000.87
2000	239,000,000,000.45	2011	918,000,000,000.55
2001	438,000,000,000.70	2012	874,000,000,000.84
2002	321,000,000,000.38	2013	1,108,000,000,000.39
2003	241,000,000,000.69	2014	2,681,000,000,000.08

2. Infrastructural Development (reform 2)

	Pre-reform period (₦ B)	Post-reform period	(₦ B)
1999	498,000,000,000.08	2007	759,000,000,000.28
2000	239,000,000,000.45	2008	960,000,000,000.89
2001	438,000,000,000.70	2009	1,152,000,000,000.80
2002	321,000,000,000.38	2010	883,000,000,000.87
2003	241,000,000,000.69	2011	918,000,000,000.55
2004	351,000,000,000.30	2012	874,000,000,000.84
2005	519,000,000,000.50	2013	1,108,000,000,000.39
2006	552,000,000,000.39	2014	2,681,000,000,000.08

3. Infrastructural Development (reform 3)

	Pre-reform period (₦ B)	Post-reform period	(₦ B/T)
1999	498,027,000,000.60	2007	759,323,000,000.00
2000	239,450,000,000.90	2008	1,123,458,000,000.00
2001	438,696,000,000.50	2009	1,152,796,000,000.50
2002	321,378,000,000.10	2010	883,874,000,000.50
2003	241,688,000,000.30	2011	918,548,000,000.90
2004	351,300,000,000.00	2012	874,000,000,000.84
2005	519,500,000,000.00	2013	1,108,000,000,000.39
2006	552,385,000,000.80	2014	987,443,000,000.08

Appendix 4
Output for the Chow Test Analysis

Research Question 1 Pre PPT/GDP (1994-2003)
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:11
Sample: 1 5 Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1598550898.89412	373695446.6383271	4.277683641249293	0.02346284009435797
X	0.02260373551423092	0.01007341934713816	2.243898991522933	0.1105611626373991

R-squared	0.6266373206196184	Mean dependent var	2209239000.468
Adjusted R-squared	0.5021830941594911	S.D. dependent var	811588495.039932
S.E. of regression	572625524.3721116	Akaike info criterion	43.45853649445263
Sum squared resid	9.836999734873075e+17	Schwarz criterion	43.30231165942628
Log likelihood	-106.6463412361316	Hannan-Quinn criter.	43.03924449071433
F-statistic	5.035082684157627	Durbin-Watson stat	1.922665327517667
Prob(F-statistic)	0.1105611626373993		

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:12
Sample: 14 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1438247944.256472	376732537.3783775	3.817689744201586	0.0622715925124888
X	0.02326828906329183	0.009489000172398771	2.45213285283456	0.1337412594026901

R-squared	0.750404205661237	Mean dependent var	2084441250.37
Adjusted R-squared	0.6256063084918554	S.D. dependent var	880002646.3093297
S.E. of regression	538453543.4434452	Akaike info criterion	43.35315344692782
Sum squared resid	5.798644368936044e+17	Schwarz criterion	43.04630062748777
Log likelihood	-84.70630689385565	Hannan-Quinn criter.	42.67978770690611
F-statistic	6.01295552795055	Durbin-Watson stat	2.172922122936537
Prob(F-statistic)	0.1337412594026903		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 1598550898.89 + 0.0226037355142*X

Research Question 2: Post PPT/GDP (2005-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:26
Sample: 1 5 Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19394371.31185818	2304398.142678357	8.41624151342028	0.003519433104576319
X	2.380858832578465e-07	2.550316152184298e-07	0.9335543871842335	0.4193996343069808

R-squared	0.2251113102338817	Mean dependent var	20576943.894
Adjusted R-squared	-0.03318491968815773	S.D. dependent var	4234734.09412939
S.E. of regression	4304425.294009882	Akaike info criterion	33.67735982185538
Sum squared resid	55584231335136.17	Schwarz criterion	33.52113498682903
Log likelihood	-82.19339955463846	Hannan-Quinn criter.	33.25806781811707
F-statistic	0.8715237938309291	Durbin-Watson stat	0.8419458653886347
Prob(F-statistic)	0.4193996343069807		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:27
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17511834.44741198	1938376.615962824	9.034278634605566	0.01203149879559959
X	3.365895137408582e-07	1.920831125798271e-07	1.752311846784428	0.2218167874087271

