Correlates of state government finances and the Nigerian economy

John C. Imegi
Rivers State University of Science and Technology
Port Harcourt, Nigeria

Key words
Correlates, state government finances, Nigerian economy, Gross Domestic Products

Abstract

This study investigated the correlate of state government finances and the Nigerian economy. To achieve this purpose research question was raised, a review of literature was made and a hypothesis was developed. In generating the necessary data for the study, state government finances was operationalized as state internally generated revenue while the Nigerian economy was measured by Gross Domestic Product (GDP). The records were obtained from the Central Bank of Nigerian Statistical Bulletin of various years. In analyzing the data generated from this study, the simple percentages and regression analysis were adopted . The result of our analysis indicates that from 2010 to 2014, the percentage of SIGR to GDP is 41.64%, which means that the degree of state government finances in Nigeria is low. On the relationship between state government finances and the Nigerian economy, the analysis shows a correlation co-efficient of 0.493 and a p-value of 0.965. This suggests that though a moderate relationship exists between state government finances and the Nigerian economy, the impact is insignificant. Based on these findings, it is recommended that state governments in Nigeria should intensify efforts in their revenue mobilization and ensure that all sources of revenue stipulated in the 1999 constitution are adequately tapped. This in the long-run has the potential to bring about financial independence.

Introduction

Within the last decades issues of domestic resource mobilization has attracted considerable attention in many developing countries including Nigeria. In the face of unabated debt difficulties, coupled with the domestic and external financial imbalances confronting them, it is not surprising that many developing nations have been forced to adapt stabilization and adjustment policies and increase revenue which demand better and more efficient methods of mobilizing domestic financial resources with the view of achieving financial stability and promoting economic growth. Taxation plays a significant role in achieving this purpose. According to Opuene (2006), taxation is the imposition by the government of a compulsory levy on the income, profit, property, or the expenditure (consumption) of an individual, family, community, firms or corporate bodies so as to enable the government carry out its economic and social responsibilities to the citizenry.

In a federation like Nigeria, the concept of inter-governmental fiscal relations subsists, and the government fiscal power is based on three-tier tax structure – federal, state, and local governments, each of which has different tax jurisdiction for the enactment of tax laws, formulation of tax policies, and tax administration (Adesola, 2004). In 2002, about 40 different taxes and levies are shared by all three levels of government. Each tier of government has the sphere clearly spelt out in the Taxes and Levies (approved list for collection) Decree, 1998. The most variable taxes are under the control of the federal government while the lower tiers are responsible for the less buoyant sources, which imply that the federal government tax corporate bodies while the state and local governments tax individuals. According to Odusola (2006), the Nigeria's tax system whether at the federal, state or local levels is characterized by unnecessary complexity, distortion and largely inequitable tax laws that have limited application in the

informal sector. Promulgation of Decree No. 7 of 1975 set aside federalism in Nigeria taxation which limited the independence of state governments in the enactment of tax laws. State Assemblies were not involved to defend their limited independence to make tax laws as the peculiarities of their states might dictate. Consequently, the federal government on average accounts for 90 percent of the overall tax revenue annually, but only accounts for about 70 percent of total government expenditure (Naiyeju, 2010; Odusola, 2006).

According to Philips (1997), the breakdown of total tax and levy collection of the three tiers of government was 96.4 percent for the federal government, 3.2 percent for the state government and 6.4 percent for the local government. The above analysis clearly demonstrates that much is yet to be done to improve state government tax revenue in Nigeria. In addition, the ever increasing financial needs of states compelled state governments to imbibe the culture of improving internally generated revenue as alternative means of meeting and sustaining the various competing financing needs. It is upon this premise that this study tends to examine the correlates of state government finances and the Nigerian economy. This necessitates the question, what is the degree of state government finances in Nigeria? Based on the above, it was hypothesized that state government finances have no significant influence on the Nigerian economy.

Literature Review

A large body of research indicates that high marginal tax rates reduce economic growth. Two studies completed by Padovano (2001) and Gali (2002) confirm the negative effects of high marginal tax rates on economic growth. Using data from 23 OECD (Organization for Economic Co-operation and Development) countries from 1951 to 1990, Padovano (2001) and Gali (2002) found that high marginal tax rates and progressive taxes trended to be negatively associated with long-term economic growth. In 2002, they followed up their original study and found that an increase of 10 percentage points in marginal tax rates decreased the annual rate of economic growth by 0.23 percentage points. Additional studies corroborate the finding that high and increasing marginal taxes negatively affect economic growth. For example, Reinhard, Koester and Roger (1989), using data for 63 countries during the 1970s, found that reducing the progressivity of the tax system while allowing the government the same tax revenue led to higher levels national income.

