**Effect of Tax Revenue on Expenditure Allocation of Government Sectors in Southwest State, Nigeria**

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**Abstract**

Taxation has been recognized as exerting a significant influence on government expenditures, which constitute a fundamental component of an economy, particularly in numerous developing and underdeveloped nations. Taxes stand out as the primary source of funding for government expenditures. The extent to which tax revenue affect expenditure allocation of government sectors in southwest state, has remained a subject of concern in the Nigerian context. Therefore the study examines the effect of tax revenue on expenditure allocation of government sectors in southwest state, Nigeria. The research design employed in this study is ex-post facto, and data were obtained from audited annual financial reports and budgets of the southwestern states governments spanning a period of forty years, from 1982 to 2022. The study encompassed all six states within the southwest region of Nigeria. Both descriptive and inferential statistical techniques were utilized for analysis. Descriptive statistics, such as minimum, maximum, mean, and standard deviation values, were computed. Variance Decomposition Analysis (VDA) and Impulse Response Function (IRF), integral components of time series regression analysis, were employed to assess all study variables at a significance level of 5%. Regression analysis was conducted to investigate the impact of tax revenue on the allocation of government expenditures across various sectors in the southwest states of Nigeria. The study concluded that there is significant relationship between revenue and expenditure profile of state governments in southwest states, Nigeria. The study therefore recommended that government should explore avenues to diversify revenue sources beyond taxes.

**Keyword:** Tax Revenue, Expenditure, Allocation, Government, Southwest State, Nigeria

**1.0 Introduction**

Taxation had been said to have an impact on government expenditures, which is the main element of an economy in many developing and underdeveloped countries. The most important source of finance for government expenditures is taxes (Gurdal, Aydin &Inal, 2020). Many theoretical studies exist on the relationship between government expenditure and taxes. Toward the end of the nineteenth century, the German political theorist Adolph Wagner designed Wagner’s Law, which says that, by law, the size of the government sector in an economy increases in line with per capita income increases (Baer &Galvão, 2008). The steady upward trend in government expenditures, which has been seen in almost all countries and has become almost a universal situation, also necessitates the financing of these expenditures. The most important sources of funding are taxes and debt, but because borrowing has an additional cost, it lags behind taxes in order of preference.

A tax is a compulsory charge or some other type of levy imposed upon taxpayers (an individual or legal entity) by the government of a nation in order to fund various public expenditures (Craig, Adetola&Maminu, 2020). Taxes are levied in almost every country of the world, used to raise fund for government expenditures. It is an instrument the government uses to measure, assess and control the informal sector that dominates developing economies of the world (Okwara&Amori, 2017). Tax is one of the major sources of government revenue. The study of the teachings of Christianity, Islamic and other prominent religions in the world shows that tax is a religious duty based on social and civil responsibilities (Bala, Enoch and Yakubu, 2018).

Tax revenue mobilization as a source of financing developmental activities in less developed economies has been a difficult issue primarily because of various forms of resistance, such as evasion, avoidance corrupt practices attending to it (Oluba, 2008). These activities are considered as sabotaging the economy and are readily presented as reasons for the underdevelopment of the states. Tax system in States such as Osun state is characterized by evasion and avoidance; both which significantly reduce the supposed income to the government through tax and as such, the financial capacity of the State to embark on the infrastructural development could be hindered. Also, there is widespread false declaration of profit by the few available tax payers in an attempt to reduce their tax payment. Many petty traders do not maintain adequate record that could assist in establishing accurately, their incomes for the purpose of determining tax. All these myriads of problems have implications on the infrastructural development in the State (Ajiteru, Adaranijo& Bakare, 2018). The study therefore examines the effect of tax revenue on expenditure allocation of government sectors in southwest state, Nigeria

**2.0 Literature review**

**Concept of Taxation**

Tax is a mandatory levy enforced by the government which includes federal, state and local government, on the assets, goods, services, and incomes of taxpayers (Chigbu, Akujobi&Appah, 2012). Taxation is a tool employed by the government of a nation for generating public funds. It is a required payment imposed by the government on the income, profit or wealth of individuals, group of persons, and corporate organizations (Efuntade, et. al., 2020). Payment of taxes is a legal obligation and a necessary duty, imposed by the government on individuals and corporations to fund its operations, run public utilities and perform other social responsibilities (Akinleye, Olaoye and Ogunmakin, 2019). This makes tax to be the primary source of revenue for the government. Tax is a method of enforcing necessary levies on all assets, goods, services, and incomes of individuals, firms, businesses, companies, corporations, etc. by the government.

