The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy

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**ABSTRACT**

The study empirically examines the effect of petroleum profit tax (PPT) on Nigeria economy, in line with the objectives of this study, secondary data were obtained from central bank of Nigeria statistical bulletin covering the period of 1970 to 2010. In concluding the analysis, multiple regressions were employed to analyze data on such variables Gross Domestic Product (GDP), petroleum profit tax, inflation, and exchange rate were all found to have significant effects on the Economics Growth with the Adjusted \( R^2 \) of 86.3%. Following the outcome of this study, it is therefore concluded that the abundance of petroleum and its associated income has been beneficial to the Nigerian economy for the period 1970 to 2010. Income from a nation’s natural resource has a positive influence on economic growth and development. It is recommended that Government should transparently and judiciously account for the revenue it generates through PPT by investing in the provision of infrastructure and public goods and services. It is expected that the more effectively and efficiently revenue is utilized by Government to create growth, employment opportunities and wealth in the economy, the more willing taxpayers would be to meet their obligations to the Government and discharge their duties in the overriding goal of achieving National Development.

**Key words**: Petroleum profit tax (PPT); Exchange rate; Inflation; Nigerian Economy

**BACKGROUND TO THE STUDY**

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 it lends itself to creating an environment conducive to the promotion of economic growth.

Oil is the dominant source of government revenue, accounting for about 90 percent of total exports, and this approximates to 80% of total government revenues. Since the oil discoveries in the early 1970s, oil has become the dominant factor in Nigeria’s economy. The problem of low economic performance of Nigeria cannot be attributed solely to instability of earnings from the oil sector, but as a result of failure by government to utilize productively the financial windfall from the export of crude oil from the mid – 1970s to develop other sectors of the economy.

The Nigerian petroleum industry has been described as the largest among all industries in the country. This is probably due to the belief that petroleum is one of the major sources of energy worldwide. The size, international characteristic, and role assumed by the petroleum industry...
were noted to have originated from the notion that petroleum is versatile as it currently satisfies a wide variety of energy and related needs. Petroleum is the most vital source of energy, providing over 50 percent of all commercial energy consumption in the world. The revenues obtained from crude oil in Nigeria are of absolute advantage to expenditure commitments on various projects at the local, state, and federal levels. The Nigerian economy relies heavily on the revenue derived from petroleum products, as they provide 70 percent of government revenue and about 95 percent of foreign exchange earnings. Apart from this, the contribution of petroleum to national development is many and varied; employment generation, foreign exchange earnings, income generation, industrialisation, and improvements in other economic variables. While the major investors in the petroleum industry are the international oil companies (IOCs), the principal legislation governing petroleum operations in Nigeria is the Petroleum Profit Tax Act (PPTA) of 2007. Its main fiscal instrument is the Petroleum Profit Tax (PPT). Under the PPT, the tax rate was set at 67.5 percent for the first five years of operations by the oil company and 85 percent thereafter (Onyemaechi 2012).

The Petroleum Industry is the largest and main generator of GDP in Nigeria which is the most populous in African nations. Since the British discovered oil in the Niger Delta in the late 1950s; the oil industry has become the main stay of the Nigerian economy. This was however not the case prior to the 1950s. Available literature on the Nigeria’s Economy has it that Nigeria was primarily an agrarian economy, whose revenue generation was based on agriculture. Statistics from the Federal Bureau of Statistics indicate that between 1958-1969, the contribution of agriculture to Gross Domestic Product (GDP) at current factor cost was 52 percent while that of oil was just 0.007 percent. Agriculture formed the main stay of the country’s economy accounting for higher percentage of Gross Domestic Product (Success 2012).

Statement of the problem.

It is obvious from the judgment articulated in the previous theories that petroleum income be it revenue from the sale of crude oil, petroleum profit tax, royalties e. t.c can cause an increase or a decrease in economic growth and development of a nation, depending on the type of theory, policy and practical implementation the government in power adopts. Nigeria with all its oil wealth has performed poorly, with GDP, per capita today. The problems with Nigerian economy have been traced to failure of successive governments to utilize oil revenue and excess crude oil income in the development of other sectors of the economy effectively and efficiently. Over all, there has been poor performance of national institutions such as power, energy, road, transportation, politics, financial systems, and investment environment have been deteriorating and inefficient Nafziger, (2003). Therefore at this juncture, it is important to examine the impact of petroleum profit tax (PPT) on economic growth in Nigeria.

