Quest Journals
Journal of Research in Humanities and Social Science
Volume 10 ~ Issue 6 (2022) pp: 16-20
ISSN(Online):2321-9467
www.questjournals.org

Research Paper

Effect of Statutory Allocations on Internally Generated Revenue (IGR) Of State Governments in Nigeria

John Akintayo OMIMAKINDE
Finance and Account Department
and
Elizabeth Adeteju OMIMAKINDE
Department of Science Policy and Innovation Studies
National Centre for Technology Management, Obafemi Awolowo University, Ile-Ife, Nigeria

Abstract
The paper examined the relationship between Statutory allocations to states and own revenue this second tier of government in Nigeria between 1999 and 2020 using a technique of Structural Vector Autoregressive (SVAR) Model to account for the contemporaneous relationship between the variables. The results reveal that statutory allocations to states in Nigeria do not encourage own revenue at this level of government and thereby hinder their (states) optimal resources utilisation. States should therefore, strive to be innovative in the mode of collecting revenue from existing sources.
Keywords: *Statutory allocations, revenue, IGR, States.*

R*eceived 02 June, 2022;* ***R****evised 13 June, 2022;* ***A****ccepted 15 June, 2022 © The author(s) 2022.*
P*ublished with open access at* ***www.questjournals.org***

I. Introduction

Greater number of state governments is faced with an increasingly huge budget deficit as they struggle to pay salaries, meet contractual obligations and service overhanging debts accumulated when oil price was relatively favourable (Olusola, 2011). Most states in Africa's most populous country are highly leveraged when compared with revenue, leaving them vulnerable to the price volatility of crude oil which serves as the biggest contributor to the revenue basket. Crude oil price came under intense pressure at the tail end of 2014 as the growth of demand trailed off and overproduction created a glut in the market. The down tide significantly affected the revenue of states and basic commitments such as payment of salaries, utility bills, procurement of medical kits among others gradually became difficult, thereby prompting two-third of Nigeria's 36 governors to demand for bailout.

As about 75% of state government's revenue are collected by the federal government, the state government only gets the balance after obligations to debt holders are deducted at source (Igyo, Simon and Iorlumun, 2019). Based on this revenue disbursement process, the governors of the 36 states under the aegis of the Nigeria's Governors Forum (NGF) promptly demanded a Fiscal Restructuring Plan that intends to see more revenue allocated to states at the expense of the federal government.

Regarding tax revenue, the state government and state-controlled entities (local government) collect and control 100% revenue generated from personal income tax, property tax, road tax, radio and television tax among other networks of complex and somewhat overlapping tax (Jamala, Asongo, Mahai and Tarfena, 2018). It can be said that the volume of revenue pulled from taxation is strongly connected to the overall health of the economy. Hence, our economic health is obviously unstable as Nigeria is presently experiencing an economic downtown with the general level of prices of goods and services continues to skyrocket.

Findings from extant empirical literature revealed that the quest for extracting own revenues can equally serve as a potent agent for state building. A number of authors such as Meina, (2016) and Ramırez, (2017)have made a convincing narrative of state- and nation building. This is done through the means of revenue generation in general, and taxation to be specific. The emphasis here is on fiscal sociology.

Recent public finance scholars argue in the contrary that state capacity (the ability of a state to raise tax revenues and to uphold the rule of law) is an important determinant of economic growth (Besley and Persson, 2021and Acemoglu and Robinson, 2019). Much of this research looks at the rise of the fiscal institutions and not fiscal sociology as pronounced by the earlier scholars.

Therefore, the need for adequacy of revenue at all levels of government has become imperative, given the expenditure profile of government aimed at reducing poverty, generating employment, boosting growth and creating wealth. State governments now face more challenges in terms of struggling to be less dependent on the Federal government for financial resources. The problem of lack of fiscal transparency as a result of mismanagement of funds, corruption, poor internal control and lackadaisical attitude to government work and property still abounds. The question that comes to mind is assuming the statutory allocation is not forthcoming because oil is de-emphasized in the economy, what would be the lot of state governments? How would they survive fiscally? (Olusola, 2011).

The need for state and local governments to generate adequate revenue from internal sources has therefore become a matter of extreme urgency and importance. This need underscores the eagerness on the part of state and local governments and even the federal government to look for new sources of revenue or to become aggressive and innovative in the mode of collecting revenue from existing sources. Owing to the inherent power of the government to impose taxes, the government is assured at all times of its IGR no matter the circumstances. State governments now face more challenges in terms of struggling to be less dependent on the center and hence the need for them to place, as a matter of urgency, a topmost priority on their internal generation efforts.

II. Literature Review

According to Broms (2016), revenue extraction is seen as a boon for government quality. While a growing number of studies have identified institutions as an essential component for spurring development (Acemoglu, 2019). The study concludes that a developed economy has a tendency of state capacity-raising effects, which have beneficial long-term consequences for government quality.