According to Brautigam, (2018), a well-designed tax system can help governments in developing  
countries prioritize their spending, build stable institutions, and improve democratic accountability. Lopez and Kadar (2021) posit that taxation among Organisation for Economic Development Countries (OEDC) had uniformly been geared towards efficiency, increased tax revenue, equity and enforceability.

**The Nature and Scope of Taxation**

Taxation is a compulsory but non-penal levy by the government through its agent on the profits, income, or consumption of its subjects or citizens. It is also viewed as a compulsory and obligatory contribution made by individuals and organization towards defraying the expenditure of government (Akinleyeet al., 2018). Kotler (1975) posits that it is a charge levied by the government on the income or wealth of a person or corporate organization for the common benefit of all. The term does not include specific charges made against a particular person or properties for current or permanent benefits and privileges accruing only to those paying such charges.

Similarly, Ogundele (2019) defines taxation as the transfer of real economic resources from private sector to the public sector to finance public sector activities. It may be inferred from the foregoing that taxation is the transfer of financial resources from private economic agents like households and corporate bodies, to the public sector to finance the development of the society. Going by the definition of taxation, Nzotta (2017) identified four key issues which must be understood for taxation to play its functions in any society.

First, a tax is a compulsory contribution made by the citizens to the government and this contribution is for general common use. Secondly, a tax imposes a general obligation on the tax payer. Thirdly, there is a presumption that the contribution to the public revenue made by the tax payer may not be equivalent to the benefits received. Finally, a tax is not imposed on a citizen by the government because it has rendered specific services to him or his family. Thus, it is evident that a good tax structure plays a multiple role in the process of economic development of any nation which Nigeria is not an exception (Appah, 2020).

**Objectives of Taxation**

The main purpose of tax is to raise revenue to meet government expenditure and to redistribute wealth and management of the economy (Ola, 2018; Jhingan, 2019; Bhartia, 2020). Anyanwu (1993) pointed out that there are three basic objectives of taxation. These are to raise revenue for the government, to regulate the economy and economic activities and to control income and employment. Also, Nzotta (2017) noted that taxes generally have allocation, distributional and stabilization functions. The allocation function of taxes entails the determination of the pattern of production, the goods that should be produced, who produces them, the relationship between the private and public sectors and the point of social balance between the two sectors.

The distribution function of taxes relates to the manner in which the effective demand over economic goods is divided, among individuals in the society. According to Musgrave and Musgrave (2006), the distribution function deals with the distribution of income and wealth to ensure conformity with what society considers a fair or just state of distribution. The stabilization function of taxes seeks to attain high level of employment, a reasonable level of price stability, an appropriate rate of economic growth, with allowances for effects on trade and on the balance of payments.

Nwezeaku (2005) argues that the scope of these functions depends, inter alia, on the political and economic orientation of the people, their needs and aspirations as well as their willingness to pay tax. Thus the extents to which a government can perform its functions depend largely on the ability to design tax plans and administration as well as the willingness and patriotism of the governed Tax is discriminatory in the sense that it is assessed on persons or property based on profits/incomes or gain, the benefit derived by citizens from tax payment is without reference to the contribution of individual tax payers (Angahar and Sani, 2020).

In line with this, Al-Fawwaz(2016) posits that it is accurate to say that the primary objective and purpose of taxation in most nations of the world is essentially to generate revenue for government expenditure on social welfare such as provision of defence, law and order, health services and education. Tax revenue can also be expended on capital projects otherwise called consumer expenditure, creating social and economic infrastructure which will improve the social life of the people (Angaharand Alfred, 2012). Other than facilitating the administrative function of government, taxation as the most potential source of revenue to the government of any nation, has played very crucial roles as an instrument of government’s economic, social and fiscal policy. Taxation is used for the purpose of discouraging certain forms of anti-social behaviour in the society.