The objectives of this study

The main objective of this study is to examine the impact of petroleum profit tax (PPT) on economic growth (proxy by GDP) in Nigeria. Other specific objectives are:

- To examine the effect of PPT on exchange rate in Nigeria
- To investigate the effect of PPT on inflation rate in Nigeria
LITERATURE REVIEWS

Petroleum Profit Tax in Nigeria

According to Odusola (2006), petroleum profit tax (PPT) is a tax applicable to upstream operations in the oil industry. It is particularly related to rents, royalties, margins and profit sharing elements associated with oil mining, prospecting and exploration leases. It is the most important tax in Nigeria in terms of its share of total revenue contributing 95 and 70 percent of foreign exchange earnings and government revenue, respectively.

Petroleum operation as defined in the PPTA essentially involves petroleum exploration, development, production and sale of crude oil. The Petroleum Profit Tax is regulated by the Petroleum Profit Tax Act of 1959 as amended by the Petroleum Profit Tax Act of 2007. Although the initial law was passed in 1959 to capture the first oil export made in that year (Nwadighoha, 2007). Section 8 of Petroleum Profit Tax Act (PPTA) states that every company engaged in petroleum operations is under an obligation to render return, together with properly annual audited accounts and computations, within a specified time after the end of its accounting period. Petroleum profit tax involves the charging of tax on the incomes accruing from petroleum operations (Nwezeaku 2005). He noted that the importance of petroleum to the Nigerian economy gave rise to the enactment of a different law regulating the taxation of incomes from petroleum operations. The petroleum profit tax is charged, assessed and payable upon the profits of each accounting period of any company engaged in petroleum operations during any such accounting period, usually one year (January to December) (Anyanwu (1993).

The profits of a company in relation to the accounting period is the aggregate of:
(a) the proceeds of sale of all chargeable oil during that period;
(b) the value of all chargeable oil disposed of in that period;
(c) the value of all chargeable natural gas in that period; and
(d) all income of the company of that period incidental to and arising from any one or more of its petroleum operations (i.e. winning or obtaining and transportation of petroleum or chargeable oil in Nigeria by or on behalf of a company, for its own account by any drilling, mining, extracting or other like operations or process, not including refining at a refinery, in course of a business carried on by the company engaged in such operations, and all other operations, incidental there to and any sale of or disposal of chargeable oil by or on behalf of the company.

Oremade (2006) indicated that for petroleum profit tax purposes, crude oil sales valued at the prices actually realized by the oil producing company in the world oil market. On the other hand, this value has to be compared with the value at the posted price and if the posted price is higher, tax is then based on the posted price. Sales of crude oil for local refining and sales of gas are valued for petroleum profit tax purposes at the actual amount realized on sale.

According Ofe, Onyemachi and Caroline (2008), the administration of PPTA is under the care and management of the Federal Board of Inland Revenue. The tax laws according to Adekanola (2007) have vested the authority to assess, administer and collect all taxes from corporate entities on the Federal Inland Revenue Services. Taxes administered at the Federal level include the Petroleum Profits Tax, Companies Income Tax, and the Value Added Tax as well as the Capital Gain Tax, when such capital gains are generated by corporate entities. The administration of taxes in Nigeria has also been focused on revenue generation to the detriment of stimulating economic development.
Ofe et al (2008) brought out further that the Board may do all 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 to the Federal Minister of Finance. Whenever the Board shall consider it necessary with respect to any tax due, it may acquire, hold and dispose of any tax or of any judgment debt due in respect of any tax and shall account for any such property and the proceeds of sale thereof in a manner to be prescribed by the Minister. The Board may sue and send be sued in its official name. In the exercise of the powers and duties conferred upon it, the Board shall be subject to the authority, direction and control of the Minister of Finance. Any written direction, order or instruction given by the Minister after consultation with the chairman of the Board shall be carried out by the Board. However, the Minister shall not give any such direction in respect of any particular company which would have the effect of requiring the Board to increase or decrease any assessment made or to be imposed upon or any relief given tax, penalty or judgment debt due by such company or which would have the effect of altering the normal course of any proceeds, whether civil or criminal, relating either to the recovery of any tax or penalty or to any offence relating to the tax. Any Act, matter or thing done by or with the authority of the Board in pursuance of the provisions of PPTA shall not be subject to challenge on the ground that such was not or was not period to be in accordance with any direction, order or instruction given by the Minister (Ofe et al 2008). Oil companies that only market petroleum products including companies engaged in refining of crude oil such as petrol do not fall into the category of companies engaging in petroleum operations and they are therefore taxable under CITTA. Where a company is involved in both petroleum operation and marketing of petroleum product, the trading results from the petroleum operations would be subject to Petroleum Profits Tax while the results from the marketing activities will be taxed under the Companies Income Tax Act. All reference to companies in this unit relates to companies engaged in petroleum operation except where otherwise stated.