R-squared	0.605569112358874	Mean dependent var	19522620.2025
Adjusted R-squared	0.4083536685383109	S.D. dependent var	4062016.020925394
S.E. of regression	3124443.818918401	Akaike info criterion	33.05426358058255
Sum squared resid	19524298355154.81	Schwarz criterion	32.7474107611425
Log likelihood	-64.1085271611651	Hannan-Quinn criter.	32.38089784056082
F-statistic	3.070596808381054	Durbin-Watson stat	1.439098241088433
Prob(F-statistic)	0.2218167874087271		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 19394371.3119 + 2.38085883258e-07*X

Research question 3: Pre PPT/ID (1994-2003)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:37
Sample: 1 5
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	128473783068.4713	52680196491.82285	2.438749124415535	0.09260354086907786
X	2.506787820110372	1.420059343311628	1.76526976278643	0.1757008558264987

R-squared	0.5094975447110958	Mean dependent var	196200000000.532
Adjusted R-squared	0.3459967262814611	S.D. dependent var	99818334988.96293
S.E. of regression	80723555535.72336	Akaike info criterion	53.35564396222003
Sum squared resid	1.954887725498704e+22	Schwarz criterion	53.19941912719366
Log likelihood	-131.3891099055501	Hannan-Quinn criter.	52.93635195848171
F-statistic	3.116177335408058	Durbin-Watson stat	1.186641520118356
Prob(F-statistic)	0.1757008558264987		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 11:38
Sample: 1 4
Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	94467873872.31276	18349986066.37743	5.148116926661088	0.03572192127171543
X	2.647763060999929	0.4621926796104877	5.72869969128747	0.02914550676594978

R-squared	0.9425584470327445	Mean dependent var	168000000000.66
Adjusted R-squared	0.9138376705491166	S.D. dependent var	89349501024.5714
S.E. of regression	26227134742.16063	Akaike info criterion	51.12485066375253
Sum squared resid	1.375725193566899e+21	Schwarz criterion	50.81799784431248
Log likelihood	-100.2497013275051	Hannan-Quinn criter.	50.45148492373081
F-statistic	32.81800015295717	Durbin-Watson stat	2.802652339285728
Prob(F-statistic)	0.02914550676594978		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 128473783068 + 2.50678782011*X

Research question 4: Post PPT/ID (2005-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 16:39
Sample: 1 5 Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	734930252282.164	156986525246.4734	4.681486204808356	0.01841680294094975
X	0.01076499853400398	0.01737396258035655	0.6196052560959904	0.5793928575781384

R-squared	0.1134517753088645	Mean dependent var	788400000000.566
Adjusted R-squared	-0.1820642995881807	S.D. dependent var	269711512546.4768
S.E. of regression	293237855722.3819	Akaike info criterion	55.93555126446549
Sum squared resid	2.579653200859815e+23	Schwarz criterion	55.77932642943913
Log likelihood	-137.8388781611637	Hannan-Quinn criter.	55.51625926072718
F-statistic	0.3839106733817777	Durbin-Watson stat	0.7877276203969741
Prob(F-statistic)	0.5793928575781384		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 16:40
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	586925080970.574	82157585782.98048	7.143893961550166	0.01903659013492345
X	0.01850936040005461	0.008141392477230393	2.273488282480061	0.1508761610624514

R-squared	0.7210112938520401	Mean dependent var	697500000000.5076
Adjusted R-squared	0.58151694077806	S.D. dependent var	204711992809.5896
S.E. of regression	132428733901.8409	Akaike info criterion	54.36335084651129
Sum squared resid	3.507473912568917e+22	Schwarz criterion	54.05649802707124
Log likelihood	-106.7267016930226	Hannan-Quinn criter.	53.68998510648957
F-statistic	5.168748970574144	Durbin-Watson stat	1.937131873214966
Prob(F-statistic)	0.1508761610624512		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 734930252282 + 0.010764998534*X

