International Journal of Business and Management Practices (IJBMP)
Vol.3, No.2, 2025: 101-112

Analysis of the Impact of Macroeconomic Components on the Realization of Tax Revenue in Nigeria

Onaolapo Adekunle Rahman[1], Raji Mojeed Gbolagade[2*]
[1]Ladoke Akintola University of Technology
[2]Polytechnic Ibadan

Correspondence Author: Raji Mojeed Gbolagade; raji_mojeed64@yahoo.com

A R T I C L E I N F O

Keywords: Inflation, Real Gross Domestic Product, Realization of Tax Revenue, Institutional Theory

Received : 2 February
Revised : 11 March
Accepted: 25 April

A B S T R A C T

This study investigates the impact of macroeconomic components (MCs) on tax revenue realization in Nigeria, using time series data covering the period from 1998 to 2023. The empirical techniques used in this study are descriptive and inferential statistics. The study shows that the F-statistic of the model is statistically significant (p-value = 0.0000), indicating that the overall regression model is a good model. RTR (-1) with p-value 0.0015< 0.05, which is significant and positively associated with realization tax revenue. The study therefore concluded that MCs have significant in influencing Nigeria's realization of tax revenue. The study therefore recommended that MCs should be central considerations in policy-making to optimize tax revenue realization in Nigeria

DOI: https://doi.org/10.59890/ijbmp.v3i2.6
E-ISSN: 3045-9252
https://journal.multitechpublisher.com/index.php/ijbmp

INTRODUCTION

Increases in economic productivity, employment, national income, growth rate, and GDP are examples of macroeconomic components (MCs), which are defined as external economic variability that stimulates a variety of economic agents. Public revenue can be derived through fiscal policies such as taxes which a government expends to finance social and welfare services and correspondingly to accomplish national macroeconomic objectives.

According to Arvin, Pradhan and Nasir (2021); Gurdal, Aydin and Inal (2021), Taxation is one of the economic instruments expended by governments to control the macroeconomic and realize revenue towards the aspiration of economic growth and social justice. Nigerian government in recent decades had employed suitable policy approach to invigorate its tax revenue. It has also embarked on broad tax reforms to encourage growth, thus enabling increase in the tax revenue to GDP by 1.2 percentage points from 6.7% in 2020 to 7.9% in 2021 (Revenue Statistics in Africa, 2024). When this is compared with the average for the 36 African Countries, there is an increased of 0.5 percentage points in the same period, and was 16.0% in 2022 (Revenue Statistics in Africa, 2024). In Nigeria, tax structure relate to the share of each tax to total tax revenue. In Nigeria, the corporate sector of the economy produced the largest percentage of tax revenue (47%). Non-tax revenues amount to 4.6% of GDP in the same period. This was less than the average non-tax revenue (6.2% of GDP) for the 36 African countries.

Thus, this study aims to investigate how macroeconomic factors affect Nigeria's tax revenue generation. The paper has complimentary two hypotheses stated in the null form below:

- Ho1: Real Gross Domestic Product (RGDP) has no appreciable effect on Nigeria's tax revenue generation.
- Ho2: Inflation (INF) has no significant impact on the realization of tax revenue in Nigeria.

The study aims to contribute to the growing area of research suitable economic and fiscal planning and also to which traced tax realization in developing countries to variation in Macroeconomic factors. Economic growth and development can be planned and maintained using this causal relationship if it is fully comprehended and articulated. The paper's introduction was given in this part. The paper's remaining sections are broken down into five sections: methodology, results and discussion, conclusion and suggestions, and review of related literature.

LITERATURE REVIEW

Review of related literature

This section discusses the Conceptual, Theoretical, Empirical review, as well as the gap in the existing literature.

1. **Conceptual Review**

   This section undertake the review of four basic concepts relevant to the study namely: Real Gross Domestic Product (RGDP) and Inflation (INF), The idea of taxes and the realization of tax income.

