# Causal Relationship between Revenue Allocation and Economic Growth of Niger Delta Area

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### Abstract

This study determines the causal relationship between statutory allocations and economic growth of Niger Delta area. The study looks at how statutory allocations to the six states affect the economic growth (GDP) of the six Niger Delta states. Data were secondarily sourced from Federal Ministry of Finance of Nigeria and Canback Global Income Distribution database (C-GIDD); and were subjected to multiple regression analyses and Granger causality technique to determine the overall effect on Niger Delta and the six states respectively. The result of the study conclude that there is an insignificant relationship between statutory allocation and economic growth of Niger Delta area and recommend that statutory allocation to the region should be channelled to economic friendly projects that will cause efficient growth of the region.

*Keywords*: Statutory allocation, growth, Niger Delta JEL Classification: O40 Economic Growth and Aggregate Productivity: Revenue allocation

#### Introduction

The developmental strides of the Niger Delta area have been under unprecedented criticism. The various observations by onlookers and scholars have question the developmental achievements of the area compared to the proceeds generated from the region. Argument are not farfetched based on the developmental strides experienced in Libya, Ahbu Dhabi and other oil generating economies of the world. The economy of Nigeria at large proportionately reveals the picture experiences in the Niger Delta area. The largesse of the oil product in this area in quantity has run into uncountable millions since generation of oil for commercial purpose. Most of the revenue from these oil output has cumulated to the cruz of federal government revenue for over 80 to 90% of Nigeria since the discovery of oil after independence. These same revenue have cumulated into what has dictated the pace and developmental achievement of Nigeria. The various states of the nation have received most of its allocation from the federal government from the oil revenue generated in the Niger Delta. These allocations are shared in different proportion over time under different governmental administration among the tiers of government and the various level of government. However, according to Ekekwe (2003) statutory allocation to the states has been insufficient to deliver the necessary and sufficient conditions for the development of the Niger Delta areas. Regardless of the various means that facilitates revenue generation and the taxing powers, the underdevelopment of the region is alarming (Usman, 2011). The increased revenue however failed to better the developmental strides Niger Delta needs (Ekekwe, 2003). The underdevelopment of the region have facilitated different forms of demands from reparation to agitations against unfair treatment in terms of their ecology and in

the eighties to confrontations, riots, demonstrations, kidnapping, holding of hostages, pipeline and flow-station vandalization, killing, among others (Ukeje, 2004). This is as a result of the fact that in-spite of the devastating effects of underdevelopment on the people and the communities, the total statutory allocation and revenue generation via petroleum profit tax and other form of taxes which oil producing companies and other investment parastatals pay directly to the federal government of Nigeria, have had little or no impact on the Niger Delta area. Thus, this research will be incomplete without identify with various research works in the areas of statutory allocation in Nigeria and their developmental achievements. This research is premised on the research of Ogbonna and Shaka (2016) that look at statutory allocation and economic development of three states of the Niger Delta region. Thus the study looks at all the six states that make up the Niger Delta as a base study. Hence, this study attempts to determine how the statutory allocation to the six Niger Delta states has influenced the economic growth of the Niger Delta Area.

### Literature Review

### **Conceptual Framework**

In a federal system of government like Nigeria, the major characteristic is statutory allocation. According to Ikeji (2011) statutory allocation is sharing revenue generated centrally among the various organs/level of government. However, since 1958 several commission, committee, Acts and Decrees have been set to allocate revenue distribution starting with Sir Raisman and Professor Ronald recommendation of Distributable Pool Account (DPA) to share federally collected revenues, Okigbo committee of 1979 recommended horizontal allocation of revenue among the states; Revenue Allocation Act No. 1 of 1981, Allocation of Revenue Act No. 1 of 1982; in 1984, Revenue Amendment Decree No. 36 of 1984 was promulgated, Decree no 49 of 1989 set up a commission that appraised formula for revenue allocation; in 1992, the allocation formula was reviewed and revenue re-arrangement was made and in 2002, the Revenue Mobilization Allocation and Fiscal Commission (RMAFC) reacting to the Supreme Court submission re-allocate the sharing formula. The sharing formula is still under debate and unending. However, the appropriate formula for revenue sharing has been a major issue in the Nigerian politics. Thus, the study look beyond the issues of revenue sharing formula but the end impact on the general wellbeing of the recipient of such revenue generation and direction.

