

Innovations

Do Fiscal Autonomy Options Impact Healthcare Delivery in Nigeria?

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Abstract

The study investigates how Nigerian healthcare delivery is affected by alternatives for fiscal autonomy. In order to provide healthcare services to its citizens, a state must have the ability to generate revenue on its own. The provision of these fundamental socioeconomic benefits necessitates massive government spending and autonomy. Therefore, it has become important that all levels of government generate enough revenue to expand healthcare services, spur economic growth, and generate wealth. Fiscal autonomy was measured as a ratio of internally generated revenue to federal allocation. Time series data from the Central Bank, the Joint Tax Board, the State Board of Internal Revenue, and the National Bureau of Statistics' annual reports were used in the analysis. Theories of economic growth, economic development, and fiscal autonomy were reviewed. The association between state healthcare services and fiscal autonomy is examined using the instrumental variable three-stage least squares (3SLS) panel estimation method. The estimated model, which was based on an augmented Cobb-Douglas production function, is consistent with David Wheeler's work from 1980. To determine the instrument among the three-stage and two stage least square, the Hansen-Sargan test was used. To determine the reliability of estimates, the Hausman's test was used. The outcome also supports the hypothesis that an increase in fiscal autonomy is a significant driver of an increase in healthcare services among states and economic development at large in Nigeria. The research study recommends increasing the fiscal autonomy of states in Nigeria as one of the ways to increase the GDP per capita growth rate in those states. Furthermore, states should invest in healthcare services and manpower training, as seen in the significant and negative impact of healthcare, to provide citizens with access to primary healthcare and live birth registration, as well as to increase the GDP per capita growth rate in Nigerian states.

Key Words: 1. Fiscal Autonomy 2. Healthcare delivery 3. Economic Development 4. Revenue 5. Federating States

Introduction

Nigeria, as a federation, consists of three tiers of government: the federal government, 36 states, and 774 local government areas. The essence of these governments at all levels is to stimulate rapid economic development through adequate provisions of social and economic infrastructure for the citizenry. In spite of the constitutional provisions for the existence of these tiers of governments and their fiscal powers, resource allocation and management among these tiers of governments have remained contentious issues in Nigeria's fiscal federalism (CFRN, 1999) and Aigbepue, S & Ainabor, A. E. (2011). These contentious issues arise because most states of the federation get the bulk of their revenues in the form of statutory allocations from the federation account to finance their expenditure programs. Though the revenue allocation system mandates that a certain fraction of the federation account be allocated to state governments, these funds are not enough to meet expenditure requirements. This is because about 80 percent of the revenue to the federation account is from oil, which is not stable and certain due to high fluctuations in the price and output of oil. Hammed and Tunde, 2016.

Addingly, fiscal autonomy (FA) is the process where different tiers of government enjoy separate independence and existence from the control of the central government. With fiscal autonomy, the component units within a federation possess the authority to raise revenue from their own sources for the provision of public goods and services. More so, fiscal autonomy requires not only the physical and legal existence of government apparatus (governors, courts, and legislative assemblies, among others), but that each level of government be put in place not as an appendage of another but as an independent body exercising its own power and free from the control of the central government (Lukpata, V. I., 2013).

State governments, as the second tier of government in Nigeria, have the power to derive their revenue internally from various sources other than revenue allocation from the federal government. Internally generated revenue (IGR) is a verifiable source of revenue that state governments generate within the areas of their jurisdiction, though the sources of revenue are by no means uniform across the states. It is worrisome that most states are extremely poor in internally generated revenue and are overly dependent on federal allocations. This implies poor or no fiscal autonomy for most states in Nigeria since the issue of fiscal autonomy relates to internally generated revenue and transfers or allocations from the federal government. For instance, the share of federation accounts with states was about 57.97 percent of the total revenue in 2002 and rose to 65.82 percent in 2016, while the aggregate internally generated revenue by states declined from 13.38 percent in 2002 to 7.92 percent in 2016. The percentage average of internally generated revenues in relation to the federal revenue allocation was between 5 and 9 percent for most years between 2002 and 2016 (CBN, 2017).