- **Real Gross Domestic Product (RGDP):** Real Gross Domestic Product (RGDP) is the prevailing measure of the value added created through the production of goods and services in a country during a certain period. As such, it also measures the income earned from that production, or total amount spent on final goods and services less imports. To calculate RGDP, it is necessary to discount the nominal GDP by a GDP deflator. Using the prices from that year, the nominal GDP of that year is calculated. The GDP deflator is a measure of the money price of all new, domestically produced, final goods and services in an economy in a year relative to the real value of them. It can be used as a measure of the value of money. It includes prices for businesses, the government, and private consumers. The GDP deflator essentially removes inflation from the equation and enable the researcher to compare the GDP of a recent year to the GDP of a target year (Ganti, 2025). According to Mashi (2014), RGDP rebasing might be posing a challenge for the nation's tax structure, requiring the revenue agency to foster its spirit in order to ensure that the ratio of revenue tax to RGDP is improved. There is a lot of work to be done, thus Federal Inland Revenue Services (FIRS) employees are advised to boost their efforts. The total tax to GDP ratio has decreased to around 12% as a result of the country's RGDP reduction, while the non-oil tax to RGDP ratio is now at roughly 4% (Revenue Statistics in Africa, 2024).
- **Inflation (INF):** Inflation is the steady rise in an economy's average price of goods and services over time. When prices generally increase, each unit of money may buy fewer goods and services. Since inflation affects every aspect of the economy, it has undoubtedly not done well for the economy. According to Samia, Alhammal, and Sohail (2016), inflation is defined as actual earnings that have an impact on economic growth. Similar to this, Omodero, Okafor, and Nmesirionye (2021) hypothesized that, in favorable circumstances, inflation can become an effective form of taxation and always has an impact on the ability to pay taxes. They also hypothesized that inflation is directly related to the realization of tax income. If the government intends to obtain a substantial amount of infrastructure amenities, the value of money will decrease due to the equivalent impacts of inflation and an increase in tax revenue (Somorin, 2011). Nonetheless, price increases are a natural byproduct of expansion.
- **Concept of Taxation:** Given that the government has a number of responsibilities to fulfill for the benefit of the people it oversees, these studies are seen as a requirement that each and every citizen must fulfill in order to stay up to date. Mirmohamadi et al. (2016) discovered that several nations, including Iran, have examined their tax reform framework.
- **Realization of Tax Revenue (RTR):** ICAN, (2021) validated that realization of tax revenue constitutes both direct and indirect taxes. For the Nigeria factor, the support of international standards on information exchange for tax purposes. ICAN (2021) further emphasized that, for

Federal Inland Revenue Services (FIRS) to have better access to information that it would hitherto, in its authority to act outside Nigerian Jurisdiction.

2. Theoretical Review

The theoretical review was institutional theory on work of Lima, Aguiar, & Lui, (2021); Howlett, Mukherjee, & Rayner, (2018) have been established in literature. Therefore, this study is hinged on institutional theory which have significance to it.

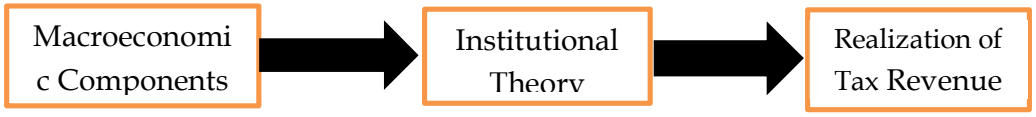

Figure 1. Theoretical Framework
Source: Researcher's Conceptualization (2025)

Institutional theory was developed by (DiMaggio and Powell 1983) for governmental integrity. Justification for using institutional theory to anchor this study premised on previous works of Lima, Aguiar, & Lui, (2021); Howlett, Mukherjee, & Rayner, (2018); from the previous works. This theory aids as a foundation for accepting the susceptibilities intrinsic in the government systems and the potential for tumbling breakdowns in governance. By draw attention to the interconnectedness and interdependence of institutional governance and realization of tax revenue, this theory give emphasis to the value of regulatory oversight.

One of the potencies of institutional theory is its ability to provide a framework for identifying and assessing systemic weaknesses. By analysing the various avenues through which institutional theory can transmit, regulators can develop mediations to mollify the likelihood and awfulness of bad governance. Stress testing, for example, allows control device to kindle hostile state of affairs and appraise the resilience of corruption, mis-management both in private and public sectors, thereby improving the general firmness of the system.

