Utilization of Internal Revenue Generation to Reduce Cost of Living in Nigeria

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Abstract  
The study investigates the utilization of internal revenue generation to reduce cost of living in Nigeria. The specific objective is to determine the impact of internally generated revenue of the three tiers of government on cost of living in the country. Annual time series data spanning from 1981-2017 were employed and Ordinary Least Squares technique used to carry out the multi-regression analysis with the aid SPSS version 20. The findings revealed that federal government independent revenue has insignificant negative influence on consumer price index (CPI) being proxy for cost of living. On the contrast, state government internally generated revenue (IGR) has significant positive impact on CPI while the local government IGR exerts strong and significant positive impact on CPI. The study thus recommends that the three tiers of government in Nigeria should take advantage of all IGR sources in their region and under their control for maximum benefit and reduction of cost of sustenance in the country.

Keywords: Internal revenue generation, utilization, reduction, cost of living, Nigeria.

1. Introduction  
Inadequate revenue generation and misuse of resources in a developing country such as Nigeria has posed a serious challenge which leads to high cost of living and poor delivery of public goods and services on the part of the government. Most importantly the mismatch of cost of living and internally generated revenue in the country has been heightened in the recent times, thereby resulting to poor state of the citizenry who can no longer afford the cost of goods and services. Internally generated revenue accruing to the three tiers of government in Nigeria is meant to be used in subsidizing the cost of education, food, health services, transportation and electricity for the common man in the country. This major aim is defeated as majority of people resort to self-medication and herbal remedies to avoid high cost of medical services. Due to lack of proper feeding, many fall sick and cannot get medical help even from government owned health centers due to lack of adequate facilities for work. Many parents cannot afford quality education that is now at the mercy of private individuals who wish to recover their heavy investment in the nearest future.

The question is, of what use is internally generated revenue when the cost of sustaining life and businesses is so high and cannot be affordable by everyone in the country. There is obvious lack of infrastructures to boost businesses as a result many private businesses have been forced to close down. Oteh (2010) posits that provision of infrastructure is necessary for business expansion in an economy just as physical assets and services. This is because it raises the standard of living of the populace. When government revenue is well utilized, it has a favourable multiplier effect on all facets of the economy and people living in the country.
1.1 Study objectives
1. To establish the effect of federal internally generated revenue (FIGR) on consumer price index (Proxy for cost of living) in Nigeria.
2. To assess the impact of state internally generated revenue (SIGR) on consumer price index (CPI).
3. To determine the influence of local government internally generated revenue (LIGR) on CPI.

1.2 Statement of hypotheses
1. There is no significant relationship between FIGR and CPI.
2. SIGR does not have significant impact on CPI.
3. LIGR does not influence CPI significantly.

2.1 Conceptual review
2.1.1 Consumer Price Index (CPI)
Consumer price index is a measure of changes in the purchasing power of a currency and the rate of inflation. The CPI expresses the current prices of a basket of goods and services in terms of the prices during the same period in a previous year, to show effect of inflation on purchasing power (Business Dictionary, 2017). CPI has been described as a comprehensive measure applied to estimate the price changes of goods and services representing consumption expenditure in an economy (TET, 2017). In Nigeria, CPI measures changes in the prices paid by consumers for a basket of goods and services (Trading Economics, 2017). Those goods and services are broken into eight major groups: food and beverages, housing, apparel, transportation, medical care, recreation, education and communication, other goods and services (Investopedia, 2017). CPI measures the price level of all goods and services that are bought by consumers within the economy while GDP deflator measures the price level of all goods and services that are produced within the economy (Quickonomics, 2017).

2.1.2 Internally generated revenue
Internally generated revenue are revenues generated by states within the Nigerian federation, independent of their share of revenue from the federation account (Delloite, 2016). It can therefore be said that IGR refers to all constitutionally approved revenues accruing to the federal, state and local governments but do not include federation account allocation, loans and funds from external sources. According to Asimiyu and Kizito (2014), economic development and sustainability of states in Nigeria depends on the ability of such states to generate revenue internally to supplement the revenue allocation from federation account.

2.1.3 Tax Revenue collections.
Nigerian constitution arranges tax revenue collections in the following order as contained in the second schedule part II of the 1999 constitution:

Federal Government
- Companies income tax;
- Withholding tax;
- Petroleum profit tax;
- Value added tax;
- Education tax;
- Capital gains tax - Abuja residents and corporate bodies;
- Stamp duties involving a corporate entity;
- Personal income tax in respect of: armed forces, police, residents of Abuja, FCT, external affairs and Non-residents.

**State governments**
- Personal income tax (except as stated above); direct (self and government) assessment and withholding tax (individuals only);
- Capital gains tax (individuals only);
- Stamp duties (instruments executed by individuals only);
- Pools betting and lotteries, gaming and casino taxes;
- Road taxes;
- Business premises registration and renewal levy;
- Development levy (individuals only);
- Naming of streets registration fee in state capital;
- Right of occupancy fees in state capitals;
- Markets where state financiers are involved.

