



Performance and Potentials of Taxation as an Alternative to Dwindling Oil Revenue in Nigeria: A Trend Analysis 2010-2022

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Abstract: Nigeria is a country heavily dependent on revenues from its endowed oil and gas resources; however, revenues from these resources are fraught with price shocks due to regional and global events. This situation is affecting availability of funds for provision of public goods and services and economic growth of the nation. Therefore, the aim of this study is to evaluate the performances and potentials of revenues from taxation as an alternative to revenues from oil and gas. To achieve this aim, secondary data on revenues from oil, taxation and total revenues are collected from the data base of the Organization for Economic Cooperation and Development and Federal Inland Revenue Service. Collected data was analyzed using descriptive statistical tools of tables, figures, and percentages while public policy analytical framework and optimal tax theory underpin the study. Result from the study revealed that revenue from taxation is dominant in 10 out of 13 years covered by the study and accounts for 55% of total revenue collected 2010-2022. Therefore, it could be concluded that taxation has shown excellent performances to serve as an alternative to oil and gas revenue in Nigeria. Similarly, taxation is prosperous as an alternative to oil and gas revenue.

Keywords: Oil and gas revenue, Taxation, Alternative, Public policy analysis, Optimal taxation theory

JEL Codes: E60, F62, F65, H20

1. Introduction

Taxation is said to be the most viable means of providing funds to kingdoms and empires in the ancient civilizations for provision of public goods and services. To

portray the significance of taxation to modern societies, a saying exist that nothing is certain except death and taxes (Mohammed, Mas'ud, Karaye, Sallau, Adam and Sulaiman, 2023; United States National Constitution Centre, 2023). In today's modern civilization, ten countries with the highest tax to Gross Domestic Product (GDP) ratio globally are in the developed economies of Organization for Economic Cooperation and Development (OECD). Among the ten countries, only one country has a tax to GDP ratio of 39.30% the remaining nine have more than 40% tax to GDP ratio. In consistence to this, the OECD block has the highest average tax to GDP ratio of 34% in 2022. Latin America and the Caribbean have tax to GDP ratio of 21.70%; Asia-Pacific has average tax to GDP ratio of 19.80% while African countries have tax to GDP ratio of 15.60% (Organization for Economic Cooperation and Development, 2023a, b, c & d).

Thus, it could be argued that the developed economies are significantly leveraging on taxes to provide the public goods and services that nationals of other countries of the world are longing to have. Impliedly, if countries in other regions of the world could leverage on taxation, it may significantly enhance their public revenues which may enable them provide essential public goods and services as obtained in the developed economies. Indeed, an initiative known as tax for Sustainable Development Goals (SDG's) meant to help countries leverage on taxation mobilize enough resources to make progress on SGD's was launched in 2021 (United Nations Development Program, 2021). This is re-enforcing the importance of taxation in raising public funds for provision of public goods and services.

Nigeria is a country with fast growing population which was 95,214,257million in 1990 which grew to 160,952,853million in 2010 and further grew to 218,541,212million in 2022 (World Bank, 2024). With an annual growth rate of 3.2%, it is projected that the country's population will reach 400million by 2050 (United Nations, 2023). Moving along with this fast growing population, is an infrastructural deficit which accounts for only 35% of Gross Domestic Product (GDP) against 70% of GDP in developed economies (Asaju, 2023). The country has also an alarming infrastructural decay which is estimated to require investment of \$2.30billion (Orjime, 2023). Decay and deficits in infrastructure are constraints to achieving socio-economic development in the country. Indeed, the absence of critical and required infrastructures in virtually all sectors of the economy is not only affecting socio-economic development but also effecting efforts at enhancing

the standard of living of the populace (Ajasu, 2023). This precarious situation requires Nigeria to be generating public revenue enough to address the myriads of problems affecting its citizens.

Conversely, Nigeria as an oil and gas resources rich country is heavily dependent on revenues accruing from the sale of its oil and gas resources. However, revenues from these sources are associated with lots of price shocks leading to uncertainties in inflows of anticipated revenues. Likewise, the world is experiencing energy transition that entails moving away from oil and gas energy sources that are negatively affecting the environment to renewable energy sources which are environmentally friendly (Alagoz and Alghawi, 2023; Mohammed, 2016). These in turn are making the country vulnerable to borrowings most often associated with stringent conditions sometimes even inhibiting the government from provision of essential public services such as in agriculture, education, health, transportation (Biglaiser, and McGauvran, 2022; Debt Management Office, 2023). However, Nigeria's growing population, growth in number of micro, small and medium enterprises and corporations could have been making more tax revenues available to the government and could potentially be leveraged on to make more tax revenues to government in the future.

Therefore, the aim of this study is to evaluate the performance of taxation as source of revenue to serving as alternative to dwindling and threatened oil and gas revenue accruing to Nigeria. The study covers period of 13 years 2010-2022; perhaps, long enough to show policy makers the performances of taxation on total government revenue in contrast to non-taxes sources of revenue dominated by oil and gas revenues. In this way, the policy makers could appreciate the contributions and strengthen tax administration with a view to making taxation an alternative source of revenue to oil and gas revenues. This is section one of the study as the introduction, section two is literature review, section three is on data and methods, section four is results and discussions, section five is conclusion while section six is recommendations of the study.