**Government expenditure**

Government spending or expenditure includes all government consumption, investment, and transfer payments. In national income accounting, the acquisition by governments of goods and services for current use, to directly satisfy the individual or collective needs of the community, is classed as government final consumption expenditure (Abata, 2014). Government acquisition of goods and services intended to create future benefits, such as infrastructure investment or research spending, is classed as government investment (government gross capital formation). These two types of government spending, on final consumption and on gross capital formation, together constitute one of the major components of gross domestic product (Abiola, 2014).

Government spending can be financed by government borrowing, taxes, custom duties, the sale or lease of natural resources, and various fees like national park entry fees or licensing fees. When Governments choose to borrow money, they have to pay interest on the money borrowed. Changes in government spending is a major component of fiscal policy used to stabilize the macroeconomic business cycle. Government spending can be a useful economic policy tool for governments (Adah, 2012). Fiscal policy can be defined as the use of government spending and/or taxation as a mechanism to influence an economy. There are two types of fiscal policy: expansionary fiscal policy, and contractionary fiscal policy. Expansionary fiscal policy is an increase in government spending or a decrease in taxation, while contractionary fiscal policy is a decrease in government spending or an increase in taxes.

**Empirical Review**

Adegbite (2017) examined the effect of revenue allocation on expenditure in Oyo state. It also analyzed the significant components of revenue allocation on expenditure in Oyo state. Data were obtained from approved budgets of the Oyo State government from 1990 to 2015. Pearson product moment correlation and multiple regressions were employed to analyze the relationship between the dependent variable(Revenue Generation in Oyo State) and independent variables (Pay as You Earn(PAYE), Capital Gain Tax, Road Tax, and Other Taxes (Stamp duties, Betting and Gaming Taxes, Business Premises and registration levies, Development levies and Market fees). Findings show that there is a positive significant effect of Pay as You Earn (PAYE) on Government Revenue in Oyo state (β = .1393567; p ≤ 0.05). All other variables have positive significant effect on Government Revenue in Oyo state with the exception of Capital gain tax which has negative effect on Government Revenue in Oyo state with the adjusted R2 @ 96.4%. In conclusion, Personal income tax impacted Government Revenue positively, strongly, significantly and statistically in Oyo State. It is now recommended that Oyo state government should look inward on how more internal revenue will be generated extensively in the state in order to achieve micro-objectives of the government, and to eradicate the paucity of government revenue.

Tyoakosu and Awuhe (2017) examined the income profile of Benue State Government and assessed the impact of personal income tax on the internally generated revenue accruable to the state. Adopting the ex-post facto research design, secondary data was obtained from Benue State Board of Internal Revenue Service (BIRS) from 2007 to 2016 and analyzed using descriptive statistics, correlation and ordinary least square multiple regression technique. The study found that pay-as-you-earn has significant positive contribution to internally generated revenue in Benue state while direct assessment has insignificant negative contribution to internally generated revenue in the state over the study period. It was recommended among others, that the tax authority and government of Benue state should conduct a thorough census and aggressive registration of the self-employed in order to drag them into the tax net of the state to further enhance tax revenues accruing to the state through direct assessment.

Bala, Enoch and Yakubu (2018) examined the problems of revenue allocation on expenditure in Gombe state. The methodology used in data collection is survey, which utilized both primary and secondary types of data. Purposive sampling technique was adopted in selecting a sample of 150 respondents from both employees of state board of internal revenue service and taxpayers in the state. The chi square statistics test was used in testing the hypotheses. The study found that tax avoidance/evasion and complete absences of information technology are serious problems affecting revenue generation in the state. It recommends that government should device strict measures in dealing and punishing individuals engage in tax avoidance and evasion. It should also employ the use of information technology as it is the only way problems experience in personal income tax collection can be reduced drastically

**3.0 Methodology**

The research design employed in this study is ex-post facto, and data were obtained from audited annual financial reports and budgets of the southwestern states governments spanning a period of forty years, from 1982 to 2022. The study encompassed all six states within the southwest region of Nigeria. Both descriptive and inferential statistical techniques were utilized for analysis. Descriptive statistics, such as minimum, maximum, mean, and standard deviation values, were computed. Variance Decomposition Analysis (VDA) and Impulse Response Function (IRF), integral components of time series regression analysis, were employed to assess all study variables at a significance level of 5%. Regression analysis was conducted to investigate the impact of tax revenue on the allocation of government expenditures across various sectors in the southwest states of Nigeria.

