

**THE EFFECT OF FISCAL POLICY ON ECONOMIC DEVELOPMENT: A  
COMPARATIVE STUDY ON GROSS DOMESTIC PRODUCT AND HUMAN  
DEVELOPMENT INDEX IN NIGERIA 1990-2017**

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**ABSTRACT:** *This study sought to provide more insights on the topic “fiscal policy and economic development” by extending its focus to examining the relationship between fiscal policy and economic development using human development index (HDI) as a more comprehensive representation of human and economic progress than the gross domestic product (GDP). The study adopts an ex-post facto research design to enable the use of Nigerian time series data from 1990 to 2017 in an Ordinary Least Square (OLS) regression technique for analyses. Findings reveal that fiscal policy variables such as government revenue and expenditure have negative effect on the gross domestic product but positive and significant on human development index of Nigeria, while government debt has positive effect on GDP and significantly negative effect on HDI. Results further reveal interesting outcomes on the effect of fiscal policy on Nigeria’s economic development such trade depicting a negative and significant effect on HDI but positive and insignificant for GDP. The study, therefore recommends that using HDI to measure the effect of fiscal policy may be a better approach to measuring economic development. Also, that the government of Nigeria should engage in more productive and try to improve on the mechanisms to grow its revenue to enhance economic development in Nigeria.*

**KEYWORDS:** Fiscal policy, gross domestic product, human development index, economic development.

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## **INTRODUCTION**

Every country wants to achieve stable economic growth, industrial development and higher living standards for its citizens. To this end, every economy relies on fiscal policies or public financing for economic development projects and programs as a prerequisite for the achievement of these goals.

Nigeria is known as the largest country in Africa, in term of the economy (GDP) and its population size of over 180 million which also makes it the most populous country in Africa. Nigeria enjoys the advantage of its vegetation, tropical climate with other diverse ranges of crops with lots of benefits. It should have been one of the world’s biggest exporters of a variety of products, which

would have led to a large proportion of opportunities from entrepreneurship and trade. This shows how vital its resources are when the goal is to achieve economic development in the country.

Poverty has been a major challenge facing the vast proportion of the Nigerian population since the past decades. In the 1980s, a little less than 30% of the Nigerian population lived below the poverty line. Researches and statistics have shown that there has been no real change in Nigerians' living standards, while the worldwide living standards continued to improve. The country's high poverty is also contributing significantly to worldwide poverty.

Nigerian economy began to experience a recession from the early 1980s which leads the country to a depression. This country remained in recession up to the early 1990s without the hope of recovery. Hence, the government continued initiating policy measures that would tackle and overcome the dwindling economy. Drawing experience from the great depression, policy measure taken by the government to curb the depression was to increase government spending (Nagayasu, 2003). Okunroumu, (1993), stated that macroeconomic stability in Nigeria has remained harmful and unproductive; hence one cannot say that the Nigerian economy is performing. This is evident in the adverse government fiscal policies, inflationary trend, undulating foreign exchange rates, the rise and fall of gross domestic product, increasing unemployment rates as well as unfavourable balance of payments, as they all indicate a growing macroeconomic instability. As such, Nigeria as an economy is unable to perform well in an environment where there is low capacity utilization which attributed to unpredictable and volatile government policies as well as a shortage in foreign exchange in Nigeria (Isaksson, 2001).

The terms economic growth and economic development have often been used interchangeably in the field of economics, yet many scholars have tried to differentiate between the two. Some of them believe that failed development projects can be traced back to the lack of understanding in the concept of development itself. Galloping (1994), states that development is about qualitative transformation; while growth is mainly about a quantitative increase. Therefore economic development, with a goal to increase the quality of life, is not synonymous to economic growth, with one means to the same ends.

As GDP represents economic growth alone and is a too narrow indicator for measuring economic development, and lately, it is being criticized for haven failed to account for and measure other aspects of development, such as life expectancy and enrolment in school. Hence, the HDI remains a broader and more comprehensive multi-composite indicator for measuring development, compared to GDP, even though GDP still provides about one-third of the index.

Development remains a problem in Nigeria and the use of fiscal policies as a tool to spur development is now being put to question. According to Okoroafor and Nwaeze (2013), the divergence between Nigeria's economic indicators, macroeconomic variables, and reality is a source of concern; this can be observed in Nigeria. The reality is that people are so poor, that they can hardly afford three square meals a day as well as having access to basic needs like public

healthcare, education, and others. This remains a paradox where even though the Nigerian economy is showing evidence of growth in terms of GDP, the proportion of Nigerians living in poverty, discomfort, and unemployment is rapidly increasing every year.