2. Literature Review

2.1. Conceptual Review

Nigeria is a West African country that came into being in 1914 after the amalgamation of the Northern and Southern protectorates under the colonization of the Great Britain. The country was later structured into regions and later into states and local

government with the current federal structure composing of 36 states, 774 local governments and a Federal Capital Territory (FCT) in Abuja. The country was heavily dependent on agriculture 1914 to 1958 when oil and gas were discovered in commercial quantity. Production of oil commenced with 5,100 barrels per day moving upward and launching Nigeria into the circle of oil and gas resource rich countries which saw the country joining the Organization of Petroleum Exporting Countries (OPEC). With more oil and gas revenue flowing, the country became abandoned the agricultural sector as the main stay of the economy to become heavily dependent on revenues from these resources (Elaigwu, 2024).

Although the country is practicing federalism, federating units in Nigeria are heavily dependent on federal monthly grants to the extent that only five (5) states were viable enough to depend on their Internally Generated Revenue (IGR) in 2022 (Ogunyale and Edeh, 2023). The more the revenue accrue from oil and gas into the federation account, the more the monthly grants each state and local governments receive. Therefore, it could be contended that provision of public goods and services in the country depend largely on oil and gas revenues. However, revenue from these sources are often associated with international price shocks such that when prices go up more revenue accrue and when prices fall down, less revenue accrue. Most often when more revenue accrues to government of the day, such is misappropriated by embarking on white elephant projects necessitating borrowings in times of deficit receipts with consequences of future debt servicing and repayments (Balogun, 2022; Egboboh, 2023; Yakubu and Aina, 2023). Thus, all of these situations are negatively affecting revenues accruing to the government.

Further complexity is the global concerns about the environmental consequences of fossil fuels which necessitated an energy transition that is shifting demand of oil and gas to renewable energy sources thereby putting Nigeria into further financial difficulties. However, the country is experiencing fast growing population which was 44,928,342million in 1960 when the country got independence increasing to 160,952853million in 2010 which further increased to 218,541,212million in 2022 (World Bank, 2024). Similarly, the number of working citizens in 2010 was 51.18 million which increased to approximately 60 million people in 2022. Likewise, the number of Micro, Small and Medium Enterprises (MSME's) as at 2010 is 17.26million which increased to 39.70million as at 2022 (Small and Medium Enterprises Development Agency, 2024). Arguably, these are blessings which if taxed appropriately as working citizens, owners of MSME's and corporations the

country could raise more and more tax revenues. Similarly, these blessing could be leveraged on to be raising more tax revenues in the future to such extent that taxation become an alternative source of revenue to the dwindling and threatened oil and gas revenues.

Indeed, there are strong agitations for the government to resort to taxation as a way of getting out of its financial difficulties as the era of oil boom is contended as gone (Otaru, 2015). The Federal government at the centre is empowered by law to collect eight (8) different taxes which are the Companies Income Tax (CIT), Petroleum Profit Tax (PPT), Value Added Tax (VAT), Education Tax (ET). Others are Withholding Tax (WT) on Companies and residents of the Federal Capital Territory and non-resident individuals; Capital Gains Tax (CGT) on Companies and residents of the Federal Capital Territory and non-resident individuals; Stamp Duties (ST) on corporate bodies and residents of the FCT. Lastly, is Personal Income Tax (PIT) of members of the armed forces, police, residents of the FCT and staff of Ministry of foreign Affairs and non-resident individuals (Taxes and Levies Act, 1998). There are prior empirical studies conducted to assess taxation as an alternative to oil and gas revenue or on the impact of taxation on economic growth.

2.2. Empirical Review

Temerigha, Iworiso and Idiko (2023) examined the impact of taxation revenue and its sustainability on economic growth of Nigeria 1994-2021. To conduct the study, quantitative data on Gross Domestic Product (GDP), Value Added Tax (VAT), Petroleum Profit Tax (PPT), Companies Income Tax (CIT) and Custom duties was collected from the Annual statistical bulletin of Central Bank of Nigeria (CBN), Federal Inland Revenue Service (FIRS) and National Bureau of Statistics (NBS) 1994-2021. Thus, data for the study is a time series data which was subjected to multiple regression, correlation, co-integration analyses and Augmented Dicky-Fuller tests while the study is underpinned by expediency theory. Results from the study revealed that VAT and Custom duties have significant positive impact on economic growth of Nigeria, CIT do not have any impact on economic growth while PPT has negative impact on economic growth of Nigeria.