Similarly, Mullen and Williams (1994), using data from US states from 1969 to 1986, examined the impact of state and local tax structures on the economic performance of states. They concluded that "lowering marginal tax rates can have a considerable positive impact on growth" and that "creating less confiscatory tax structure, while maintaining the same average level of taxation, enables sub-national government to spur economic growth.

Engen and Skinner (1996) revealed evidence on tax rates and economic growth in the United States and -internationally. They concluded that "a major tax reform reducing all marginal rates by five percentage points, and average tax rates by 2.5 percentage points, is predicted to increase long-term growth rates by between 0.2 and 0.3 percentage points''. More so, Romer and Romer (2007) analyzed the impact of changes in the level of taxation on economic growth. In this important study, the authors investigated the effects of tax reforms on GDP in the United States in the post-world War II period. The study found that such tax changes had very large effects on GDP-a tax increase equivalent to 1% or GDP lowered output (as measured by real GDP) by roughly 2% to 3%.

Labour supply increases as tax decrease taxes are an important determinant of labour supply. By changing the returns (in the form of the after-tax wages) to employees, taxes

influence labor force participation and the number of hours worked. Numerous studies provide compelling evidence that taxes reduce labour supply, both in terms of hours worked and participation in the workforce. An important contribution was recently made by Prescott (2004). Prescott examined the role of marginal tax rates in accounting tar changes -in hours worked and employment income for the working age population (people aged 15 to 64 years) in the G-7 countries for the periods of 1970 to 1974 and 1993 to 1996. He found that, during these two time periods, differences in marginal tax rates accounted for a large part of the differences in hours worked in the United States and several European countries. Similarly, Davis and Magnus (2004) recently completed a study that investigated the effects of national differences in tax rates on employment income, payroll, and consumer spending. The authors posited that higher tax rates reduce the reward for work and, thus, decrease work time in the private sector and increase the size of the underground economy. After examining data from 16 industrialized countries during the 1990s, they found that a tax rate increase of 12.8 percentage points led to 122 fewer hours worked per adult per year, which translated into a decline of 4.9 percentage points in total employment and an increase in the underground economy of roughly 3.8% of GDP.

A study by Cardia et al (2003) supports these findings, it strongly suggests that taxes can account for most of the changes in hours worked both over-time and across countries. One of the most influential studies on the relationship between taxes and investment is that by Hall and Jorgenson (1967). The authors calculated the effects of changes in tax policy on investment behavior in the United States after three major tax revisions following the Second World War. They found that tax policy was highly effective in changing the level, timing, and composition of investment.

Fazzari, Hubbard, and Bruce (1988) analyzed the effects of taxes on capital spending. The authors investigated whether marginal or average tax rates had an impact on capital investment. They found that lower average tax rates increased the amount of earnings firms would make. The authors analyzed the impact High and increasing marginal tax has for reinvestment in capital. They observe that changes in income tax rates reduce economic growth by 4.6%. Mullen, and Williams (1994) examined changes in the United Kingdom's tax policy from 1978 to 1992, and the impact of those changes on labour supply. They concluded that increases in after-tax wage levels had a positive impact on hours worked.

In a more recent study, Carroll, Davis and Smith (1998) explained trends in average hours worked by the working age population (people aged 15 to 64 years) across 21 OECD countries from 1956 to 2004. They concluded that average hours worked has fallen substantially in most OECD countries over the period average hours worked by the working population in 2004 were almost 20% below their 1956 levels. The authors found that income and consumption taxes better explained the decrease in hours worked than other factors such as labour regulation and the size and duration of unemployment benefits. High taxes mean less investment. Investment is important for a nation's future wellbeing. High marginal tax rates lower an investor's willingness to invest by lowering the returns on his investment. A reduced amount of investment has a number of negative consequences; including decreased productivity of marginal tax rates have a more important influence on firms' investment decisions. For such firms, lower marginal tax rates reduced the cost of new investment and stimulated capital investment. Stum and Sparoh (2011) provided empirical evidence regarding the influence of business taxes on capital investment. The study used American tax reforms as natural experiments to estimate the responsiveness of investment in fixed assets. The authors concluded that investment changed significantly subsequent to every major business tax reform since 1962.