Contributions of Petroleum Industry to Growth of the Nigerian Economy
The contributions of the petroleum industry to growth and development of the Nigerian economy can be enumerated in terms of the industry’s impacts on the economic variables responsible for economic growth in Nigeria. The contributions of petroleum industry can also be analysed in terms of its share of revenue generation in the Nigerian economy. The petroleum industry has contributed immensely in both foreign exchange reserves and government revenues (Onyemaeche 2012). It has been observed that the government share of crude oil revenue as a result of various joint venture agreements with the international oil producing companies is roughly 70 percent of revenues accruing from crude oil transactions. He said further that the petroleum industry can also contribute significantly to growth and development of the Nigerian economy through foreign direct investment (FDI). Foreign direct investment (FDI) has been referred to as real investment interactions of the rest of the world with a given domestic economy. Whether these interactions encourage or discourage economic growth depends on the area of strength of the economy concerned and purpose of the investment.

The effect of petroleum profit tax on Nigeria economy
The purpose of taxation is to raise money for activities which cannot be pursued without government action. These include the public contribution to economic investment, as well as enabling people to meet their basic needs and enjoy wider opportunities. Without taxation, government cannot create a better society. One of the ways to collect tax is through petroleum
profit tax. Petroleum profit tax, according to Attamah (2004), is a legislation which imposes tax upon profits from the mining of petroleum in Nigeria and provides for the assessment and collection thereof and for the purposes connected therewith. One of the sources of petroleum income is the Petroleum Profit Tax. Accounting for income from oil and gas producing activities according to Gallun and Stevenson (1986), differ in many respects from financial accounting. The purpose of tax accounting is to gather information for the efficient preparation of income tax returns according to rules established by the Federal Board of Inland Revenue Code and Regulation (now Federal Inland Revenue Services). Besides the petroleum profit tax, Nigeria needs to meet its export commitment or quota approved by the Organization of Petroleum Exporting Countries (OPEC), scheduled dates of each supply agreement and resolve all necessary regulatory issues between government agencies and oil companies as operators of oil fields. Azaiki and Shagari (2007), brought out that countries blessed sufficient to have petroleum, can base their development on this resource. They point to the potential benefits of enhanced economic growth and the creation of jobs, increased government revenues to finance poverty alleviation, the transfer of technology, the improvement of infrastructure and the encouragement of related industries. Ogbonna (2009) expressed the view 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. According to Nwete (2004) the following are the objectives of petroleum taxation in Nigeria

- To achieve 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. This in effect will achieve government aim of controlling the petroleum sector development.
- The high profit profile of a successful investment in the oil industry makes it a veritable source for satisfying government objective of raising money to meet its socio-political and economic obligations to the citizenry.
- To re-distribute wealth between the wealthy and industrialized economics 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 high potential for environmental pollution and degradation stemming from industry activities makes it a target for environmental taxation, as a way of regulating its activity and promoting government quest for a cleaner and healthy environment.
- Cleaner production may be achieved by imposing tax on it for pollution and environmental offences. Under the petroleum Profits Tax Acts of 1959 an oil company, in computing its taxable profits from petroleum operations, is entitled to deduct all outgoings and expenses which are wholly, exclusively and necessarily incurred by such company for the purpose of such petroleum operations.

The petroleum tax system has also been designed to provide neutrality, so that an investment project which is profitable for an investor before tax will also be profitable after tax. This makes it possible to harmonize the desire to secure significant revenues for the community with the requirement to provide sufficient post-tax profitability for the companies (Kjell and Petter 2011).