Likewise, Nwachukwu, Nwoha and Inyama (2022) examined the effect of VAT, PPT, CIT and PIT on economic growth of Nigeria 1987-2021. To achieve the aim of the study, quantitative secondary data on VAT, PPT, CIT, PIT and GDP were collected from the statistical bulletin and annual report and statement

of accounts of the Central Bank of Nigeria (CBN). Collected data is subjected to descriptive statistical analysis, Ordinary Least Square (OLS) regression analysis and econometric technique of Augmented Dicker Fuller Tests. Results from the study indicates that VAT, PPT, PIT and CIT have positive and significant effect on gross domestic product in Nigeria implying that taxation have positive effect on gross domestic product in Nigeria. Therefore, these findings are depicting that taxation is a viable option to achieving economic growth and development in Nigeria.

Similarly, Agbo and Onuegbu (2022) examined the impact of tax revenue on Nigeria's economic growth with ex post facto as the design of the research. The study employed annual time series data for the period 1994-2020 collected from quantitative secondary data on the variables of GDP, VAT, CIT and PPT. The data was sourced from the data bases of Federal Inland Revenue Service (FIRS), World Bank, Central Bank of Nigeria (CBN) and United Nations Development Program (UNDP). Collected data was subjected to Ordinary Least Square and Multiple Regressions while triangulation of cost of service and economic growth theories underpinned the study. Findings from the study revealed that VAT has a positive and significant impact on the economic growth of Nigeria, CIT has a negative and significant impact on the economic growth of Nigeria while PPT has a positive but weak impact on the economic growth of Nigeria.

Orits, Edirin, and Abel (2021) conducted a study that focused on analysing the causality of non-oil tax component of Nigerian government revenue; specifically, CIT and Stamp duties. The study was carried out by collecting quantitative secondary on CIT and stamp duties from the publications of FIRS and CBN collected over the period 2000-2015. Therefore, data for the study is time series in nature as such relevant tests like unit root test, chow test, and granger causality test, were conducted on the collected while least square and auto regressive regression analyses were carried out to determine the causality of the chosen taxes on Nigerian government revenue. However, the study is not guided by any theoretical framework. Findings from the study revealed that CIT and stamp duties have positive and significant impact on federal government revenue.

Similarly, Ellawule (2021) examined the effect of tax revenue both oil and non-oil on economic development in Nigeria. To conduct the study, quantitative secondary data was collected on Human Development Index (HDI) from the data base of the Human Development Reports (HDR) of the United Nations. Similarly, quantitative secondary data was collected from FIRS on CIT, PIT, Stamp duties,

CGT, VAT, National Information Technology Development Tax (NITDT) and Education Development Tax (EDT) for the period 2011-2019. The theory of optimal taxation was used as the theoretical framework of the study while collected data was subjected to multiple regression analysis. Findings from the study indicated that non-oil tax had a significant effect on economic development in Nigeria while oil tax had no significant effect on the economic development in Nigeria.

Likewise, Owan, Ndibe, and Anyanwu (2020) investigated the impact of diversifying the Nigerian economy on economic growth 1981-2016. In achieving the aim of the study, quantitative secondary data on GDP growth rate as a proxy for economic growth, non-oil GDP as a proxy for GDP diversification, non-oil export as a proxy for export diversification, and investment and exchange rate were collected from CBN statistical bulletin and annual reports and World Development Indicators (WDI) of 2016 and 2017. The study is guided by the triangulation of Variety for diversification theory, Neoclassical growth and the Endogenous Growth models. Collected data for the study was analysed using an econometric approach of Ordinary Least Squares (OLS) to empirically analyse the impact of oil and non-oil GDP contributions to economic growth in Nigeria. Results from the study revealed that non-oil GDP impacted positively and significantly on economic growth in Nigeria. Similarly, non-oil export and investment impacted positively but insignificantly on economic growth in Nigeria.

Equally, Olowo, Daramola, Ogunsanwo, Edewus (2020) examined the sectorial contributions of non-oil with specific focus on environmental, information and communication technology and financial sectors' revenue to economic growth in Nigeria 1981-2018. To achieve the aim of the study, quantitative time series data on environmental sector revenue, ICT sector revenue and financial sector revenue was collected from the annual publication of Central Bank of Nigeria Statistical Bulletin. The theory of growth rate maximization underpins the conduct of the study while collected data was analysed using Autoregressive distributed lag model as the main estimation technique. Results from the study revealed that revenue from information and communication technology and financial sector contributed positively and significantly to economic growth in Nigeria while environmental sector revenue has positive but statistically insignificant contributions to economic growth in Nigeria.

Also, Adeusi, Uniamikogbo Erah and Aggreh (2020) examined the effect of non-oil revenue on economic growth in Nigeria using the variables of VAT, CIT,

PIT, Custom and Excise duties and GDP 1994-2018. Quantitative secondary data on these variables was collected from the publications of FIRS and the National Bureau of Statistics (NBS) over the period of the study. The study was guided by socio-political theory while collected data was analysed using descriptive statistics and Ordinary Least Square (OLS) regression techniques. Results from the study indicated that custom and excise duties and VAT have more significant positive effect on the Nigerian economic growth than direct taxes. In the same vein, but from different perspective, Odunayo and Ogunleye (2018) investigated the effect of taxation as an alternative to the dwindling oil revenue in Nigeria for the period of 24 years. Specifically, the study examined the effect of value added tax, petroleum profit tax, and company income tax on economic growth in Nigeria. The study utilized secondary annual time series data from statistical bulletin of Central Bank of Nigeria (CBN) from 1994-2017. Johansen co-integration and error correction model technique were used in analyzing the collected data for the study, however no theory was used to guide the study. Result from the study showed that on the long run, petroleum profit tax, company income tax and value added tax negatively affects the economy of Nigeria.