Stum and Sparoh (2011) investigated the impact of tax reforms on investment using a cross-country comparison. The authors examined the impact of tax reforms on the investment decisions of over 3,000 firms from 1981 to 1992 in 14 OECD countries. The authors found that changes in tax policy affected investment levels in 12 of the 14 countries.

In addition, Carroll, Davis and Smith (1998) found that a five percentage point rise in marginal tax rates would reduce the proportion of entrepreneurs who make new capital investment by 10.4%. Further, such a tax increase would lower average capital investment by 9.9%.

An Overview of the Nigerian Economy

Nigeria gained her political independence from Great Britain in 1960 with high hopes for a society that would guarantee rapid economic, social and political progress. From 15th January, 1966 to 31st September 1979, the nation had been under military dictatorship regimes. It is important to know that from 1st October 1979, to 31st December 1983, Nigeria practiced the American type of democracy. However, this democracy fell on 1st January 1984 when Nigeria witnessed yet another era of military regime. A democratically elected Government was sworn in on 29th May 1999. It is the hope of Nigerians that the military will restrict themselves to their constitutionally defined roles. It was expected that the economy would usher in high standard of living for its citizens. To this effect, a lot of effort was put into designing and establishing appropriate economic strategies through the various National Development Plans. Specifically, the Government undertook substantial investment in industries, social services and infrastructure in order to accelerate the pace of economic growth and development. At that time, expectations were heightened by exploration of huge oil reserves which included sharp increases in foreign exchange earnings and government revenue. The so-called oil boom produced profound changes in the investment, production and consumption patterns of the country. It also led to fundamental changes in the socio-cultural values, political arrangements, mode of economic management as well as the policies and programmes that were embarked upon in the period, (Central Bank of Nigeria, 1993).

It must be noted that the Nigerian economy is still primarily agrarian, yet about 90% of the country's foreign exchange earnings is generated by the oil sector and about 70% of the Federal Government revenue is also derived from the oil sector. But the share of the agricultural sector in the GDP is 31%. This is about thrice of the sector. However, because of low productivity in agriculture, 59.65% of total labour force is employed in the sector. The relative shares of employment by other sectors are 14.98% in Chemical-Petro-Chemicals, 4.01% in Construction, 3.13% in basic industries, 2.06% in public utilities, 6.04% in Government, and 10.27% others. The manufacturing sector in spite of it contributing less than 10.01% contribution to the GDP has the greatest potential for employment generation. One of the major manifestations of the gravity of the nation's economic depression is the increasing lack of capacity to create new jobs or maintain existing ones. The continued inability of the economy to provide employment, the existence of a large number of unemployed unskilled labour and the resultant social and economic consequences has made it imperative that job creation and occurrence should be the primary objectives of economic recovery programmes. Unfortunately, the implementation of the policy objectives of job-creation in the past had been unsuccessful. Specifically, the IMF-World Bank Structural Adjustment Programme (SAP) embarked upon since 1986, instead of creating new employment has even reduced the existing low level of employment and output. Furthermore, the deregulation of both interest and exchange rates had

led to high cost of production. This has resulted in high prices, thereby reducing the purchasing power of the population.

More importantly, the stock of unsold goods has risen and a reasonable number of business enterprises have folded, industrial investment has drastically declined and capacity utilisation fell from 70.0 percent in 1986 to 29.0 percent in 1995. This unpleasant situation was aggravated by dumping that has adversely affected a large proportion of the Nigerian populace. Many people have not only become discouraged and marginalized but have been existing and continue to exist a standard of living which denies them the attainment and enjoyment of individual and social basic needs and self-reliance. In spite of these economic and social crises arising primarily from the introduction and implementation of the SAF the IMF-World Bank still put pressure on Nigeria to continue with SAP (Muyi, 2006).

The oil boom of the 1970s placed Nigeria into the class of countries with higher per capita income. However, since then, the oil market has weakened and the foreign exchange earnings from the dominant sector eventually declined substantially. Consequently, Nigeria has once again been regrouped into the countries with low per capita income. The economic crisis is not only that of low per capita income but also that of macroeconomic instability characterized by high inflation rate, sharp depreciation of the national currency, high unemployment rate, and balance of payments disequilibrium. These problems resulted because of Nigeria's continued dependence on the export of crude oil for foreign exchange earnings and Government revenue (Ndukwe, 1991).