Major issues arising within the Niger Delta is whether the housing of natural resources (i.e. crude Oil and gas) is a curse on the Area. This fear is termed Dutch Disease which is the fears of de-industrialization an economy experience in the wake of the appreciation of natural resources, while in the case of Nigeria; the discovery of crude oil and natural gas deposits in the Niger Delta. Dutch Disease theory state that the discovery of natural resource and eventual dependence on such discovery; expose the economy to booms and busts. The appreciation of the crude oil and natural gas following the boom of crude export destabilize agricultural profitability and export in Niger Delta states. The petroleum exports in the 1970s and 1980s" growth hurt other sectors exports excessively. The agricultural activities in cocoa, groundnuts, palm oil and cassava was disastrous in the Niger Delta states totally because of the contamination of the soil by oil spillage and this had overall impact on the agricultural activities. Regardless of the enormous profits and revenue generation enjoyed by the Multinational corporations and the federal government, the Niger Delta indigenes had little or no benefits from its natural resources (Oguduvwe, 2013: Oluduro & Oluduro. 2012).

Revenue generation from oil and other Niger Delta resources are non-renewable and therefore, the profit/income from such activities should be used to build facility for fair wealth distribution (Eweje, 2007 and Orogun, 2010). According to Edino et al. (2010) oil spillage destroyed the possible yield and nutrients of crops in the Niger Delta and its overall development. Akhigbe (2013), states that the role of MNOCs and the Nigerian State is the reason behind armed insurgency and deteriorating standard of living.

### Theoretical Framework

There are several numbers of developmental theories as they pertain to economic development. They include sustainable theory of development, modernization theory of development, theory of structuralism, basic needs theory, theory of industrialization and human development theory. The theories of development are multiple in nature(s) and viewed as a united theory about necessary societal desirable change achievable. The theory of sustainable development encompasses the general well-being of the needs of the people. According to Agagu (2008), sustainable development is that which help facilitate the meeting of the present generation yearnings and at the same time avoiding sacrificing future generation needs. Sustainable development and advancement.

Modernization theory of development is based on modernization processes and looked at the beneficial part of countries and that which make up major obstacles for economic development. The term modernization theories were developed from the innovative act of scientist like David Apter, Seymour Martin Lipset, David McClelland and Talcott Parsons; while, the theory of development by industrialization was the only key to economic development according to Marshall Plan. Another theory of development is the theory of structuralism economics which view Structuralism as an expansion theory that tend to achieve economic development structurally. The theory is the country's economic transformation to a modern, urbanized manufacturing and service economy from mainly subsistent agriculture. This is aim at self-sustenance. Another theory of development is the Basic needs theory that was introduced to address the short coming of Modernization theory and Structuralism theory of development in 1976 by the International Labour Organization. Human Development Theory is another theory of development that looks at ideas based on different origins like ecology, sustainable development, feminism and welfare economics. The theory was improved by Amartya Sen and MahbubulHaq and majored on people"s capabilities that serve as determinant of their well-being. Generally, development is the elevation of an entire society towards an enhanced or more civilized life. However, according to Todaro and Smith (2003) what constitute this life has tended to drift under certain context, as the process of development deepens and as new problems to be solved by development emerge. Goulet (1992) provides three basic core values which serve as conceptual basis for development. Life sustenance is the provision of basic needs. Self-Esteem is self-independent and respect while freedom refers to total independence for expression of will. The study looking at all the theories as yardstick for the study observed that regardless of the endowed resources available and utilized in the region, it is still far from development as shown by different development theories; regardless of interventions in Niger Delta Development Board, the Niger Delta Basin Development Authority, the Presidential Task Force, the Presidential Implementation Committee and the NDDC.

