The Impact of Taxation on Investment and Economic Development in Nigeria

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Abstract

This study examines the impact of taxation on investment and economic growth in Nigeria from 1980-2010. The ordinary least square method of multiple regression analysis was used to analyze the data. The annual data were sourced from the central bank of Nigeria statistical bulletin and NBS. The result of the analysis showed in conformity to our prior expectation because the parameter estimates of corporate income tax (CIT) and personal income tax (PIT) appears with negative signs, this means that an inverse relationship exist between taxation and investment. The economic implication of the result is that a one percent (1%) increase in CIT will result in decrease in the level of investment in Nigeria. Consequently, an increase in PIT will result in decrease in the level of investment. Finally, the result therefore 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. We also observed that taxation statistically is significant factor influencing investment, GDP and government expenditure in Nigeria. Based on the result of our findings, it is recommended that the government of Nigeria should use taxation to achieve its set target that will enhance economic growth and development.

Keywords: Taxation, Investment, Economic Development, Growth.

1. Introduction and Background to the Study

The political, economic and social development of any country depends on the amount of revenue generated for the provision of infrastructure in that given country. However one means of generating the amount of revenue for providing the needed infrastructure is through a well structure tax system. Azubike (2009) is of the view that tax is a major player in every society of the world. The tax system is an opportunity for government to collect additional revenue needed in discharging its pressing obligations. A tax system offers itself as one of the most effective means of mobilizing a nation's internal resources and if lends itself to creating an environment conducive to the promotion of economic growth. Nzontta (2007) on the other hand, argues that taxes constitute key sources of revenue to the federation account shared by the federal, state and local governments.

Appah, et al (2004). Tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society also Anyanwu (1996) and Anyanfo (1997) stated that tax are imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc.

On the other hand, Tosuu and Abizadeh (2005) acknowledge that taxes are used as proxy for fiscal policy. They outlined five possible mechanisms by which taxes can affect economic growth. First, taxes can inhibit investment rate through such taxes as corporate and personal income, capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can affect on research and development expenditure. Fourth, taxes can lead to a flow of resources to other sectors that may have lower 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.

Tax is a major sources of government revenue all over the world. Government use tax proceeds to render their traditional functions, such as provisions of public goods, maintenance of law and order, defense against external aggression, regulation of trade and business to ensure social and economic maintenance.

Musgrave and Musgrave (2004) stated that economic effects of tax include micro effects on the distribution of

income and efficiency of resources use as well as macro effect on the level of capacity output, employment, prices and growth.

1.1 Statement of the problems

In developing countries, the government has to play an active role in promoting economic growth and development because private initiative and capital are limited. Fiscal policy or budget has become an important instrument in promoting growth and development in such economies.

Taxation is an important part of fiscal policy which can be used effectively by government and developing economies. Taxation play a very vital role in economic development of a country which include: resources mobilization, reduction in inequalities of income, improvement in social welfare, foreign exchange, regional development, control inflation etc.

According to the classical economist the only objective of taxation was to raise government revenue. But with the change in circumstances and ideologies, the aim of taxes has also been changed. These days apart from the objective of raising the public revenue, taxes level affect consumption, production and distribution with a view to ensuring the social welfare through the economic development of a country, tax can be used as an important tool in the following manner: optimum allocation of available resources, raising government revenue, encouraging savings and investment, acceleration of economic growth, price stability, control mechanism etc. the one and major problem to be address in this work "is the poor fiscal discipline in the allocation of resources and the operation of an ineffective tax regime in Nigeria". The work therefore intends to examine whether cross sectional economic growth is enough a viable tax policy in Nigeria.

1.2 Objective of the study

This study generally seeks to "identify the extent to which effective tax policies has brought about economic growth and development in Nigeria. While the specific objectives are as follows:

I. To examine the impact of taxation on investment in Nigeria.
II. To investigate if there is any contributions of tax to real gross domestic product (RGDP) in Nigeria.
III. To determine whether the extent of cross sectional allocation of resources through tax revenue has impacted the level of investment in Nigeria.

1.3 Research Hypothesis

i. The general proposition of this study is that there is a positive relationship between tax revenue , investment and economic growth in Nigeria
ii. "There is no significant relationship between tax revenue, potential investment and economic growth in Nigeria".

