

Relational Analysis of the Effect of Federation Accounts and Federal Government Retained Revenue on the Nigerian Economic Growth (1981-2015)

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Abstract

The study is a relational analysis of the effect of federation accounts and federal government retained revenue on the Nigerian economic growth. The specific objective is to examine the extent to which federation account and federally internally generated revenue (FAFRR) affect the economic growth (GDP), educational system (EDU) and health standard (HLT) of the people. The study made use of ex-post facto research design and also employed time series data spanning from 1981 to 2015 which were obtained from CBN statistical bulletin. The statistical tools used for the analysis were multiple regression and t-test with the aid of SPSS version 20. The result revealed that FAFRR as the independent variable has a strong positive relationship and impact on all the dependent variable (GDP, EDU & HLT). The researchers were concerned about the visible result of the deterioration in the health care services, educational system and the economy generally. The research therefore concludes that, those gaps could be blamed on corrupt government officials who misappropriate government funds and resources. The study hereby recommends intensive anti-corruption moves by the relevant authorities that will actually bring these corrupt officials to book and that will serve as a deterrent to the existing and potential ones.

Keywords: Federation account, Retained revenue, Economic growth, Education, Health.

1.1 Introduction

Nigeria is a country that is made up of 36 states including the federal capital, 774 local governments. The success of Nigeria's federal system for effective government depends on an appropriate division of responsibilities and resources among federal, state and local authorities' supported by a sufficient institutional capacity of each of these levels to carry out its assigned functions. Stevens, Barhan and Gbayogu (2001).

Revenue implies the inflow of financial resources or monies into the government sector from other economic units/sectors, Otobala (2011). Revenue consists of revenue receipts and capital receipts. Revenue receipts include routine and earned, while capital receipt covers the items which are basically of non-repetitive and non-routine variety and changes government financial assets and liabilities Bathia (2006). Revenue also entails all non-repayable receipts and grants and is divided into current receipts and capital receipts. Jegede (2014). While current receipts comprise tax and non-tax receipts within a given period. Capital receipts are receipts from non-financial assets used in production process for more than one year. Grants on the other hand are non-compulsory non-repayable unrequited receipts from other government and international institution. In Nigeria Revenues consists of all revenue, nonoil revenue and federal government independent revenue in their aggregates, Jegede (2014). These revenues have been used by the federal government and their functional equivalent throughout history to carry out many functions of governments which include economic infrastructure social security's debt services, providing the Army, the police, the court system and for the operation of government itself.

On the other hand economics growth can be levied as the ability of an economy to improve its production of goods and services over a period of time using the factors of production within the economy. Pop nova et al (2008). The Effect of Revenues on Economic growth covers all economic activities from imposition of tax system to all extraction and exportation. Nigeria economic growth has been unstable, remained unpredictable and satisfactorily low over the years especially when compared with other nations. This study intends to examine the effect of the federation accounts and federal government retained revenue in Nigeria economic growth.

1.2 Objective of The Study

The major objective of this study is to carry out a Relational analysis of the Effect of Federation Account and Federal Government retained revenue in Nigeria economic growth (1981-2015). The study also seeks to achieve the following specific objectives.

- To investigate the extent to which federation account and Government retained revenue affect GDP.
- To assess the extents to which federation accounts and federal government retained revenue affect the education of the people.
- To evaluate to extent to which federation accounts and federal government retained revenue affect

health standard of the people.

1.3 Research Questions

To achieve the above objective the following research questions have been raised.

- (1) To what extent does federal government retained revenue affect Nigeria economic growth as represented by GDP?
- (2) To what extent does federation accounts and federal government retained revenue affect education of the people?
- (3) To what extent does federation account and federal government retained revenue affect health standard of the people?

1.4 Research Hypothesis

- H0₁ A Federation account, federal government retained revenue does not significantly affects Nigeria economic growth as represented by GDP.
- H0₂ There is no significant relationship between federation accounts; Federal Government retained Revenue and the education of the people.
- H0₃ The health standard of the people has not been positively influenced by the federation accounts and federal government retained revenue.

2.1 Conceptual Review

Revenue Allocation: Olowononi (2000) defines revenue allocation to include allocation of tax powers and the revenue sharing arrangement not only among the three levels of government but among the state government as well. Revenue allocation can be described as a method of sharing the centrally generated revenue among different tiers of government and how the amount allocated to a particular tier is shared among its components for economic development.

Economic Growth: It is a sustained rise in the output of goods, services and employment opportunities with sole purpose of improving the economics and financial welfare of the citizen.

Gross Domestic Product (GDP): It is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. Through GDP is usually calculated on an annual basis. It can be calculated on a quarterly basis as well. GDP includes all private and public consumption, government outlays, investment and export minus input that occur within a defined system.

Revenue: Revenue is defined as all amount of money received by a government from external sources for example those originally from "outside the government" net of refunds and other of debt the sale of investment, and intra-government transfer Ahmed (2010).