Conversely, increase in natural resources income 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 economic growth (Bawa and Mohammed 2007).

In 2009, persistent inflation and environmental degradation led to deprivation of means of livelihood and other socio-economic factors to the people of Niger Delta which is the major oil producing state in Nigeria. Despite the fact that crude oil has been the source of Nigerian 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 the economic development (Nwezeaku 2010).

METHODOLOGY
This chapter describes the methodology employed in this study. Methodology consists of the procedures to be used for collecting data, summarizing and analyzing the data gathered in other to answer the research questions. It is intended to applying the chosen methods in the research to minimize the costs of obtaining the data and analyzing them while maximizing the expected values of resultant information as well as association level of accuracy. For the purpose, issues addressed include; research design, study population sample and sampling technique, data collection and research instrument validation. Economic growth is one of the substantial problems in the developing countries. There are many models to analyze the impact petroleum profit tax on Nigeria economic growth.

Method of data collection
Method employed in Carrying out this research work was by secondary data. Secondary data is the name given to data that has been used for some purpose other than that for which they were originally collected. Secondary data generally used when the term manpower resources necessary for survey are not available and of course the relevant information required. Secondary data were gotten from different sources e.g. CBN Statistical Bulletin and Federal Inland Revenue service Bulletin.

Sample size
The duration of my research was basically from 1970-2010 which is in the range of 40yrs. This duration was used because it is detailed enough to give a good result and analysis. This study employs annual data on the rate of petroleum profit tax (PPT), inflation, exchange rate and economic growth (proxied by Gross domestic products) for Nigeria over the period 1970 to 2010. Data were obtained from the CBN Statistical Bulletin.

DATA ANALYSIS TECHNIQUES
The analysis was carried out in two forms and they are regression analysis and correlation. Regression analysis includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables.
Regression models in the following variables:
The unknown parameters denoted as $\mu$: this may be a scalar or a vector.
The independent variable $X$
The dependent variable $Z$
In various fields of application, different terminologies are used in place of dependent and independent variables
A regression model relates $Z$ to a function of $X$ and $\mu$
$Z = p (X_1, X_2, X_3, \mu)$
Where $X_1$ — $X_3$ are the independent variables.

**MODEL SPECIFICATION**

\[
\begin{align*}
pat &= a_0 + a_1 GDP + a_2 \text{infl} + a_3 \text{exch} + \mu \quad 1 \\
\log \text{pat} &= a_0 + a_1 \log \text{GDP} + a_2 \log \text{infl} + a_3 \log \text{exch} + \mu \quad 2
\end{align*}
\]

- $\log \text{GDP}$ — log of Gross Domestic Product
- $\log \text{ppt}$ — log of petroleum profit tax
- $\log \text{infl}$ — log of Inflation
- $\log \text{exch}$ — log of Exchange rate

**PRESENTATION AND ANALYSIS OF DATA**

This chapter will be used in analyzing and presentation of data collected from different reliable source like CBN Statistics Bulletin 2010. This was done so as to determine the effect of petroleum profit tax (PPT) on Nigeria economy from the period of 1970 to 2010.

According to the research question, to what extent does the PPT affects the economic growth in Nigeria? The following tables below are actually gotten from different sources but they are answers to these research questions.

**Table 1**

The effects of PPT on economic growth.

| Dependent Variable | Independent Variables | Coefficient | Standard Error | T | P>|t | [95% Conf. interval] |
|--------------------|-----------------------|-------------|----------------|---|-----|-------------------|
| $ppt$              | $GDP$                 | 11.82811    | 1.914262       | 6.18 | 0.000 | 7.928885 15.72733 |
|                    | $\text{infl}$         | -185204.3   | 173377.4       | -1.07 | 0.293 | -538362.4 167953.9 |
|                    | $\text{exch}$         | -80561.61   | 165368.3       | -0.49 | 0.629 | -417405.8 256282.6 |
|                    | constant              | -1867373    | 5077965        | -0.37 | 0.715 | -1.22e+07 8476103 |

R-square= 0.8753  Adj R-square = 0.8636  Root MSE = Prob > F = F( 3, 32) =
TABLE I shows the result of the output effects of PPT policy in Nigeria in the short run. A 1% increase in the petroleum profit tax (PPT) increases economic growth (GDP) by 11 percent. This suggests a positive relationship between the rate of PPT and the GDP in Nigeria. The result is also significant. 1% increase in the petroleum profit tax reduces exchange rate (EXCH) by 8.0%. This means that the relationship between PPT and EXCH is negative suggesting that if PPT increases EXCH reduces. The relationship between PPT and inflation (INFL) is negative suggesting that if PPT in Nigeria increases, the inflation reduces that is 1% increases in VAT reduces INFL by 18.5%.