Specifically, this raises also the concerns on whether which of the fiscal policy compositions have a positive impact on the economic development and how it relates to both economic growth and development in Nigeria. Therefore, it is pertinent to consider the reasons why these fiscal policies are not adequately or fully yielding required outcomes and how it can be corrected or improved in Nigeria. The outcomes of this study will enable us to understand some causes of poor or low development and to improve implementation of the fiscal policy in order to address those causes. Also, it will contribute to an existing debate on whether using HDI is a better measurement for economic development rather than the traditional use of GDP.

### **Research Objective and Question**

The primary objective of this study is to examine scenarios of fiscal policy that could facilitate the achievement of rapid development success in the Nigerian economy, by examining the relationship between the fiscal policy and economic growth and development in Nigeria from 1990 to 2017, and in order to address the above problem, the following questions have been articulated to guide this study:

1. What is the relationship and effects of fiscal policy components on Gross Domestic Product in Nigeria?
2. What is the relationship and effects of fiscal policy components on Human Development Index in Nigeria?

Based on various observations in the relationship between fiscal policy and its compositions and the failure in achieving substantial economic development in Nigeria, the following hypotheses are tested in this study:

**Hypothesis 1:** there is no negative relationship between total fiscal policy composition and gross domestic product index in Nigeria.

**Hypothesis 2:** there is no negative relationship between total fiscal policy composition and the human development index in Nigeria.

The first hypothesis is designed to explore the effect of fiscal policy (government revenue, government expenditure, government debt) on economic growth (GDP) to conform existing literature and theories. The second hypothesis is also designed to explore the effect of fiscal policy (government revenue, government expenditure, government debt) on economic development using human development index (HDI), which will make it one of the few studies to use HDI in recent times, in attempt to compare them with the effect on the traditional use of GDP.

## **LITERATURE REVIEW**

### **Understanding Fiscal Policy**

Fiscal policy is known as the use of public expenditure and taxation by the government to influence the flow of economic activity in a nation. Microsoft Corporation, (2004) explains that fiscal policy is a deliberate act of manipulating spending and taxes by the government, in an effort, to influence the macro-economic variables to its expected goal of employment creation, sustaining economic growth, and low inflation. It remains an important tool used by the government to stabilize the macroeconomic conditions of their countries. It is a way by which the government can adjust its spending level, and in combination with the monetary policy, a more excellent micro stability of the economy can be achieved. Reem (2009).

Dornbusch & Fischer, (1990), explains that a government's increase in spending and a reduction in taxes move the economy away from recession, while a reduction in government spending and an increase in tax move the economy towards recession. Omitogun & Ayinla, (2007), believed that with the use of government budget, fiscal policy could be implemented. It means that budgets cannot be seen as only an administering tool used by the government sector but as an important measure of determining the economic life of a country.

Medee & Nembee, (2011), explains that the achievement of desired macroeconomic objectives of the government involves the use of the fiscal policy. Where taxation, borrowing, and spending, are used to manipulate and control aggregate demand, employment, and output. Anyanwu (1993) states that fiscal policy aims at improving economic conditions which in the long run or short run will be conducive to the growth. Therefore, it is evident that there can be economic growth and stability and a smooth running economy, when fiscal policy is used in harmony with other measures.

In the absences of an accurate approach for measuring development in its complexity and diversity, the most appropriate method of measuring development is the Human Development Index, because it is the only approach, which accounts for the literacy rates, and life expectancy, both of which affect productivity and could have an impact on economic growth. It also contributes to the creation of more opportunities in the education sectors, healthcare sectors, employment and the conservation of the environment.

### **Empirical Literature Reviews**

Many economists have long given the relationship between fiscal policy and economic growth a lot of attention. At the same time, the investigations and analysis of that correlation of these factors have disturbed economists for almost as long. In the neoclassical model, public policy attributes to a fiscal policy a role in determining the level of output rather than the long-run growth rate (Kneller et al. 1999).

Connolly and Li (2016), examined the effects of government consumption spending, public social spending, and public investment on economic growth. Their finding shows that when public social spending increases, economic growth experiences negative and significant impact, there is no significant effect between government consumption spending and public investment have with economic growth. Even expenditure on various sector of the economy separately can promote growth as seen in Lupu, Petrisor, Bercu & Tofan(2018) study which tested the importance of various categories of public expenditure, the functional structure, and growth in the gross domestic product (GDP) using data for 10 Central and Eastern European countries from 1995–2015. They found that education and health care expenditures impact positively on the economy, but other sector expenditures such as general public services defense, social welfare, and economic affairs impact negatively on the economy. Many researchers such as Barro and Sala-i-Martin (1995); Kneller, Bleaney and Gemmell (1999); Odedokun (2001); all used fiscal policy variables in their growth equations and have also found significant contribution of the variables on growth.