Literature is essentially reviewed with a view to getting gaps that could justify the conduct of the current study. Gaps in the literature are considered as areas that have not yet been explored or are under-explored which could be from the perspective of population or sample (size, type, location, etc.), research method, data collection and/or analysis, or other research variables or conditions (National University United States of America, 2024). Reviewed studies conducted by Temerigha, Iworiso and Idiko (2023); Nwachukwu, Nwoha and Inyama (2022); Agbo and Onuegbu (2022); Orits, Edirin, and Abel (2021); Ellawule (2021); Owan, Ndibe, and Anyanwu (2020); Olowo, Daramola, Ogunsanwo, Edewus (2020); Adeusi, Uniamikogbo Erah and Aggreh (2020); and Odunayo and Ogunleye (2018) have differences in terms of type of data and its method of collection, tools of analysing the collected data and theoretical framework guiding the conduct of the study. Therefore, this study could be justified as it may confirm what is known in the area or reveal new insights on the subject.

3. Data and Methods

This study is aimed at evaluating the performances and potentials of revenues from taxation to serve as alternative to dwindling revenues from oil and gas which the

Nigerian government heavily depends on. To achieve this, data on overall revenue that accrued to Nigerian government at the center is collected from the data base of Organization for Economic Cooperation and Development (OECD) 2010-2021 as the available data. Data on total revenue, revenue from taxes excluding Petroleum Profit Tax (PPT) and Gas Income (GI) is collected from the website of Federal Inland Revenue Service (FIRS) 2011-2022. Therefore, data from FIRS lack data for 2010, all relevant data on this year is extracted from OECD data base. Data on total revenue that is lacking in OECD data base is sourced from the annual reports of Central Bank of Nigeria (CBN) for 2022. However, this study unlike previous studies (Temerigha, Iworiso and Idiko (2023); Nwachukwu, Nwoha and Inyama (2022); Agbo and Onuegbu (2022); Orits, Edirin, and Abel (2021) excluded PPT and GI since the bases of these taxes and income is oil and gas while the study is focusing on performance of taxes that have nothing to do with oil and gas and how these could potentially serve as alternative to oil and gas income. Nigeria's growing population, increasing number of working citizens and number of Micro, Small and Medium Enterprises (MSME's) and ability of government to overcome challenges in the tax system are evaluated as potentialities of generating more tax revenue thereby enhancing the potentialities of taxation to serve as an alternative to volatile and dwindling oil and gas revenue.

Descriptive statistics is a means by which data collected for conducting a study is summarized, and put in clear and understandable ways through numeric and graphic means. Thus, it is essentially a means by which large volumes of research data could be numerically or graphically presented in a more sensible way. While the numeric means of descriptive statistics enable researchers to present data numerically, graphical data presentations enable identification of patterns in the data (Jaggi, 2024). Consequently, this study employs descriptive statistics to present results on the performances of taxes on Nigerian government revenue 2010-2022. The potentialities of taxation to serve as alternative to oil and gas revenues are depicted by simple descriptive analysis of relevant subjects.

3.1. Theoretical Framework

The blue print or guide or foundation upon which the conduct of a study is laid on is referred to as theoretical framework (Fulton, 2010; Kivunja, 2018). A triangulation of public policy analytical framework and optimal taxation theoretical framework is adopted in guiding the conduct of this study.

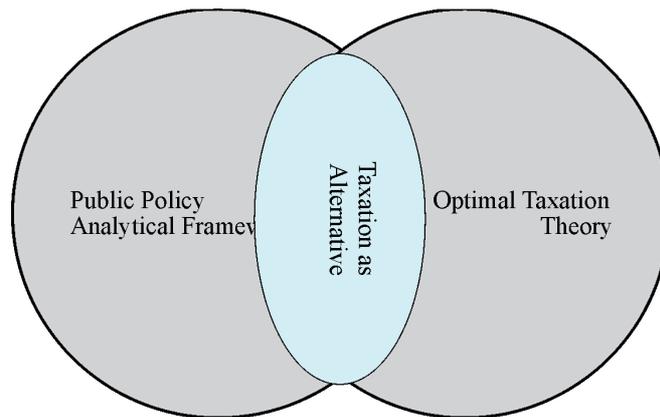


Figure I: Triangulation of Theoretical Frameworks

Public policy is described as composing of laws, regulations, procedures and administrative actions of governments and institutions that affect members of the public (United States Centre for Disease Control and Prevention, 2015). Such actions of governments and institutions often affects the overall being of the citizens as they could be good or bad; thus, the need to analyse such policies to determine their status (Torjman, 2005). Undertaking an analysis of a government or an institutional policy is what is simply referred to as public policy (Bromley, 1990; Dorfman, 1976). This study evaluates the performances and potentials of taxation as an alternative to dwindling oil and gas revenue accruing to Nigeria. Evaluation denotes the process of an overall examination of a programme to aid in making informed decision (Patton, 1987). The evaluation could be one; formative evaluation, undertaken to ensure that a programme is viable, suitable and adequate before it is fully implemented. Two, process evaluation aimed at determining whether the implemented programme is as intended. Three, outcome evaluation that measures the effect of an implemented programme on target population and four, impact evaluation, which is about measuring the effectiveness of a programme in achieving its ultimate goals (Mohammed, 2019). This study undertakes impact evaluation of public policy analysis as one of the frameworks underpinning the conduct of this study.