Williams and Krasniqi (2017) disagreed, arguing that unless formal institutions reform, tax revenue drive realization will remain unchanged. Therefore, in order to reduce public sector corruption and maintain the exceptional toughness of the formal institutions, it is necessary to improve them and make amends in the tax justice system.

3. Empirical Review

The real gross domestic product and inflation are macroeconomic factors that ffect the generation of tax income: Abdulwahab and David (2023) investigated how tax income affected Nigeria's economic development. The researchers used twenty-four (24) years of time series data, from 1998 to 2021. For this study, ex-post facto and correlational research designs were used. In order to examine the impact of independent variables including petroleum profit tax, corporate income tax, customs and excise duty, value-added tax, and education tax on the dependent variable, GDP, the study also used a fixed effects regression model. The study's conclusions showed that

Nigeria's GDP is positively and significantly impacted by the petroleum profit tax, customs and excise duty, value-added tax, and education tax. On the other hand, corporation income tax has a substantial and adverse impact on Nigeria's GDP.

Adefolake and Omodero (2022) examined the consequences of tax revenue on the GDP in Nigeria. Employed time series data from the year 2000 to 2021. Ex-post facto research design was adopted for their study. Secondary data obtained from the CBN statistical bulletin and published Federal Inland Revenue Statement. The study revealed that company income tax has a negative and significant influence on GDP.

Mukolu and Ogodor (2021) examined value-added tax on Gross Domestic Product in Nigeria. The scholars surveyed were from the year spanning 1994 to 2018. Secondary data were sourced from the CBN statistical bulletin as well as from Federal Inland Revenue Services (FIRS) and made use of Augmented Dickey-Fuller for analysis for their study. Findings from their study exhibited a positive significant influence of value-added tax on GDP.

The impact of tax income on GDP was studied by John and Dickson (2020). Both raw and adjusted GDP from 1984 to 2018 were used by the researchers. Petroleum profit tax was one of the factors that was used, and it was discovered to have a negative and negligible impact on adjusted GDP. On the other hand, value-added tax had a significant and beneficial impact, while corporation income tax had a significant and negative impact as well. Inflation had no effect on GDP, according to this study, while petroleum profit tax had a very small effect on GDP. In contrast, value-added tax and corporation income tax had a considerable but unfavorable impact on GDP.

Pyvavar, Sokolova, and Lyashenko (2023) investigated the connection between tax receipts and inflation. The study's main goal is to control the state's economic relations policy by utilizing its authority and a number of institutional structures. To get the results, the researchers employed a number of statistical techniques, including empirical data and comparative analysis. The study's conclusions confirmed the state's actions in the area of economic relations management.

Su, Khan, Tao, and Umar (2020) investigated how inflation affected Venezuela's economic activity. primarily to the economy, taking into account the impact of oil prices on inflation. The researchers show how the various elements relate to one another and conclude that considering the geopolitical potential is essential. The goal is to demonstrate that Venezuela's economy depends on oil and that the relationship between inflation and oil prices is tenable over the long term. It is believed that tax adjustments will maintain a manageable rate of inflation. Essentially, the researchers think about applying statistical analytic techniques like inference and generalization.

The scope of their studies were limited in terms of year coverage that is between 1-3years, variables scope, very few number of variables in most of the studies were used, methodologies in term of evaluation used for their studies were not robust enough, because most of the studies used simplified

method like percentage, Analysis of variance (ANOVA). Furthermore, geographically most of the studies were based on foreign and none of the studies talked about in Nigeria. These are the gaps in existing literature which the researcher tries to bridge in the current study. Therefore, the current study would like to improve upon on those gaps highlighted by using larger scope like twenty –five years, use more variables and use more robust methodology like vector autoregressive model and the current study would be based in Nigeria.

Figure 2 presents the conceptual framework of the inter-relationship among the variables used in the study. The summation of direct and indirect taxes represents the dependent variable while the two Macroeconomic Components stand for the explanatory variables.