2. Theoretical Framework and Literature Review

The notion that there is a relationship between tax laws and investments behavior is founded upon some theoretical postulations put forward by some scholars. According to Lipsey (1979) the determents of investments are national income, rate of investment and expectations. The level of demand for goods is the prime determinant of investment, Lipsey (1979) argues that the higher the level of demand and income, the higher the willingness amongst firms to invest, because of the favorable expectations about the future. These are strong limitations to the ability of firms in obtaining funds by borrowing. Therefore they tend to finance their investments more from retention out of profits. But the higher level of demand will possibly result in higher a profit which means more for retention and thus limits the ability to invest. The accelerator theory on the other hand assumes a capital output ratio and that the industry would be operating at its full capital if demand for its products increases and the industry is to produce the higher level of output, capital stock must increase and this necessitate new investment.

Firms in most cases finance their investment with borrowed funds, as long as the rate of return on capital i.e the marginal efficiency of capital (MEC), is greater than the interest rate charged on borrowed funds, firms would always like to add to their existing capital being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital assets during its life just equal to the supply price.

Marginal efficiency of capital (MEC) is concerned with the profitability of firms as an additional amount of capital will bring to the economic enterprises. It is therefore not of place to expect the firm to be actually aware of a factor as direct taxation on the expected rate on capital aspect. Consequently, it is presumed that since taxes lower the expected returns they will lower investment expenditures.

The government on the other hand does grant tax incentives with a prior view that the action world call forth net investment. The link between such tax incentive, example accelerated depreciation according to Martion (1987) reduce whatever curtailing effect the income tax may have on investment. The neoclassical theory of demand assumed perfect certainty, fixed relative prices and interest rate, technology and substitutability of capital for other inputs. It is proposed that initial allowance and tax credits on net investment favour short live investment. The efficiency of these incentives is explained in terms of neutrality.

Broadway (1978) looks at an efficient or neutral incentives as one that does not distort the allocation of capital among investment of varying durabilities. An analytical definition of neutrality is that given by Musgrave (1959) which submits that the tax structure including any investment incentives built into it is said to be neutral if it reduce the internal rate of return after tax by the internal rate its return after tax by the same proportion on all investment. Another approach to neutrality was that made by Nickel (1978). He argued that corporate tax has no effect on investment if interest payment are not tax deductible but all capital expenditure may be immediately offset against tax. He also believed that this will hold true if tax rate remain constant.

Foreign investment plays an essential role in accelerating the industrial development of many underdeveloped nation. This is true in that many of them do not have the money or technological known how that will enable them explit their natural endowments, moreover, the marketing of such goods are closely controlled by larger international concern. In recognition of this roles, the various government of under developed nations do offer some tax incentives in order to attract foreign investments. However, Kaldor (1970) thought that the amount of investment which large international companies will undertake in these sectors will depends on their estimate of annual growth of world consumption. He therefore believed it is unlikely that any special concessions (in the tax holidays etc) granted by the producing countries will have any appreciable effect on the total flow of investment from foreign lands.

Kaldor (1963) also held that it is shortage of resources and not inadequate tax incentives that places a limit on the pace of economic development. Therefore, government should impose more taxes for the provision of infrastructural facilities. In doing this, Adam Smith's cannons of taxation suggest that tax should not be; (i.) Of a magnitude which would drive people out of business and (ii).Sufficiency high to discourage industry with consequent reduction in revenue.

On the other hand, Philip (1968) argued in favour of low tax with some degree of performance as some powerful incentive for investors than a high tax rate combined with any generous incentives than the temporarily, this he believe will ensure a low tax burden on the firm at all times.

From the foregoing, it is clear that there is no general consensus as to the actual impact of laws on investments, the issue of power suggest that tax laws affect profitability. This research work will therefore attempt to show the strength of income tax law in determining investments as well as profits.

2.1 Empirical Literature

In this section, we will review some empirical studies that relates to the subject matter.

Rockly, (1972:247), in a study involving company planners of sixty – nine United Kingdom companies stat "this existence or expectation of a continuing demand for a firms products and a need to replace worn out equipment were most replace worn out equipment were most frequently cited to be principal detainment of corporate capital spending".