The capacity of a state government to generate revenue internally is a crucial consideration for the creation of a state government. States are expected to provide basic socio-economic infrastructure, such as public schools, public health, and public infrastructure, to their citizens. The provision of these infrastructures requires huge government spending. Therefore, the need for adequate revenue at all levels of government has become imperative. State governments now face more challenges in terms of struggling to be less dependent on the federal government for financial resources with which to reduce poverty, generate employment, boost economic growth, and create wealth.

Interestingly, a lot has been written about the need for improved allocation to states and local governments from the federation account as well as how to boost the internally generated revenue of state governments in Nigeria, like Hammed and Tunde (2016), NSEA (2011), Punch (2018), Wheeler (1980), and Wagner (1890). According to these studies, not much attention has been paid to the relationship between the source of state revenue, which defines the fiscal autonomy of the state, and the socioeconomic development of the state,

especially in the context of Nigerian states. Fiscal autonomy and viability of a state are also functions of its commercial, industrial, economic, agricultural, infrastructural, and technological advancement and progress. This study therefore examines the relationship between fiscal autonomy and healthcare delivery across the states in Nigeria. Specifically, the study attempts to provide answers to the following pertinent questions: to what extent has fiscal autonomy impacted healthcare status across the 36 states of Nigeria? The study is guided by the null hypothesis that fiscal autonomy does not significantly impact the healthcare status of states in Nigeria.

Given the comparative nature of this article, the 11-year period was chosen because of the availability of consistent data, which provides a wider coverage for a critical examination of healthcare delivery. The key issues that are being examined within the socioeconomic indicators are health status, measured by total registered live births. The study will be of great appeal to researchers and policymakers. This is because it provides a vital link between fiscal autonomy and healthcare status across the states in Nigeria. Furthermore, the findings of this study will aid government policymakers in designing better fiscal independence policies that will address the challenges of healthcare and the poor economic performance of states in Nigeria.

Given the context of this study, fiscal autonomy could be measured by the ratio of internally generated revenue to federal allocation across the states. According to Hammed et al. (2016), the two measures of fiscal autonomy include revenue generation and expenditure approaches. Revenue decentralization is the ratio of sub-national revenue to consolidated government revenue, while expenditure decentralization is the ratio of sub-national expenditure to central government expenditure. For the purpose of this study, according to Hammed *et al.* (2016), which was elaborated by Barro, R. (2013), revenue decentralization was used because it measures the performance of socioeconomic variables in the provision of basic needs for the masses. Mathematically, $FA = IGR/FAAC$. Where FA is fiscal autonomy, IGR is internally generated revenue by the states, and FAAC is a federal allocation from the federation account.

More so, a few empirical papers on state fiscal autonomy were reviewed, one of which, Nkang Eyam et al. (2022) and UNDP. (2011), investigates the impact of fiscal autonomy on educational attainment in the federating states of Nigeria. The capability of a state to internally generate revenue is a basic requirement for the provision of social infrastructure. In the context of this research, an instrumental variable three-stage least squares (3SLS) panel estimation framework was adopted. The result from the rigorous estimation technique of 3SLS does not seem to give support to the hypothesis that an increase in fiscal autonomy can significantly drive an increase in literacy rate vis-à-vis educational attainment across the states and hence economic development in Nigeria. The study therefore strongly advocates that states should tow the middle path of not being completely fiscally autonomous in striving for fiscal autonomy, as fiscal autonomy itself does not necessarily guarantee high educational attainment in states in Nigeria. This study therefore, examines if fiscal autonomy options impact on healthcare delivery in Nigeria.

Research Questions

The study answered the following pertinent research questions:

- i. To what extent has fiscal autonomy impacted on economic growth in the 36 states of Nigeria?
- ii. What is the relationship between fiscal autonomy and healthcare delivery in 36 states of Nigeria?

Objectives of the study

The specific objectives of the study are to:

- i. Investigate the impact of fiscal autonomy on economic growth in 36 states of Nigeria

- ii. Ascertain the extent to which fiscal autonomy impacts on healthcare delivery in 36 states of Nigeria.