Given the adjusted R² significant 86%, it presages the independence variables incorporated into this model have been able to determine variation of PPT to 86%. The F and probability statistics also confirmed the significance of this model.
The above table is represented by regression plots below:

Table 2 also shows the result effects of PPT on inflation, exchange rate and gross domestic product (GDP) on Nigeria economy in the long run by finding the log of PPT compared with logarithms of the independent variables. 1% increase in PPT brings about 1.18% increase in GDP. An increase in the PPT has a positive impact on output. This also suggests a positive relationship between PPT and economic growth in Nigeria in the long run decision planning. The result is also significant. The relationship between log of PPT and log of exchange rate is also positive. This indicates that 1% increase in PPT increases exchange rate by 0.65% in the long run. Also, 1% increase in PPT in the long run reduces log of inflation rate by 0.74%, suggesting that there is inverse relationship between PPT and inflation rate in the long run.

Given the coefficient of determination ($R^2$) to a tune of 85.7% and Adj R-squared to be 0.8438 (84%), it connotes the independence variables incorporated into this model have been able to determine variation of PPT to 84%. The F and probability statistics also confirmed the significance of this model. The results indicate that the coefficient of PPT is statistically significant and the constant is statistically significant.

**SUMMARY AND CONCLUSIONS**

This study has reviewed the effects of PPT on Nigerian economy. The links between PPT and economy growth has assessed. PPT has a positive impact on growth after a considerable lag. All the variables are statistically significant. The countries that performed PPT have a more per capita GDP level and are less dependent on the international trade. Estimated results suggest that PPT impacts strongly upon inflation, exchange rate, and gross domestic product. In addition,
PPT and inflation are closely related, that is oil revenue and inflation move in opposite directions. For every 1% increase in oil revenue will cause a decrease in inflation. PPT is viewed as one of the policies available for the control of inflation. Results also showed that PPT revenue contributed positively to the development of the respective sector. The huge revenue earned by the government through the PPT helps government to fund public expenditure that stimulates the national economy and improve economic growth. Increasing oil revenue benefits the Nigerian economy in the sense that when oil revenue is on the increase, prices of goods and services reduce. The study also reviewed that there is a negative relationship between PPT and inflation returns in the long run as supporting economic theory suggestion that taxes are a good hedge against inflation. An increase in petroleum income helps to drive down inflationary trends in Nigeria as indicated by our results, and therefore set the economy in the part of growth and development. This study brought out that petroleum incomes have a positive effect on the economy of the producing nation, and this agrees that per capita income in Nigeria grew over the period under review. There is evidence that petroleum income has a significant positive impact on the Nigerian economy for the period under review. Lastly, the findings of this study pointed out that the abundance of petroleum and its associated income has been beneficial to the Nigerian economy for the period 1970 to 2010. Income from a nation’s natural resource has a positive influence on economic growth and development.

POLICY RECOMMENDATIONS

Based on the findings made in the course of this study, the following recommendations are hereby suggested

1. It is recommended that Government should transparently and judiciously account for the revenue it generates through PPT by investing in the provision of infrastructure and public goods and services. It is expected that the more effectively and efficiently revenue is utilized by Government to create growth, employment opportunities and wealth in the economy, the more willing taxpayers would be to meet their obligations to the Government and discharge their duties in the overriding goal of achieving National Development.

2. For the PPT policy to have a more significant impact on the revenue and economic development of Nigeria, Government should minimize or find ways of eliminating totally the widespread corruption and leakages in the petroleum profit tax administration

REFERENCES


Kjell L and Petter O (2011) Petroleum taxation: Experience and issues


Nwete,B,O.(2004) ,“How can Tax Allowances Promote Investment in Nigerian Petroleum Industry”bonlaw@yahoo.co.uk