Research question 5: Pre CIT/GDP (1996-2006)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 16:48
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-58056625.86672211	1174210377.885375	-0.04944312106257806	0.9650597812011441
X	0.07644293581673325	0.0176983682806201	4.319208110300149	0.04964545349218679

R-squared	0.9031737640680718	Mean dependent var	4853402000.377499
Adjusted R-squared	0.8547606461021075	S.D. dependent var	1536556558.902507
S.E. of regression	585586026.5712581	Akaike info criterion	43.52097720304395
Sum squared resid	6.858219890310285e+17	Schwarz criterion	43.21412438360389
Log likelihood	-85.0419544060879	Hannan-Quinn criter.	42.84761146302223
F-statistic	18.65555870008269	Durbin-Watson stat	3.394240857748186
Prob(F-statistic)	0.04964545349218653		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 16:49
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	996509367.0622438	2502812520.718694	0.3981558182296817	0.7587748656679866
X	0.05661725535727568	0.04404703849740332	1.285381657625254	0.4209129808797139

R-squared	0.6229553821126929	Mean dependent var	4167075667.086667
Adjusted R-squared	0.2459107642253857	S.D. dependent var	845722220.0278461
S.E. of regression	734410896.5135394	Akaike info criterion	43.90175657999669
Sum squared resid	5.393593649178208e+17	Schwarz criterion	43.30083143910876
Log likelihood	-63.85263486999503	Hannan-Quinn criter.	42.69382035015229
F-statistic	1.652206005759469	Durbin-Watson stat	2.902877697843331
Prob(F-statistic)	0.4209129808797116		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = -58056625.8667 + 0.0764429358167*X

Research question 6: Post CIT/GDP (2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 16:58
Sample: 14 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10259431975.79582	7150056503.320784	1.434874251837158	0.2877842290341729
X	0.03106784444921465	0.0136958933124908	2.268405845486577	0.151407030504937

R-squared	0.7201100278764488	Mean dependent var	25933159500.4375
Adjusted R-squared	0.5801650418146733	S.D. dependent var	5675651044.555744
S.E. of regression	3677519505.455097	Akaike info criterion	47.19573851469833
Sum squared resid	2.70482994260054e+19	Schwarz criterion	46.88888569525828
Log likelihood	-92.39147702939666	Hannan-Quinn criter.	46.52237277467661
F-statistic	5.145665079837674	Durbin-Watson stat	2.874530806208162
Prob (F-statistic)	0.151407030504937		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 17:00
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17137186346.22473	4389547139.594189	3.904089830052277	0.1596328101139895
X	0.01356237053470717	0.009454845462088251	1.434435981961751	0.3875758071815916

R-squared	0.6729468060196557	Mean dependent var	23249294667.20667
Adjusted R-squared	0.3458936120393114	S.D. dependent var	2258481682.686627
S.E. of regression	1826588705.069882	Akaike info criterion	45.72403004831687
Sum squared resid	3.336426297488866e+18	Schwarz criterion	45.12310490742894
Log likelihood	-66.58604507247531	Hannan-Quinn criter.	44.51609381847247
F-statistic	2.057606586346622	Durbin-Watson stat	2.924406973421394
Prob(F-statistic)	0.3875758071815879		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 10259431975.8 + 0.0310678444492*X

Research question 7: Pre CIT/ID (1999-2006)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 17:04
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	476823475680.0437	275310849776.7504	1.731945820757518	0.2254221123948472
X	-1.600365380221652	4.14964209375695	-0.3856634726713826	0.73690236408669