**Local governments**
- Shops and kiosks rates;
- Tenement rates;
- On and off liquor license;
- Slaughter slab fees;
- Marriage, birth and death registration fee;
- Naming of streets registration fee (excluding state capitals);
- Rights of occupancy fees (excluding state capitals);
- Market/motor park fee (excluding markets where state fiancé is involved);
- Domestic animal license;
- Cattle tax;
- Wrong packing charges;
- Signboard/advertisement permit;
- Merriment and road closure fees;
- Public convenience, sewage and refuse disposal fee;
- Customary, burial ground and religious places permit;
- Bicycle, trucks, carve, wheelbarrow and carts fee other than mechanically propelled trucks;
- Road/television (other than radio TV transmitter licenses, vehicle radio licenses to be imposed by the Local Government of the state in which vehicle is registered).

### 2.2 Theoretical review
Hypothetically, this study is backed up by the Fiscal Decentralization Theory (FDT) initially supported by Oates (1972), and further promulgated by several authors. Fiscal decentralization also referred to as devolution of fiscal power from the national (central or federal) government to subnational (lower level) governments, is believed to be part of a reform package to enhance public sector efficiency, attract healthy competition among states and local governments in the area of public service delivery to boost economic growth (Bahl & Linn, 1992; Bird & Wallich, 1993). It is a system where government structure allows responsibilities, functions and resources to be shared between the higher and the lower government levels. The major aim of decentralizing revenue generation and expenditure responsibilities is to improve the efficiency of the public sector, cut the budget deficit and promote economic growth (Bird, 1993; Bird & Wallich, 1993; Bahl & Linn, 1992; Gramlich, 1993; Oates, 1993). The argument is that decentralization will increase economic efficiency because local governments are better
positioned than the central government to deliver public services that match local preferences and needs which will lead to faster economic development of a country both in the short and long run (Oates, 1972).

2.3 Empirical review
Ekankumo and Braye (2011) appraised stimulating internally generated revenue by subnational governments in Nigeria. The study revealed the inadequacy of the use of taxation as the major source of internal revenue but suggested the entrepreneurial option as the only sustainable means to boost economic development.
Adenugba and Ogechi (2013) studied the effects of internal revenue generation on infrastructural development in Lagos State. The study employed descriptive and inferential statistics by using simple percentage and spearman rank. The findings revealed a positive significant relationship between IGR and Infrastructural development in the State.
Muriithi (2013) examined the relationship between government revenue and economic growth in Kenya. The study was conducted in Kenya and in the year 2013. Descriptive research design was adopted while the time series data from 2003 to 2011 were collected from Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS) and Ministry of Finance Kenya. The result of the multi-regression analysis indicated a significant negative impact of import and excise duties on the economic growth while income tax, Value Added Tax and none tax revenue showed a positive and significant impact on the economic growth.

Nnanseh and Akpan (2013) examined the effects of internally generated revenue on infrastructural development in Akwa Ibom State focusing on road, water and electricity. The study employed simple percentage statistics for data analysis and simple regression statistics for hypotheses testing; the findings revealed uneven contributions to infrastructural development in the areas of road, water and electricity. Remarkably, the IGR contribution on road construction within the period covered by the study was very outstanding.
Abiola and Ehigiamuose (2014) evaluated internally generated revenue and its consequence on fiscal sustainability of State governments in Nigeria. The study adopted descriptive approach and there was a high correlation between the growth rates of IGR and capital expenditure.
Alexander (2015) employed least square multiple regression to investigate the relationship between GDP (the dependent variable) and the tax revenue which comprised Direct Taxes, Indirect Taxes and taxes collected by the Customs Division in Ghana. The time series data collected spanned from 1999 to 2014. The findings revealed a positive relationship between tax revenues and economic development. The study recommended more efforts to be made to ensure tax transparency and information sharing between Ghana and other Countries. This will help the Ghana Revenue Authority to prevent tax evasion and avoidance by companies and individual taxpayers whose business operations extend beyond Ghana.

Mohammed, Ahmed and Saliu (2015) investigated the relationship between government spending and internally generated revenue in Adamawa's State Local government using pooled regression technique. The findings revealed a significant association between government expenditure and internally generated revenue of Adamawa state government.
Dagwom, Bako, and Ishaya (2016) used Ordinary Least Squares (OLS) regression to test the impact of revenue generation on social service delivery in Plateau State. The study covered a period ranging from 2006 to 2015. The result of the econometric analysis showed that only IGR among all other explanatory variables has a significant and positive impact on social service delivery in Plateau State.
The foreign and local studies stated above did not consider the effects of IGR (of the three tiers of government) on cost of living in Nigeria as a whole, though the works are similar to the present study but vary in variables, study objectives and period of time covered.