2.2 Review of Empirical Studies

Nsebot (2004) studied the effect of revenues fluctuation in economic growth in Nigeria from 1970-1999 using multiple regression model of OLS and found that total federally collected revenue has a significant impact on economic growth and the standard deviation of total federally collected yields a positive influence in economic growth as against the prior expectation. The result further indicates that tax base could be change to raise nonrevenue without altering the rate since the coefficient of tax to revenue is elastic.

Egwakhide (1988) analyzed the structure shift of government revenue to the level of economic development using growth in GDP as a proxy for economic growth. He used two set to regression equation by breaking sample period into two 1961-1971 and 1972-1982. First regression analysis indicated that a positive relationship exist between the variables. The second regression result indicates also rose from 81% to 82%. He concluded that result of the regression analysis indicates that external fund has been the single most important sources of government revenue. The study also found that economic development has a significant impact in direct government revenue.

Medee and Neubee (2011) carried an econometric analysis of the impact of fiscal policy variable in Nigeria economic growths (1979-2009) using vector Auto regression and error correction mechanism techniques and claimed that tax revenue have effect on the gross domestic product both at the short and long run, meaning that tax revenue positively impact in the economic growth in Nigeria.

Anastasias and Dritsaki (2005) examined the relationship between tax revenue and later of economic growth in Greece from 1956-2002 using annual time series data and applying the multivariate VAR model and testing for granger causality among the variables. The result shows that there exist a causal relationship between tax revenue and economic growths in Greece.

Illyas and Siddiqi (2010) studied the impact of revenue gap on economic growths using a case study of Pakistan over the period of 1980-2008. Under investigating variables had mix order of integration. The results reveal that revenue gap is significant and negatively related with economic growth. The econometric results

suggest that the gap between targeted revenue and actual collected revenue is high; it affects economic growth negatively and significantly.

Oechlin (2009) examines Government Revenue and Economic growth in wealthy institutionalized states. The finding reveals that even well-funded government often fail to provide crucial public goods such as adequate infrastructure reliable law enforcement. The model further predicts the instability effects to be stronger in places into low levels of human or physical capital or in remote countries where technology adoption in more expensive.

Okafor (2012) used multiple correction and regression method to evaluate the relationship between tax revenue generation and economic development of Nigeria (1981-2007) and concluded that there exists a strong significant relationship between tax revenue and Gross Domestic Product (GDP).

Muriithi (2013) did a null on the relationship between government revenue and economic growth in Kenya. The study adopted a descriptive research design. The study used a secondary data collected from central bank of Kenya, KNBS KIPPRA and ministry of finance etc. The study concluded that increase in VAT leads to positive effect on the rate of economic growth. The study also concludes that there is a relationship between governments

Okwori (2016) examined the revenue sources and economic growth in Nigeria-an appraisal. The result of the study shows that increase in oil by one percent increases GDP by 0.21% same goes for non-oil increase by 0.25% ED by 0.07% respectively except for DD by 0.026% the study further recommend that economic policy should be formulated both for domestic and external loan utilized in productive ventures for increase productivity.

Dang (2013) studied the revenue allocation and economic development in Nigeria An Empirical study, time series date was used from the period of 1993- 2012, Error correction model (ECM) and prairies Granger Causality test were used to analysis the data. The study shows that revenue allocations have significant causal relationship with economic development in Nigeria, with all revenue allocation of states having significant negative relationship.

Gbeyesola and Uga (1999) studied the average responsiveness and the temporal stability of government revenue in Nigeria from 1970-1995 using regression analysis and other test statistic (Parameter) like chow test (t-test) for structural change, to determine the inter temporal stability. The study find out that total federally collected revenue was more responsive to change in income in early years, it was also found that the magnitude of parameter estimate measuring responsiveness to change in tax revenue to change in tax rate and tax reform diminished significantly as the economy move away from 1980.

Ajakaiye (1999) analyze the impact of VAT revenue in Nigeria using the (GE methodology simulation model) and found that if VAT able organization treat VAT in the expected non cascading manner and VAT revenue are reinserted into the economy via increase in sectoral government consumption, the general price level will increase by 5%.

The study find out that VAT will have the most adverse effect in price consumption output employment and income best approximate the Nigeria system.

Worlu and Nkoro (2012), examines the impact of tax revenue on the economic growth of Nigeria covering the period of 1980 to 2007 using secondary data from Central Bank of Nigeria and Federal inland Revenue Service. The dates were analysed using the three stage least square estimation technique, the result shows that tax revenue impact on economic growth in Nigeria.

Rewane (2007) studied the impact of oil revenue on Nigeria credit worthiness debt profile and sustainability from 1973-2004. He found that the biggest challenges facing oils producing country is how to use its oil wealth strategically to promote sustainable development.