**4.0 Results and Discussion**

**Short-run regression analysis of the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria**

In Table 1, the short-run result indicates that the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria which is statistically significant at 1 percent level of significance. This signifies that ceteris paribus a 1 percent increase in the Income Tax (INT) will cause a decrease in the expenditure profile of governments in southwestern states by 5.7 percent. In the same vein, the result also shows that the Property Tax (PRT) has an effect on the expenditure profile of governments in southwestern states which is significant at 1 percent level. It implies that ceteris paribus, 1 percent unit increase in Property Tax (PRT) will bring about 1 percent increase in the expenditure profile of governments in southwestern states. The result in the analysis as shown in Table 1 also revealed that Company Tax (COT) affect the expenditure profile of governments in southwestern states which is statistically significant at 1 percent level of significance. This signifies that ceteris paribus a 1 percent increase in the Company Tax (COT) will cause an increase in the expenditure profile of governments in southwestern states by 0.4 percent. In the same Table 1, the result also shows that the Royalties (ROY) has a positive effect on the expenditure profile of governments in southwestern states which is significant at 1 percent level. It implies that ceteris paribus, 1 percent unit increase in Royalties (ROY) will bring about 0.06 percent increases in the expenditure profile of governments in southwestern states.

The general model of the equation is presented in equation 1 below:

IGT= 10.423704-5.780878INT+1.002280PRT+1.002280COT+0.068674ROY…… eqn (1)

The result of the short-run implies that four of the four explanatory variables INT, PRT, COT and ROY were significant in explaining variation in the expenditure profile of governments in southwestern states with p values of (0.0048, 0.0754, 0.0000 and 0.0131) but INT shows a negative coefficient of (-5.780878).

Findings based on the result obtained indicate that R-square= 0.8109, which implies that approximately 81% of the variation in the dependent variable (expenditure profile of governments in southwestern states) is caused by the explanatory variables included in the model and remained robust after adjusting for degree of freedom. Moreover, the explanatory variables are jointly significant at 5% level. The F-statistics of 25.48340measures fitness of the model indicates that the model is fit for analysis and prob F-statistics (0.000000) indicated a joint significant between the sampled variables.

**TABLE 1 Short-run regression analysis of the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 10.423704 | 4797455. | 2.172765 | 0.0308 |
| INT | -5.780878 | 203037.9 | -2.847191 | 0.0048 |
| PRT | 1.002280 | 56126.88 | 1.785740 | 0.0754 |
| COT | 0.450077 | 0.014429 | 31.19262 | 0.0000 |
| ROY | 0.068674 | 0.027459 | 2.500961 | 0.0131 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.810971 | Mean dependent var | | 59244564 |
| Adjusted R-squared | 0.807833 | S.D. dependent var | | 92264028 |
| S.E. of regression | 40445633 | Akaike info criterion | | 37.88893 |
| Sum squared resid | 3.94E+17 | Schwarz criterion | | 37.96018 |
| Log likelihood | -4655.339 | Hannan-Quinn criter. | | 37.91762 |
| F-statistic | 25.48340 | Durbin-Watson stat | | 1.285247 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Source: Researcher’s Computation, 2023

**Long-run regression analysis of the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria**

In Table 2, the long-run result indicates that the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria which is statistically significant at 1 percent level of significance. This signifies that ceteris paribus a 1 percent increase in the Income Tax (INT) will cause a decrease in the expenditure profile of governments in southwestern states by 6.5 percent. In the same vein, the result also shows that the Property Tax (PRT) has an effect on the expenditure profile of governments in southwestern states which is significant at 1 percent level. It implies that ceteris paribus, 1 percent unit increase in Property Tax (PRT) will bring about 1.4 percent increase in the expenditure profile of governments in southwestern states. The result in the analysis as shown in Table 2 also revealed that Company Tax (COT) affect the expenditure profile of governments in southwestern states which is statistically significant at 1 percent level of significance. This signifies that ceteris paribus a 1 percent increase in the Company Tax (COT) will cause an increase in the expenditure profile of governments in southwestern states by 0.4 percent. In the same Table 2, the result also shows that the Royalties (ROY) has a positive effect on the expenditure profile of governments in southwestern states which is significant at 1 percent level. It implies that ceteris paribus, 1 percent unit increase in Royalties (ROY) will bring about 0.06 percent increases in the expenditure profile of governments in southwestern states.