Ramsey (1927) is said to have laid the foundation of optimal taxation which posits that a tax system should be chosen in such a way to maximize a social welfare function subject to a set of constraints. Therefore, social welfare function in the society is based on the utilities of individuals in the society. Thus, if faced with one

line of taxation say commodity, and the social planner must raise a given amount of tax; then, commodities which experience inelastic demand are taxed most heavily. However, it is contended that within the context of developed economies, the central instrument in use is the labour income tax (Mirrlees, 1971). This notwithstanding, subsequently, Atkinson and Stiglitz (1976) showed how commodity taxes should be set in the presence of an optimal income tax. Therefore, on the overall, Optimal taxation theory is basically concerned with how various forms of taxation should be designed to collect the optimal revenue that maximizes social welfare. Thus, the task here requires an integrative consideration of the revenue-raising and income distribution objectives of taxation. Leveraging on optimal taxation theory, Nigerian government could come up with the most optimal taxation arrangement in Nigeria for taxation to be an alternative to its heavily dependent on but dwindling oil and gas revenue. Therefore, this theory is adopted in guiding the conduct of this study.

4. Results and Discussion

This section is devoted to presenting and discussing results of this study on the performances and potentials of taxation as an alternative to dwindling oil and gas revenue in Nigeria by means of trend analysis 2010-2022. Figure II present trends of Nigeria's total revenue 2010-2022 based on obtained data from OECD and CBN.

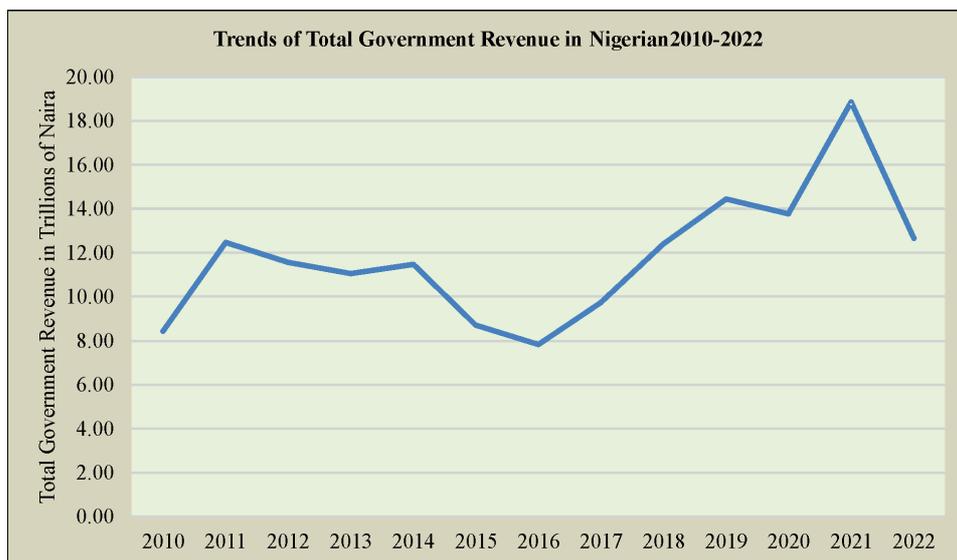


Figure II: Trends of Total Government Revenue in Nigeria 2010-2022

From Figure II, Nigeria's total government revenue in 2010 is ₦8.44trillion which increased to ₦12.47 trillion in 2011 which however fell down to ₦11.57trillion in 2012. Nigeria's total government revenue further fell down to ₦11.04trillion in 2013 but slightly increased to ₦11.47trillion in 2014. In 2015, total Nigeria's government revenue sharply fell down to ₦8.71trillion which further fell down to ₦7.84trillion in 2016. Total government revenue accrued to Nigeria significantly increase to ₦9.73trillion in 2017 which significantly further increased to ₦12.40trillion in 2018. In 2019, Nigerian government total revenue increased to ₦14.44trillion which however, decreased to ₦13.77trillion in 2020 and significantly increased to ₦18.86trillion in 2021. Total government revenue to Nigeria significantly decreased to ₦12.66trillion in 2022. Therefore, the trend of revenue accruing to Nigerian government over the period of the study is fluctuating. Decreasing trends occurred in six years out of the thirteen years of the study which are 2012, 2013, 2015, 2016, 2020 and 2022. Increasing trends also occurred in six years which are 2011, 2014, 2017, 2018, 2019 and 2021. Figure III is break down of the total government revenue into taxes and non-taxes revenue which is dominated by oil and gas revenues.

