



Relationship between profit after tax and investment decision in some selected oil and gas companies in Nigeria

Oboh JO, Ahakiri FI

Department of Accounting, Faculty of Management Sciences, University of Calabar, Nigeria

Abstract

The study seek to evaluate the relationship between profit after tax and investment decision in some selected oil and gas companies in Nigeria using quoted companies in the Nigeria stock exchange. The study adopted ex post facto research design and 15 oil and gas companies were used for the population of the study for the period of ten (10) years (2004-2013). Seven (7) companies were selected as the actual sample size using judgmental sampling techniques. Two null hypotheses were stated and analyzed using Ordinary Least Square statistical techniques. The result revealed that there is a positive relationship between profit after tax and investment decision but not significant. Based on this, it was recommended that the government should review tax incentives in order to encourage companies in the sector because presently the sector accounts for almost eighty percent of the government revenue.

Keywords: relationship, profit after tax, investment decision, selected oil and gas companies, and Nigeria

Introduction

Companies profits are subject to tax by the host nation or country which are payable in each year of assessment. This practice however in most cases turn to discourage investment and limit business goals (wealth creation). This is because most countries tax policies are not always in favour of investors, thereby forcing companies or investors into different practices such as; tax avoidance, tax evasion and possible discontinue, withdrawal and relocation of business for not meeting their goals (wealth creation).

In view of the above, governments come up with various taxes incentive policies at the beginning of every year with the aim of moving the country forward. Some of the policies are; tax haven, zero tax on dividend, zero tax on tariffs and capital allowances which our study is sought to investigate whether its availability to companies has any significant influence on their investment decision.

Taxation of capital tends to discourage investment by reducing the earnings the firm receives from investment (Hall & Taylor, 1986) [6]. In Nigeria, however, the tax system contains specific incentives for investment. In other countries, such as America, the net effect of the tax system is generally to reduce investment; the incentives do a great deal to offset the negative influence of taxation, raises the rental price of capital and discourages investment.

Tax incentives such as the investment tax credit and depreciation lowers the rental price of capital and stimulates investment. An anticipated increase in tax incentives can reduce investment because firms will postpone their capital purchases until they can take advantage of the tax credit. Investment is the most volatile of the major components of GNP. Several generations of economists have supported that this volatility is in significant part responsible for the observed fluctuations in production, income and employment.

In the literature of Ulrich, Christopher and Lothar (2002) [15], taxes influence investment and financing decisions. In their literature “measuring the impact of taxation on investment and financing decisions” decision makers may cope with the complexity of existing tax system, they opined further that decision makers may be inclined to ignore complicated tax features and rely on statutory tax rate. Hence, they may make the wrong decisions with respect to tax.

In dealing with complexity of tax, Ulrich, Christopher and Lothar (2002) [15] provided a promising way that does not ignore the most important feature of tax system beyond statutory tax rate, to use effective tax rates comprises the most important element of a tax system. Such rates are useful to the policy makers as well as for business managers, who demand condensed but sophisticated information on investment tax burdens.

Adesola (1989) [1] identified that the following tax policies were made by the government with the hope that investors will be encouraged to invest and standard of living will be improved.

1. Increase in Tax Free Earned Income of Individuals: in order to give further tax relief to low income earners, the present level of workers earned income which will be exempted from tax is increased from N7,500 to N30,000
2. Non-taxable Allowance: Retirement gratuities: gratuities and other allowances such as; housing allowance, transport allowance below a certain range and utility are non-taxable.
3. Decrease in the Rate of Tax: In furtherance of government policy to stop emphasis from income to consumption as a basis of taxation, government has decided to review downward the existing rates of personal income tax. For this purpose, the highest marginal rate of all personal income tax reduced from 30 to 25 percent. This is