### **Fiscal Policy and Economic Growth in Nigeria**

Starting with Olayiwola O. Olaniyi & Titilola S. O (2004) who used Nigeria as a case study and concluded that even though Nigeria is a deposit of abundant resources, its level of development cannot be allocated to its economic growth. Seers (1972) asked the most vital questions in determining what the development of a nation is: What has been happening to unemployment? “What has been happening to poverty? What has been happening to inequality? By looking at these three indices, it is possible to determine if there was a period of development in an economy. A sharp decline in any of the three means that there has been a period of economic development in that economy. The reverse is the case when at least one or more of these indices have been on the rise and more especially if all three indices are on the rise.

### **Some Fundamental Challenges of Fiscal Policy in Nigeria**

Fiscal policy in Nigeria has been greatly influenced by the over 75 percent of revenue from oil and gas, but since 1970, the unstable nature of both its revenue and expenditure remained on the increase over the years. Both revenue and expenditure was on the increase in 1979-82, 1991-92 and more recently in 2000-02 as there were high oil prices in the periods. However, the scaling back of expenditure has always followed as oil prices subsequently decline. The implication, therefore, becomes a disruption to fiscal policies, as well as economic development, growth, poverty reduction, diversifying the economic and proper public sector inclusions.

Poor policy management and implementation, as well as lack of feedback mechanism, has affected the use of fiscal policy in achieving economic growth in Nigeria. Other factors include a high level of corruption and wasteful spending. In other to put the Nigeria economy on the path of sustainable growth and development, its government must put an end to the continuous wasteful spending and embark on policies aimed at achieving sustainable productivity in all sectors of the economy.

## Understanding Human Development Index (HDI)

The human development index (HDI) is known as the summary measure of average achievements gathered from key dimensions of human development, hence an advantageous means of comparing the level of development of countries. This index was created to emphasize that the ultimate criteria for assessing the development of a country are its people and their capabilities, its human capital.<sup>1</sup>

The HDI was introduced by the United Nations Development Programme (UNDP) as part of its contribution, by providing instruments to gauge economic development focusing on these three broad areas (per capita income, health, and education). It is the geometric mean for the normalized indices of each of the three dimensions; thus it tracks changes in the level of development of economies over time. The HDI is based on three equally weighted components: Longevity, which is measured by life expectancy at birth; Knowledge, which is measured by adult literacy and the number of school years children are enrolled; and Standard of living, measured by real GDP per capita at purchasing power parity. The human development index can also be used as a tool to explore or question national policy choices, by investigating and assessing how or why two countries with the same level of GNI per capita differ, sometimes significantly, in their human development outcomes.

Below is a more detailed description of a country's level of human development.

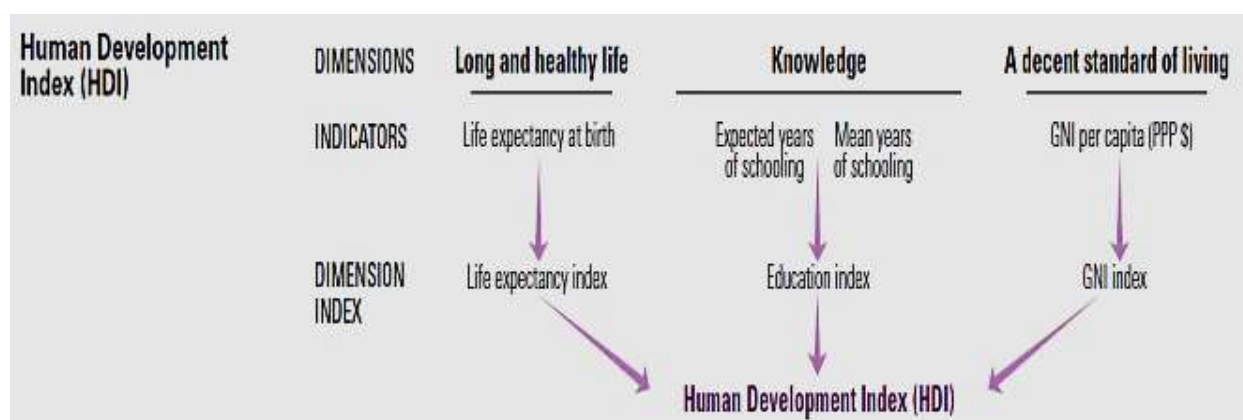


Figure 1: Composition of the Human Development Index

Source: *Human Development Report*

## Understanding Gross Domestic Product (GDP)

GDP is essential in any economy as well as for the well-being of its people; it is also an important component for improving the economy's productivity. Although, as the fast growth of the population in Nigeria still poses an issue of adequate provision and distribution of GDP, GDP may not be adequate enough for measuring well-being in Nigeria.