### **Empirical Framework**

According to Ojo (2010), due to the conditioning of the Niger Delta, the federal governments are conditioned to inject more funds to such areas to create stability because "the area lacked adequate infrastructural facilities, functional educational system and socio-economic condition" (Idowu, 2012). Odoemene (2011) and Edino et al. (2010) noted that development in the region is affected by the negative externalities from oil/gas exploration and oil related activities which resulted to continuous health problems, migration, social tension, and other deprivation. Such challenges prompted Amadi and Abdullah (2012) to dictates that an investment engagement should benefit stakeholders (Niger Delta). Carney, Gedajlovic, and Sur (2011) in their argument support Amadi and Abdullah by asserting that stakeholders have impartial rights.

According to Edino et al. (2010) oil spillage destroyed the possible yield and nutrients of crops in the Niger Delta and its overall development. Akhigbe (2013), states that the role of MNOCs and the Nigerian State is the reason behind armed insurgency and deteriorating standard of living. However, the study of Akujuobi and Kalu (2009) point that financing of state"s real asset investments are based on the soul of sources of finance for Nigerian State governments. Using OLS technique, they conclude that Federal allocations are able to significantly impact the financing of real asset investments. Davoodi and Zou (1998) also discovered an insignificant negative relationship between fiscal federalism and the economic growth in a panel data analysis. Woller and Philipps (1998) post an insignificant relationship between economic growth and decentralization. Political circumstances also play a great role on the impact of decentralization or statutory allocation on economic growth. Enikolopov and Zhuravskaya (2003) in their study find out that the effects of fiscal decentralization are dependent on political structure of party arrangement.

Akinlo (1999) states that federal grants (statutory allocation) determine state governments" Fiscal expenditure. Akujuobi and Kalu (2009) using OLS technique discovered the significant impact of federal allocation on the financing of real asset investments. Above all, statutory allocations emerge to account for major direction of total state governments" capital and recurrent expenditure (Olofin et. al, 2010). Based on the submission of Olofin et. al, this study attempt to determine how statutory allocation has affected the Niger-Delta between 2007 and 2014.

### **Research Methodology**

# **Model Specification**

Statutory allocations account for major federal funds directed to total state governments" capital and recurrent expenditure (Olofin et. al, 2010). Ogbonna and Shaka (2016) also identify the role of statutory allocation on economic growth using OLS. Akujuobi and Kalu (2009) using OLS technique states that federal allocation significantly related to financing of states real asset investments. Based on the submission of Olofin et. al (2010) and supported by Akujuobi and Kalu (2009), this study looks at the effect of statutory allocation on Niger Delta region growth in Nigeria between 2007 and 2015. The study used data from CBN issues of various years, the Federal Ministry of Finance Nigeria and the C-GIDD (Canback Global Income distribution database) and subjected to Granger Causality technique. It is used to determine whether one time series forecast another.

The test technique is based on the following equations;

 $(Y)_{t} = \alpha + \Sigma^{m}_{t=1}\beta_{i}(Y)_{t-1} + \Sigma^{m}_{t=1}T_{j}(X)_{t-j} + U_{t....(1)}$  $(X)_{t} = \overline{O} + \Sigma^{m}_{t=1}Y_{i}(X)_{t-1} + \Sigma^{m}_{t=1}Y_{j}(Y)_{t-j} + \varepsilon_{t....(2)}$ 

Where  $U_{t and} \varepsilon_t$  are serially independent random vectors with zero mean and finite covariance matrix.

The study"s model is estimated thus;

$$\begin{split} & \textit{NIGERDELTAgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{NIGERDELTAgdp}_t + \sum_{t=1} \beta_1 \textit{NIGERDELTAstat}_{t-j} + \varepsilon_t \text{----} \ (1) \\ & \textit{AKWAgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{AKWAgdp}_t + \sum_{t=1} \beta_1 \textit{AKWAAstat}_{t-j} + \varepsilon_t \text{----} \ (2) \\ & \textit{BAYELSAgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{BAYELSAgdp}_t + \sum_{t=1} \beta_1 \textit{BAYELSAstat}_{t-j} + \varepsilon_t \text{----} \ (3) \\ & \textit{CROSSRIVERS gdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{CROSSRIVERS gdp}_t + \sum_{t=1} \beta_1 \textit{CROSSRIVERS stat}_{t-j} + \varepsilon_t \text{----} \ (4) \\ & \textit{EDOgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{EDOgdp}_t + \sum_{t=1} \beta_1 \textit{EDOstat}_{t-j} + \varepsilon_t \text{----} \ (5) \\ & \textit{DELTAgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{DELTAgdp}_t + \sum_{t=1} \beta_1 \textit{DELTAstat}_{t-j} + \varepsilon_t \text{-----} \ (6) \\ & \textit{RIVERSgdp}_t = \alpha_0 + \sum_{t=1} \beta_1 \textit{RIVERS gdp}_t + \sum_{t=1} \beta_1 \textit{RIVERS stat}_{t-j} + \varepsilon_t \text{-----} \ (7) \end{split}$$