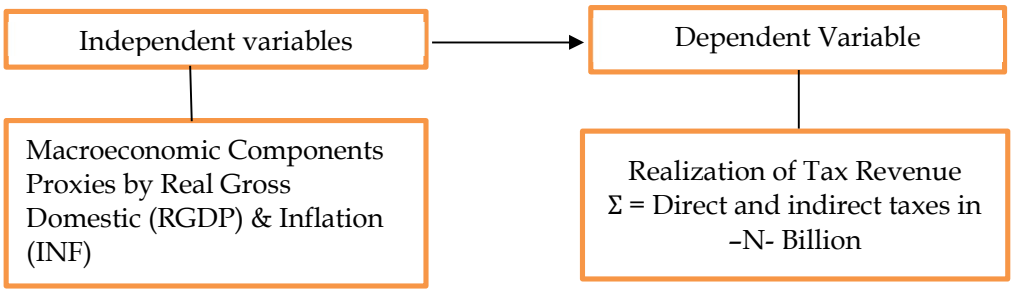

Figure 2. Conceptual Framework
Source: Researcher's Conceptualization, (2025).

METHODOLOGY

The ex-post facto research design used in this study refers to the utilization of secondary and historical data sources that are outside the researcher's control. The Federal Inland Revenue Service Annual Report and the Central Bank of Nigeria Annual Report served as the study's primary data sources. Descriptive statistics was used to assist the researcher in describing the intrinsic statistical behaviour of the time series. These include the following mean, median, minimum, maximum, standard deviation, skewness, kurtosis, and Jacque bera. Data analysis was subjected to various pre-diagnostic tests. Therefore, for the objective of the study, the researcher used Vector Autoregressive Estimates.

Model Specification

This study has adopted the Udah and Ayara (2014) with the modification. The initial model was specified as:

GDP =f (INQ, GCF, LAB, FDI, INF and FID).....1

Where:

GD = Gross Domestic Product
INQ = Institutional Quality
GCF = Gross Fixed Capital Formation
LAB = Labour Force Growth Rate
FDI = Foreign Direct Investment
INF = Inflation,
FID = Financial Development
μ = stochastic Error Term

t = Time.

The rationale for the adoption

Udah et.al (2014) model has been adopted with modifications by changing GDP to RGDP and taken away from the model is INF to form the current model stated below:

The econometric form of the model can be expressed as:

$$RTR_t = \alpha_o + \beta_1 RGDP_t + \beta_2 INF_t + \mu_t \ldots \ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

Where:

RTRt = Realization of Tax Revenue
MCs = Macroeconomic Components
RGDP = Real Gross Domestic Product
INF = Inflation
α = Constant
μt = Error Term
t = Time
β = Beta, β1, and β2, are the Beta coefficients of the regression equation.
Apriori Expectations Reject if β1 –β2 > < 0.05; otherwise do not reject.

RESULT

This part of the analysis arranges for a summary of the data set while an attempt is also made to describe the key features of the data. The table displays the mean, median, maximum, minimum, standard deviation, skewness, kurtosis, and Jarque Berra statistics of the series to determine the series suitable for running the vector autoregressive estimates established on the normality test governed by the P-value of the statistics.

Descriptive Statistics

As shown in Figure 1 below, the histogram and accompanying statistics provide an assessment of the residuals' distribution from the regression analysis. The histogram of residuals suggests a roughly symmetric distribution centred on zero, which aligns with the assumption of normally distributed residuals in a well-specified regression model. The mean of the residuals is near zero (8.78e-14), confirming that the residuals are unbiased. The skewness (-0.816661) indicates a slight left skew, but it is not extreme. The kurtosis (3.089405) is close to 3, suggesting the residuals have a shape similar to the normal distribution. The Jarque-Bera test statistic (2.898713) and its associated probability (0.234721) indicate no significant deviation from normality, as the p-value is greater than the conventional significance level of 0.05. The residuals' distribution supports the assumptions of normality and no severe misspecification in the model. This enhances confidence in the validity and reliability of the regression results and associated inferences about the relationship between macroeconomic factors and tax revenue realization in Nigeria.