Structure of the Nigeria's fiscal profile

The sharing of revenue between the various tiers of government in Nigeria is based on the use of several principles and a given formula. Fundamentally, there are two components to the revenue allocation formula used for the disbursement of the federation account. These are the Vertical Allocation Formula (VAF) and the Horizontal Allocation Formula (HAF). The vertical allocation formula shows the percentage allocated to the three tiers of government. This formula is applied vertically to the total volume of disburseable revenue in the federation account at a particular point in time. The VAF allows every tier of government to know what is due to it: the federal government on one hand and the 36 states and 774 local governments on the other (Bashir, 2008); on the other hand, the horizontal allocation formula is applicable to states and local governments only. It provides the basis for sharing the volume of revenue already allocated in the budget with the 36 states and 774 local governments. Through the application of the principles of the horizontal allocation formula, the allocation due to each state or local government is determined. Thus, it can conveniently be concluded that the vertical allocation formula is for inter-tier sharing between the three tiers of government, while the horizontal allocation formula is for intra-tier sharing amongst the 36 states and the 774 local governments in Nigeria (Bashir, 2008).

Contributions of fiscal autonomy to socioeconomic variables

Fiscal autonomy, as a multi-faceted concept enshrined constitutionally, gives the states the autonomy to generate income and spend such income to promote the socioeconomic wellbeing of their citizens. In order to assess the extent to which the sub-central government (SCG) performs, the correlation between socioeconomic performances is weak, pointing out the multidimensionality of fiscal autonomy and the diversity of states and fiscal institutions in Nigeria. Some of these non-correlations are a result of fiscal policies from a practical point of view since the states characteristics differ. The autonomy of the states has gone a long way to improve the socioeconomic wellbeing of the masses by increasing the net enrollment of primary schools and net secondary school enrollment, reducing the rate of unemployment, increasing the number of registered childbirths, reducing maternal mortality, increasing internally generated revenue (IGR), increasing economic growth (GDP), and increasing fiscal autonomy as a ratio of IGR to allocation from the federation account.

Fiscal Autonomy: According to National Bureau of Statistics (NBS) 2019, the first 10 states with the highest autonomy are Lagos State with 38 billion, followed by Ogun (24.6 billion), Adamawa (15.4 billion), Rivers (7.2 billion), Cross Rivers (6.4 billion), Edo (5.6 billion), Kano (6.2 billion), Kwara (5.6 billion), Enugu (5.4 billion), and Kaduna (4.9 billion), while the 10 least autonomous states are Yobe State with 0.9 billion, followed by Bauchi (1.0 billion), Borno (1.0b), Kebbi (1.0b), Bayelsa (1.2b), Akwa-Ibom (1.2b), Katsina (1.3b), Ebonyi (1.4 billion), Jigawa (1.4 billion), and Gombe state with 1.6 billion.

Basic healthcare: A healthy economy is determined by an active and healthy population. If the active population of the state is healthy, it translates into the productive capacity and output of that country. The attainment of basic health care by reducing infant mortality rates gives the state a future. Fig. 4.15 reveals that the 10 top live birth registrations were obtained in Kano with 0.7 m, followed by Oyo and Katsina with 0.6m, Borno with 0.4m, Lagos, Jigawa, and Kaduna with 0.3 m, and Rivers, Ogun, and Gombe with 0.2 m of live births registered, while the 10 least live birth registered states are Zamfara with 0.02 m, followed by Bayelsa with 0.03m, Taraba with 0.05 0.05 0.05 m, Abia with 0.06m, Cross River, Delta, Niger, and Yobe with 0.08m, and Kebbi with 0.09m.