Where;

NIGERDELTA<sub>STAT/GDP</sub> = Cumulative Statutory revenue allocated to Niger Delta States and their GDP

CROSS RIVERS<sub>STAT/GDP</sub> = Statutory revenue allocated to Cross Rivers State of Nigeria and their GDP

AKWA<sub>STAT/GDP</sub> = Statutory revenue allocated to Akwa Ibom State of Nigeria and their GDP EDO<sub>STAT/GDP</sub> = Statutory revenue allocated to Edo State of Nigeria and their GDP BAYELSA<sub>STAT/GDP</sub> = Statutory revenue allocated to Bayelsa State of Nigeria and their GDP DELTA<sub>STAT/GDP</sub> = Statutory revenue allocated to Delta State of Nigeria and their GDP RIVERS<sub>STAT/GDP</sub> = Statutory revenue allocated to Rivers State of Nigeria and their GDP = stochastic error in with usual while noise properties

#### **Presentation and Interpretation of result Table 1**

GROSS DOMESTIC PRODUCT OF NIGER DELTA STATES IN NIGERIA IN MILLIONS OF NAIRA 2007-2014

	MILLIONS OF MAINA 2007-2014								
	RIVERS	AKWA IBOM	EDO	DELTA	BAYELS A	CROSS RIVERS	NIGER DELTA		
2007	2,232,877.18	1,184,540.21	1,259,691.17	1,774,796.22	459,591.53	984,641.18	6,711,597.28		
2008	2,233,034.09	1,184,564.74	1,259,684.64	1,774,826.48	459,633.94	984,641.21	7,896,385.10		
2009	2,959,312.65	1,569,862.04	1,669,512.21	2,352,041.52	609,055.90	1,304,971.06	10,464,755.38		
2010	3,135,930.03	1,663,577.17	1,769,085.38	2,492,463.91	645,400.68	1,382,767.61	11,089,224.78		
2011	3,399,694.24	1,803,583.65	1,917,983.25	2,702,176.55	699,650.31	1,499,076.58	12,022,164.58		
2012	3,722,813.32	1,974,884.98	2,100,254.50	2,958,941.23	766,234.58	1,641,616.25	13,164,744.85		

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2013	3,821,052.07	2,027,138.79	2,155,657.04	3,037,121.28	786,372.94	1,684,932.25	13,512,274.38
2014	4,087,255.06	2,168,184.45	2,305,690.35	3,248,654.04	841,221.65	1,802,221.43	14,453,226.99
2015	3,757,703.67	1,993,447.97	2,119,896.29	2,986,723.28	773,369.87	1,656,961.63	13,288,102.71

SOURCES: C-GIDD (Canback Global Income distribution database),

### Table 2: Central Bank of Nigeria Statistical Bulletin (Various Issues)

STATUTORY ALLOCATION TO NIGER DELTA STATES IN NIGERIA IN MILLIONS OF NAIRA 2007-2014

	RIVERS	AKWA IBOM	EDO	DELTA	BAYELSA	CROSS RIVERS	NIGER DELTA
2007	238,821.00	133,729.23	28,785.35	95,591.00	108,603.05	29,231.65	605,975.93
2008	361,111.00	219,731.80	36,818.05	147,733.00	151,305.49	43,736.49	923,617.78
2009	241,336.00	186,955.09	37,645.79	155,497.00	103,090.54	30,103.09	716,981.73
2010	272,294.00	230,341.87	42,883.06	163,617.00	121,603.36	35,745.60	823,601.83
2011	397,023.00	270,449.09	58,285.36	235,395.00	202,274.76	52,617.21	1,105,141.85
2012	216,525.61	254,214.59	58,440.42	203,647.43	158,361.43	51,360.78	884,109.85
2013	247,585.59	296,257.26	65,513.89	219,190.36	189,054.03	53,665.83	1,005,753.07
2014	168,316.76	236,922.12	52,657.46	171,841.98	138,670.16	44,850.88	760,601.90
2015	130,935.76	136,653.51	28,573.06	91,556.99	77,385.86	29,826.81	494,931.99

SOURCES: FMF (Monthly Allocation of Federal Ministry of Finance database).