Christopher, et al (1983), Discovered in a study of 208 British industrial companies, that the low investment experienced then was as a result of inadequate demand for funds (rather than general storage of capital) reflecting low investment opportunities. They subsequently suggested that a policy aimed at expanding the domestic demand would stimulate investment. Kiaselgoff and Modigliani (1987) discovered in a bid to quantity demand, many proxies have been suggested, including sales, output, profit and others. But in a study involving sixty US from Kul (1971) demonstrated that sales is superior to profit in explaining investment behavior.

Clark (1979) showed that for the 1954-78 output was clearly the main determinant of business fixed investment in the United States of America. Given that the prime determinant of corporate capital ending is the demand for its products to the workers, while the government in a bid to stimulate capital investment manipulate the corporate tax rate as having a strong impact on capital spending such studies include, Rockley (1863) who found that reductions in the rate of taxation did not appear to have very powerful impact on corporate investment. He however, attributed this to a large number of

firms who evaluated investments proposals on a pretax basis.

Hall and Jorgenson (1971) estimated a one percent increase in cost of capital as a result of a cut in corporate tax rate from 52 to 48 persons in 1964.

Krausz (1987) using Npi stimulation revealed that for certain assets classification lowering the tax rates from 46 to 33% may actually reduce the Npi of projects for companies whose tax rate is below 35%. As to its influences on foreign investment, the corporate income tax has been founded by Moore, Swenson and Steece (1982) as having a weak relationship with foreign manufacturers investments.

Tony, et al (1980) in their survey of foreign firms in US indicated that executives of such companies ranked states and local tax rate 15th and 16th respectively.

A survey carried out by Fortunate (1977) on US executives indicated that 20% of the respondents cited stated and or local taxes on business and industry as one of the three to five most important factors in choosing a location.

In Nigeria, Mary (1965) found that only six out of twenty-six British companies operating in Nigeria attached much importance to the generous tax incentive offered in Nigeria.

Hakem (1966), in his survey, discovered that only 16% respondents selected tax incentive as a factor that influenced their decisions to set up a pioneer industry. In another empirical study carried out by Philip (1969). It was understood that out of 51 companies studies 33 ranked import duty reliefs highest amongst tax incentives available to them. It ranked its second most important. Also, Philips (1969) study 60% of the firms studies thought they probably world set in without tax holiday. 7% were more definite about the unimportance of tax incentives while 35% through otherwise. Other incentives include accelerated depreciation. Hall and Jorgenson depreciation has a 9% reduction in the cost of capital and 17.5% increase in net investment in manufacturing equipments over the period 1854-70. Broadway (1978) in the act of neoclassical theory of investment developed models with which he proved that:

a. Investment allowance do not discriminate against investment with varying durabilities.
b. Initial allowance discriminate against short-live projects
c. Tax credit on gross domestic investment, discriminate short-live capital
d. Tax credit on net investment discriminates against short-live capital
e. Accelerated depreciation discriminate against very long-lived investment for which the social discount rate is greater than the square root of tax depreciation rate multiply by the depreciation rate multiply by the depreciation exponent.
f. Interest subsidy also discriminates against short-lived capital.

In a comparative study of investment incentives in relation to the life span of projects. Musgrave and Musgrave (1976), Brown (1962) and Charles (1962) argued that accelerated depreciation favours long-live investments as compared with investment tax credit and vice-versa for short lived investment initial allowance which is a form of accelerated depreciation was showed by Black (1959) as favouring long-live investment relatives to investment allowances and vice-versa for short-lived ones. On the other hands, Sandomos (1974) analysis suggested accelerated depreciation favoured short-lived capital. This different definitions of accelerated depreciation rate to the capital stock while Broadway, et al (1978) applied it to the capital as written down for tax purposes it must be stated Sandomos' method of calculating depreciation is similar to that of Nigerian methods as contained in the finance (Miscellaneous Taxation provision Decree 1985). The Accelerated cost recovery system (ACRS) which is another way of expressing accelerated depreciation was been criticized as generating adequate allowance for depreciation relative to economic depreciation (Tax Reform Act 1985) because it is used on cost rather than on current cost. Also it has been criticized for failure to consider the issues of fluctuating inflation.