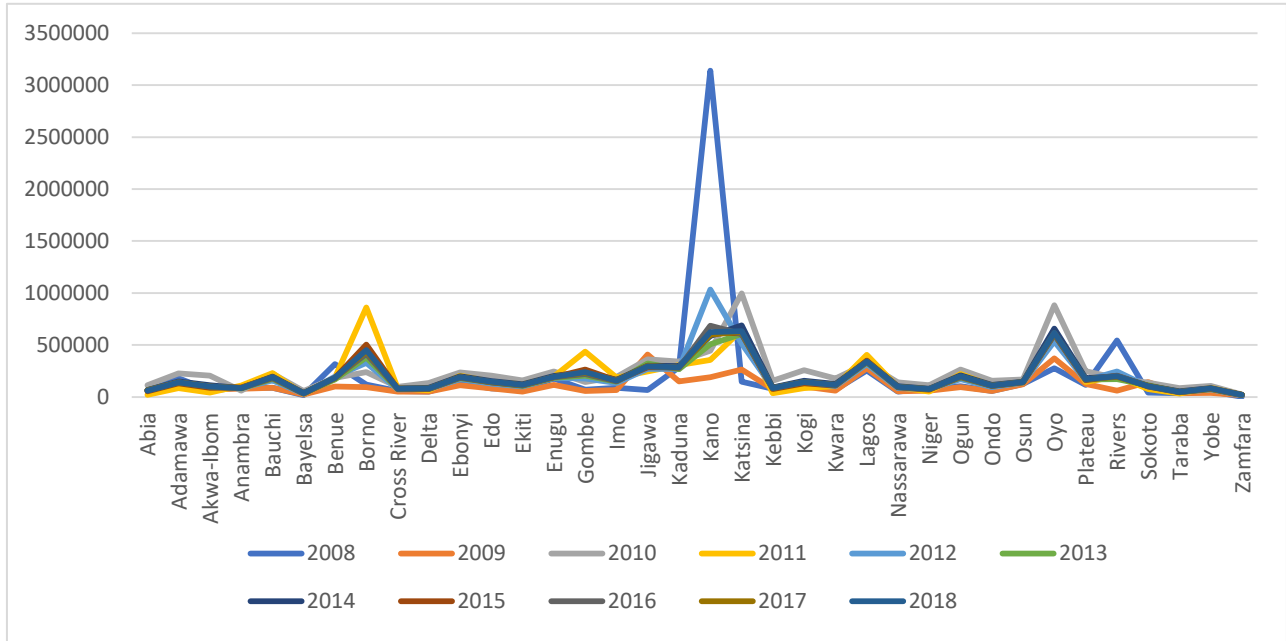


Fig. 1 Showing Total live birth registered across the states

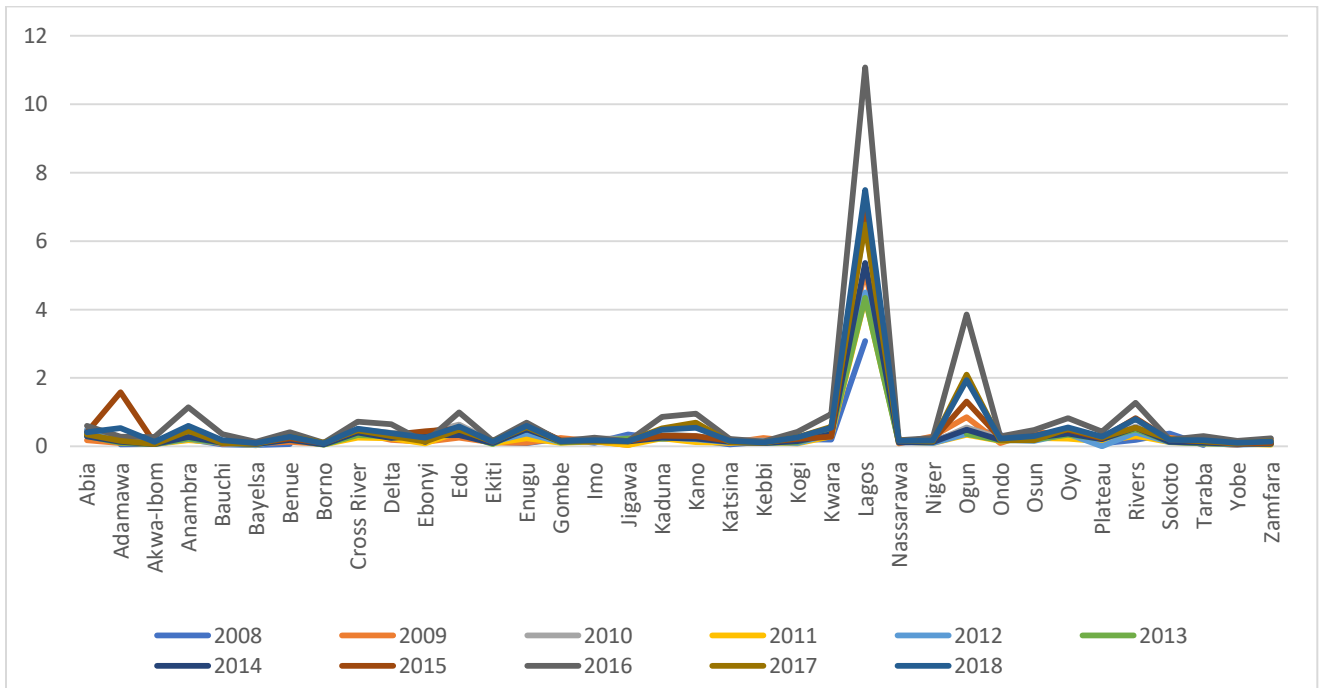


Fig.2. Showing Fiscal Autonomy measured by the ratio of federal allocation to IGR