R-squared	0.06922036602317416	Mean dependent var	374000000000.4025
Adjusted R-squared	-0.3961694509652387	S.D. dependent var	116198106697.0652
S.E. of regression	137299234982.9681	Akaike info criterion	54.4355870415295
Sum squared resid	3.770215985381659e+22	Schwarz criterion	54.12873422208945
Log likelihood	-106.871174083059	Hannan-Quinn criter.	53.76222130150778
F-statistic	0.1487363141529536	Durbin-Watson stat	3.158310206809901
Prob(F-statistic)	0.7369023640866874		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 17:06
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	392270983213.6426	653402369739.249	0.6003513323194479	0.6557938266123553
X	-0.0107913669029064	11.49923899451119	-0.0009384418315035741	0.999402569374848

R-squared	8.806722953114132e-07	Mean dependent var	391666666667.0767
Adjusted R-squared	-0.9999982386554094	S.D. dependent var	135574087986.2578
S.E. of regression	191730629510.5465	Akaike info criterion	55.03131261625307
Sum squared resid	3.676063429251046e+22	Schwarz criterion	54.43038747536514
Log likelihood	-80.54696892437961	Hannan-Quinn criter.	53.82337638640868
F-statistic	8.806730708603139e-07	Durbin-Watson stat	2.902877697843335
Prob(F-statistic)	0.9994025695503029		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 476823475680 - 1.60036538022*X

Research question 8: Post CIT/ID (2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 17:15
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	654597608842.342	332556522257.7424	1.968380004692877	0.1878752292805271
X	0.5627401212252414	0.6370101616818889	0.8834083898119408	0.4702059596163684

R-squared	0.2806817252260123	Mean dependent var	938500000000.71
Adjusted R-squared	-0.07897741216098143	S.D. dependent var	164666329284.5897
S.E. of regression	171045235335.0152	Akaike info criterion	54.87511767102738
Sum squared resid	5.851294506162151e+22	Schwarz criterion	54.56826485158732
Log likelihood	-107.7502353420547	Hannan-Quinn criter.	54.20175193100565
F-statistic	0.7804103831901212	Durbin-Watson stat	2.134498377152547
Prob(F-statistic)	0.4702059596163696		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 17:16
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	322779079736.5911	138493411038.8076	2.330645749248997	0.2580278706211921
X	1.407294941412681	0.2983072643367147	4.717601981774722	0.1329772953167375

R-squared	0.9569999158795003	Mean dependent var	957000000000.6567
Adjusted R-squared	0.9139998317590006	S.D. dependent var	196517174822.2105
S.E. of regression	57630204730.74894	Akaike info criterion	52.62722342085795
Sum squared resid	3.321240497308038e+21	Schwarz criterion	52.02629827997003
Log likelihood	-76.94083513128694	Hannan-Quinn criter.	51.41928719101355
F-statistic	22.25576845844501	Durbin-Watson stat	2.924406973421396
Prob (F-statistic)	0.1329772953167369		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 654597608842 + 0.562740121225*X

Research question 9: Pre VAT/GDP (1999-2006)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 20:07
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4683259212.034832	4289701756.538429	-1.091744712763897	0.3889228906635397
X	0.08764398963712262	0.05370735663502914	1.63188053049625	0.2442919179064536

R-squared	0.5710947053415067	Mean dependent var	1977684000.4325
Adjusted R-squared	0.35664205801226	S.D. dependent var	3289849853.135748
S.E. of regression	2638775302.742719	Akaike info criterion	46.53189137783596
Sum squared resid	1.392627019672985e+19	Schwarz criterion	46.22503855839591
Log likelihood	-91.06378275567193	Hannan-Quinn criter.	45.85852563781424
F-statistic	2.663034065812728	Durbin-Watson stat	2.496048299785156
Prob(F-statistic)	0.2442919179064531		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 20:08
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	268893798.1665981	9535179.471292593	28.20018217550621	0.02256556808851088
X	0.0009779265662180556	0.000140314291426825	6.969543560201436	0.0907239145394126