- expected to further reduce the tax burden on citizens and encourage voluntary compliance with tax laws.
4. Tax Incentives on repatriation of foreign earnings: In 1996, government intended to encourage the repatriation of foreign earnings by individual Nigerians and groups. Therefore, concession rate of tax is to apply proceeds of foreign earnings that are repatriated into Nigeria in convert currencies. Such earnings include remuneration of foreign enterprise from book sale by authors.
 5. Teachers, nurses, doctors and other professionals outside Nigeria: A Nigerian who earns his income from abroad is allowed to bring the income into Nigeria free of tax provided that such foreign earnings are deposited in a domiciliary account with an authorized bank in Nigeria.
 6. Dividends, interests, rent, royalties, fees, commissions, etc. from foreign countries: This category of income earned from abroad; brought into Nigeria by a Nigerian resident is to enjoy 100% tax rebirth provided that the income is received in convertible currency which is paid into domiciliary account in a bank approved by the government.
 7. Company tax: Mandatory Self-Assessment for Companies: The self-assessment scheme was introduced in Nigeria in 1991. Some of the incentives given so far to achieve this goal include non-payment of provisional tax by self-assessment filers. As from 1996, it is mandatory that all companies with a turnover of one million naira and above to file self-assessment returns.
 8. Incentive on manufacturing enterprises: There have been a lot of incentives for manufacturing concerns in Nigerian tax laws. These include: (a) the removal of taxes on interest granted by banks for manufacturing for export. (b) Dividends derived from manufacturing companies in petrochemical and liquefied natural gas sub-sectors are tax exempt. (c) Low rate of tax (20 percent) for small scale manufacturing companies for the first five years of commencement of business. (d) Removal of restrictions of capital allowances for manufacturing companies. In addition to these incentives, which was continued in 1995, government. (a) Exempt from tax the profit of any Nigerian company in respect of goods exported from Nigeria, provided that the proceeds from such export are repatriated to Nigeria and are used exclusively for purchase of raw materials, plants, equipment and spare parts; and (b) Exempt from tax the profit of companies whose supplies are exclusively input to the manufacturing of product for export. For this purpose, it must give a certificate of purchase of input of exportable goods to the seller before the profit can be eligible for tax exemption.
 9. Tax of free zone enterprises: All new industrial undertaking including foreign companies and individuals operating in any export processing zone in Nigeria shall be allowed full tax holiday for manufacturing activity which shall include: assembling or processing of goods for export provided that the export of the company or person shall not be less than 75 percent of the total turnover during assessment year.
 10. Tax relief to export-oriented enterprise: The profit or gains of 100 percent export-oriented undertaking established outside an export free zone shall be fully exempted from income tax for three consecutive assessment year provided that: (a) the undertaking is 100 percent export-oriented; (b) the undertaking is not formed by splitting up or the reconstruction of a business already in existence; and (c) manufacture produces and export articles during the relevant year and export proceeds forms 75 percent of its turnover; and (d) The undertaking is not formed by transfer of machinery or plant previously used for any purpose to the new undertaking or where machinery or plant previously used for any purpose is transferred to the undertaking. The tax written down value of the machinery so transferred does not exceed 25 percent of the total value of the machinery or plant in the new undertaking. The undertaking repatriates at least 75 percent of the export earning to Nigeria and place this in a domiciliary account opened in any bank registered in Nigeria.
 11. Solid minerals: It is the intention of the government to diversify the revenue base of the country by exploiting its solid minerals. Recently, initial and annual allowances have been increased from 20 percent and 10 percent to 30 percent and 20 percent respectively. As from 1996, new companies going into the mining of solid minerals are to enjoy a tax free holiday for the first three years of their operations.
 12. Replacement of industrial plants and machineries: Government has always been very keen on industrialization. This is simply reflected in the numerous tax incentives that have been given to manufacturers over the years. One of the problems besetting industries of late is the replacement of plants and machinery because of escalating cost of these equipment. In addition to the roll-over relief under the capital gains tax act and to assist companies replace their obsolete plants and machinery. Plants and machineries bought in replacement of the old ones are to attract a once and for all 95 percent capital allowance in the first year with 5 percent retention as the book value until the final disposal of the asset. An investment allowance of 15 percent will be granted for such replacement with effect from 1st January, 1996.
 13. Tax incentive for hoteliers and other service related tourism: government is very committed to the attraction of foreign exchange into Nigeria through visits for both business endeavor's and pleasures, development of the country's abundant tourism potential has been embarked upon as a matter of policy since this is a great potential foreign exchange earner for the country. To further boost the development of tourism, 25 percent of incomes derived from tourists by hotels in convertible currencies will be exempted from tax with effect from 1996 provided such incomes are set aside and put in a reserve fund to be utilized within five years in expansion or the construction of new hotels, conference Centers and new facilities useful for tourism development.
 14. Tax incentives for research and development: As a means to encourage the development of industrial technology, the government has always allowed expenses on research and development (other than capital expenditure) as tax deductible to the consumers of such research findings. As the economy expands, it is expected that researchers will continue to spring up and the products of such researches