Jegade (2014) did a work on Econometric Analysis of the Effectiveness of Public Revenue in Economic growth in developing countries. An examination of Nigeria Economy, a time to series data from 1980-2008 was used in the study, while ordinary least square (OLS) methods T test and F-test were used as analytical techniques. The study revealed that public revenues were effective in promoting economic growth in Nigeria. The study revealed that public revenues in Nigeria and has caused volatility in other revenues such as non-oil and Federal government independent revenue.

2.2.1 Gap in Literature:

Considering the empirical reviews, it can be seen that no work has been done on relational analysis of the effect of federation accounts and federal government retained revenue on the Nigerian economic growth (1981-2015). This is the gap that this work has aimed to fill.

3.0 Research Methods

3.1 Research design

The research design adopted in this study is ex-post facto. Time Series Annual data on federation account and federally retained revenue, GDP, expenditure on education and health were extracted from the Central bank of

Nigeria statistical bulletin for the period spanning from 1981 to 2015. The econometric technique of Ordinary Least Squares (OLS) was used with the aid of the Statistical Package for Social Sciences (SPSS) version 20 in analyzing the data.

The conventional econometric model was adopted and reformulated for the study as follows:

$$EG = f(\text{FAFRR}) \quad (1)$$

Where;

EG = Economic growth as dependent variables.

FAFRR = Federation account and federally retained revenue.

The above model is specified thus:

$$GDP = \beta_0 + \beta_1 \text{FAFRR} + \mu \quad (2)$$

Where;

GDP = Gross domestic product

FAFRR = Federation account and federally retained revenue

β_0 = the parameter which represents the intercept

β_1 = the regression parameter used in determining the significance of the impact of the independent or explanatory variable (FAFRR) on the dependent variable (GDP). μ = Random disturbance term.

$$EDU = \beta_0 + \beta_1 \text{FAFRR} + \mu \quad (3)$$

Where;

EDU = Education standard of the people

FAFRR = Federation account and federally retained revenue

β_0 = the parameter which represents the intercept

β_1 = the regression parameter used in determining the significance of the impact of the independent or explanatory variable (FAFRR) on the dependent variable (EDU). μ = Random disturbance term.

And:

$$\text{HLT} = \beta_0 + \beta_1 \text{FAFRR} + \varepsilon \quad (4)$$

Where;

HLT = Health standard of the people

FAFRR = Federation account and federally retained revenue

β_0 = the parameter which represents the intercept

β_1 = the regression parameters used in determining the significance of the impact of the independent or explanatory variable (FAFRR) on dependent variable (HLT).

ε = Random disturbance term.

4.0 Results and Discussions

	GDP & FAFRR	EDU & FAFRR	HLT & FAFRR
R	0.933	0.971	0.945
R ²	0.870	0.943	0.893
Adjusted R	0.866	0.941	0.889
Standard Error	10296.436	28.747	24.850
Durbin Watson	0.315	1.036	1.245
F-Value	220.094***	546.768***	274.377***
T-Test	14.836***	23.383***	16.564***
P-Value	0.000	0.000	0.000

SOURCE: SPSS OUTPUT FOR RESEARCH DATA, 2017.

*****Significant at 0.000**

The study results revealed that there is a strong positive relationship between the dependent variables, (GDP, EDU, and HLT) and the independent variable (FAFRR) as depicted by coefficient of determination (R) of 0.933, 0.971 and 0.945; and the correlation coefficient (R-Square) of 0.870, 0.943 and 0.893 respectively. Therefore, the FAFRR commands an influence equivalent to 93.3%, 97.1% and 94.5% of the changes in the GDP, EDU and HLT respectively. That means, 6.7%, 2.9% and 5.5% of other variables not mentioned could as well influence the economy, the educational and health standard of the people. The F-test shows that the model is statistically significant since the p-value of $0.000 < 0.05$.

4.1 Test of Hypotheses

The study earlier hypothesized that FAFRR does not have significant influence on GDP, EDU and HLT of Nigerians. Looking at the individual results, it shows that FAFRR has a strong positive impact on economic growth, educational and health standards of the people. That means the null hypotheses have been rejected and the alternatives which state otherwise accepted.

5.0 Conclusion and Recommendation

The result of the study shows that the government is actually committed in ensuring that funds and resources are made available for economic growth and better standard of living in terms of health and man power development. The physical results, judging from dilapidated school buildings, non-payment of teachers' salaries and to almost a collapsed health system depict the existence of corruption which has eaten deep into the fabrics of the Nigerian economy. This research finding is therefore a clarion call to the EFCC and other anti-graft agencies to intensify effort in checking all government officials entrusted with public funds to ensure efficient, effective and economic utilization of these resources. Further research is recommended to be carried out to find out how funds allocated to health, education and for economic growth generally are being practically utilized. The actual expenditure on these economic variables should be marched with the fund released by the government to establish the variance. This could also give the anti-graft agencies the direction to do their work effectively.

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