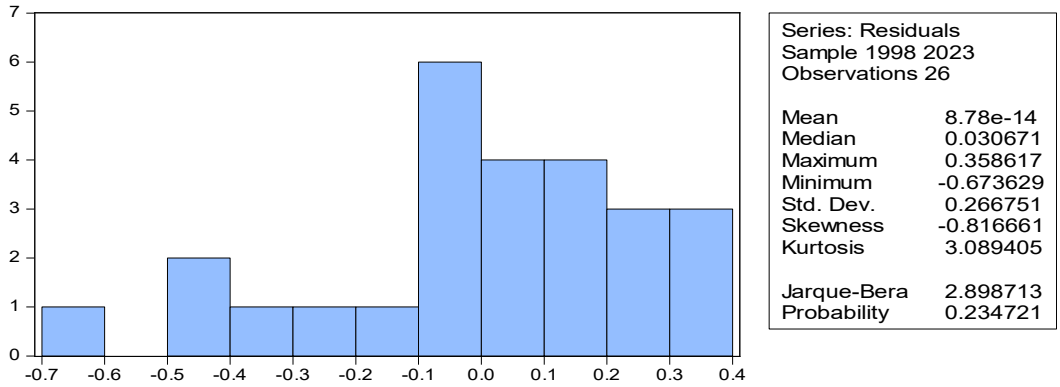

Figure 3. Test of Normality for Analysis of the Effects of MCs on the Realization of Tax Revenue

Source: Researcher's Computation, (2025)

As shown in the Table 1, the analysis examines the effects of various macroeconomic factors (MCs) on tax revenue realization in Nigeria. The results indicate a high explanatory power, with an R-squared value of 89.7%, suggesting that the included factors collectively explain a significant portion of the variations in tax revenue. The adjusted R-squared value (86.5%) confirms this robustness while accounting for the number of variables. The model's F-statistic is statistically significant (p-value = 0.0000), demonstrating that the overall regression model is a good fit. However, individual coefficients reveal mixed effects, with most variables showing statistically insignificant t-statistics and probabilities above the conventional threshold of 0.05. This suggests limited individual contributions of specific factors to tax revenue, except for RTR (-1), which is significant and positively associated with tax revenue realization. The Durbin-Watson statistic (1.99) indicates no severe autocorrelation issues in the residuals, reinforcing the reliability of the regression results. However, the standard error of regression and sum of squared residuals highlight some variability that may require further investigation. In summary, while the model effectively captures the overall relationship between the examined factors and tax revenue, the lack of individual significance for most variables suggests that broader structural or unobserved dynamics may influence tax revenue realization.

Table 1. Analysis of the Effects of MCs on the Realization of Tax Revenue in Nigeria

Variables	Coefficient	Std. Error	t-Statistic	Prob.
RTR(-1)	0.830825	0.223987	3.709261	0.0015
RTR(-2)	-0.133497	0.242668	-0.550123	0.5886
RGDP(-1)	-0.026189	0.244497	-0.107116	0.9158
RGDP(-2)	0.412195	0.502553	0.820203	0.4223
INF (-1)	0.002887	0.015032	0.192081	0.8497
INF (-2)	-0.001231	0.012058	-0.102096	0.9198
C(7)	-1.515225	3.304085	-0.458591	0.6517
R-squared	0.897168	Mean dependent var		8.570030

Adjusted R-squared	0.864695	S.D. dependent var	0.831846
S.E. of regression	0.305985	Akaike info criterion	0.694240
Sum squared resid	1.778905	Schwarz criterion	1.032959
Log likelihood	-2.025124	Hannan-Quinn criter.	0.791779
F-statistic	27.62796	Durbin-Watson stat	1.994436
Prob(F-statistic)	0.000000		

Source: Researcher's Computation, (2025)

Researcher further carried out diagnostic tests to justify the acceptability of the Model, such tests are tests of serial correlation and tests of heteroscedasticity to establish the validity and reliability of the Model are now presented as follows: The Breusch-Godfrey Serial Correlation LM Test determines whether the regression analysis's residuals show serial correlation, as indicated in Table 2. The F-statistic, which is above the conventional significance level of 0.05, is 12.34553, according to the results, with a corresponding probability value of 0.2005. With a probability value of 0.3045 and an observed R-squared statistic of 15.39821, both values are above 0.05. The null hypothesis that there is no serial association cannot be disproved because both p-values are greater than the 0.05 cutoff. This suggests that the regression findings are trustworthy and unaffected by autocorrelation because there is no discernible evidence of serial correlation in the model's residuals.