Musharraf, Antonios and Martinez-Vazquez, (2016) examined the determinants of tax morale in Pakistan, a country that has struggled with low tax effort over the past decade. The researchers exploited novel data for individual taxpayers collected in 2014 by Pakistan's Federal Board of Revenue to estimate a Binary probit regression model. Motivated by the lack of empirical analysis of the determinants of tax morale for Pakistan, the results are, generally, in line with the findings of the modern empirical literature of tax morale in other countries. Generally, groups with lower labour force participation rates have more positive attitudes towards tax compliance in Pakistan. On the other hand, professional groups with higher labor force participation rates such as the self-employed exhibit lower tax morale but not in statistically significant way.

On the extensive margin, educated respondents have higher tax morale in comparison to the illiterate. On the intensive margin, education has a U- shaped effect on tax morale; only those with very low or very high attainment levels have higher tax morale with respect to bachelor's degree holders. The study found out that the metropolitan areas which are the largest population centers, are industrialized and seats of government have significantly high tax morale. In provinces where metro areas compete for public funds from the provincial tax administration, respondents exhibit lower tax morale. The findings show that females have significantly higher tax morale than males. However, their attitude towards tax compliance drastically worsens with the passage of time to the extent that elderly males have higher tax morale than elderly females.

The advent of large-scale, regularised taxation was primarily driven by the increased demands of maintaining a standing army during the early modern era, followed by ambitions of providing a wider range of public services (Mann, 2013). The argument can be summarized as such: to increase domestic revenue collection, mainly in the form of taxes, rulers needed to strike bargains with the prospective and existing revenue base over the extent and methods of revenue extraction. Parallel to this, a strong and effective state bureaucracy developed out of the need to collect, administrate, and spend such revenue (Moore, 2017).

D'Arcy and Nistotskaya (2016) employing a cross country-approach, use historical evidence to give credence to the notion that capacity building tends to precede bargaining in successful cases of institution building. This is supported in research showing that taxation spurs contemporary citizens of developing states to monitor and take a more active interest in politics (Broms, 2017) regardless of whether they have agreed to being taxed in the first place. While neither of these studies refutes the potentially beneficial effects from revenue bargains on government quality, they indicate that the initial impetus for the process to come about is more likely to start with the strengthening of capacity that tends to derive from efforts to raise revenue.

The greater past external transfers to district governments do not encourage internal revenue generation, but instead have a depressing effect on own revenues (Tewodaj and Samuel, 2018). Despite inbuilt incentives in the allocation formula for one of the key intergovernmental grants, increases in grants and transfers lead to a modest but statistically significant decline in subnational revenue effort, not the increase hoped for by policy makers in the decentralization community. When potential simultaneity emerging from the incentive schemes is more explicitly accounted for, the negative effects of external grants on local revenues becomes much more pronounced, suggesting that the incentives may mitigate, but by no means eliminate, the negative impact transfers have on internally raised revenues. In addition to examining a level effect on own revenues, we assess how transfers affect subsequent growth of IGR was also assessd, the findings reveal a depressing effect.

Although increasingly justified in terms of state building, recent tax reforms in anglophone African economies contributed only modestly to that goal (Moore, 2017). The reforms have indeed produced impressive tax agencies, but no detectable increases in revenue collections. They have not addressed some major deficiencies in tax policy and administration. The reforms have however helped improve the career prospects for senior African tax administrators and generated more movements of senior staff between tax agencies, the private sector, and international advisory work. These personnel changes have ambiguous implications for the development of revenue capacity in the long term.

Against the backdrop of high macroeconomic instability and the need to meet the demands of public spending, (Hans and Bernd, 2017) analysed the trade-off between growth and volatility of tax revenues in Latin America. Controlling for composition of revenue sources and other idiosyncrasies, the authors find out that revenues above or below its long-run equilibrium to react stronger or weaker respectively to business cycle dynamics. As state governments in the US are also constrained in their external financing and habitually tend to suffer from cyclical budget contractions, the vast majority of the existing literature on tax revenue growth and volatility is concerned with US federal states.

III. Methodology

The paper employed a Structural Vector Autoregressive (SVAR) Model proposed by Bernanke (1986) and Sims (1986) to estimate the relationship between Federal Allocations to states and own revenue this second tier of government in Nigeria.