The table above shows trend of both GDP and statutory allocation to the various state of the Niger Delta area within the period under study. The GDP of the six states and the cumulative GDP of Niger Delta appreciate continuously throughout the period of the study. However, the statutory allocations to the different states fluctuate up and down within the period.

Statutory allocation to Rivers state appreciate at the beginning of the period and fell in 2009 to 241 billion but appreciate in 2010 and further in 2011 to 397 billion before falling in 2012 to 216billion. However, 2013 show improvement in statutory allocation but fell to 168billion in 2014 and further in 2015. Akwa Ibom statutory allocation experiences the same twist in trend over the years in different denomination and rate. Edo statutory allocation shows continuous progression in federal allocation over the years until 2014 when it dropped from 65 billion in 2013 to 52billion in 2014 and further to 28billion. In the case of delta state, statutory allocation fell three times in 2012, 2014 and 2015 after enjoying appreciating allocation over time. Like Delta state, Bayelsa statutory allocation fell in 2009, 2012, 2014 and 2015 in reaction to shortage in revenue generation of federal government. Cross rivers state also witness dwindling statutory allocation within the period. The Niger Delta cumulated allocation from the table above fell first in 2009 to 716billion due to global economic crisis that had it toll on the Nigerian revenue and oil price shock, while the second fall in allocation fell in 2012 to 884billion was due to global fall prices finally 2014 760billion and further 2015. in oil and in to in

Table 2: ADF Unit Root Test for Niger Delta states" GDPs								
Variables	ADF Test Stati	ADF Test Statistic						
	P-Value	Test Statistic	Level, 1 <sup>st</sup>	& 2 <sup>nd</sup>	Level	of		
			Differencing		integration			
RIVGDP	0.0222	-4.296960	-3.519595**		1(0)			
AKWAGDP	0.0713	-3.540413	-2.0388***		1(2)			
BAYELSAGDP	0.0224	-4.285587	-3.519595**		1(0)			
CRIVERGDP	0.0222	-4.296540	-3.519595**		1(0)			
DELTAGDP	0.0222	-4.299248	-3.519595**		1(0)			
EDOGDP	0.0221	-4.302525	-3.519595**		1(0)			
NIGDELTAGDP	0.0238	-4.227714	-3.519595**		1(0)			

## Diagnostic test Using ADF statistics and Heteroskedasticity

Source: Researchers E-view result, Note:\*, \*\*, \*\*\* statistically significant at 10%, 5% and 1% significant level

The unit root results above show that Rivers-GDP, Bayelsa-GDP, Cross Rivers-GDP, Delta-GDP, Edo-GDP and the overall Niger Delta-GDP were stationary at level with significant P-value except Akwa-GDP that was stationary at second level with significant P-value.

Variables	ADF Test Stati	stic	ý	
	P-Value	Test	Level, $1^{st}$ & $2^{nd}$	Level of
		Statistics	Differencing	integration
RIVSTAT	0.0190	-4.451411	-3.519595**	1(1)
AKWASTAT	0.0162	-4.616639	-3.519595**	1(1)
BAYELSASTAT	0.0435	-3.647917	-3.519595**	1(1)
CRIVERSTAT	0.0051	-3.457910	-2.021193**	1(1)
DELTASTAT	0.0225	-4.595116	-3.694851***	1(2)
EDOSTAT	0.0051	-3.618697	-2.043968***	1(2)
NIGDELTASTAT	0.0469	-3.455132	-3.403313**	1(0)

Table 3: ADF Unit Root Test for Niger Delta states" Statutory Allocation

Source: Researchers E-view result, Note:\*, \*\*, \*\*\* statistically significant at 10%, 5% and 1% significant level

The unit root results in table 3 above show that Rivers-STAT, Bayelsa-STAT, Cross Rivers-STAT, and Akwa-STAT were stationary at first level while Delta-STAT and Edo-STAT were both stationary at second level. However, the overall Niger Delta-STAT was stationary at level with significant P-value.