3.0 Methodology

The study made use of ex-post facto and descriptive research designs. Ex-post facto (which implies after event research) was adopted because the research data were all historical. The descriptive research design allows numerical collection of research data and their statistical analysis to arrive at the results which serve as empirical evidences in this field of study. The data on CPI (dependent variable) were obtained from the International Monetary Fund, International Financial Statistics and data files, FGIR data were gathered from the Central Bank of Nigeria annual reports, SIGR and LIGR (independent variables) were collected from the CBN Statistical Bulletin, 2017 edition. All data obtained from various sources were logged to achieve uniformity of data values and to keep them at the same base for easy analysis. The study made use of Augmented Dickey Fuller Unit root testing to establish stationarity of data to avoid spurious regression result. Ordinary Least Squares (OLS) method was used to perform the multi-regression analysis with the aid of SPSS version 20.

The model adopted for the study is specified below:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu_i \]

Where:

- \( Y = \) CPI (Consumer Price Index)
- \( X = \) Determinant of economic development
- \( X_1 = \) FGIR (Federal Government Independent Revenue)
- \( X_2 = \) SIGR (State Government Internally Generated Revenue)
- \( X_3 = \) LIGR (Local Government Internally Generated Revenue)
- \( \beta = \) Determines the relationship between the independent variable \( X \)
- \( \mu_i = \) normally distributed error term.

4.0 Data analysis and interpretation of result

Table 4.1: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.956</td>
<td>.913</td>
<td>.905</td>
<td>.26256365</td>
<td>.566</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), LOGLIGR, LOGFGIR, LOGSIGR
b. Dependent Variable: LOGCPI

From table 4.1 above, R value is 95.6% suggesting a high correlation between the predictor variables and the dependent variable. The R Square value of 91.3 explains the rate of variability on CPI caused by FGIR, SIGR, and LIGR. Therefore, it shows that 8.7% of the changes is associated with other factors the model did not account for.
<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>23.953</td>
<td>3</td>
<td>7.984</td>
<td>115.817</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>2.275</td>
<td>33</td>
<td>.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26.228</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2: ANOVA

a. Dependent Variable: LOGCPI  
b. Predictors: (Constant), LOGLIGR, LOGFGIR, LOGSIGR  
Source: Author’s Computation, 2018.

Table 4.2 above depicts the value of F Statistics to be 115.817 with a p-value of 0.000. This indicates that the model is suitable for the study and statistically significant. However, the result also suggests that the independent variables (FGIR, SIGR and LIGR) collectively have significant and positive influence on CPI.

Table 4.3: COEFFICIENTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.076</td>
<td>.323</td>
<td>3.334</td>
<td>.002</td>
</tr>
<tr>
<td>LOGFGIR</td>
<td>-.194</td>
<td>.097</td>
<td>-.380</td>
<td>-2.001</td>
</tr>
<tr>
<td>LOGSIGR</td>
<td>.309</td>
<td>.102</td>
<td>.627</td>
<td>3.038</td>
</tr>
<tr>
<td>LOGLIGR</td>
<td>.130</td>
<td>.014</td>
<td>.732</td>
<td>9.522</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LOGCPI  
Source: Author’s computation, 2018.

The study earlier hypothesized that FGIR, SIGR and LIGR do not have significant impact on CPI. From the result on table 4.3, FGIR has insignificant negative impact on CPI, therefore, Ho1 is hereby accepted. This result is in agreement with the findings of Muriithi (2013) but conflicts with the findings of (Adenugba & Ogechi, 2013; Nnanseh & Akpan, 2013; Abiola & Ehigiamuose, 2014; Alexander, 2015). However, SIGR has significant positive impact on CPI, thus, Ho2 is rejected and alternative which states otherwise accepted. In like manner, LIGR has a robust significant positive impact on CPI and so Ho3 is rejected and alternative accepted. These results agree with the findings of (Adenugba & Ogechi, 2013; Nnanseh & Akpan, 2013; Abiola & Ehigiamuose, 2014; Alexander, 2015) but disagrees with the study of Muriithi (2013) who discovered significant negative impact of import and excise duties on the economic growth in Kenya.

5.0 Conclusion and recommendation

The findings of this study revealed that SIGR and LIGR have more impact on consumption cost reduction than FGIR in the country. The implication is that the revenue powers allowed to the three tiers of government require states and local governments to take maximum advantage of them for better delivery of public goods and services. The FGIR which is the revenue accruing to the federal government independently also requires improvement in order to affect consumption cost positively. Therefore, the study recommends sufficient revenue generation to improve the economy through all revenue sources within the state and local governments. This will help reduce consumption cost and improve economic performance of the country.
Acknowledgement
This paper is part of PhD Dissertation of the Author. The author wishes to appreciate the Institute of Chartered Accountants of Nigeria for the research grant that helped to conclude this work. I thank the Supervisory team J.U.B. Azubike (Asst. Prof) and M.C. Ekwe (Asst. Prof) for their continuous encouragement that helped in completing the entire research work. The author expresses sincere gratitude to Prof. John Uzoma Ihendinihu of Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria and Prof. Kabiru Isa Dandago of Bayero University, Kano-Nigeria for their immense contributions and high level professional expertise applied in the review of the entire Dissertation.

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