As in many Sub-Saharan African countries, Nigeria's experience has also proved that public sector intervention can result in failure in achieving desired objectives. The main argument in support of Government intervention is based on the inherent failure of price mechanism to evolve a stable equilibrium in the market economy, (CBN, 2000). Since the attainment of independence, the Nigerian Government had adopted and implemented four Development Plans between 1980 and 1985. The country adopted the IMF World Bank Structural adjustment Programme (SAP) in July 1986. As Gbosi (2004) observed, the primary objectives of the SAP were: to restructure and diversify the production base of the Nigerian economy; lay the basis for sustained growth; improve fiscal and balance of payments stability; limit unproductive elements in the public sector to improve the sector's efficiency and intensify growth of the private sector; and establish a realistic and sustainable exchange rate for the naira; and reduce the debt burden and attract a net inflow of foreign capital, while keeping a lid on foreign loans.

These objectives were to be achieved through the main instruments of the SAP which included trade and payments liberalization, tariff reforms, adoption of tight fiscal and monetary policies to mop excess liquidity and commercialization and privatization of public enterprises. Thereafter, the country adopted three years rolling plans. These objectives were designed to promote rapid economic growth and development and also to bring about significant improvement in the living conditions of the people. Over the years, the results of the Government's role in economic activities and achievements in economic performance in Nigeria have been mixed. For example, the country experienced growth in real output in some years and declines in other years. However, the over-all picture is that of low scoring for the country's development efforts. Specifically, the economic crisis from the 1980's and early 1990's brought out clearly the difference between growth and development. A country may achieve growth of GDP without economic development. The data in Table 1 is used to highlight Nigeria's economic performance over the period, 1970 - 2000.

Table 1: Macroeconomic Trends

Year	Federal Fiscal Overall (N Million)	Inflation %	Growth Rate of GDP	Net Foreign assets (N Million)	Real Exchange Rate	Interest Rate %	Real Interest Rate
1970	(460.0)	13.80	46.80	150.0	-	7.00	(6.80)
1971	170.0	15.71	26.33	280.0	-	7.00	(8.74)
1972	(59.0)	28.60	8.45	240.0	-	7.00	(21.60)
1973	166.0	5.71	59.09	410.0	-	7.00	1.29
1974	1,796.0	12.61	60.00	3,560.0	-	7.00	(5.61)
1975	(428.0)	33.60	17.09	3,670.0	-	6.25	(27.35)
1976	(1,091.0)	24.55	24.66	3,400.0	-	6.50	(18.05)
1977	(781.0)	13.45	17.41	2,960.0	-	6.00	(7.45)
1978	(2,822.0)	22.03	7.32	1,420.0	-	6.75	(15.28)
1979	1,461.0	11.46	19.03	3230.0	-	7.79	(3.67)
1980	(1,975.0)	10.28	18.62	5,610.0	-	8.43	(1.85)
1981	(3,902.0)	20.62	40.29	2,560.0	-	8.92	(41.70)
1982	(6,104.0)	7.73	2.36	1,060.0	-	9.54	1.81
1983	(3,364.0)	23.26	9.99	810.0	-	9.89	(13.28)
1984	(2,660.0)	39.51	11.32	1,420.0	-	10.24	(29.27)
1985	(3,039.0)	7.46	13.76	1,820.0	-	9.43	1.97
1986	(8,254.0)	54.76	0.97	4,460.0	-	10.50	4.74
1987	(5,889.0)	11.23	49.03	6,870.0	-	13.96	2.73
1988	(15,134.7)	54.50	33.39	7,970.0	-	16.30	(38.20)
1989	(12,160.9)	50.49	54.78	1,8230.0	-	20.44	(30.05)
1990	(22,116.1)	7.35	15.94	41,320.0	-	25.30	17.95
1991	(35,755.3)	13.02	24.31	54,000.0	-	20.04	7.02
1992	(35,645.3)	44.58	69.69	39,390.0	-	24.76	(19.82)
1993	(107,270.0)	57.17	26.79	58,710.0	-	31.65	(25.32)
1994	(70,270.0)	57.04	31.25	55,994.5	-	20.48	(36.56)
1995	1,000.0	72.80	116.16	108,655.8	76.67	20.24	(52.56)
1996	37,049.1	29.30	42.79	148,982.9	81.66	19.70	(9.60)
1997	(5,000.0)	8.50	4.09	221,952.0	82.02	18.40	(9.90)
1998	(13,338.9)	10.00	(3.48)	209,136.2	84.22	18.30	8.30
1999	(285,104.7)	6.6	2.8	666.271.2	92.65	20.53	13.9
2000	(103,777.3)	6.9	3.8	1,275.016.9	63.3	21.32	14.4