R-squared	0.9798283543994779	Mean dependent var	332785000.4933333
Adjusted R-squared	0.9596567087989558	S.D. dependent var	22622207.24722058
S.E. of regression	4543814.982717456	Akaike info criterion	33.73115315451983
Sum squared resid	20646254597167.64	Schwarz criterion	33.13022801363189
Log likelihood	-48.59672973177973	Hannan-Quinn criter.	32.52321692467542
F-statistic	48.57453743754627	Durbin-Watson stat	2.846153846133771
Prob(F-statistic)	0.0907239145394116		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = -4683259212.03 + 0.0876439896371*X

Research question 10: Post VAT/GDP (2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 20:13
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4677278.350673534	6551182.64359511	0.7139593879658301	0.5493293092911737
X	4.836378119862378e-05	1.457978132551324e-05	3.317181521371086	0.08011003875985704

R-squared	0.8461975407903921	Mean dependent var	25933160.1875
Adjusted R-squared	0.7692963111855881	S.D. dependent var	5675650.759731874
S.E. of regression	2726107.2230538	Akaike info criterion	32.78150033373024
Sum squared resid	14863321183172.2	Schwarz criterion	32.47464751429019
Log likelihood	-63.56300066746049	Hannan-Quinn criter.	32.10813459370852
F-statistic	11.00369324572583	Durbin-Watson stat	2.597127627300051
Prob(F-statistic)	0.08011003875985679		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/01/15 Time: 20:14
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13384732.7239668	4026811.369064142	3.323903579590194	0.1860441222438101
X	2.478533370859086e-05	9.968800475965479e-06	2.486290478814142	0.2434474276566939

R-squared	0.8607560457005698	Mean dependent var	23249295.54
Adjusted R-squared	0.7215120914011395	S.D. dependent var	2258481.933305131
S.E. of regression	1191845.037742981	Akaike info criterion	31.05462434360053
Sum squared resid	1420494593992.568	Schwarz criterion	30.4536992027126
Log likelihood	-44.5819365154008	Hannan-Quinn criter.	29.84668811375613
F-statistic	6.181640345042196	Durbin-Watson stat	2.998111095564405
Prob(F-statistic)	0.2434474276566879		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 4677278.35067 + 4.83637811986e-05*X

Research question 11: Pre VAT/ID (1999-2006)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 11:15
Sample: 1 4 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	433838608324.2353	226901567548.1126	1.912012389391023	0.1960222842617821
X	-0.7822481358328894	2.840822999123218	-0.2753596883981578	0.808880409537238

R-squared	0.03652669785865426	Mean dependent var	374387750000.5249
Adjusted R-squared	-0.4452099532120186	S.D. dependent var	116104041170.9962
S.E. of regression	139576662104.0626	Akaike info criterion	54.46848955863754
Sum squared resid	3.896328920822334e+22	Schwarz criterion	54.16163673919749
Log likelihood	-106.9369791172751	Hannan-Quinn criter.	53.79512381861582
F-statistic	0.07582295799473146	Durbin-Watson stat	3.181413632265752
Prob(F-statistic)	0.808880409537237		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 11:15
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	368794202790.8204	401250816546.5521	0.91911140758522	0.5268170024594381
X	0.3560734266785958	5.904579371334286	0.06030462193586064	0.9616553223435932

R-squared	0.003623470143454321	Mean dependent var	392057666667.3333
Adjusted R-squared	-0.9927530597130914	S.D. dependent var	135450606622.0557
S.E. of regression	191208721088.1498	Akaike info criterion	55.025861008893
Sum squared resid	3.656077502016586e+22	Schwarz criterion	54.42493586800508
Log likelihood	-80.5387915133395	Hannan-Quinn criter.	53.8179247790486
F-statistic	0.003636647426827653	Durbin-Watson stat	2.846153846133838
Prob(F-statistic)	0.9616553223435897		

Estimation Equation:
==========
Y = C(1) + C(2)*X

Substituted Coefficients:
==========
Y = 433838608324 - 0.782248135833*X

Research question 12: Post VAT/ID (2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 11:24
Sample: 14 Included observations: 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	755888447369.7134	535465118098.9123	1.411648344253274	0.293535396573557
X	0.509611610080106	1.191687784335382	0.427638528126998	0.7105574195556999