Methodology

The research design for this study is based on the “correlation analysis and three-stage least square (3SLS)” Panel research design. In which case, the researcher relied heavily on the documented research of others in the subject area and related areas as major sources of information, data collection and processing. The study measures the impact of fiscal autonomy on healthcare over time across the States in Nigeria. The choice of the healthcare status draws largely from the fact that it is the basic needs fulfillment indicators to drive the provision of public goods and services across the states. To achieve this goal, the model will be estimated using three-stage least square (3SLS)” Panel research design that enables us to capture different impact on each of the 36 states.

The empirical model in this study is anchored on the augmented neo-classical growth theory, which flows from the basic need fulfillment and economic growth theories of Wheeler (1980). It had been argued that additional resources from output growth will generate widespread improvements in the physical quality of life for the poor even when incomes remain unequally distributed, according to Wheeler (1980). It also implies that investment in a wide range of fiscal autonomy and socioeconomic indicators will lead to the provision of public goods and services across the states. On the other hand, augmented Cobb-Douglas theories postulate a continuous production function linking the outputs of capital and labor, which leads to the steady-state equilibrium of the economy.

In modeling the production process according to Wheeler, it is necessary to give simultaneous attention to the labor-augmenting role of welfare inputs and the role of capital and effective labor in determining output contribution to educational attainment, unemployment rate, access to health status, population, and economic growth, which are assumed to be characterized by unitary elasticity of substitution aimed at determining the impact of fiscal autonomy and socioeconomic performance across 36 states in Nigeria. The model is specified using the augmented neo-classical growth theory as follows:

$$Q_t = A_t K_t^\alpha L_t^\beta \tag{1}$$

Where; Y = Output , A = Total factor productivity or efficiency parameter, K = Stock of capital, L = Labour force, α = output elasticity of capital and β = output elasticity of labour.

For the purpose of this study and ease of analysis, symmetry across states is assumed. The alternative model will be endogenized using efficiency parameter ‘A’ in that it accounts for healthcare indicator that affect Output and allows the variables to come into the model. Thus the model will be:

$$A_t = A(F_t^{\theta_1} H_t^{\theta_2}) \tag{2}$$

Where: $F_t^{\theta_1}$ = Fiscal autonomy proxied by the ratio of IGR to Federal allocation, $H_t^{\theta_2}$ = Access to Healthcare proxied by total live birth registered.

Empirically testing the effect of the Healthcare with respect to output, according to Wheeler (1980), production is assumed to exhibit unitary elasticity of labour were:

$$H_t = F_t^{\theta_1} Q_t^{\theta_2} K_t^\alpha L_t^\beta \tag{3}$$

Equation (3) is consistent with Wheeler (1980) unitary elasticity of labour.

Where: α and β can be interpreted as the output elasticities of capital and effective labour, while the θ 's are the labour-augmenting elasticities of healthcare and economic growth. Partially differentiated to get the interactive Healthcare equation, thus:

$$h_i = \beta_{10} + [\beta_{11} + \beta_{12} \ln H_{it0}] (q_i - p_i) + [\beta_{13} + \beta_{14} \ln H_{i0}] f_i + \varepsilon_{4i} \tag{4}$$

Description and measurement of variables

q_i = GDP per capita growth rate measured as the ratio of total output to the population

k_i = capital expenditure of states

f_i =fiscal autonomy measured as a share of internally generated revenue to federal allocation

h_i = Health status proxied by registered live birth

p_i = Population growth rate of states

$i = 1, 2, 3, 4, 5, 6, 7, 8, 9, \dots, 36$ states

G_0, E_0, U_0 and $H_0 = 2008$ levels of welfare availability, access to health status, access to educational attainment and unemployment rate respectively.