<sup>1</sup> <http://hdr.undp.org/en/content/human-development-index-hdi>

## RESEARCH DATA AND METHODOLOGY

### Research Design, Sources and Methods of Data Collection

This study undertakes both a qualitative and quantitative approach in observing the relationship between fiscal policy compositions and economic growth / development trend in Nigeria. It is designed to structurally ascertain the effect or impact of fiscal policy variables on economic growth and development in Nigeria. The study adopted a research design known as ex-post facto research design, a quasi-experimental study to examine how an independent variable affects a dependent variable as the participants are not randomly.<sup>2</sup>

According to Kerlinger and Rint (1986), ex-post factor in the context of social science, seeks to reveal the relationships between variables by observing past and present condition to possible contributing factors. *Ex post facto* research provides a systematic and empirical solution to research problems, by using data which are already in existence. Therefore this study uses data for fiscal policy such as government revenue, government expenditure, government debt, government investment, trade, including control variables such as population, inflation, transparency, accountability and corruption index, in an ordinary least square regression. The sample period is 28 years from 1990-2017 and relies on secondary data collected from key agencies in Nigeria such as the Central Bank and National Bureau of Statistics, and International organizational such as World Bank, IMF, UNDP, and others.

This is because the data from these organizations represent real-life data and are also used by many other studies in this field. They are also ideal for answering this research questions and for empirically testing our research hypotheses in other to achieve the objectives of the study. A multiple regression mechanism and co-integration technique was used for analyzing the data and then drawing policy inferences after. In this regards, the hypothesis for this study can be defined following the estimated regression analysis which will appear as follows:

**Ho1:** there is no negative relationship between total fiscal policy and gross domestic product index in Nigeria.

(Ho1:  $\beta_n \geq 0$ )

**Ha1:** there is a negative relationship between total fiscal policy and gross domestic product index in Nigeria.

(Ha1:  $\beta_n < 0$ )

**Ho2:** there is no negative relationship between total fiscal policy and human development index in Nigeria.

(Ho2:  $\beta_n \geq 0$ )

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<sup>2</sup> <https://study.com/academy/lesson/ex-post-facto-designs-definition-examples.html>

**Ha2:** there is a negative relationship between total fiscal policy and human development index in Nigeria.

(Ha2:  $\beta_n < 0$ )

**Model Construction**

In the empirical application of this study, the study examines the impact on fiscal policy on both Gross Domestic Product and human development index, both independently and interactively. Data from countries like Nigeria are considered far from balanced, so to inspire this empirical analysis, we therefore start with a simple Ordinary Least Square (OLS) model to observe the behaviour of the variables, embedded into Barro’s endogenous growth model to keep the discussion manageable.

**For Hypotheses One;**

In order to obtain the impact of fiscal policy on economic growth (GDP) in Nigeria, this paper defines the model as the following:

$$GDP = f (GREV, GEXP, GDBT, INV, TRD, POP, INFL, TRACCOR) \dots\dots\dots (1)$$

In an econometric format:

$$GDP_t = \beta_{0t} + \beta_2 GREV_{t+} + \beta_3 GEXP_{t+} + \beta_4 GDBT_{t+} + \beta_5 INV_{t+} + \beta_6 TRD_{t+} + \beta_7 POP_{t+} + \beta_8 INFL_{t+} + \beta_9 TRACCOR_{t+\epsilon_t} \dots\dots\dots (2)$$

Where:

GDP is Gross Domestic Product (per capita)

GREV is government revenue as a percentage of GDP, GEXP is Government Expenditure as a percentage of GDP, GDBT is Government Debt as a percentage of GDP, INV is Government Investments as a percentage of GDP, TRD is Trade as a percentage of GDP, population headcount in millions (POP), Inflation rate (INFLA), Transparency, Accountability, and Corruption Index (TRACCOR),  $\beta_0$  is the constant term, ‘t’ is the time trend and ‘ $\epsilon$ ’ is the random error term.