R-squared	0.08377700737425531	Mean dependent var	979862750000.25
Adjusted R-squared	-0.3743344889386171	S.D. dependent var	190067642551.1253
S.E. of regression	222820123565.0084	Akaike info criterion	55.40399121010585
Sum squared resid	9.929761493105125e+22	Schwarz criterion	55.0971383906658
Log likelihood	-108.8079824202117	Hannan-Quinn criter.	54.73062547008413
F-statistic	0.1828747107386252	Durbin-Watson stat	2.000136858238877
Prob(F-statistic)	0.7105574195556999		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 11:25
Sample: 1 3 Included observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	72110555054.06445	432686035360.5279	0.1666579208963368	0.8948685038362948
X	2.361176997348653	1.07116036981094	2.204316985481269	0.271129666112708

R-squared	0.8293227995182911	Mean dependent var	1011859000000.167
Adjusted R-squared	0.6586455990365823	S.D. dependent var	219193984938.1604
S.E. of regression	128065274700.2103	Akaike info criterion	54.22420997002803
Sum squared resid	1.640071458404033e+22	Schwarz criterion	53.6232848291401
Log likelihood	-79.33631495504204	Hannan-Quinn criter.	53.01627374018363
F-statistic	4.859013372481275	Durbin-Watson stat	2.998111095564399
Prob(F-statistic)	0.2711296661127069		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 755888447370 + 0.50961161008*X

Test of Hypotheses

Hypothesis One: Pre-PPT and Post-PPT /GDP (1994-2003 & 2005-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:10
Sample: 1 10 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2091552386.097815	594726191.3292066	3.516832479536873	0.007882351603202932
X	0.01120593552154448	0.002580534662515483	4.342485952357263	0.002470110974104273

R-squared	0.7021281186218791	Mean dependent var	3894683400.442
Adjusted R-squared	0.6648941334496141	S.D. dependent var	2325882335.327888
S.E. of regression	1346414424.673607	Akaike info criterion	45.05615534368766
Sum squared resid	1.450265442375328e+19	Schwarz criterion	45.11667236228646
Log likelihood	-223.2807767184383	Hannan-Quinn criter.	44.98976832178684
F-statistic	18.85718424642015	Durbin-Watson stat	1.571277296019389
Prob(F-statistic)	0.002470110974104281		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:10
Sample: 1 9 Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2245057829.557952	561007781.5417818	4.001830105436333	0.005177838401800483
X	0.008756219034010501	0.002889324284790861	3.030542151361286	0.0190999810010879

R-squared	0.5674790121497999	Mean dependent var	3384422555.983333
Adjusted R-squared	0.5056902995997712	S.D. dependent var	1776745834.919219
S.E. of regression	1249179569.390203	Akaike info criterion	44.92251273914177
Sum squared resid	1.092314717607326e+19	Schwarz criterion	44.96634042299426
Log likelihood	-200.151307326138	Hannan-Quinn criter.	44.82793274277584
F-statistic	9.184185731177486	Durbin-Watson stat	1.530220359264791
Prob(F-statistic)	0.0190999810010879		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 2091552386.1 + 0.0112059355215*X

Hypothesis Two: Pre-PPT and Post-PPT /ID (1994-2003 & 2005-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:34
Sample: 1 10 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	231508511224.3938	57294174393.22998	4.040698965927492	0.003732118859428789
X	0.2503998997855372	0.2486011296248694	1.007235567124663	0.3433116767916143

R-squared	0.112543218625739	Mean dependent var	271800000000.491
Adjusted R-squared	0.001611120953956435	S.D. dependent var	129814226236.1807
S.E. of regression	129709610872.1884	Akaike info criterion	54.19186156771786
Sum squared resid	1.345966652209163e+23	Schwarz criterion	54.25237858631668
Log likelihood	-268.9593078385893	Hannan-Quinn criter.	54.12547454581704
F-statistic	1.014523487680935	Durbin-Watson stat	1.53552666481654
Prob(F-statistic)	0.3433116767916158		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:35
Sample: 1 9 Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	221168326383.7981	58396682874.19129	3.787343997950687	0.006826515222630839
X	0.4154137306776925	0.3007568870362724	1.38122765789763	0.2096892224158929