3.1 Model Specification

The VAR model in this case follows a basic VAR equation, which can be written as:

$$Y_t = A_1 Y_{t-1} - - - + A_p Y_{t-p} + B_0 X_t + B_1 X_{t-1} + - - - + e_t \qquad 1$$

where Y_t *and* X_t describe an (n x 1) vector containing the values of Federal Allocations to States and States' IGR at time t respectively and A_i corresponds to the coefficients to be estimated

So, when X_t affects the level of Y_t, then, the two variables have contemporaneous relationship.
Thus, in an attempt to take care of the said contemporaneous relationship in the VAR model, a SVAR model (AB model) of the relationship in the equation above is specified as

$$AY_t = A_1 Y_{t-1} - - - + A_p Y_{t-p} + BU_t \qquad 2$$

The ultimate goal here is to estimate A and B and the parameters.
Therefore, the structural model above implies that

$$Ae_t = BU_t \qquad 3$$

The transformation of the equation 3 above in matrix form is as follows:

$$\underset{A}{\begin{bmatrix} 1 & 0 & 0 \\ a_{21} & 1 & 0 \\ a_{31} & a_{32} & 1 \end{bmatrix}} \underset{e_t}{\begin{bmatrix} e_{1t} \\ e_{2t} \\ e_{3t} \end{bmatrix}} = \underset{B}{\begin{bmatrix} b_{11} & 0 & 0 \\ 0 & b_{22} & \vdots \\ 0 & 0 & b_{33} \end{bmatrix}} \underset{U_t}{\begin{bmatrix} \mu_{1t} \\ \mu_{1t} \\ \mu_{1t} \end{bmatrix}} \qquad 4$$

Where, A is a lower triangular matrix, B is a diagonal matrix and E$[U_t, {U_t}^I] = I$, the identity matrix.

IV. Results and Analysis

4.1 Test for Normality

The normality test results are presented in the Table 2 below.

Table 1: Jarque-Bera Test results

Equation	**Chi^2**	**Df**	**Prob.**
dlnFED	27.329	2	0.0000
dlnIGR	17.222	2	0.0002
dGOV	0.542	2	0.0076
ALL	45.094	2	0.0000

Source: Author's computation from data extracted from Central Bank of Nigeria (CBN) Statistical Bulletin (2020) and World Governance Indicators (WGI, 2020)

From the results above, it was revealed that the Jarque-Bera P-values of each of the variables is not only individually significant at 1% level but also collectively significant at 1% level. The result implies that the data are normally distributed and that the data can be used for further analysis.

4.2 Test for Stability

In an attempt to ascertain the stability condition or otherwise of the VAR specification in the paper, Test for Stability is performed and the results are presented in the Table 3 below.

Table 2: Stability Test results

Eigenvalue	Modulus
0.1578 + 0.6654i	0.6839
0.1578 - 0.6654i	0.6839
-0.3559	0.3559
0.2668	0.2668
-0.0495 + 0.2361i	0.2412
-0.0495 - 0.2361i	0.2412

Source: Author's computation from data extracted from Central Bank of Nigeria (CBN) Statistical Bulletin (2020) and World Governance Indicators (WGI, 2020)

The results from Table 2 above show that all the eigenvalues lie inside the unit circle (i.e. the modulus). This is an indication that the VAR specification of the model satisfies stability condition.

4.3 Structural Vector Autoregression Results

4.3.1 Short Run Estimate

The results of the Short run estimate of the Structural Vector Autoregression employed in this paper are shown in the Table 3 below.

Table 3:Short Run Estimate Results

		dlnFED	dlnIGR	dGOV			dlnFED	dlnIGR	dGOV
Matrix A =	**dlnFED**	1	0	0	**Matrix B**	**dlnFED**	-0.177	0	0
	dlnIGR	-0.119	1	0	**=**	**dlnIGR**	0	0.088	0
	dGOV	0.004	-0.017	1		**dGOV**	0	0	0.008

Source: Author's computation from data extracted from Central Bank of Nigeria (CBN) Statistical Bulletin (2020) and World Governance Indicators (WGI, 2020)

From the results above, it is shown that A is a lower triangular matrix while B is a Diagonal matrix. The results revealed that both the lower triangular and diagonal matrices supplied to SVAR model imposed the intended constraints and that the SVAR implies that the model fitted is just identified. The estimates of /A: 2 1 and /A:3 2 appear negative and apparently most of the off-diagonal elements of the A matrix contain negative values of the actual contemporaneous effects, the estimated effects are therefore negative in the short run. This implies that statutory allocations to states in Nigeria do not encourage own revenue at this level of government in the short run. The indication here is that second tier of government in Nigeria rely heavily on her share from Federation Account for fiscal survival. This significantly hinders the ability of States to optimally harness the potentials they are endowed with to improve their IGR.

4.3.2 Long Run Estimate

Similarly, the results of the long run estimate of the Structural Vector Autoregression employed in this paper are shown in the Table 4 below.