2.2 Demand Taxes and Investment

Generally, whenever an industry experiences a constant demand that it can satisfy with the confidence of the existing capacity, it would normally replace worn out machineries and equipments. But where the demand is of such a magnitude that the industry operating at full installed capacity cannot satisfy it, they tend to increase their capacity by investing in either case. The decisions to undertake the investment would not be taken unless the additional returns resulting from doing so exceed the cost. In other words, the MEC must be less than zero. One reason is, tax is a charge on profit. Hence tax would play a role in investment decision so far as it affects profitability. Another reason is that accelerated depreciation assist firms by differing their tax liabilities. According to Wilson (1984), Accelerated depreciation rules bring about greater certainty about the level of cash and that the cash flow would be produced sooner than later, thus raising the discounted cash returns. This is very important in capital budgeting as it may improve the Npv of projects.

Depreciation rules also affect the composition of investment due to their impact on the implicit price, a firm must pay for it capital. Accelerated depreciation as compared with true depreciation in an asset value may result in the equipment of an interest free loan from the amount of tax deferred. Therefore, a policy of accelerated depreciation will favour capital intensive industries. In the area of attracting foreign investment, Kaldir (1963) subscribed to the fact that tax concession can affect the location choice. This may occur because many under developed countries may have the same natural endowments. So that the one that offers in the best concession will attract foreign investors.

Accelerated depreciation (Companies Income Tax Act 1979)

In Nigeria, it is made up of an initial allowance of a proportion of gross investment and an annual allowance. Prior to 1985, the rates were as follows:

S/N	Qualifying Expenditure	Initial allowance	Annual allowance
1.	Plant and machinery including furniture, fittings, motor vehicles	20%	12 ½%
2.	Building: industrial non-industrial residential	20%	12 ½%
3.	Plantation	25%	15%

Source: CITA 1978

2.3 Theoretical Literature

Taxation is a compulsory levy imposed on a subject of a state or upon his properly, corporate bodies, Institutions ,etc in order to defray expenses inquired by the government to provide security, social amenities and create conditions for the economic well being of the society.(Edame,2011, Okoi and Edame,2013).

Anyango (1996) and Anyanwu (1997) stated that tax are imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc.

Tosun and Abizadeh (2005) says taxes are used as proxy for fiscal policy. However, the impact of taxation on an economy is left to be seen as analyzed below. Engen and Skinner (1996). Are of the view that ; a presidential campaign is incomplete without a proposal for tax reform. Recent proposals suggested that by reducing marginal tax rate, or by replacing the current federal income tax with a consumption type tax, Nigeria can experience increased work effort, saving and investments resulting in faster economic growth. For example, Steve forbes vaulted briefly into the political limelight based almost solely on his advocacy of a flat tax which cut nearly every persons tax bill; but which was supposed to balance the budget by stimulating economic growth. The kemp commission in U.S.A suggested that its general principles for tax reform would almost double US. Economic growth rate over the next five to ten years. Most recently presidential candidate Robert Dole proposed a 15% across the board income tax cut coupled with a halving of the tax on capital gains with a predicted increase in gross domestic product (GDP) growth rates from about 2.5 to 3.5% point.

If has been evidence in research that high taxes are bad for economic growth. This is because, it discourages new incentives, by distorting investment decisions because the tax code makes some form of investments profitable more than others or by discouraging work effort and workers acquisition of skills. Consequently, Nigeria has developed a contrary view. This is evident in a publication by the: The Punch Newspaper of 12th January 2013. The federal government has made N4.62 trillion from tax collection in 2011, the federal Inland Revenue said the figure represents an increase of N990 billion or 27.27% over the N3.63 trillion revenue targeted for the agency. It also represents an increase of N1.79 trillion or 71% over the N2.83 trillion, with the agency generated in 2010 similarly.

Ukegbu (2012) has pointed out about the lapse in poor investment growth and low contribution to GDP on Nigeria manufacturing sector to a persistent increase in multiple taxation. He pointed out that multiple taxation. He pointed out that multiple taxation has affected the Gross Domestic Product of the country, which has decline from 9.5% in 1975 to 6.65% in 1995, 3.421% in 2010. Similarly, manufacturing capacity utilization declined rapidly from 70.1% in 1980 to 29.29% in 1995, 52.78% was recorded in 2005 but the figure declined to 46.44% in 2010.

Gwartney and Lawson (2006). High marginal tax rate as witnessed in Nigeria has an enormous effect to GDP. As marginal tax rate rises, individuals get to keep less and less of their additional earnings. It discourages work effort, as taxes reduce the amount of additional earnings that one is permitted to keep. It also distort price signals and encourage individuals to substitute less desired but tax deductible goods for non-deductible ones that are more desired.