Table 2. Breusch-Godfrey Serial Correlation LM Test for Analysis of the Effects of MCs on the Realization of Tax Revenue in Nigeria.

F-statistic	12.34553	Prob. F(2,9)	0.2005
Obs*R-squared	15.39821	Prob. Chi-Square(2)	0.3045

Source: Researcher's Computation, 2025

As shown in Table 3 below, the Breusch-Pagan-Godfrey test evaluates whether heteroskedasticity (non-constant variance of the residuals) exists in the regression model. The results show that the p-values for the F-statistic, observed R-squared, and scaled explained sum of squares are all above the conventional 0.05 significance level. This indicates that the null hypothesis of homoskedasticity cannot be rejected. In practical terms, the absence of significant heteroskedasticity suggests that the variability of the residuals is constant across observations, supporting the validity of the model's inferences. This stability enhances the reliability of the estimated coefficients and their associated statistical tests.

Table 3. Heteroskedasticity Test: Breusch-Pagan-Godfrey for Analysis of the Effects of MCs on the Realization of Tax Revenue in Nigeria.

F-statistic	1.252819	Prob. F(6,19)	0.3245
Obs*R-squared	7.370380	Prob. Chi-Square(6)	0.2879
Scaled explained SS	4.111904	Prob. Chi-Square(6)	0.6615

Source: Researcher's Computation, 2025

DISCUSSION

Research conducted by Ihuarulam, Sanusi, and Oderinde (2021) was found to be consistent with the current study. As their results revealed that inflation is positively related to tax revenue, also, Gross Domestic Product is positively related to tax revenue.

Another study conducted by Odunsi, Egwahke, and Akinlabi (2018) revealed that inflation has a negative effect on tax revenue performance but was not significant. But in harmony, some studies indicate that there is a positive effect of inflation on tax revenue performance. This aligns with Samia, Alhammali, and Sohai (2016); and Daniel, Israel, Chidubem, and Quansah (2021).

In line with Onakoya, Afintinni, and Oyeyemi, (2017), their results are contrary to the researcher's expectations as their study revealed that inflation, interest rate, and trade openness had a short-run relationship with tax revenue, unlike exchange rate and unemployment. All variables apart from the exchange rate were positively related to the dependent variable in Sub-Saharan African countries. Similarly, Amouzou, Dzoagbe, & Ayivi, (2019) also have contrary to the researcher's expectations as their study revealed that all the macroeconomic variables such as tax rate, per capita GDP, and Trade openness are positively correlated with tax revenue

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that MCs have pivotal in influencing Nigeria's realization of tax revenue. Although the regression models show strong explanatory power, the variation in the significance of individual predictors suggests that certain factors within MCs have a more substantial impact than others. This necessitates a targeted approach to isolate and enhance the influence of the most critical factors. The findings affirm that MCs should be central considerations in policy-making to optimize tax revenue realization in Nigeria..

REFERENCES

Abdulwahab, A. I., & David, R. (2023). Does tax revenue enhance economic growth in African? Journal of Management and Business Research, 10(1), 47-57.

Adefolake, A. O., & Omodero, C. O. (2022). Tax revenue and economic growth in Nigeria. Cogent Business & Management, 9(1), 1–19.

Amouzou, E. K., Dzoagbe, N. E. K., & Ayivi, W. (2019). Impact of macroeconomic and institutional factors on tax revenue: New evidence from Togo. International Journal of Economics, Commerce and Management, VII (12), 41-53.

Arvin, M. B., Pradhan, R. P., & Nair, M. S. (2021). Are there links between institutional quality, government expenditure, tax revenue, and economic growth: Evidence from low-income and lower-middle-income countries? Economic Analysis Policy, 70, 468-489.

Central Bank of Nigeria Annual Reports and Statistical Bulletin, (2022).