**For Hypotheses Two;**

In order to obtain the impact of fiscal policy on economic development (HDI) in Nigeria, this paper defines the model as the following:

$$HDI = f (GREV, GEXP, GDBT, INV, TRD, POP, INFL, TRACCOR) \dots\dots\dots (1)$$

In an econometric format:

$$HDI_t = \beta_{0t} + \beta_2 GREV_{t+} + \beta_3 GEXP_{t+} + \beta_4 GDBT_{t+} + \beta_5 INV_{t+} + \beta_6 TRD_{t+} + \beta_7 POP_{t+} + \beta_8 INFL_{t+} + \beta_9 TRACCOR_{t+\epsilon_t} \dots\dots\dots (2)$$

Where:

HDI is human development index,

GREV is government revenue as a percentage of GDP, GEXP is Government Expenditure as a percentage of GDP, GDBT is Government Debt as a percentage of GDP, INV is Government Investments as a percentage of GDP, TRD is Trade as a percentage of GDP, population headcount



in millions (POP), Inflation rate (INFLA), Transparency, Accountability, and Corruption Index (TRACCOR),  $\beta_0$  is the constant term, 't' is the time trend and 'e' is the random error term.

The first function enlightens us on the impact of fiscal policy and others variables on the economic growth which is represented by the gross domestic product, showing how various key indicators relate with the trends of gross domestic product in Nigeria. The second function enlightens us on the impact of some government expenditure and others variables on the economic development which is represented by the human development index trend, showing how various key indicators relate with the trends of human development index in Nigeria. Thus, equations (1, 2, 3 and 4) were used to analyze the theoretical and empirical relationship between fiscal policy variables and economic growth (GDP) on one hand and economic development (HDI) on the other hand, in Nigeria. The signs and magnitude of the sizes of the estimated parameters in the modeled equations were relied upon in accepting and/or rejection of the hypotheses.

In reality, the components of fiscal policy should have different effects and relationships with gross domestic product and human development index across these hypotheses. The commonly accepted rationale behind this hypothesis is that the components of fiscal policy are expected to aim at enhancing economic growth and economic development in any economy. This is also supported by previous researches on the relationship and impact of these components of fiscal policy on the development or growth of the economies.

### Expected relationship (Coefficient Signs)

The expected coefficients of the independent variables (government expenditure, government debt, government borrowings, government current account balances, country population, inflation rates, transparency, accountability and corruption index, years of election and polity) are unclear. For the Fiscal Policy, it will depend on whether these components are utilized judiciously for their planned objectives which will, therefore, leads to a positive impact on the growth and development, but otherwise, it then will lead to the negative impact on growth and development.

**Table 1:** Summary of Variables and their Expected Signs

Variables	Description	Expected Sign	Sources
<b>HDI</b>	Human Development Index	Positive	UNDP
<b>GDP</b>	Annual growth rate	Positive	World Bank
<b>GREV</b>	Government Total Revenue as (% of GDP)	Positive	International Monetary Fund
<b>GEXP</b>	Government Total Expenditure as (% of GDP)	Positive	International Monetary Fund

<b>GDBT</b>	Government Debt as (% of GDP)	Negative	International Monetary Fund
<b>INV</b>	Investment as (% of GDP)	Positive	National Statistics Office actual data: 2017
<b>TRD</b>	Trade as (% of GDP)	Positive	World Development Indicators
<b>POP</b>	Annual population by headcount in (millions)	Negative	National Statistics Office actual data: 2017
<b>INFL</b>	Inflation, end of period consumer price as (% changes)	Negative	International Monetary Fund
<b>TRACCOR</b>	Transparency, Accountability and Corruption Index	Positive	World Bank Group, CPIA

## DATA ANALYSIS AND INTERPRETATION

### Summary Statistics and Testing of Data

Below is a presentation of the summary statistics of the operational variables of Fiscal policy compositions and other control variables with the logged GDP per capita growth rate in a common sample.

**Table 2:** Summary Statistics of Operational Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
hdi	28	0.455	0.051	0.372	0.532
gdpp	28	0.723	0.145	0.550	0.956
grev	28	16.765	6.150	5.551	28.807
gexp	28	17.250	5.254	9.482	30.857
gdbt	28	32.774	23.150	7.276	74.962
inv	28	15.247	2.365	10.654	20.072
trd	28	37.546	8.792	20.723	53.278
pop	28	133.969	29.777	90.557	188.686
infl	28	9.386	6.499	0.00	23.811
traccor	28	1.393	1.523	0.001	3.000

*Source: Author's STATA 14.0 Output*

The above table presents the descriptive statistics for all the variables using in this study in a common sample. The low standard deviation of 0.051 and 0.145 for hdi and gdpp implies that those individual observations did not deviate much from their respective means. However other

variables presented standard deviations higher than 1%, such as 6.150, 5.254, 23.150, 2.365, 8.792, 29.777, 6.499 and 1.393, for grev, gexp, gdbt, inv, trd, pop, infl and traccor respectively.