$\epsilon_{1i}, \dots, \epsilon_{4i}$ = Stochastic error terms.

Apriori; $\beta_1, \beta_2, \beta_4$ and $\beta_5, > 0, \beta_3 < 0$ (Iyeli, I. Iyeli, 2010) and Gujirati, D. N. & Porter, D.C. (2009).

Basically, the study adopts various sources of data for the purpose of the analysis. States-level data was sourced from the National Bureau of Statistics (federal allocation, unemployment, and total live births registered), the Joint Tax Board (JTB) and state board of internal revenue (SBIR) (gross state domestic product and internally generated revenue data), and the Federal Ministry of Education (primary and secondary school enrollment data) of the 36 States for the period 2008–2017, bearing in mind the flow of revenue generation and expenditure activities in the 36 States of the federation (Hausman and Taylor, 1981).

Presentation and Discussion of econometric results

The simultaneous regression results were estimated using the Ordinary Least Squares (OLS), two-stage least squares (2SLS), and three-stage least squares (3SLS) estimation techniques. The Hausman’s test was used to select the most robust estimates between the two-stage least squares and the three-stage least squares. The Hausman’s test result selects the 3SLS regression estimate. Also, the Hansen-Sargan test was used to examine if the instruments used in the 3SLS are well identified. The Hansen-Sargan test shows that the model is well identified. This shows that the 3SLS estimate is robust; thus, we interpret the coefficients of the 3SLS panel regression estimates. This section therefore presents the regression results and analyzes the impact of fiscal autonomy on key socioeconomic indicators in Nigeria. The results are structured in two sections. The first section shows the aggregate panel regression result, while the second section presents the panel regression result for each of the six (6) geo-political zones in Nigeria.

Presentation and analysis of aggregate results

Table 3: Panel Regression Result of Fiscal Autonomy and Healthcare Status Equation

	OLS	2SLS	3SLS
Log of birth rate			
IGR to FAAC	0.22*** (0.05)	-0.72 (0.7)	-0.72 (0.63)
GDP per capita growth rate	0.04 (0.04)	0.79 (0.51)	0.78* (0.46)
Constant	11.59*** (0.54)	1.04 (7.3)	1.05 (6.56)
Observations	351	243	243
Hansen-Sargan		68.889(0.00)	20.717(0.189)
Hausman		1.81 (0.8750)	

Source: computed by the author using panel estimation technique

From table 3 above, the negative sign of live birth (-0.72) suggests that fiscal autonomy has a negative impact on live births registered in Nigeria. A percentage increase in fiscal autonomy will lead to a 0.72 percent decrease in live births registered in Nigeria. This suggests that fiscal autonomy negatively affects live births registered in Nigeria. This could be linked to the fact that citizens do not have access to health facilities, a lack of trained health care workers, and low internally generated revenue in most states. On the contrary, total

live births registered have a significant and positive impact on the GDP per capita growth rate (0.78). The positive sign conforms to theoretical expectations. Economic theory expects a positive relationship between live births and GDP per capita growth rates. In line with our a priori expectation, the positive sign of the coefficient implies that an increase in the GDP per capita growth rate ratio by 1 percent will lead to an increase in live births by 0.78 percent. This suggests that increasing live births can spur economic development in Nigeria. The standard error of 0.46 indicates that the GDP per capita growth rate is statistically significant at 5%. This simply means that access to health status significantly impacts the GDP per capita growth rate in Nigeria.

Presentation and Discussion of Regional results

Table 4: Panel Regression Result for South East

Log of birth rate	OLS	2SLS	3SLS
GDP per capita growth rate	-0.05 (0.03)	-0.33 (0.24)	-0.34 (0.23)
IGR to FAAC	-0.09 (0.12)	-0.71** (0.3)	-0.71** (0.29)
Constant	12.23*** (0.45)	15.09*** (3.11)	15.13*** (2.97)
Observations	49	34	34
Overid		38.722 (0.001)	19.778 (0.230)
Hausman		0.10 (0.999)	