The general model of the equation is presented in equation 4.1 below:

IGT= -6.547174+1.436842INT+0.471193PRT+0.060986COT+9.200429ROY…… eqn (2)

The result of the long-run implies that three of the four explanatory variables INT, COT and ROY were significant in explaining variation in the expenditure profile of governments in southwestern states with p values of (0.0327 and 0.0000) but INT shows a negative coefficient of (-6.547174).

**TABLE 2 Long-run regression analysis of the combined effect of tax revenue on expenditure allocation of government sectors in southwestern states, Nigeria**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| INT | -6.547174 | 30469833 | -2.148724 | 0.0327 |
| PRT | 1.436842 | 20724275 | 0.717007 | 0.4741 |
| COT | 0.471193 | 0.024777 | 19.017746 | 0.0000 |
| ROY | 0.060986 | 0.042552 | 1.433214 | 0.1532 |
| C | 9.200429 | 7.289224 | 1.263271 | 0.2078 |
|  |  |  |  |  |
|  |  |  |  |  |

**Result and Variance Decomposition Analysis (VDA) of the combined effect of tax revenue on expenditure allocation of government sectors in southwest states, Nigeria**

Statistically speaking, while impulse response function (IRF) traces the effects of a change to another endogenous variable in the VAR environment, Variance Decomposition Analysis (VDA) separates the variations in an endogenous variable into the component shocks in the model. Fitly, the variance decomposition analysis provides information about the relative relevance of each of the random innovations affecting the variables in the VAR model.

**Variance Decomposition Analysis (VDA) of Inter-government transfer (IGT)**

The variance decomposition analysis results for the selected variables (IGT, PRT, INT, COT and ROY) over a 10 year horizon are presented in Table 3, the results divulge that Inter-government transfer (IGT)of state governments in southwest states variable was 100 percent explained by its own shock in the first year, but it slowly reduces to 92 percent in the long-run (i.e. the 10th year). Other complementary results show that PRT have 0.5 percent, the INT has a total of 0.6 percent, the COT has a total of 5 percent and lastly the ROY has 0.7 percent report for the fluctuations in the Inter-government transferof state governments in southwestern states in the long-run (i.e. the 10th year).

**TABLE 3: Variance Decomposition Analysis (VDA) of Inter-government transfer (IGT)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period** | **S.E.** | **IGT** | **INT** | **PRT** | **COT** | **ROY** |
| 1 | 71252991 | **100.0000** | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| 2 | 88836889 | **94.10162** | 0.000690 | 0.428685 | 5.468193 | 0.000807 |
| 3 | 93076084 | **93.40883** | 0.157735 | 0.526958 | 5.905738 | 0.000736 |
| 4 | 93991359 | **93.06573** | 0.342480 | 0.665417 | 5.812261 | 0.114108 |
| 5 | 94325833 | **92.72322** | 0.414118 | 0.688744 | 5.851995 | 0.321924 |
| 6 | 94466888 | **92.48253** | 0.466200 | 0.688026 | 5.888526 | 0.474722 |
| 7 | 94549200 | **92.32184** | 0.502391 | 0.690363 | 5.908376 | 0.577025 |
| 8 | 94596418 | **92.23073** | 0.523041 | 0.691030 | 5.913074 | 0.642123 |
| 9 | 94622319 | **92.18146** | 0.533977 | 0.691055 | 5.911967 | 0.681539 |
| 10 | 94637012 | **92.15361** | 0.539579 | 0.690875 | 5.910369 | 0.705571 |

Source: Researcher’s Computation, 2023

**Variance Decomposition Analysis (VDA) of Income Tax (INT)**

Furthermore, the VDA of Income Tax (INT) also was 99 percent in the first year but gradually reduce to 97 percent in the long-run while other variables have 0.1 percent, 1 percent, 0.2 percent and 0.8 percent for, IGT, PRT, COT and ROY respectively.