**Table 3:** Correlation Matrix among the variables in levels

	hdi	gdpp	grev	gexp	gdbt	inv	trd	pop	infl	traccor
hdi	1									
gdpp	0.88	1								
grev	-0.50	-0.59	1							
gexp	-0.51	-0.53	0.74	1						
gdbt	-0.79	-0.67	0.47	0.68	1					
inv	0.53	0.35	-0.02	0.03	-0.43	1				
trd	-0.22	-0.30	0.55	0.37	-0.04	0.15	1			
pop	0.99	0.90	-0.56	-0.52	-0.75	0.48	-0.25	1		
infl	0.54	0.30	-0.07	-0.12	-0.51	0.46	0.27	0.53	1	
traccor	0.87	0.89	-0.48	-0.53	-0.80	0.39	-0.20	0.87	0.30	1

*Source: Author's STATA 14.0 Output*

It is evident that the contemporaneous correlation between the dependent variables HDI and GDP, with all the independent variables are low with the highest as the level of TRACCOR which is positive at 0.89. The levels of GREV, GEXP, GDBT and TRD all have a negative correlation with the dependent variables except for the INV, POP, INFLA, and TRACCOR. It is also noticeable that the levels of GDBT have the highest negative correlation in the whole table, the rest of the variables correlate with each other in a mix both negative and positive correlations with lower magnitudes.

### Hypothesis Testing

Hypothesis one sought to determine if fiscal policy has a negative and significant effect on economic growth and development in Nigeria. Data were used in a panel least squares regression analysis to confirm the acceptance or rejection of hypothesis five.

**H<sub>01</sub>:** There is no significant negative effect of fiscal policy on the gross domestic product in Nigeria.

**H<sub>a1</sub>:** There is a significant negative effect of fiscal policy on the gross domestic product in Nigeria.

**Ho2:** There is no significant negative effect of fiscal policy on the human development index in Nigeria.

**Ha2:** There is a significant negative effect of fiscal policy on the human development index in Nigeria.

The decision criteria are to accept alternate hypothesis (Ha) if the sign of the coefficient for fiscal policy compositions is positive, the t-Statistic > 2 and the probability of the t-Statistic is < 0.05. If otherwise, Ha will be rejected, and Ho is therefore accepted.

**Table 4:** Extract from Ordinary Least Squares Regression Outputs for Nigeria

VARIABLES	NGA GDP	NGA HDI
Government Revenue	-0.0032	0.0009***
Government Expenditure	-0.0005	0.0001
Government Debt	0.0014	-0.0004***
Investment	-0.0022	0.0007
Trade	0.0014	-0.0003**
Population (Logged)	0.0032***	0.0017***
Inflation	-0.0023	-0.0003
Transparency, Accountability, and Corruption	0.0456**	-0.0028**
Constant	0.2463	0.2306
Observations	28	28
R-squared	0.8944	0.9952
AdjR-squared	0.8499	0.9931
Method	OLS	OLS

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Source: Author's STATA 14.0 Output*

## Results and Interpretation

Table above, shows the results of the extracts of Nigeria least squares regression analysis result. The result here shows that R<sup>2</sup> (regression value) of the two moderating factors is about 89% and 99% for GDP and HDI respectively at 5% level of significance. This means, both economic growth and development as depicted by (gross domestic product -GDP) and (human development index-HDI) in Nigeria are each responsible for, by about 89% and 99% of the variations of fiscal policy variables in the presence of some other control variables. Considering the p-value "Prob" of the t-test for each independent variable, we realize that in the case of economic growth in the first column, GREV, GEXP, INV AND INFL presents negative effect on the gross domestic product while GDBT, TRD are positive with insignificant effect, while POP and TRACCOR are also positive but have insignificant effects on the on GDP.

In economic development in the second column, shows GDBT, TRD, INFL, TRACCOR negative and significant effects on human development index while the rest are positive with GREV, and POP having significant effects and GEXP and INV with no significant effects on human development index HDI. This also highlights the difference between using the economic development trend and a single predictor and using multiple regressions to ask if the predictor is related to the dependent variable after controlling for all the other predictors in the model.

Based on the above results, it could be concluded that fiscal policy has more negative effects on the gross domestic product (GDP) and more positive effects on human development index (HDI) in Nigeria.

## **INTERPRETATION, SUMMARY AND DISCUSSION OF FINDINGS**

### **Interpretation and Summary of Findings**

The formulated hypotheses being tested are stated in null (**Ho1**): there is no negative relationship between total fiscal policy and gross domestic product in Nigeria (**Ho2**): there is no negative relationship between total fiscal policy and human development index in Nigeria.