Source: computed by the author using panel estimation technique

Table 5: Panel Regression Result for North East

Log of birth rate	OLS	2SLS	3SLS
GDP per capita growth rate	-0.31 (0.26)	-0.09 (0.33)	-0.19 (0.14)
IGR to FAAC	-0.01 (0.1)	0.09 (0.29)	0.07 (0.27)
Constant	15.4*** (3)	13.11*** (3.71)	14.24*** (1.71)
Observations	58	40	40
Overid		43.946 (0.000)	12.471 (0.711)
Hausman			0.34 (0.9967)

Source: computed by the author using panel estimation technique

Table 6: Panel Regression Result for South South

GDP per capita growth rate	OLS	2SLS	3SLS
Log of birth rate			
GDP per capita growth rate	0.58*** (0.15)	0.96*** (0.2)	1.03*** (0.17)
IGR to FAAC	0.19* (0.1)	-0.12 (0.13)	-0.16 (0.12)
Constant	4.1* (2.12)	-1.26 (2.71)	-2.23 (2.3)
Observations	58	40	40
Overid		29.936 (0.018)	24.776 (0.073)
Hausman			18.84 (0.99)

Source: computed by the author using panel estimation technique

Table 7: Panel Regression Result for North Central

Region 4	OLS	2SLS	3SLS
Log of birth rate			
GDP per capita growth rate	0.43*** (0.1)	0.4*** (0.1)	0.4*** (0.1)
IGR to FAAC	0.13 (0.09)	0.34** (0.17)	0.34** (0.16)
Constant	6.7*** (1.28)	7.39*** (1.29)	7.38*** (1.24)
Observations	57	39	39
Overid		48.590 (0.000)	18.195 (0.312)
Hausman		604.01 (0.000)	

Source: computed by the author using panel estimation technique

Table 8: Panel Regression Result for South West

Region 5	OLS	2SLS	3SLS
Log of birth rate			
GDP per capita growth rate	0.17 (0.15)	-0.14 (0.48)	-0.15 (0.23)
IGR to FAAC	0.14 (0.13)	0.42 (0.44)	0.42* (0.22)
Constant	10.07*** (2.06)	14.32** (6.67)	14.47*** (3.22)
Observations	59	41	41
Overid		60.776 (0.000)	26.338 (0.049)
Hausman			81.33 (0.99)

Source: computed by the author using panel estimation technique

Table 9: Panel Regression Result for North West

	OLS	2SLS	3SLS
Log of birth rate			
GDP per capita growth rate	0.55*** (0.19)	0.35 (0.38)	0.35 (0.37)
IGR to FAAC	0.34 (0.27)	0.73 (0.78)	0.72 (0.76)
Constant	5.85** (2.63)	9.14 (5.96)	9.06 (5.77)
Observations	70	49	49
Overid		49.355 (0.000)	37.374 (0.001)
Hausman		53.43 (0.99)	

Source: computed by the author using panel estimation technique

In this section, the regression results are discussed to determine the impact of fiscal autonomy on the key social and economic performance of various regions in Nigeria. The results are discussed in six sections: section one discusses panel regression results for the South East region, North East, South South, North Central, and South West, while section six discusses regional panel regression results for the North West.

The 3SLS result in Table 4 above shows that the negative sign of live birth suggests that fiscal autonomy has a negative impact on live births registered in the South East region. A percentage increase in fiscal autonomy

will lead to a 0.71 percent decrease in live births registered in the Southeast region. This suggests that fiscal autonomy negatively affects live births registered in Nigeria. This could be linked to a lack of access to health facilities in the region. On the contrary, fiscal autonomy has a positive impact on live births registered in Nigeria.

More so, the 3SLS result in Table 5 above shows that, again, the positive sign of live birth suggests that fiscal autonomy has a positive impact on live birth registered in the North East region. A percentage increase in fiscal autonomy will lead to 0.07 percent increases in live births registered in the North East region. This suggests that fiscal autonomy positively affects live births registered in Nigeria. This could be linked to the access to healthcare facilities in the region. On the contrary, fiscal autonomy has a positive impact on live births registered in the North East.

The 3SLS result in Table 6 above shows that the negative sign of live birth suggests that fiscal autonomy has a negative impact on live birth registered in the South South region. A percentage increase in fiscal autonomy will lead to a 0.16 percent decrease in live births registered in the South South region. This suggests that fiscal autonomy negatively affects live births registered in Nigeria. This could be linked to the inability of citizens to have access to healthcare facilities in the region. On the contrary, fiscal autonomy expects a positive impact on live births registered in the region.