High tax rate will reduce the incentives of people to invest in both physical and human capital. When tax rates are high foreign investors will look for other places to put their money and domestic investment will look for investment projects abroad were taxes are low. This therefore contributes to a reduction in GDP.

3. Research Methodology

This section discusses the methodological issues in the study. In precise term. This chapter deals with scope of the study, sources of data, methods of data collection, model specification, estimation techniques, data description and limitations of the study.

3.1 Model Specification

The models that are used in the study include the following;

1. Investment model: This model shows the relationship that exist between investment and taxation in Nigeria. It is stated in linear form, thus,
   $INV = f (CIT, PIT)$
   Where:
   INV= Investment level in Nigeria
   CIT= Corporate or company income tax
   PIT= Personal income tax
   The model is presented in econometric form below.
   $INV = \beta_1 < o$ and $\beta_2 < o$
   Where β_0 = autonomous tax rate
   β_1= marginal rate of corporate income tax
   β_2 = marginal rate of personal income tax
   e = The random term

   ## 2. GDP Model

This model shows the relationships that exist between taxation and output of goods and services in Nigeria for the period under review. It is stated in linear form as follows:
   $GDP = f (CIT, PIT)$
   Where GDP = Gross Domestic Product of Nigeria
   CIT and PIT remains the same as stated above.
   The econometric form of this model is given below:
   $GDP = a_1 + a_1 (IT + a_2 PIT + e)$
   $a_1 <_0$ and $a2 <_0$
   where a_0 = autonomous tax rate
   a_1 = marginal rate of corporate income tax
   a_2 = marginal rate of personal income tax
   a_2 = the random term

4. Government Expenditure Model

This model shows the relationship that exist between taxation and government expenditure in Nigeria for the period under review. It is stated as follow:
   $GEX = f(CIT, PIT)$
   Where GEX = Government expenditure in Nigeria
   CIT and PIT remain the same as stated above.
   The econometric form of this model is given below:
   $GEX = Y0 + Y1 (CIT + Y2 PIT + e)Y1 >0$ and $Y2 >0$
   Where: Y1   = autonomous tax
   Y1 = marginal rate or corporate tax
   Y2 = marginal rate of personal income tax
   e= the random error.

4.1 Estimation techniques

This study shall be estimated with the use of the ordinary least square of multiple regression. The multiple regression issued because we desire to estimate the relationship that exist between the dependent and independent variables.

The statistical test for the measurement of the parameter estimate includes, the co-efficient of determination R^2, the test and the f – test. The significance level at which the hypothesis are accepted is 5% (0.05).

The degrees of freedom for the regression sum of square (RSS) is R – 1 and the degrees of freedom for the error sum of square is (ESS) is n – k, k is the number of parameter estimate and n is the number of observation.

4.2 Techniques of the data analysis

The technique that would be adopted in this research work is that of ordinary least square (OLS) method on the basis of its BLUE properties. The essence of this technique is its unique feature compared with other techniques of estimation of models.

4.3 Sources of data

The source of data used in this study was mainly secondary data.
The data was also collected from the chartered institute of taxation of Nigeria CITN (Annual Journal), Central Bank of Nigeria statistical bulletin (CBN), NBS and published data from the federal ministry of finance.

5. Presentation of Empirical Result

This Section attempts to present the data used for the study and the discussion of the results of our analysis. It is therefore divided into presentation of empirical result and interpretation of results. Here we present the empirical results for annual summary figures of investment level, GDP, government expenditure and tax rates (corporate income tax and personal income tax) sourced from the Central Bank of Nigeria statistical bulletin and the NBS from 1980 – 2011 using the aforementioned techniques for analysis.

Table 4.1: Result for investment model

Variables	Co-efficient	t-statistics	Probability
Constant	12.2433	3.242321	0.0004
CIT	-0.241321	-1.420113	0.0001
PIT	-0.092311	-010232	0.0002
Adjusted	$R_2 = 0.820$		f-statistics = 6.802

Table 4.2: Result for GDP Model

Variables	Co-efficient	t-statistics	Probability
Constant	0.023121	0.498432	0.0004
CIT	-0.522122	-4.009233	0.0001
PIT	-0.334321	-2.192455	0.0002
Adjusted	$R_2 = 0.881$	f-statistics	= 12.342