will be commercialized. This will be a welcome development to aid our economic growth. With effect from 1996, companies and other organizations that engage in research and development activities for commercialization are to enjoy 20 percent investment tax credit on their qualifying capital expenditure.

15. Tax incentive for manufacturers of locally made spare-parts and tools and equipment: Self-reliance is the cornerstone of this administration's economic policy. This path has been chosen to make the country less dependent on other countries for our needs so as to conserve foreign exchange as well as accelerate the growth of local technology, to achieve this objective in 1996. (a) all companies that engage wholly in the fabrication of tools, spare parts and simple machinery for local consumption and export are to be given 25 percent investment tax credit on the qualifying capital expenditure, (b) any tax payer who purchases locally manufactured plant and machinery and equipment are similarly entitled to 15 percent investment tax credit on such fixed asset bought for use.
16. Reduction of rate of company tax: In view of government receipts from companies' tax, the rate is reduced from 35 to 30 percent with effect from 1st January, 1996. Value added tax rate remains 5% on added value.
17. Reduction in capital gains tax: In order to stimulate the activities in the capital market, encourage capital formation through investment and prompt efficient management arising from merger acquisition and take-over where desirable, the rate of capital gain tax is reduced from 20 to 10 percent with effect from January, 1996.
18. Exemption from import duty: For the avoidance of doubt, aircrafts imported by commercial airlines are exempted from import duty. With this gesture, commercial airlines are to avoid unreasonable increase.
19. Rent charges on residential accommodation: Hitherto, there were restrictions on rent paid in respect of residential accommodation with effect from 1st January, 1996. Rents allowable for tax purposes in respect of residential accommodation will be included to actual rent paid subject to a maximum of 100 percent of the staff basic salary.
20. Broadening the VAT base: With successful implementation of VAT in 1994 and successful moderate broadening of its base in 1995, it holds more promises as a convenient substitute tax for personal income tax that has continued to come down since 1994. Government will continue to improve the administrative machinery of its collection.
21. Custom duty rebate of 35 percent: In order to minimize adverse effect of the depreciation of the naira, government in August, 1995 approved of 35percent custom during rebate on all consignment lying at the port or after 31st July, 1995. This measure was designed to cushion the hard effect of inflation in the economy. However, the rebate will not affect luxury items such as electronics, wine and other alcoholic drinks.
22. Inclusion in the Import Prohibition: The following items have been included in import prohibition list: (a) Kaolin (b) Spaghetti products (c) Rice (c) Textile materials etc.
23. Investment tax relief: Enterprises located in areas devoid of essential infrastructure like electricity, water tarred

roads and telephone that incurs expenditure in the provision of these facilities shall be allowed an investment tax relief as revealed by the CBN statistical bulletin, vol. 9: No facilities at all 100%, Lack of electricity 50%, Lack of water 30%, Lack of tarred road 30% and Lack of telephone 5%.

To benefit from this relief, the company must be located at least 20 kilometers from the infrastructure facilities and relief is for three years only.