**Hypothesis One:** The relationship between the total fiscal policy and gross domestic product in Nigeria indicates a negative but insignificant effect for government revenue and expenditure, except for debt. Although, these effects differ from the majority of literatures, they could be associated with poor utilization of the government fund or bad policy application. Therefore, since some of the independent variables have positive effects; we could therefore reject the null hypothesis.

**Hypothesis Two:** The relationship between the total fiscal policy and human development index in Nigeria indicates a positive effect for both revenue and expenditure, but highly significant for revenue, while debt shows a negative effect. Although government expenditure presents a positive effect, its insignificance still remains a problem. This could be due to poor utilization of the expenditures, or as a result of wastage and leakages through corruption. However, some of the control variables have adverse outcomes; therefore we do not reject the null hypothesis.

This does not yet fully explain why the Nigerian economic development rate has been low over the years, but it tells us that there is need to increase government expenditures on specific activities to increase the level of development in the country. Also, there is the need to look at other factors such as population, transparency, accountability, and fight on corruption, control of inflation rate and activities that improve the GDP growth rate.

### **Summary and Discussion**

The findings of this study have shown some level of interesting results. One interesting observation in the result is that of the impact of fiscal policy on GDP. Data has shown that the Nigerian

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government has only experienced less not many years of fiscal surplus from about 1980 to this period which implies that it has been spending more than it generated. The ordinary least square regression results shows a negative with coefficient of (-0.0005) and insignificant effect of government expenditure on GDP with ( $P > t = 0.911$ ), while for HDI the results show positive with coefficient of (0.0001) and insignificant effect of government expenditure on GDP ( $P > t = 0.711$ ), hence implying that excessive spending has not benefited the Nigeria economy. This result also implies that most of the extra-budgetary activities of the government have not been on projects that are meant to yield long-run benefits; instead, extra spending has been on overhead costs of the government, such as salaries, wages, funding of national assembly and other arms of the government.

In Nigeria, the effect of government expenditure on economic development presents a positive but insignificant result, and this is true in a reality where we see that the annual budget grows by a large percentage every year, but it would be difficult to say the life of its citizens are getting better. This means that Nigeria needs to either learn from other countries with similar background but achieves development through their fiscal policy implementation. According to the UNDP, Nigeria with a human development index value of about 0.53 in 2017, with an increase of about 14.4 percent between 2005 and 2017, and ranking 157 out of 189 countries, put the country at a low category on the world human development index. This indicates that Nigeria's GNI per capita, life expectancy at birth and expected and mean years of schooling has increased but at a low pace between 1990 and 2017.<sup>3</sup> Therefore Nigeria needs to improve in these areas to rapidly in the human development

## CONCLUSION AND RECOMMENDATION

### Conclusions

Economic growth as we know it is "when the capacity of an economy to produce goods and services increases, compared between one period of time and another", which can be measured by gross national product (GNP) or by gross domestic product (GDP) in nominal or real terms, In other words "the increase in what a country produces over time". This does not really reflect the level of development in a country, as it is one thing to have the capacity to do something and another thing to actually do the thing and achieve the expected outcomes. As such, it is necessary that policymakers and all those who worry about development at a professional level or otherwise, be fully aware of these foundational differences (Olayiwola O. & Titilola S.O (2014).

The comparison in this study shows the inherent difference between these two phenomena's. First is the actual income and expenditure of a country; second is its development level. However, the income may be of lesser importance when considering how the wealth is translated into quality services such as healthcare, education, access to basic needs such as water and food by the citizens

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<sup>3</sup> See more information on Nigeria HDI, on the UNDP briefing note for countries. [http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/CHN.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/CHN.pdf) and [http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/NGA.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/NGA.pdf)

of the country which mainly defines how developed the country is. The actual growth of GDP is only a potential for development, until this GDP is translated to physical achievements which will have direct impact on the life of citizens, GDP will remain a potential for development but not development itself. This is the trap which most middle income countries find their selves in.

An internationally redefined method of measuring economic development recognizing the presence of indicators such as access to healthcare, education, basic needs; such as water and food and other important development factors, would be a good director to begin. Else the gap between understanding both concepts will continue to increase, and the answer to the question: "Is development a failure?", will always be positive. Nigeria continues to be an example of countries with growth but poor development.

### **Recommendations**

This study provides some recommendations for Nigeria, and this made serve as guide from other developing countries with similar experiences.