Source; Gbosi (2004)

Methodology, Analysis and Results

This study focused on State Government Finances and the Nigerian Economy for the period of 2010-2014. While state government finances were operationalized as state internally generated revenue, the Nigerian economy was measured by Gross Domestic Product (GDP). The records were obtained from the Central Bank of Nigerian Statistical Bulletin of various years. In analyzing the data generated from this study, the simple percentages and regression analysis were adopted, which was computed with the aid of the Statistical Package for Social Sciences (SPSS) version 17.

The model specification and estimation for this study is as designed thus:

GDP = $f[\alpha_o + \beta LogSIGR]$

Where GDP = Gross Domestic Product

SIGR = State Internally Government Revenue

α_o = Regression Constant
β = Regression Co-efficient

The respondents were asked to indicate the degree of state government finances in Nigeria, and the result obtained is presented in the Table 2 below.

Table 2: Degree of state government finances in Nigeria

Year	SIGR (in millions of naira)	GDP (in millions of naira	% of SIGR to GDP
2010	12031	33985	35.4
2011	13387	37330	35.9
2012	16523	40544	40.75
2013	20359	37286	54.60
2014	15955	38387	41.56
Average			**41.64**

Source: SPSS Version 17 Windows Output

The data presented in the table above indicate the degree of state government finances (SIGR) in relation to GDP. In 2010, the percentage of SIGR to GDP was 35.4%; in 2011 it was 35.9%; in 2012 it was 40.75; in 2013 it was 54.60; and in 2014 it was 41.56%. From 2010 to 2014, the percentage of SIGR to GDP is 41.64%. This implies that the degree of state government finances in Nigeria is low.

In testing the stated hypothesis, Gross Domestic Product (GDP) was regressed against State Internally Generated Revenue (SIGR), and the result obtained is shown in the Table 3 below.

Table 3: Impact of State Government Finances on the Nigerian Economy

Model	R	R Square	F	Sig.
1	.493[a]	.243	.965	.398

Source: SPSS Version 17 Windows Output

The Table above shows a correlation of 0.493 which is close to zero from the positive side. This suggests there is a moderate relationship between state government finances and Nigerian economy. But the F-ratio of 0.965 and probability of 0.398 indicate insignificant impact. It therefore implies that state government finances have no significant impact on the Nigerian Economy.

Conclusion and Recommendations

The ever increasing financial needs of states governments compelled them to imbibe the culture of improving internally generated revenue as alternative means of meeting and sustaining the various competing financing needs. Although there are several sources of revenue to the state government, most of the sources of state governments tax revenue are untapped particularly the miscellaneous sources thereby under-mining their revenue generation efforts. The tax system in most states of the federation is seen as an embodiment of contention and controversy whether in its policy formulation, legislation or administration. As a result, the role of taxation in promoting economic activity and growth is no more felt. Similarly, the literature has equally suggested that state income tax levels have impact on economic growth. States with low tax rates are more successful in the collection of taxes as the rate of evasion is low, compared to states with high tax rates.

The result of our analysis indicates that from 2010 to 2014, the percentage of SIGR to GDP is 41.64%, which means that the degree of state government finances in Nigeria is low. The implication of this is that a greater proportion of state government revenue comes from

statutory transfers. On the relationship between state government finances and the Nigerian economy, the analysis shows a correlation co-efficient of 0.493 which is close to zero from the positive side and a p-value of 0.965. This suggests that though a moderate relationship exists between state government finances and the Nigerian economy, the impact is insignificant. Based on this discussion and the conclusion drawn there from, it is recommended that state governments in Nigeria should intensify efforts in their revenue mobilization and ensure that all sources of revenue stipulated in the 1999 constitution are adequately tapped. This in the long-run will bring about financial independence.

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Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493[a]	.243	-.009	2381.10173

a. Predictors: (Constant), SGR

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5473484.870	1	5473484.870	.965	.398[a]
	Residual	1.701E7	3	5669645.443		
	Total	2.248E7	4			

a. Predictors: (Constant), SGR

b. Dependent Variable: GDP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31805.128	5899.435		5.391	.013
	SGR	.364	.371	.493	.983	.398

a. Dependent Variable: GDP