Positive impact of tax policies on investment decisions

According to Rolph and Break (2001) ^[11], though most of the tax policies have in one way or the other affected investment decision in Nigeria, it is now well felt due to the nature of the Nigerian economy which is import oriented and unindustrialized. They argued that some of the policies that have impacted positively on investment decision are as follows:

1. Increase in Tax Free Earned Income of Individual: the impact on investment decision can be said to be positive, since the marginal propensity to save have increased leading to increase in investment.
2. Non- taxable Allowance: Some allowances such as gratuities used to be taxed, but with effect from 1st January, 1996. Gratuities have been exempted from tax thereby increasing the amount of retirement benefit that will be invested for returns.
3. Decrease in Tax Rate: Though tax rate cannot be computed accurately, decrease in tax such as the personal income tax from 30 to 25 percent have actually made an impact on investment decision in Nigeria, in that, it has also increased the income to be reinvested. At least with effect from 1998, any income from N30,000 and below should attract a minimum tax of ½percent.
4. Tax incentives on the repatriation of foreign earnings: Apart from political and economic instability in Nigeria, more earnings have been repatriated into this country to be reinvested especially in this civilian administration, though most of the funds repatriated were for personal use; mostly used on residential building and luxury.
5. Mandatory self-assessment for companies: The self-assessment scheme was introduced in Nigeria in 1991. Although not only the factors have view that the self-assessment will help it withhold increase necessary for expansion or investment.
6. Incentives for manufacturing enterprises: Incentives such as: (a) the removal of taxes on interest granted by banks for manufacturing for export; (b) tax exempt of dividends from petro-chemical and liquefied natural gas sub-sectors; and (c) low tax rate of 20 percent for small manufacturing companies for the first five years of commencement of business, etc have contributed a lot to the investment in such areas floured by tax policies and the growth of small scale industries even though Nigeria is still an unindustrialized nation.
7. Tax of export free zone enterprise.
8. Tax Relief to Export-Oriented Enterprise: Although there have been an increase in the investment in export oriented enterprise in Nigeria, the economy is an import oriented enterprise that cannot operate without the above tax

- policies.
9. Solid Mineral: The recent increase in initial capital allowance from 20 percent and 10 percent to 30 percent and 20 percent respectively. As of 1996 of new companies going into mining of solid minerals and to enjoy tax free holiday for the first three (3) years of their operation have contributed in the diversification of crude oil
 10. Replacement of industrial plants and machinery: Most companies that were before now at the verge of folding up or collapse capitalized on such tax policy as 95 percent to be granted for the purchase of new machineries as initial allowance and have to reinvest these in businesses.
 11. Tax incentives for hoteliers and other service related tourism: There have been an increase in the number of hotels in Nigeria in recent times and these can be related to the tax policies and incentives, especially VAT, which transfers the burden to the customers.
 12. Tax incentives on research and development: It is expected that such incentives as 20 percent investment tax credit on qualifying capital expenditure for such companies and organizations engaged in research and development. But actually, there have not been progress or retrogression in investment decisions in this area and if there is any, it is quite insignificant.
 13. Tax Incentives for Manufacturers of Locally Made Spare-Parts, Tools and Equipment: The above incentives have led to the increase in investment in such industries that engage in the manufacture of spare parts.
 14. Reduction of rate of company tax: the reduction in the rate of companies' income tax from 35 to 30 percent with effect from 1st January, 1996 can be traced as one of the major causes of registration of more companies in Nigeria, that is, there are more investments in companies.
 15. Reduction in capital gains tax: the reduction in the rate of capital gains tax from 20 to 10 percent is one of the major contributions in investment in capital goods.
 16. Exempted from import duty: The exemption from duty of aircraft imported for commercial purposes is the major reason for increase in investment in private airlines business in Nigeria.
 17. Rent charges on residential accommodation: The modification in rent charges on residential accommodation have contributed to increase in the construction of residential houses.
 18. Incentives to companies engaged in petroleum operations: (a) the memorandum of understanding usually reached between government and operators in this sector has encouraged investments. (b) more so, investment tax credits on petroleum investment allowance are granted for qualifying capital expenditures.