Table 4:Long Run Estimate Results

		dlnFED	dlnIGR	dGov
	dlnFED	0.172	0	0
Matrix C =	**dlnIGR**	0	0.077	0
	dGOV	0	0	0.008

Source: Author's computation from data extracted from Central Bank of Nigeria (CBN) Statistical Bulletin (2020) and World Governance Indicators (WGI, 2020)

From the results, C is a diagonal matrix. In the long run SVAR, constraints are placed on elements of the C matrix. These constraints are often exclusion restrictions. The results show that the long-run response of Federal allocations to states (FED) to a shock in Internally Generated Revenue of States (IGR) and a measure of institutional quality (GOV) is zero. By implication, there is no long run causal relationship among the variables in the long run.

Thus, change in Federal allocations to states (FED) do not affect change in Internally Generated Revenue of States (IGR) and a measure of institutional quality (GOV). This is supported by the work of Tewodaj and Samuel, (2018) which reveals that the greater past external transfers to district governments do not encourage internal revenue generation, but instead have a depressing effect on own revenues. Similarly, the findings of this paper are also in line with the work of Hans and Bernd, (2019) which reveals that as state governments in the US are constrained in their external financing, they also habitually tend to suffer from cyclical budget contractions due to volatile nature of tax revenue growth of US federal states.

V. Conclusion

The paper reveals that there is no long run causal relationship among Federal allocations to states (FED), Internally Generated Revenue of States (IGR) and a measure of institutional quality (GOV). This is indeed an indication that statutory allocations to states in Nigeria do not encourage own revenue at this level of government but instead imposes negligible effect on own revenues. This level of government should therefore look for new sources of revenue or become aggressive and innovative in the mode of collecting revenue from existing sources.

References

[1]. Acemoglu, Daron, Robinson, James A., (2019). Why Nations Fail? Crown Business, New York.

[2]. Bernanke, B. (1986). Alternative Explanations of the Money-Income Correlation. Carnegie-Rochester Conference Series on Public Policy, Vol. 25(1), 49-99.

[3]. Besley, Timothy, Persson, Torsten, (2021). Pillars of Prosperity. Princeton University Press, Princeton, New Jersey.

[4]. Broms, R. (2017) Colonial Revenue Extraction and Modern Day Government Quality in the British Empire. World Development Vol. 90, pp. 269–280.

[5]. Central Bank of Nigeria (CBN, 2020). “Fiscal Policy and Government Finance”. Central Bank of Nigeria Annual Report.

[6]. D’Arcy, M. (2016). Why do citizens assent to pay tax? Legitimacy, taxation and the African State. Afrobarometer working paper No. 126.

[7]. Hans, F. and Bernd, S. (2017). Growth and Volatility of Tax Revenues in Latin America.World Development Vol. 54, pp. 114–138

[8]. Igyo, A. J., Simon, J., and Iorlumun, A. P. (2019). Beyond Statutory Federal Allocation: A CriticalEvaluation of the Contribution of Personal IncomeTax on Internally Generated Revenue of Benue State.British Journal of Economics, Management & Trade13(3): 1-13. Article no.BJEMT.24567 ISSN: 2278-098X. www.sciencedomain.org

[9]. Jamala, G. Y., Asongo, A.I., Mahai, S. and Tarfena, H. J. (2018). Appraisal of Revenue Generation in Numan Southwestern Adamawa State, Nigeria.IOSR Journal of Economics and Finance (IOSR-JEF) 2 (2), 01-06www.iosrjournals.org

[10]. Olusola, O. (2011). Boosting Internally Generated Revenue of Local Governments in Ogun State, Nigeria (A Study of selected Local Governments in Ogun State).European Journal of Humanities and Social Sciences, 8 (1).

[11]. Mann, M. (2013). The Sources of Social Power. Vol II: The Rise of Classes and Nation-States 1960–1999. Cambridge, UK: Cambridge University Press.

[12]. Meina, C. (2016). Revenue, time horizon, and land allocation in China Published by Elsevier Ltd. Vol. 62, 101–112.

[13]. Moore, M. (2017). Revenue Reform and State Building in Anglophone. Africa Institute of Development Studies, Brighton, UK World Development, 60 (3), 99 –112.

[14]. Musharraf. R. C, Antonios, M. K. and Martinez-Vazquez, J. (2016). The determinants of tax Morale in Pakistan. Journal of Asian Economics: International Center for Public Policy, Department of Economics, Andrew Young School of Policy Studies, Georgia State University,14 Marietta Street,Atlanta,GA30303,USA.

[15]. Ramırez, J. M. (2017). Property Tax Revenues and Multidimensional Poverty Reduction in Colombia: A Spatial Approach, World Development.

[16]. Sims, C. (1986). Are Forecasting Models Usable for Policy Analysis? Econometrica, 67(5), 1113-1156.

[17]. Tewodaj M. and Samuel B. (2018).Do External Grants to District Governments Discourage Own Revenue Generation? A Look at Local Public Finance Dynamics in Ghana International Food Policy Research Institute, Washington, USA World Development, 40 (5), 1054–1067