R-squared	0.2141709533541725	Mean dependent var	275222222222.6911
Adjusted R-squared	0.1019096609761971	S.D. dependent var	137209491087.1939
S.E. of regression	130030180626.2301	Akaike info criterion	54.21307192081419
Sum squared resid	1.183549351158303e+23	Schwarz criterion	54.25689960466668
Log likelihood	-241.9588236436638	Hannan-Quinn criter.	54.11849192444825
F-statistic	1.907789842941367	Durbin-Watson stat	1.756368285630366
Prob(F-statistic)	0.2096892224158939		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 231508511224 + 0.250399899786*X

Hypothesis Three: Pre-PPT and Post-CIT /GDP (1999-2006 & 2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:56
Sample: 1 8 Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31399462.18218564	636680464.2669971	-0.04931745819833734	0.9622670287306589
X	0.07927997132063251	0.004866700928171119	16.29029038166631	3.405926271260246e-06

R-squared	0.9778902558373673	Mean dependent var	9056067250.48
Adjusted R-squared	0.9742052984769285	S.D. dependent var	5404266199.610666
S.E. of regression	867964547.4445384	Akaike info criterion	44.21351784962273
Sum squared resid	4.520174733723614e+18	Schwarz criterion	44.23337823504269
Log likelihood	-174.8540713984909	Hannan-Quinn criter.	44.07956753366596
F-statistic	265.3735607190103	Durbin-Watson stat	2.071302966096284
Prob(F-statistic)	3.405926271260233e-06		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 12:56
Sample: 1 7 Included observations: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-982057484.3442606	607958044.4257125	-1.615337593356346	0.1671591320451536
X	0.09054895140576199	0.005819255470507909	15.56022963155092	1.991567794213282e-05

R-squared	0.9797669759534289	Mean dependent var	7697706286.158571
Adjusted R-squared	0.9757203711441146	S.D. dependent var	4105170714.432686
S.E. of regression	639664492.557473	Akaike info criterion	43.62574213418122
Sum squared resid	2.045853315194047e+18	Schwarz criterion	43.61028789105416
Log likelihood	-150.6900974696342	Hannan-Quinn criter.	43.4347305973688
F-statistic	242.1207461865956	Durbin-Watson stat	2.580452701723842
Prob(F-statistic)	1.991567794213282e-05		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = -31399462.1822 + 0.0792799713206*X

Hypothesis Four: Pre-PPT and Post-CIT /GDP (1999-2006 & 2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:03
Sample: 1 8 Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	288957361188.6271	85117177249.66272	3.394818420036034	0.01458874058881164
X	0.924036107405931	0.6506244007363235	1.420229715270719	0.2053549867692722

R-squared	0.2515952662393769	Mean dependent var	394875000000.4363
Adjusted R-squared	0.1268611439459396	S.D. dependent var	124181247146.4239
S.E. of regression	116037316012.6968	Akaike info criterion	54.00455032613026
Sum squared resid	8.078795224458279e+22	Schwarz criterion	54.02441071155022
Log likelihood	-214.018201304521	Hannan-Quinn criter.	53.87060001017348
F-statistic	2.01705244413793	Durbin-Watson stat	1.993074994011022
Prob(F-statistic)	0.205354986769274		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:04
Sample: 1 7 Included observations: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	326411929535.1581	117905144361.402	2.768428225104772	0.03943868467032936
X	0.4800543863720544	1.128564976838549	0.4253670778592047	0.6882556402591145

R-squared	0.03492363363144069	Mean dependent var	372428571429.0143
Adjusted R-squared	-0.1580916396422711	S.D. dependent var	115276272699.9933
S.E. of regression	124054176154.696	Akaike info criterion	54.16080182443637
Sum squared resid	7.694719310710169e+22	Schwarz criterion	54.14534758130932
Log likelihood	-187.5628063855273	Hannan-Quinn criter.	53.96979028762395
F-statistic	0.1809371509264762	Durbin-Watson stat	2.112332558779654
Prob(F-statistic)	0.6882556402591169		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 288957361189 + 0.924036107406*X