Negative impact of tax policies on investment decision

Todaro (2007) ^[14] identified that some of the tax policies made in Nigeria have negative impact on investment decision in Nigeria. These include: (a) Broadening VAT base: Though this is an indirect tax, that is, the incidence of taxation is on the final consumers, this has contributed in searching investors from possession of such VAT able goods, (b) customs duty rebate of 35 percent: The policy that on or after 31st of July, 1995 that there will be 35 percent rebate of all consignment

lying at the port, this led to inflow of goods into the market thereby causing a situation where the returns on investment become smaller as a result of competition with such goods and (c) inclusion in the import list: Such items like rice and pasta products did lead to investment in its production; rather, it brought about smuggling of such goods (Salawu, 2009) ^[12].

Categories of investment decision

In the research by Okon (2011) ^[10], investment decision can be categorized into two types. These include: (a) Invest in an entirely new business; and (b) expansion of existing business by procuring capital equipment like machinery, office structures new lines of business etc.

Decision to investment is taken within the broad strategy of the firm. This could be the type of business, the pattern of activities and many other aspect of management. The firm's view of the production methods open to it as determined by its products and services and covered also is the market and technological considerations. Decision whether or not to invest in a given activity at a particular moment will reflect the degree of confidence in the market ability to absorb output at prices sufficiently high enough to cover all costs, the extent of the firm's capacity utilization. Thus, firms considering investment opportunity must have sufficient confidence in the stability of its economic environment, the market prospect and its ability to meet the cost of the investment (given the nature of government policy) so that it can expect a flow of cash from sales of resulting output sufficient in meeting additional cost of the investment.

Nwachukwu (1990) ^[9] classified investment in entirely new business into three basic ways: (a) Inheriting an existing enterprise, (b) buying an existing enterprise; and (c) creating a new venture. In like vein, Anyakwu (2010) ^[3] maintains the same opinion but shift in nomenclature and desired it thus: buying a going concern, inheriting a going concern and starting a wholly new business.

- a) Inheriting an existing going concern. A going concern resulting from individual inheritance of a business in the words of Nwachukwu (1990) ^[9] arises where an individual inherits an enterprise, when either the parent or relation dies or retires.
- b) Buying a going concern: Buying an existing going concern in a consideration as may be agreed by parties involved. According to Nwachukwu (1990) ^[9], this arises where somebody purchases an existing business from those who are either too old to manage the business or about to retire into another line of business. Anyankwu (2010) ^[10] highlighted the advantage that comes with buying a going concern; reduction in the uncertainty of successful operation in the future, eliminating or minimization of efforts, time and cost of the various steps involved in launching a new business and the likelihood that the purchase price will be cheap.
- c) Creating a new venture: This involves starting a whole new going concern through individual innovation to start a business of their own. Here, the idea of the new going concern is their own. Many individuals prefer creating a new business to buying an existing business. Nwachukwu (1990) ^[9] state the reasons as follows: (i) Experience the joy, sorrow and gains the experience of starting new

product or project, (ii) the entrepreneur selects his location, suppliers, employees, equipment and machines and record keeping methods; and (iii) decides when to start the business and formulate his own plans, organizational procedures, rules and regulations. Before an investment decision is made to enter a particular industry, he has to clearly identify what services or products that he/she wants to introduce into the market.

Methodology

The research design adopted for the study is ex-post facto research design. The design was used because it allows the researcher to examine the independent variable in relation to the influence on the dependent variable. The population of this study is made of fifteen (15) quoted oil and gas exploration companies whose activities has great affect on investment decision of both local and foreign investors in Nigeria. The companies constitute both multinational and local companies. The researcher adopted the judgmental sampling in selecting the sample for this study. Seven (7) companies were carefully selected out of fifteen (15) companies to investigate the possible relationship existing between profit after tax and investment decision of Nigerian oil and gas companies.