Table 4 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey							
F-statistic	1.709539	Prob. F(6,	,2)	0.4140			
Obs*R-squared	Obs*R-squared 7.531480 Prob. Chi-Square(6) 0.2745						
Scaled explained SS	0.110510	Prob. Chi-Square(6)		1.0000			
Test Equation:							
Dependent Variable: RESID <sup>2</sup>							
Method: Least Squares							

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$D_{2} = \frac{10}{2} \frac{10}{2} \frac{10}{10} \frac{10}{10$							
Date: 10/26/16 11m	e: 23:51						
Sample: 2007 2015							
Included observations							
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
С	3.01E+12	2.67E+12	1.130059	0.3757			
AKWASTAT	3192344.	20834492	0.153224	0.8923			
BAYELSASTAT	18055508	65660787	0.274982	0.8091			
EDOSTAT	-2.64E+08	2.95E+08	-0.893027	0.4661			
DELTASTAT	63962776	43543092	1.468953	0.2796			
RIVERSTAT	-13211603	22246665	-0.593869	0.6128			
CROSSRIVERSST							
AT	-17171017	1.01E+08	-0.169910	0.8807			
R-squared	0.836831	Mean dep	endent var	7.18E+11			
Adjusted R-squared	0.347324	S.D. depe	ndent var	5.87E+11			
S.E. of regression	4.74E+11	Akaike inf	fo criterion	56.65963			
Sum squared resid	4.50E+23	Schwarz o	56.81303				
Log likelihood	-247.9683	Hannan-Quinn criter.		56.32860			
F-statistic	1.709539	Durbin-Watson stat		2.482412			
Prob(F-statistic)	0.413979						

Source: Author"s compilation using Eview 6 statistical Package

From the result in table 4, F-statistics of 1.709539 and P-value of 0.4140 is constant in both displayed section of the table. The P-value in excess of 0.05 and higher than 0.10 shows that there is no presence of heteroskedasticity and hence, the certainty of the result of this output.

Table 5: Dependent-Niger Delta GDP							
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
С	17566426	10110406	1.737460	0.2244			
AKWASTAT	59.22466	78.95848	0.750073	0.5314			
BAYELSASTAT	168.7427	248.8410	0.678115	0.5676			
EDOSTAT	-1094.329	1119.263	-0.977723	0.4313			
DELTASTAT	206.6809	165.0195	1.252464	0.3370			
RIVERSTAT	-99.77460	84.31033	-1.183421	0.3582			
CROSSRIVERSST							
AT	-39.01736	382.9950	-0.101874	0.9282			
R-squared	0.884760	Durbin-W	atson stat	1.602030			
Adjusted R-squared	0.539040	F-statistic		2.559179			

Regression result using OLS ble 5: Dependent-Niger Delta CDP

Source: Author"s compilation using Eview 6 statistical Package

The result in table 5 above shows 88% variation in Niger Delta-GDP is explained by the explanatory variables. The Durbin Watson statistics (1.6203) indicates the absence of autocorrelation. The F-statistic (2.559) is not statistically significant at 5% level of significance implying that the independent variables are not jointly significant in explaining the Niger Delta-GDP (level of economic activities). The result also shows that there is no significant relationship

between statutory allocation to the various states and Niger Delta-GDP. This is contrary to the apriori expectations of positive impact on the GDP of the six states. The overall result is in line with the findings of Enefiok and Ekpe (2014) that state that neglected infrastructural development in rural areas also affected the overall development of the state. The findings of Davoodi and Zou (1998) also support the result above by stating that an insignificant negative relationship exists between fiscal federalism and the economic growth in a panel data analysis. This however contradict earlier work of Ogbonna and Shaka (2016) that states that there is a significant relationship between statutory allocation to the three Niger delta states and economic growth of Niger Delta.