Hypothesis Five: Pre-PPT and Post-VAT /GDP (1999-2006 & 2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:12
Sample: 1 8 Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5939018466.511428	1301202850.494166	-4.564252579262279	0.003833662221975546
X	0.1056064398595013	0.009164565089266715	11.52334440651032	2.566980282184768e-05

R-squared	0.9567684304679739	Mean dependent var	7618208250.5075
Adjusted R-squared	0.9495631688793029	S.D. dependent var	7000550172.01519
S.E. of regression	1572193761.990897	Akaike info criterion	45.40167055720093
Sum squared resid	1.483075935145853e+19	Schwarz criterion	45.42153094262088
Log likelihood	-179.6066822288037	Hannan-Quinn criter.	45.26772024124415
F-statistic	132.7874663110527	Durbin-Watson stat	2.555529521186569
Prob(F-statistic)	2.566980282184773e-05		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:13
Sample: 1 7 Included observations: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5937147605.484095	1628976648.255276	-3.644710077239664	0.01483014546729779
X	0.1055862959010681	0.01314821301699543	8.030467392381521	0.0004841975741884219

R-squared	0.928045551064487	Mean dependent var	6054438857.618571
Adjusted R-squared	0.9136546612773842	S.D. dependent var	5861071218.709166
S.E. of regression	1722251006.985003	Akaike info criterion	45.60662939547461
Sum squared resid	1.483074265530429e+19	Schwarz criterion	45.59117515234755
Log likelihood	-157.6232028841611	Hannan-Quinn criter.	45.41561785866219
F-statistic	64.4884065401028	Durbin-Watson stat	2.551689983709202
Prob(F-statistic)	0.0004841975741884231		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = -5939018466.51 + 0.10560643986*X

Hypothesis Six: Post-PPT and Post-VAT /ID (1999-2006 & 2007-2014)

Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:19
Sample: 1 8 Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	290708834750.7936	100395144102.6212	2.895646371637644	0.02749018468478336
X	0.8147549386498825	0.7070979228375958	1.152251919197071	0.2930505998370919

R-squared	0.181187452592698	Mean dependent var	395303000000.4
Adjusted R-squared	0.04471869469148093	S.D. dependent var	124110387286.0369
S.E. of regression	121303622438.5568	Akaike info criterion	54.09332002579275
Sum squared resid	8.828741290029566e+22	Schwarz criterion	54.11318041121271
Log likelihood	-214.373280103171	Hannan-Quinn criter.	53.95936970983598
F-statistic	1.327684485293334	Durbin-Watson stat	1.78478915862821
Prob(F-statistic)	0.2930505998370919		

Unrestricted Test Equation:
Dependent Variable: Y
Method: Least Squares
Date: 12/02/15 Time: 13:20
Sample: 1 7 Included observations: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	337283252997.1913	118090195837.1777	2.856149493241896	0.03556649518600141
X	0.3132782754980692	0.9531597962124994	0.3286734047563902	0.7557217117584944

R-squared	0.02114832669539613	Mean dependent var	372862714286.0571
Adjusted R-squared	-0.1746220079655248	S.D. dependent var	115198378129.0022
S.E. of regression	124851979255.484	Akaike info criterion	54.17362281444487
Sum squared resid	7.794008362005896e+22	Schwarz criterion	54.15816857131783
Log likelihood	-187.6076798505571	Hannan-Quinn criter.	53.98261127763246
F-statistic	0.1080262069941576	Durbin-Watson stat	2.088255520212234
Prob (F-statistic)	0.7557217117584944		

Estimation Command:
==========
LS Y C X
Estimation Equation:
==========
Y = C(1) + C(2)*X
Substituted Coefficients:
==========
Y = 290708834751 + 0.81475493865*X