**TABLE 4: Variance Decomposition Analysis (VDA) of Income Tax (INT)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Period** | **S.E.** | **IGT** | **INT** | **PRT** | **COT** | **ROY** | |
| 1 | 7.581204 | 0.019835 | **99.98016** | 0.000000 | 0.000000 | 0.000000 |
| 2 | 9.810872 | 0.056977 | **98.43935** | 0.495975 | 0.122908 | 0.884786 |
| 3 | 11.07393 | 0.046458 | **97.87523** | 0.926791 | 0.177612 | 0.973910 |
| 4 | 11.83560 | 0.060803 | **97.51038** | 1.232864 | 0.233027 | 0.962931 |
| 5 | 12.31635 | 0.080629 | **97.33021** | 1.393646 | 0.267106 | 0.928410 |
| 6 | 12.62829 | 0.095241 | **97.23344** | 1.493726 | 0.280857 | 0.896737 |
| 7 | 12.83312 | 0.105422 | **97.18171** | 1.554526 | 0.286006 | 0.872333 |
| 8 | 12.96913 | 0.112391 | **97.15469** | 1.590137 | 0.288068 | 0.854715 |
| 9 | 13.06036 | 0.117238 | **97.13958** | 1.611371 | 0.288978 | 0.842832 |
| 10 | 13.12204 | 0.120770 | **97.12977** | 1.624498 | 0.289480 | 0.835482 |

Source: Researcher’s Computation, 2023

**Variance Decomposition Analysis (VDA) of Property Tax (INT)**

Furthermore, the VDA of Property Tax (INT)also was 98 percent in the first year but gradually reduce to 92 percent in the long-run while other variables have 3 percent, 0.7 percent, 3 percent and 0.2 percent for, IGT, INT, COT and ROY respectively.

**TABLE 5: Variance Decomposition Analysis (VDA) of Property Tax (INT)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Period** | **S.E.** | **IGT** | **INT** | **PRT** | **COT** | **ROY** | |
| 1 | 46.46385 | 1.452539 | 0.200561 | **98.34690** | 0.000000 | 0.000000 |
| 2 | 47.72760 | 3.545987 | 0.357531 | **93.25729** | 2.815091 | 0.024098 |
| 3 | 47.79959 | 3.548437 | 0.634952 | **92.98312** | 2.806951 | 0.026537 |
| 4 | 47.92358 | 3.588619 | 0.707597 | **92.61478** | 2.978271 | 0.110734 |
| 5 | 47.95855 | 3.604997 | 0.732421 | **92.48229** | 3.013797 | 0.166499 |
| 6 | 47.97464 | 3.616926 | 0.752741 | **92.42481** | 3.017473 | 0.188046 |
| 7 | 47.98274 | 3.622812 | 0.766768 | **92.39416** | 3.017710 | 0.198546 |
| 8 | 47.98640 | 3.624049 | 0.774314 | **92.38008** | 3.017267 | 0.204286 |
| 9 | 47.98830 | 3.624084 | 0.778537 | **92.37287** | 3.017145 | 0.207368 |
| 10 | 47.98941 | 3.623974 | 0.780993 | **92.36869** | 3.017131 | 0.209208 |

Source: Researcher’s Computation, 2023

**Variance Decomposition Analysis (VDA) of Corporate Tax (COT)**

Furthermore, the VDA of Corporate Tax (COT)also was 98 percent in the first year but gradually reduce to 86 percent in the long-run while other variables have 5 percent, 1 percent, 1 percent and 1 percent for, IGT, INT, PRT and ROY respectively.

**Variance Decomposition Analysis (VDA) of Corporate Tax (COT)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Period** | **S.E.** | **IGT** | **INT** | **PRT** | **COT** | **ROY** | |
| 1 | 1.38E+08 | 3.34895 | 0.195653 | 0.147024 | 98.30838 | 0.000000 |
| 2 | 1.74E+08 | 7.75126 | 0.705289 | 0.310713 | 91.18878 | 0.043963 |
| 3 | 1.83E+08 | 7.55507 | 1.255786 | 0.862239 | 90.23598 | 0.090918 |
| 4 | 1.86E+08 | 7.09420 | 1.542035 | 1.530794 | 89.38210 | 0.450867 |
| 5 | 1.87E+08 | 6.68892 | 1.689605 | 1.630450 | 89.08630 | 0.904722 |
| 6 | 1.88E+08 | 6.34050 | 1.786764 | 1.627604 | 88.96982 | 1.275313 |
| 7 | 1.88E+08 | 6.09645 | 1.841632 | 1.621594 | 88.89727 | 1.543054 |
| 8 | 1.88E+08 | 5.94937 | 1.868717 | 1.618065 | 88.84378 | 1.720073 |
| 9 | 1.88E+08 | 5.86357 | 1.880960 | 1.615970 | 88.80707 | 1.832424 |
| 10 | 1.89E+08 | 5.81195 | 1.885712 | 1.614621 | 86.78349 | 1.904224 |