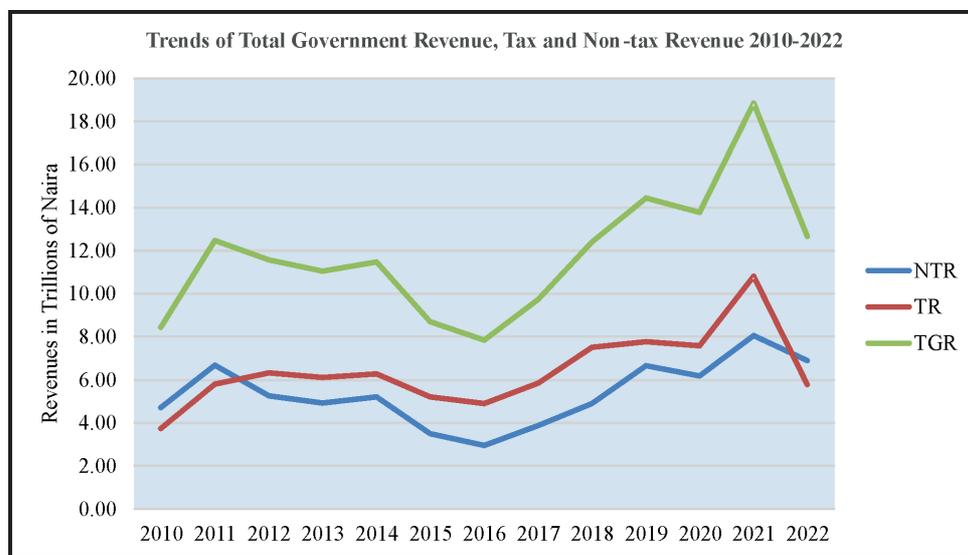


Figure III: Trends of Total Government Revenue, Tax and Non-Tax Revenue 2010-2022 (NTR=Non-Tax Revenue; TR = Tax Revenue; TGR= Total Government Revenue)

From Figure III, Nigeria's total government revenue in 2010 is ₦8.44trillion composed of ₦3.74trillion from taxation and ₦4.70trillion from non-taxes. In

2011, total government revenue is ₦12.47 trillion out of which ₦5.80trillion is from taxes while ₦6.67trillion is from non-taxes. Total government revenue of ₦11.57trillion in 2012 is made up of ₦6.33trillion from taxes and ₦5.24trillion from non-taxes. In 2013, total government revenue is ₦11.04trillion which comprises of ₦6.12trillion and ₦4.92trillion from non-taxes. Total government revenue in 2014 is ₦11.47trillion out of which ₦6.27trillion is from taxes while ₦5.20trillion is from non-taxes. In 2015, total government is ₦8.71trillion which comprises of ₦5.21trillion from taxes and ₦3.50trillion from non-taxes. Total government revenue in 2016 is ₦7.84trillion which is made up of ₦4.89trillion from taxes and ₦2.95trillion from non-taxes.

Total government revenue in 2017 is ₦9.73trillion comprising of ₦5.86trillion from taxes and ₦3.87trillion from non-taxes. Nigerian government generated total revenue of ₦12.40trillion in 2018 is composed of ₦7.51trillion generated from taxes and ₦4.89trillion generated from non-taxes. In 2019, Nigerian government total revenue is ₦14.44trillion which is made up of ₦7.78trillion from taxes and ₦6.66trillion from non-taxes. Total government revenue in 2020 is ₦13.77trillion from which ₦7.58trillion is from taxes while ₦6.19trillion is from non-taxes. Total government revenue in 2021 is ₦18.86trillion comprising of ₦10.81trillion from taxes and ₦8.05 from non-taxes. Total government revenue in 2022 is ₦12.66trillion composing of ₦5.77 taxes and ₦6.89 non taxes. Graphical presentation of the results in Figure III perhaps enables identification of patterns in the performances of taxes and non-taxes in comparison to total revenue. Table I is numeric results on the performances of taxes and non-taxes which may be more precise and objective and most readily discernible.

Table I: Share of Taxes and Non-Taxes Revenue and their Percentage Contribution to Total Government Revenue 2010-2022

<i>Years</i>	<i>TGR in Trillions of Naira (₦)</i>	<i>Taxes Revenue in Trillions of Naira (₦)</i>	<i>% Contribution of Taxes to TGR</i>	<i>Non-taxes Revenue in Trillions of Naira (₦)</i>	<i>% Contribution of Non-Taxes to TGR</i>
2010	8.44	3.74	44	4.70	56
2011	12.47	5.80	47	6.67	53
2012	11.57	6.33	55	5.24	45
2013	11.04	6.12	55	4.92	45
2014	11.47	6.27	55	5.20	45
2015	8.71	5.21	60	3.50	40