Secondary data was used for the study. It was used to provide answers to the research hypotheses. Data were gathered from the Central Bank of Nigeria (CBN) statistical bulletin, Nigeria Stock Exchange fact book, economic and financial review publication, Federal Bureau of Statistics, National Planning Commission Publication, Annual Report, Account and internet. The validated through expert advice and combination of some best practices in tax policy. In view of this, past studies on tax policy and practice were consulted. Among them are; Work by Efiok, Tapang, Okion, (2013) [13], which constitutes bases for factor variables.

Reliability of the data instrument was company’s annual reports and financial statements. Annual reports by definition are companies or entities reliable statutory reports issued annually. Audited Annual report and financial statements have reliability and credibility, both cross sectional analyses that is within and across companies and longitudinal year annual

financial survey of companies under consideration.

This study is anchored on the endogenous theory of investment. The proponents of this theory posits that investment opportunities are created base on the control variables that an organization can manipulate to its advantage and base how its uses its finance judiciously on profitable investment opportunities. This control variable is; profit after tax. which increases base of the profit generated from one accounting period to another. The Econometric model use in the study is given thus;

$$INVD = f (PAT) \quad \text{---- (1)}$$

The ordinary last square of the above model is stated thus:

$$INVD = a_0 + a_1 PAT + E \quad \text{---- (2)}$$

Where:

- INVD = investment decisions
- PAT = profit after tax
- AO = constant
- A₁-A₄ = is unknown coefficient to be estimated
- E = stochastic error

The study also adopt empirical methodological framework. Data collected from the secondary sources were tabulated and statistically analyzed using the ordinary least square (OLS) analytical techniques.

Data Presentation and Discussion of Result

The result of the data collected is presented through hypothesis below.

The two hypotheses were formulated for this study and tested using the regression. The result is presented in Table 3. The hypotheses were tested individually at 5 percent significant level H₀₃ H₀₁ There is no significant relationship between profit after tax and investment decision of oil and gas companies in Nigeria;

H₀₂ There is significant relationship between profit after tax and investment decision of oil and gas companies in Nigeria.

Table 1: Investment of the seven oil and gas companies from 2004-2013

Years	Total Oil	Conoil	Ap	Mobil	Mrs Oil	Oando	Eterna Oil	Total Invest.
	N	N	N	N	N	N	N	N
2004	3,742,235,000	7,596,787,000	7,568,785,000	882,551,000	2,831,506,000	21,564,675,000	47,375,000	44,233,914,000
2005	4,131,818,000	8,486,137,000	293,700,000	3,305,081,000	3,115,166,000	22,725,791,000	124,158,000	42,181,851,000
2006	5,767,754,000	11,294,897,000	2,455,230,000	2,833,678,000	3,386,459,000	24,369,270,000	100,821,000	50,208,109,000
2007	5,765,754,000	11,980,005,000	7,367,951,000	2,248,348,000	4,045,355,000	47,416,277,000	1,184,916,000	80,008,606,000
2008	6,338,944,000	11,892,688,000	6,852,321,000	2,837,060,000	1,915,015,000	44,878,733,000	778,281,000	75,493,042,000
2009	7,268,980,000	13,511,103,000	32,653,157,000	4,176,545,000	2,965,925,000	52,811,742,000	3,902,315,000	117,289,767,000
2010	54,601,360,000	15,260,152,000	25,022,537,000	5,958,683,000	18,528,146,000	95,192,266,000	4,623,820,000	164,585,604,000
2011	10,026,215,000	16,681,194,000	5,889,294,000	4,497,588,000	18,988,685,000	92,764,986,000	5,834,979,000	154,682,941,000
2012	11,132,914,000	15,661,295,000	7,582,842,000	6,589,968,000	19,045,010,000	105,354,528,000	6,129,075,000	171,495,632,000
2013	12,447,738,000	18,037,434,000	42,349,307,000	9,537,631,000	19,246,378,000	162,368,077,000	7,110,709,000	271,097,274,000

Source: Nigerian stock exchange fact book and Central bank of Nigeria statistical bulletin: 2004-2013

Table 2: Profit after tax of the seven oil and gas companies in Nigeria from 2004 – 2013.