Table 4.3: Result for Government expenditure model

Variables	Co-efficient	t-statistics	Probability
Constant	11.69321	2.448322	0.0003
CIT	-0.451221	5.323211	0.0002
PIT	-0.367321	2.997324	0.0000
Adjusted	$R_2 = 0.881$	f-statistic	= 45.633

5.1 Estimated Investment Model

INV =12.24-0.24 CIT - 0.09 PIT
t-statistics (3.342) (-2.420) (-1.010)
$R^2 = 0.82$
t_0-0025 = 2.052, at Degree of freedom = n – k = 29-2 = 29
f_0.05 = 4.17 at v1 = 1 and v2 = 27 Degree of freedom
f-statistics = 6.802

5.1.1 Estimated GDP Model

GDP = 0.231 – 0.522 CIT – 0.334 PIT
t-statistics (0.498) (-4.009) (-2.192)
$R^2 = 0.79$
f-statistics = 12.34

5.1.2 Estimated Government Expenditure Model

GEX = 11.69 + 0.451 CIT + 0.367 PIT
t-statistics (2.448) (5.323) (2.997)
R^2 –statistics = 0.88
f-statistics = 45.63

5.2 Interpretation of Empirical Results

From the estimated investment model, we noticed that 82 percent change in investment is caused by change in taxation R^2. The remaining 18 percent is caused by variable that are not included in the model which is accounted for by the random term. The result also conforms to our prior expectation because the parameter estimates of corporate income tax (CIT) and personal income tax (PIT) appears with negative signs, this means that an inverse relationship exist between taxation and investment. The economic implication of the result is that a one (1) percent increase in CIT will result in 24 percent decrease in the level of investment in Nigeria. Consequently, a 1 percent increase in PIT will result in 9 percent decrease in the level of investment t-test shows that the parameter estimates of CIT statistically significant and that of PIT is statistically not significant. Since t-statistics indicates that the overall regression is statistically significant (f-statistics = 6.802 > to. 0.05 = 4.17), we concluded by rejecting the null hypothesis and accepting the alternative hypothesis which states that there is a significant relationship between taxation and investment level in Nigeria.

The estimated GDP model result shows that 79 percent country is influenced by changed in taxation laws given the estimated value of the R2. The remaining 21 percent is caused by variables that are not included in the model, which is accounted for by the stochastic term. This result also conforms to our prior expectations because the parameter estimates of CIT and PIT appears with negative signs, that is to say increase in gross domestic product. The economic implication is that a decrease in tax will stimulate aggregate demand as will be more money in the hands of both corporate organization and individual to carry out economic activities. The t-test and f-test shows that the parameter estimates of CIT and PIT are statically significant given that the t-statistics are greater that the t-table value (4.009 and 2.192 > 2.052) in absolute terms.

Since the t-statistics and t-statistics are greater than the table values respectively, we conclude by rejecting the null hypothesis which states that there is a significant relationship between taxation and GDP in Nigeria. The result of the estimated government expenditure model tell us that approximately 88 percent change in government spending in taxation is influenced by change in taxation given the efficient of determination R^2 the remaining 12 percent in government expenditure is necessitated by variables that are not included in the models which is accounted for by the random term e.

The result also conforms to our prior expectation because the parameter estimates of corporate income tax (CIT) and personal income tax (PIT) appears with positive signs. This means that there is a direct relationship between taxation and government expenditure. The economic implication of the result is that a 1 percent increase in CIT will result in 45 percent increase in government expenditure in Nigeria. Also, a 1 percent increase in PIT will result in approximately 37

percent increase in government expenditure. The t-test and f-test also shows that the parameter estimates of CIT and PIT are statically significant. Since the t-statistic and f-statistic values, respectively, we conclude by rejecting the null hypotheses and accepting the alternative hypotheses which states that there is a significant relationship between taxation and government expenditure in Nigeria.

5.3 Recommendation

Base on the general findings of the study the following recommendations are however made:

i. Government through the monetary authority should implement taxation laws that stimulate the aggregate level of investment in Nigeria.

ii. The government should complement fiscal policy with monetary policy in order to achieve macro-economic objectives.

iii. Since taxation is an inevitable source of government revenue, the problem of double taxation should be avoided, tax incentives in the form of tax cut should be provided to tax payers.

iv. One of the major problems facing Nigeria today is income inequity. In view of this, government should used taxation to address this problems by using proportional tax rate.

v. Government should use tax payers' money to provide infrastructural amenities as this will encourage people to pay their taxes promptly.