<i>Years</i>	<i>TGR in Trillions of Naira (₦)</i>	<i>Taxes Revenue in Trillions of Naira (₦)</i>	<i>% Contribution of Taxes to TGR</i>	<i>Non-taxes Revenue in Trillions of Naira (₦)</i>	<i>% Contribution of Non-Taxes to TGR</i>
2016	7.84	4.89	62	2.95	38
2017	9.73	5.86	60	3.87	40
2018	12.40	7.51	61	4.89	39
2019	14.44	7.78	54	6.66	46
2020	13.77	7.58	55	6.19	45
2021	18.86	10.81	57	8.05	43
2022	12.66	5.77	46	6.89	54
Total	153.39	83.67		69.72	

From Table I, taxes contributed 44% of the total ₦8.44trillion government revenue generated in 2010 while non-taxes contributed 56%. Taxes contributed 47% of total government revenue of ₦12.47trillion in 2011 while non-taxes contributed 53%. In 2012, taxes contributed 55% of total government revenue of ₦11.57trillion while non-taxes contributed 45%. In 2013, taxes contributed 55% of total government revenue of ₦11.04trillion while non-taxes contributed 45%. Total government revenue of ₦11.47trillion in 2014 is accounted for by 55% taxes and 45% non-taxes. In 2015, total government revenue of ₦8.71trillion is composed of 60% taxes and 40% non-taxes. Revenue from taxes accounted for 62% of the ₦7.84trillion total government revenue collections in 2016 while non-taxes accounted for 38%. Total government revenue of ₦9.73trillion in 2017 is accounted for by 60% of taxes and 40% of non-taxes. Government total revenue of ₦12.40trillion in 2018 is composed of 61% taxes and 39% non-taxes.

Total government revenue of ₦14.44trillion in 2019 comprises of 54% taxes and 46% non-taxes. Taxes accounted for 55% of government total revenue of ₦13.77trillion in 2020 while non-tax accounted for 45%. In 2021, total government revenue of ₦18.86trillion is composed of 57% taxes and 43% non-taxes while in 2022 total government revenue of ₦12.66trillion is composed of 46% taxes and 54% non-taxes. Therefore, revenue from taxes as proportion of total Nigerian government revenue over the thirteen years studied is dominant in ten years while non-taxes is dominant in three years. The overall sum of government total revenue is ₦153.39trillion out of which taxes accounted for ₦83.67trillion while non-taxes accounted for ₦69.72trillion as depicted in Figure IV.

Proportional Contributions of Taxes and Non Taxes To Total Government Revenue 2010-2022

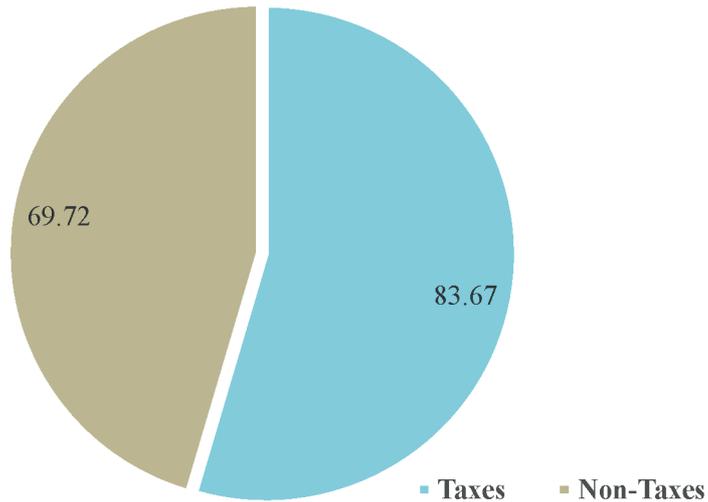


Figure IV: Share of Taxes and Non-Taxes Revenue in Total Government Revenue 2010-2022

Results from this study on trends of total government revenue as presented in Figure II revealed on the overall, fluctuating trends with significant decreasing fluctuations recorded in 2015 and 2016. This could be attributed to international prices of crude oil which up to June 2014 is \$112 per barrel falling to \$62 per barrel in December 2014. The declining oil price further moved into 2015 as average price per barrel fell to \$40 in 2015 (Prest, 2018; United States Energy Information Administration, 2016). The sharp declining trend in 2022 could be attributed to oil production volume in Nigeria which significantly fell below production levels in 2021 (Nigerian Upstream Petroleum Regulatory Commission, 2022, 2021). These same reasons could have accounted for the sharp decline in taxes and non-taxes revenue in 2015, 2016 and 2022 as presented in Figure III. However, for the taxes revenue in 2022 which is eve of the 2023 general elections, the political landscape of the nation could have additionally negatively affected economic activities thereby affected tax collections (Ojeaga, and Odejimi, 2015).