Government of Nigeria should enhance investment in economic services and social and community services, more on education by providing compulsory basic educations while improving the quality of the education as a whole; to improve and expand the coverage of health servicing like the health insurance scheme; to promote agriculture through mechanisation while expanding productivity, and provide adequate infrastructures to increase productiveness of all these sectors and as such improve the chances of development in the country, and ensure the appropriate utilization of all funds directed towards the development of these sectors.

Evidence arising from other studies has shown that when a country generates sufficient tax revenue, the government will have sufficient funds to promote the economy's productivity through investment; therefore, the channels in which the revenue are generated are very crucial to improving the size of the revenue for economic development. Thus efficiency in revenue generation will be imperative.

The Nigeria government should attempt to avoid or lessen expenditure on unproductive activities like administrative expenses such as high and unnecessary allowances to members national assemblies; political affiliations such as redirecting funds from budgets to sponsoring and promoting political parties' activities and projects without significant or not benefits to the economy; as such it will allow for more funds for productive spending.

Finally, the debate between the use of GDP or HDI to measure economic development leans more towards HDI in this study. Therefore HDI is recommended for further studies on economic development.

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**Appendix**

country	year	hdi	gdpp	grev	gexp	gdbt	inv	trd	pop	infl	traccor
Nigeria	1990	0.37	0.67	19.30	19.97	71.68	12.19	30.92	90.56	0.00	0.00
Nigeria	1991	0.38	0.65	17.50	19.17	74.96	12.23	37.02	93.16	0.00	0.00
Nigeria	1992	0.38	0.60	23.78	22.46	70.16	13.36	38.23	95.73	0.00	0.00
Nigeria	1993	0.39	0.60	19.61	28.17	71.02	13.15	33.72	98.36	0.00	0.00
Nigeria	1994	0.40	0.58	12.82	16.99	55.90	10.65	23.06	101.07	0.00	0.00
Nigeria	1995	0.40	0.57	16.05	12.50	34.04	11.60	39.53	103.85	0.00	0.00
Nigeria	1996	0.41	0.57	15.83	11.08	25.21	11.88	40.26	106.71	14.31	0.00
Nigeria	1997	0.42	0.57	15.23	13.63	24.14	13.25	51.46	109.65	10.21	0.00
Nigeria	1998	0.42	0.57	10.83	15.72	22.27	16.04	39.28	112.67	11.91	0.00
Nigeria	1999	0.43	0.55	19.05	21.01	64.94	17.92	34.46	115.77	0.22	0.00
Nigeria	2000	0.43	0.55	28.81	24.74	57.60	14.36	49.00	118.95	14.53	0.00
Nigeria	2001	0.44	0.58	27.64	30.86	53.10	15.14	49.68	122.23	16.50	0.00
Nigeria	2002	0.45	0.64	20.72	19.38	43.27	20.07	40.04	125.59	12.17	0.00
Nigeria	2003	0.44	0.68	21.01	23.21	42.09	17.55	49.33	129.05	23.81	0.00
Nigeria	2004	0.46	0.71	23.83	18.34	35.49	16.55	31.90	132.60	10.01	0.00
Nigeria	2005	0.47	0.72	24.02	19.11	18.94	15.58	33.06	136.25	11.57	3.00
Nigeria	2006	0.48	0.73	21.08	12.38	9.40	16.27	42.57	140.00	8.50	3.00
Nigeria	2007	0.48	0.75	17.02	18.09	8.12	18.65	39.34	143.85	6.61	3.00
Nigeria	2008	0.49	0.78	20.08	14.38	7.28	15.61	40.80	147.81	15.05	3.00
Nigeria	2009	0.49	0.85	10.11	15.47	8.62	19.42	36.06	151.87	13.93	3.00
Nigeria	2010	0.48	0.90	12.42	16.65	9.60	17.29	43.32	156.05	11.82	3.00
Nigeria	2011	0.49	0.90	17.73	17.36	12.13	16.21	53.28	160.34	10.29	3.00
Nigeria	2012	0.51	0.91	14.30	14.06	12.74	14.91	44.53	164.75	11.98	3.00
Nigeria	2013	0.52	0.93	11.05	13.38	12.94	14.90	31.05	169.28	7.96	3.00
Nigeria	2014	0.52	0.96	10.52	12.65	13.07	15.80	30.89	173.94	7.98	3.00
Nigeria	2015	0.53	0.95	7.60	11.07	15.98	15.49	21.45	178.72	9.55	3.00
Nigeria	2016	0.53	0.91	5.55	9.48	19.61	15.37	20.72	183.64	18.55	3.00
Nigeria	2017	0.53	0.88	5.97	11.73	23.40	15.47	26.35	188.69	15.37	3.00

Source: Author's computation from IMF, UNDP, Nigerian NBS and CBN data portal.