Sample: 2007 2015				
Lags: 2				
Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
NIGERDELTAGDP does not Granger				Accept
Cause	6	0.22551	0.8302	
NIGERDELTASTAT does not Granger				Accept
Cause		0.95766	0.5857	
BAYELSAGDP does not Granger Cause	e			Accept
BAYELSASTAT	6	0.68255	0.6502	
BAYELSASTAT does not Granger Cause BAYELSAG	OP	1.80044	0.4662	Accept
CROSSRIVERGDP does not Granger Cause	e			Accept
CROSSRIVERSTAT	6	2.17107	0.4327	
CROSSRIVERSTAT does not Granger		0.66743	0.6544	Accept
Cause				
DELTAGDP does not Granger Cause DELTASTAT	6	0.02367	0.9771	Accept
DELTASTAT does not Granger Cause DELTAGDP		0.74998	0.6325	Accept
EDOGDP does not Granger Cause EDOSTAT	0.42455	0.7354	Accept	
EDOSTAT does not Granger Cause EDOGDP	3.99167	0.3336	Accept	
RIVERSGDP does not Granger Cause RIVERSSTAT	0.11232	0.9036	Accept	
RIVERSSTAT does not Granger Cause RIVERSGDP	0.27362	0.8039	Accept	
AKWAGDP does not Granger Cause AKWASTAT	6	0.36325	0.7611	Accept
AKWASTAT does not Granger Cause AKWAGDP		62.3914	0.0892	Reject
	1			

Results of Granger causality for the Effect of statutory allocation on Niger Delta of Nigeria

Source: Author"s compilation using Eview 6 statistical Package

The granger causality result above shows that statutory allocation to Niger Delta couldn''t granger cause the Gross Domestic Product of Niger Delta area of Nigeria. Looking at the result of Bayelsa, Cross Rivers, Delta, Edo and Rivers states results were to unable granger cause the Gross Domestic Product of the states except for Akwa Ibom statutory allocation; which granger cause the Gross Domestic Product of its state in the study but with P-value greater than 0.05 indicates that the effects are not significant. The findings are contrary to apriori expectations and are supported by the findings of Enefiok and Ekpe (2014) and Davoodi and Zou (1998).

### **Conclusion and Recommendations**

The result of this research shows that there is no significant relationship between statutory allocations and economic growth (Gross Domestic Product) of Niger Delta area. The OLS result shows poor relational impacts of the statutory allocations to the six states individually on the Niger Delta economic performance; the overall impact of the variables on the economic performance of the Niger Delta was also insignificant. Based on the techniques for the study, the result shows that statutory allocations to the six states were unable to effect changes in economic growth of the individual states and the Niger Delta area of Nigeria at large. Hence, the study proffers the following recommendations;

Government should setup institutions to ensure that all statutory allocations are channelled to necessary factors that facilitate economic growth.

Secondly, the existence of militancy should not be an excuse to use development funds for rehabilitating militancy within the region

Finally, government should set up agencies to ensure that there is accurate project costing, reduction of project fund diversion and elimination of project abandonment.

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### **Biography**

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Appendis						
Dependent Variable: NIGERDELTAGDP						
Method: Least Squar						
Date: 10/26/16 Tim	e: 23:57					
Sample: 2007 2015						
Included observations	s: 9					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	17566426	10110406	1.737460	0.2244		
AKWASTAT	59.22466	78.95848	0.750073	0.5314		
BAYELSASTAT	168.7427	248.8410	0.678115	0.5676		
EDOSTAT	-1094.329	1119.263	-0.977723	0.4313		
DELTASTAT	206.6809	165.0195	1.252464	0.3370		
RIVERSTAT	-99.77460	84.31033	-1.183421	0.3582		
CROSSRIVERSST						
AT	-39.01736	382.9950	-0.101874	0.9282		
R-squared	0.884760	Mean dep	endent var	11400275		
Adjusted R-squared	0.539040	S.D. depe	ndent var	2647592.		
S.E. of regression	1797558.	Akaike in	fo criterion	31.69323		
Sum squared resid	Schwarz o	criterion	31.84663			
Log likelihood	Hannan-Quinn criter.		31.36220			
F-statistic	2.559179	Durbin-W	1.602030			
Prob(F-statistic)	0.307410					
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Source: Author"s compilation using Eview 6 statistical Package