The 3SLS result in Table 7 above shows that the positive sign of live birth suggests that fiscal autonomy has a positive impact on live births registered in the North Central region. A percentage increase in fiscal autonomy will lead to 0.34 percent increases. The 3SLS result in Table 7 shows that there were no live births registered in the region. This suggests that fiscal autonomy positively affects live births registered in the North Central region. This could be linked to the fact that citizens have access to healthcare in the region.

The 3SLS result in Table 8 shows that the positive sign of live birth suggests that fiscal autonomy has a significantly impact on live births registered in the South West region. Economic theory expects a positive relationship between fiscal autonomy and live births registered in the region. A percentage increase in fiscal autonomy will lead to 0.42 percent increases in live births registered in the South West region. This suggests that fiscal autonomy significantly affects live births registered in the region. This could be linked to the fact that citizens have access to healthcare in the region.

The 3SLS result in Table 9 shows that the positive sign of live birth suggests that fiscal autonomy has a significant impact on live births registered in the North West region. Economic theory expects a direct relationship between fiscal autonomy and live birth in the region. A percentage increase in fiscal autonomy will lead to a 0.72 percent decrease in live births registered in the North West region. This suggests that fiscal autonomy has a significant impact on live births registered in the North West. This could be linked to the fact that citizens have access to healthcare in the region.

Conclusion

The study explored the impact of fiscal autonomy and healthcare status across the states in Nigeria from 2008 to 2017, adopting the three-stage least squares panel estimation technique. The study observed that differences in the regional structure of fiscal autonomy as well as the provision of socioeconomic welfare affect economic development across the states. The aim of the study was to examine state economic growth (SGDP), the unemployment rate, access to education, and access to healthcare. The Hansen-Sargan test shows that the model is well identified. This shows that the 3SLS estimate is robust; thus, we interpret the

coefficients of the 3SLS panel regression estimates. Again, the result from the descriptive analysis therefore concludes that the mean of fiscal autonomy and key socioeconomic performance in Nigeria have a significant relationship. On the aggregate panel regression result, fiscal autonomy has a positive impact on GDP per capita growth in Nigeria. This therefore suggests that fiscal autonomy can spur economic development in Nigeria. On the contrary, fiscal autonomy has a positive impact on unemployment in Nigeria. The significant relationship indicates that fiscal autonomy cannot drive economic development in Nigeria. However, fiscal autonomy has a negative impact on secondary school enrollment and live births in Nigeria. The negative relationship suggests that citizens do not have access to education and healthcare facilities in Nigeria.

More so, 3SLS result for the six geopolitical zones shows that fiscal autonomy has a significant impact on GDP per capita and unemployment. In line with our a priori expectation, fiscal autonomy has a positive impact on GDP per capita growth in the South East region, while the South East region result shows that fiscal autonomy has a significant impact on GDP per capita, capital expenditure, unemployment, and school enrollment. More so, the South East region result shows that fiscal autonomy has a negative impact on GDP per capita growth rate but a significant impact on live birth, while the North Central region result shows that fiscal autonomy has a significant impact on GDP per capita, unemployment, school enrollment, and live birth. However, the South West region result shows that fiscal autonomy has a significant impact on GDP per capita, capital expenditure, and school enrollment, while the North West region result shows that fiscal autonomy has a significant impact on GDP per capita, capital expenditure, live births, and unemployment. This, however, suggests that GDP per capita, unemployment, access to education,

and access to healthcare are major drivers of economic development in the regions.

Recommendations

From the findings of the study, the following recommendations were made:

1. States should increase their GDP per capita growth rate according to the theory of increasing state activities: as government expenditure increases over time, the economy develops, raising the standard of living of the citizens and making their lives meaningful. States should also plug back in and invest both the IGR and statutory allocation funds into diversifying and industrializing the economy to create employment.
2. States should also invest in access to healthcare by providing healthcare facilities and trained healthcare providers to give citizens access to basic healthcare, as noticed in the significant and negative results. This will increase registered live births and guarantee a healthy state and economy at large.
3. Exclusive and concurrent lists in the constitution of the Federal Republic of Nigeria should be amended to allow for full autonomy of the regions. This will lead to an increase in GDP per capita growth rate, access to healthcare, and hence economic development.

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