Years	Total Oil N	Conoil N	Ap N	Mobil N	Mrs Oil N	Oando N	Eterna Oil N	Total(Pat) N
2004	2,778,904,000	2,213,149,000	890,120,000	1,759,468,000	824,446,000	1,471,145,000	-164,330,000	9,772,902,000
2005	3,615,040,000	2,624,230,000	-3,569,172,000	2,422,530,000	1,045,626,000	1,773,643,000	-235,504,000	7,676,393,000
2006	2,516,693,000	2,808,760,000	2,161,530,000	1,716,208,000	1,312,647,000	3,075,068,000	23,337,000	13,614,243,000
2007	3,255,410,000	2,593,476,000	3,569,172,000	1,131,103,000	1,959,314,000	5,480,415,000	-135,480,000	17,853,410,000
2008	3,950,514,000	1,821,051,000	5,005,887,000	2,393,101,000	-225,425,000	8,343,325,000	-406,646,000	20,881,807,000
2009	3,716,130,000	2,312,367,000	-9,484,616,000	2,841,963,000	1,050,910,000	10,096,979,000	-1,495,193,000	9,038,540,000
2010	5,436,638,000	2,789,977,000	2,743,866,000	3,885,610,000	205,121,000	14,374,966,000	722,751,000	24,722,291,000
2011	3,813,202,000	2,997,314,000	-22,794,000	4,082,060,000	615,624,000	2,632,338,000	1,211,159,000	15,328,903,000
2012	4,670,917,000	714,981,000	198,958,000	2,878,299,000	205,212,000	5,510,583,000	946,356,000	15,125,306,000
2013	5,334,091,000	3,070,091,000	4,583,232,000	3,480,785,000	634,418,000	-4,676,265,000	703,196,000	13,129,548,000

Source: Nigerian stock exchange fact book and Central bank of Nigeria statistical bulletin: 2004-2013

Table 3: Profit after Tax and Investment from 2004-2013.

YRS.	PAT N	INVT. N
2004	9,772,902,000	44,233,914,000
2005	7,676,393,000	42,181,851,000
2006	13,614,243,000	50,208,109,000
2007	17,853,410,000	80,008,606,000
2008	20,881,807,000	75,493,042,000
2009	9,038,540,000	117,289,767,000
2010	24,722,291,000	164,585,604,000
2011	15,328,903,000	154,682,941,000
2012	15,125,306,000	171,495,632,000
2013	13,129,548,000	253,059,840,000

Source: Nigerian stock exchange fact book and Central bank of Nigeria statistical bulletin: 2004-2013

Table 4: Regression result of investment.

Variable	Coefficient	Std. error	t-statistic	Prob. value
C	-29.75102	17.20733	-1.728973	0.1444
PAT	0.279776	0.385134	0.726438	0.5001

R = 0.892 (89%)
 R² = 0.796165
 Adjusted R² = 0.633098
 F – Statistic = 4.882420 (P.V. = 0.056095)
 SER = 0.384221
 Durbin-Watson statistic = 2.387662

The R² is specifically used to determine goodness of fit between the independent variables and the dependent variable by taking into consideration the percentage of the R². For a test to pass goodness of fit, the correlation between the variables must be 50 percent and above. The t-statistic is used to evaluate the significant relationship between the individual independent variables by comparing it with the table value. The F-statistic is used to test for the overall significance of the independent variables by comparing the value of the result with the table value. The Durbin-Watson statistic is used to test for first order autocorrelation of the random variables. The R²adjusted was added because the study used multiple regression analysis.

From the regression result in Table 4, the R² is 79 percent. This implies that 79 percent of the variation in the dependent variable was explained by the independent variables while 21 percent was explained by other variables not captured in the model or the stochastic error term. This 79 percent was explained by profit after tax, and adjusted R² showed goodness of fit of the parameter of estimate.

The constant term of -29.75102, as such it is not significant at

95 percent level of confidence. The result of the independent variables was also considered and from table 4 profit after tax entered the model with positive sign. The F-statistic result is 4.882420. This shows positive and significant relationship between the dependent and independent variables. The economic implication is that 1 percent increase in profit after tax will increase investment by 0.28 percent respectively.