Source: Researcher’s Computation, 2023

**Variance Decomposition Analysis (VDA) of Royalty Tax (ROY)**

Furthermore, the VDA of Royalty Tax (ROY)also was 98 percent in the first year but gradually reduce to 86 percent in the long-run while other variables have 5 percent, 1 percent, 1 percent and 1 percent for, IGT, INT, PRT and ROY respectively.

**TABLE 7: Variance Decomposition Analysis (VDA) of Royalty Tax (ROY)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Period** | **S.E.** | **IGT** | **INT** | **PRT** | **COT** | **ROY** | |
| 1 | 51066271 | 1.191257 | 0.274246 | 0.170356 | 0.775117 | **97.58902** |
| 2 | 66862533 | 1.641680 | 0.331241 | 0.252378 | 0.515098 | **97.25960** |
| 3 | 76493702 | 1.916874 | 0.266581 | 0.324087 | 0.393922 | **97.09854** |
| 4 | 82720193 | 2.090289 | 0.393204 | 0.318110 | 0.343021 | **96.85538** |
| 5 | 86946685 | 2.226399 | 0.671223 | 0.294537 | 0.319334 | **96.48851** |
| 6 | 89915375 | 2.331360 | 1.041041 | 0.275878 | 0.308317 | **96.04340** |
| 7 | 92048195 | 2.406579 | 1.455972 | 0.263389 | 0.302527 | **95.57153** |
| 8 | 93604656 | 2.458813 | 1.878268 | 0.255825 | 0.298997 | **95.10810** |
| 9 | 94755101 | 2.494758 | 2.282017 | 0.251717 | 0.296764 | **94.67474** |
| 10 | 95614170 | 2.519367 | 2.651891 | 0.249869 | 0.295371 | **94.28350** |

Source: Researcher’s Computation, 2023

**Discussion of Findings**

The result of the multiples regression analysis implies that four of the four explanatory variables INT, PRT, COT and ROY were significant in explaining variation in the expenditure profile of governments in southwestern states with p values of (0.0048, 0.0754, 0.0000 and 0.0131) but INT shows a negative coefficient of (-5.780878). Findings based on the result obtained indicate that R-square= 0.8109, which implies that approximately 81% of the variation in the dependent variable (expenditure profile of governments in southwestern states) is caused by the explanatory variables included in the model and remained robust after adjusting for degree of freedom. Moreover, the explanatory variables are jointly significant at 5% level.

This result does not conforms to findings from previous studies of Fasina et al., (2018) that evaluated the effect of personal income tax on internally generated revenue (IGR) of government in Ekiti State. Secondary data were used in this study. Relevant data were sourced from the approved budgets of the Ekiti State government. The variables for which data were sourced were PAYE, Direct Assessment, Road Tax, and Other Revenue, government development stock, and Government Expenditure for the period of 2003 to 2012. Mean and standard deviation were used to analyse the components of Ekiti state revenue. Multiple regression analysis technique (Ordinary Least Square (OLS) method) was used to analyse the relationship between the dependent variable (Government Revenue) and independent variables (PAYE, Direct Assessment, Road Tax, and Other Revenue). Findings indicated that PAYE had positive effect on Revenue generation of government in Ekiti state. Also, Direct assessment and Road tax had positive significant effect on Revenue generation.

**5.0 Conclusion and Recommendations**

Based on the summary of findings of this study, it was concluded that there is significant relationship between revenue and expenditure profile of state governments in southwest states, Nigeria. The study therefore recommended that government should explore avenues to diversify revenue sources beyond taxes. This could involve promoting investment opportunities, exploring public-private partnerships, and leveraging natural resources sustainably to generate additional income for the state governments.

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