Daniel, S. U., Israel, V. C., Chidubem, C.B., & Quansah, J. (2021). Relationship between inflation and unemployment: Testing Phillip Curve Hypotheses and investigating the causes of inflation and unemployment in Nigeria. Tracktoria Nauki Path of Science, 7(9), 1013-1027.

DiMaggio, P., & Powell, W.W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. American Sociological Review, 48(2), 147-60.

Ganti, A. (2025). Real Gross Domestic Product. How to calculate it Vs. Nominal. Available online at http//www.investopedia. Retrieved on January 28, 2025.

Gurdal, T., Aydin, M., & Inal, V. (2021). The relationship between tax revenue, government expenditure and economic growth in G7 countries: New evidence from time and frequency domain approaches. Economic Change and Restructuring, 54(2), 305-337.

Howlett, M., Mukherjee, I., & Rayne, J. (2018). Understanding Policy Designs Over Time. In Routledge Handbook of Policy Design, edited by M. Howlett. London: Routledge.

Institute of Chartered Accountants of Nigeria (ICAN) (2021). Advanced Taxation Study Text. Published by Institute of Chartered Accountants of Nigeria, Lagos: Nigeria. ISBN 978-978-57010- 0-5.

Ihuarulam, G. I., Sanusi, G. P., & Oderinde, L. O. (2021). Macroeconomic determinants of tax revenue in Economic Community of West Africa State. The European

John, O. A., & Dickson, O, E. (2020). Tax revenue and economic growth in Nigeria. Journal of Taxation and Economic Development, 19(1), 15–34.

Lima, L. L., R. B. Aguiar, and L. Lui. (2021). Connecting problems, solutions, and expectations: Mapping the policy design literature. Brazilian Journal of Political Science, 36: 1–41.

Mashi, A. L. (2014). Tax administration and economic performance: An overview. The Economic Journal, 12(9), 114-131.

Mirmohammadi, S. M., & Jannati, N. (2016). Investigation of the statute of the tax system from 2005- 2015 in Iran. Journal of Engineering and Applied Sciences, 11(14), 3248-3253.

Mukolu, M, O., & Ogodor, B, N. (2021). The effect of value added tax on economic growth of Nigeria. IAR Journal of Business Management, 2(1), 203–210.

Nigerian Bureau of Statistics Report, (2024).

Odunsi, K. O., Egwakhe, J. A., & Akinlabi, H. B. (2018). Macroeconomics dynamics and tax revenue performance. International Journal of Research Science and Management, 5(11), 39-50.

Omodero, C. O., Okafor, M. C.., & Nmesirionye, J. A (2021). Personal income tax revenue and Nigeria's aggregate earnings. Universal Journal of Accounting and Finance 9(4): 783-789.

Onakoya, B.A., Afintinni, O.I., and Oyeyemi, G.O. (2017). Taxation and revenue growth in Africa. Journal of Accounting and Taxation. 9, 11-22. DOI: 10.5897/JAT2016.0236 ID.56461882.

Pyvavar, I., Sokolova, N., Lyashenko, V., (2023). Estimating the relationship between inflation and tax revenues in selected European Countries: Austria, Germany, France, United Kingdom, and Italy. International Journal of Academic Accounting, Finance & Management Research, 7(4), 55-62.

Revenue Statistics in Africa (2024).OECD Publishing, Paris Available at https://oecd/revenue-statistics-in-africa-2024

Samia, M.M., & Sohail, A. (2016). The impact of trade liberalization on tax revenue: A case study on Libya economy from 1982-2012. Australian Journal of Basic and Applied Sciences, 10(4), 132-136.

Somorin, A. V. (2011). Taxation and economic expansion: A sensitivity analysis. Journal of Economics and Business, 4(3), 71-88.

Su, C. W., K. Khan K., Tao, R., & Umar, M. (2020). A review of resource curse burden on inflation in Venezuela. Energy, 20(4), 117-925.

Udah, E. B., & Ayara, N. (2014). Institutional, governance and economics performance nexus in Nigeria. Journal of Economics and Sustainable Development, 5(3), 2222-2855.