References

A Kisselgoff, F. Modigham: (1992). The theory of business finance, Cambridge, Mass: MIT Press.

Akaegbu W. (2012) Contributions of trade on effect of tax… Volta Ltd, Ghana.

Anyanwu, J. Anyango O. (1996). Personal Income tax and economic growth. Joeanee publishers. Onitsha.

Arash Abizadeh (2005). Economic growth and tax components: An analysis of tax changes. McGill, University. U.S.A.

Azubuke, K. (2009). Marginal tax and its effects on the economy. Pals publishers: Onitsha.

Black, J. (1959). "Investment Allowances, Initial Allowances and cheap loans as means of encouraging investment" review of economic studies. Vol. 22 (October,) p 44-49.

Broadway, R. (1978). "Investment Incentives, Corporate Taxation, and efficiency, in the Allocation of capital" The Economic Journal vol. 88 (September). P. 480-481.

Brown, E. C. (1962). "Tax Credits for Investment spending". National Tax Journal vol. 52 (March) p. 32-52.

Christopher, M. Carolyn A. Brunm S. (2003). Impact of corporate tax on economic development – Crowy Williams Publication, Jeneva U.S.A.

Clark, P. (1978). "Investment in the 1970 theory, performance and predications' Brooking in Economic Activities vol. 1. P. 73-113.

Economic Bulletin for Asia and The East (1969). Voted on Raja, Chellish, fiscal policy under-Developed countries, London, George Allen and Urwin, p. 34.

Edame, E. (2011). The Essential of public finance and Public financial management in Nigeria. (3rd revised Ed.) Calabar, Wusen Press Ltd.

Engen, E. M, Skinner J. (2006). Taxation and Economic growth. NBER Working paper No.5826.

Gwartney & lavson (2006). Marginal tax rate and economic growth. Lovers publishers Ltd. India.

Hakem, A. (1966). "The motivation to Invest and the location pattern of foreign private investment in Nigeria" Nigeria Journal of Economic and Social Studies (March). P. 55.

Heller, J. K. (1965). Fiscal Policy in Economic Development". The Economic of Development and Planning, New Delhi. P. 23.

John Krausz (1987). "Tax Policy and Investment behavior" American Economic Review, (Journal). Vol 57 p. 341-414.

John Krausz (1987). Towards a dynamic model for the R. U. (BAY) System. Springer Berlin Heidelberg. Germany.

Kaldor Hicks (1970). Economics Dynamics of law – Stonnic Publishers. New York.

Lipsey, R. G. (1979). Tax evasion and its effects on the economy. Joanee publishers Ltd. Onitsha. Miscellaneous taxation provision Decree 1985.

Moore, Sivenson & Steece (1982). Effects of investment potentials and Economic growth Dunamic publishers. N. York U.S.A.

Musgrave, A. R. (1959). Public finance Seligman, B. B. U.S.A.

Nickel & Company, (1987). LLC Publication on personal income tax program. U.S.A

Nzontta, O. (2007). Individual tax payers attitude and companies behavior in Nigeria Novel publishers: Onitsha.

Okoi, W.W & Edame, E (2013) The Impact of Taxation on Economic Development in Nigeria: A Case of Small Scale Businesses in Calabar Metropolis (1980-2010). Calabar: Department of Economics, Unpublished PGD Economics Thesis.

Philip A. (1992). Capital stock Growth A Micro-econometric Approach, Amsterdam, North Holland Pub. P. 242.

Philip, A. (1968). Nigerian Industrials Tax Incentives" the Nigerian Journal of Economic and social studies vol. 91 No.3 (November) p. 45.

Sandomos R. (1974). Economic development and Development Economics. Spencer publication, Akios, Pakisten.

Shao, P. (1972). Statistics for Business and Economic matters 2nd Ed. Columbus Dhrio Merill Pub. 684.

Stephen, R. (1984). "Allowable Expresses cost of Earning income" Taxation for Development principles and applications. New York. Oxford university press.

Tony H. et al (1980). "An Empirical Study of plant location Decisions of foreign manufacturing investors in the U.S, columnal Journal of world Business.

Wilson, R. (1984). Report of the Committee to Review the functioning of financial institutions, Amso