Results from Table I and Figure IV revealed the performances of taxation as a component of total government revenue to be resounding significant contributions to total government revenue. Revenue from taxes is dominant in ten years out of the total thirteen years covered by the study giving a total contribution of ₦83.67 trillion

or 55% of the ₦153.39trillion collected total government revenue 2010-2022. Conversely, non-taxes accounted for ₦69.72trillion or 45% of the total government revenue generated over the period covered by the study. This finding of the significant positive performances of taxes in total Nigerian government revenue 2010-2022 is consistent with Agbo and Onuegbu (2022), Ellawule (2021); Nwachukwu, Nwoha and Inyama (2022), Orits, Edirin, and Abel (2021), Temerigha, Iworiso and Idiko (2023) who reported that the different taxes employed in the study have statistically significant positive relationship and contribution to economic growth in Nigeria. However, it is inconsistent with Agbo and Onuegbu (2022) who reported that CIT has negative impact on economic growth and Odunayo and Ogunleye (2018) that found PPT, CIT and VAT as having negative impact on economic growth.

Theoretically, the finding indicating positive and significant performances of taxes to total revenue is better explained by public policy analytical framework as it is revealing the effectiveness of taxation as a government policy in achieving one of its primary objectives of raising revenue. From the perspective of optimal taxation theory, while it could not be concluded that taxation has attain optimality in Nigeria, its dominance in ten out of the thirteen years covered by the study may perhaps be revealing direction towards optimal taxation. In practice, the developed economies characterized by high human and capital developments are relying heavily on taxation to the extent that some of the countries have more than 40% of their GDP accounted for by taxation. Therefore, considering Nigeria's growing population, number of MSME's and corporations, the government may be making significant efforts towards improving its tax to GDP ratio which was 13.40% in 2010 but is 14.40% in 2021. It is of significance to note that although the ratio is fluctuating 2010-2022, it has never fallen below the 2010 level of 13.40% (World Bank, 2024b).

IV.1. Potentials of Taxation as an Alternative to Dwindling Oil Revenue

On potentials of taxation to be an alternative to dwindling oil revenue, the performances of taxes in relation to total government revenue from finding of this study is perhaps indicating the potentials of taxes to be an alternative to oil revenue. Therefore, if government consolidate, sustain and improve its tax generation derive towards an optimal taxation, Nigeria will continue to be reaping more on taxation. This will widen and deepen the revenue base of the government and could in the future concentrate more on generating public revenue from taxation as the most

viable source of revenue generation over centuries (Digital Tax Technologies, 2023).

Nigeria is experiencing fast growing population which was 44,928,342million in 1960 when the country got independence increasing to 160,952853million in 2010 which further increased to 218,541,212million in 2022 (World Bank, 2024). Likewise, the number of working citizens in 2010 was 51.18million which increased to approximately 60million people in 2022. Furthermore, the number of Micro, Small and Medium Enterprises (MSME's) in 2010 is 17.26million which increased to 39.70million in 2022 (Small and Medium Enterprises Development Agency, 2024). Arguably, these are potentials of generating more tax revenues to serve as alternative to dwindling oil revenue in Nigeria as growing number of working citizens, owners of MSME's and corporations, means potentials to raise more and more tax revenues. Indeed, MSME's accounts for 96.7 percent of businesses, 87.9 percent of employment, and 49.7 percent of national GDP as of 2020 (SMEDAN, 2022) and is regarded as Nigeria's informal sector. The informal sector is contended as the goldmine of tax revenue in Nigeria if properly harnessed and this is a potential to raising more tax revenue in Nigeria.

The Nigerian tax system is embedded with lots of challenges such as non-availability of accurate and verifiable statistics of tax payers, federal system that discourages tax drive, poor tax administration in terms of adequate manpower, financial resources, tools, and machineries to meet the ever-increasing challenges and difficulties of taxation in Nigeria. Similarly, there is the challenge of multiplicity of taxes thereby discouraging compliance, inadequate regulatory provisions on doing businesses, high level corruption in all facets of public life, lack of proper and adequate tax enforcement mechanisms and stringent penalties for non-compliance (Akintola, Olurin and Ebo, 2021). If these challenges could be overcome, it may be implying potentials for generating more tax revenue to serve as alternative to oil revenue.

V. Conclusion

This study evaluated the performances of taxation in total government revenue generation in Nigeria and its potentials as an alternative to dwindling oil and gas revenue accruing to Nigeria. Results from descriptive analysis of collected data for the study revealed that taxation has performed well on its contributions to total government revenue 2010-2022. Therefore, based on finding from the study, it could be concluded that taxation as the most viable source of revenue to empires,

civilizations and modern governments is playing a vital role on generation of total government revenue in Nigeria. Similarly, based on its revealed performances on total government revenue which averaged 55% over the thirteen years covered by the study, growing population, number of employed citizens, number of MSME's and corporations, it could be concluded that taxation could serve as an alternative to dwindling oil and gas revenue in Nigeria.

6. Recommendations

Based on the finding and conclusions of this study, it is recommended that government should heed to the call of experts that the era of oil boom is over and taxation is the most viable option at the disposal of government. Consequently, it is further recommended that government should review its National Tax Policy (NTP) with a view to attaining optimal taxation which may provide more sustainable public revenue. Likewise, it is recommended that government should put concerted efforts towards solving the myriads of problems and challenges of taxation in Nigeria to make it most effective, efficient, viable and sustainable.

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