Testing for the Durbin-Watson autocorrelation in the residual, the decision rule is that the calculated Durbin-Watson value must be higher than the DL table value. From the regression result the calculated DW value = 02.387662, dl= 0.376 and du = 2.414. That is, K= numbers of variables and N=numbers of years at 5 percent level of significance, the result is free from autocorrelation because the calculated value is 2.387662 > 0.376 the dl value from the WD table.

The regression result of the calculated t-statistic value in Table 4 indicated that the t-statistic value is 0.726438 and the table value is 1.860 at ninety five percent level of confidence. The calculated value of 0.726438 < 1.860 using 8 degree of freedom at one tail five percent significant, the null hypothesis of no significance is accepted and the alternative hypothesis rejected. This implies that there is no significant relationship between profit after tax and investment decision of oil and gas companies in Nigeria. From the result that was tested too using profit after tax, it was discovered that there is relationship between profit after tax and investment decision but not significant.

Conclusion

However, from the result, one can say there is a positive relationship that is not significant and as such, the governments need to review tax incentives in order to encourage companies in the sector because presently the sector accounts for almost eighty percent of the government revenue. Since it is very obvious that investment is a necessity or catalyst for the development of a nation and this assertion have been supported by Ahiator and Amoah (2013) ^[2] in Hormats (2010) ^[7] which states that when companies have a enough funds to acquire necessary assets needed to carry out its productions or services maximally, it will propel economic development. Therefore, the government should put adequate contrivance on interest rate because a moderate interest rate will enhance profitability, thereby enabling companies in the sector to operate effectively and efficiently after paying the principal and the interest rate on money borrowed. Government should also by way of policy design a programme to ensure periodic review of tax incentive.

References

1. Adesola SM. Tax Policy in the quest for social cohesion and development in Nigeria. In A. O. Sandra (Ed), public administration in period of uncertainty. Ibadan: Facts finders International. 1989, 67-78.
2. Ahiator G, Amoah A. The Effects of Corporate Taxes on the Level of Investment in Ghana. *Development Country Studies*. 2013; 3(1):57-67.
3. Anyakwu E. theory of investment. *International Journal of Research in Commerce and management*. 2010, 4(10).
4. Central Bank of Nigeria. *Statistical Bulletin*. Abuja: Central Bank of Nigeria, 2014.
5. Efiok OE, Tapang A, Okon E. The impact of tax policy and incentives on foreign direct investment (FDI) and economic growth. *Journal of commerce and Management Research*. 2013; 2(9).
6. Hall RE, Taylor J. effect of tax incentives in investment. *International Journal of commerce and investment*. 1986; 5(7).
7. Hormats DR. Importance of Investment in Global Economy. World Investment Forum Xiamen, China, under Secretary for Economic, Energy and Agricultural Affairs, 2010. accessed @<http://www.state.gov/e/rls/rmk/2010/146894.htm>
8. Nigeria Stock Exchange. Stock exchange fact book, Abuja: Nigeria stock exchange, 2014.
9. Nwachukwu N. fundamental of finance Enugu. University of Nigeria press, 1990.
10. Okon B. Effect of Company Income Tax on Investment Decision of Nigeria Companies, Calabar: University of Calabar Press, 2011.
11. Rolph ER, Break GF. Public Finance. New York: The Ronald Press, 2001.
12. Salawu RO. Essential of Public Finance. Ile-Ife: OAU Press, 2009.
13. Efiok OE, Tapang AP, Okon EE. The Impact of Tax policy and incentives on foreign Direct investment (FDI) and economic Growth: Evident from Export processing Zones. *European Journal of commerce and Management research*. 2013, 2.
14. Todaro S. Economics for developing world, London: Longman group limited, 2007.
15. Ulrich S, Christopher S, Lothar L. Meaning the Impact of Taxation on investment and financing decision. *Schmalenbach business Review*. 2002; 54(3):57-69.