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Fiscal Policy and Unemployment Reduction in Sub Saharan Africa; Emphasis on Nigeria and Ghana

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Abstract:*This research work examines the effect of fiscal policy on unemployment reduction in Sub Saharan Africa with emphasis on Ghana and Nigeria Secondary data were collected for both countries. The research covered the period 1986 to 2017. The Philips-Perron Unit root test conducted revealed that the variables were all stationary at first difference which confirms that there is no unit root in the variables. The Johansen Contegration test suggested a long run relationship exist between fiscal policy and unemployment reduction in both Nigeria and Ghana. To confirm the long run relationship, the Vector Error Correction model was adopted. The result of the Vector Error Correction Mechanism revealed thatfiscal policy has no significant long run effect on unemployment reduction in Nigeria. Only Oil Revenue has significant effect on Unemployment reduction in Nigeria, other explanatory variables (Recurrent Expenditure, Tax Revenue, Capital Expenditure and Deficit Financing) have no significant effect on Unemployment reduction in Nigeria for the period under review. Fiscal policy has a significant long run effect on Unemployment reduction in Ghana. The result also revealed that Capital Expenditure and Recurrent Expenditure have significant effect on Unemployment reduction in Ghana while Tax Revenue, Oil Revenue and Deficit Financing do not have significant effect on Unemployment reduction in Ghana. The research recommends that governments of Nigeria and Ghana should channel spending to the productive sector as this would curb the rate of unemployment facing the countries. There is also need for strict fiscal responsibility and discipline in the countries as this would reduce the leakages in their economies.*

Key Words: *Fiscal Policy, Unemployment, capital expenditure, recurrent expenditure, Tax Revenue, Oil Revenue, Deficit Financing.*

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I. Introduction:

The use of fiscal policy is very paramount in every economy more importantly in developing countries, as it is a major tool for economic stabilization and for the economic development to be faster (Ocran, 2009). Fiscal policy means the government actions regarding its receipts (revenue) and expenditure and borrowing in order to achieve a predetermined economic objective (Obi, 2007). Government therefore, use spending, taxation and borrowing to influence the pattern of economic growth, enhance employment and reduce poverty (Ugwuanya&Ugwunta, 2017).Fiscal policy serves as an economy's "shock absorber" in specific areas of economic development. The Keynesian economics believe that when government changes the level of taxation and government spending, it influences the level of aggregate demand and the level of economic activity thereby resulting to economic development. The three main instruments of fiscal policy are changes in the level of tax composition, government spending in various sectors of the economy and government deficit financing/borrowing. These changes can affect the following macroeconomic variables; Gross Domestic Product, inflation, employment, human development and reduce the level of poverty of any country. Government fiscal policy can also affect industrial development, agricultural development and financial development in the country (Babalola&Aminu, 2012).

Government uses fiscal policy to control aggregate demand in the economy, so as to achieve the economic objectives of price stability/reduced inflation, enhance employment growth, stabilize business circle, influence interest rates and attain economic growth (Reem2009).

In the last four decades, Sub Sahara African countries have been experiencing increase in both revenue and expenditure. In Nigeria, Total government revenue in 1986 was N12.6 billion; this later increased to N98.10 billion in 1990. In the year 1996, federal government total revenue amounted to N1523.6billion which increased to N1,906.16 billion in the year 2000. In 2006, the total government revenue stood at N5,965.10, this continued to increase, from N7,303.67 billion in 2010 to N677.90 billion in 2016 (CBN, 2016).

On the other hand, government expenditure in Sub Sahara Africa has also been increasing, in Nigeria, Federal Government total expenditure in 1986 was N16.22Billion, but increased to N60.27Billion in 1990. In 1996 it stood at N337.22Billion and increased 701.06 Billion in 2000 and increased up to N1938.00 in 2006. N4,194.58 Billion in 2010 and in 2015, the total Federal Government expenditure was N4,988.86 Billion and in 2017, Government expenditure amounted to N13,198 billion (CBN, 2018). Again, government total expenditure(% of the budget) for Nigeria in 2015 is 11.806%. As a result, Nigeria is ranked 190 in words ranking to General Government Expenditure (% of GDP) in the year 2015 against the world's average value of 33.88% (Ayogueze&Anidiobu, 2017). Ogbole, et al (2011) explained that government of Sub Sahara African countries have been using sectoral targeting of public expenditure in their bid to achieve income redistribution, encourage growth by enhancing productive capacities of the sectors for more employment(Abata, Kehinde, Borarinwa, 2012).

Fiscal policy is tools are expected to reduce the rate of unemployment in an economy. Unemployment rate as a measure of the number of people actively looking for job, has been a major economic challenge facing Sub Sahara Africa countries. In 1986, Unemployment rate for Nigeria was 7.0%, while Ghana was 4.3%. This has continued to persist, in 2000, it was 10.36% for Ghana and Nigeria unemployment rate was at its lowest rate of 4.0%. But unemployment rate increased to 9.5% for Nigeria while that of Ghana dropped to 5.13% for Ghana in 2014. While unemployment in Ghana has continued to decrease, it has continued to increase in Nigeria. Unemployment rate in Nigeria increased from 14.2% in 2016 to 18.8% as at December 2017 (NBS 2018). The graph below shows the unemployment rate for Ghana and Nigeria.

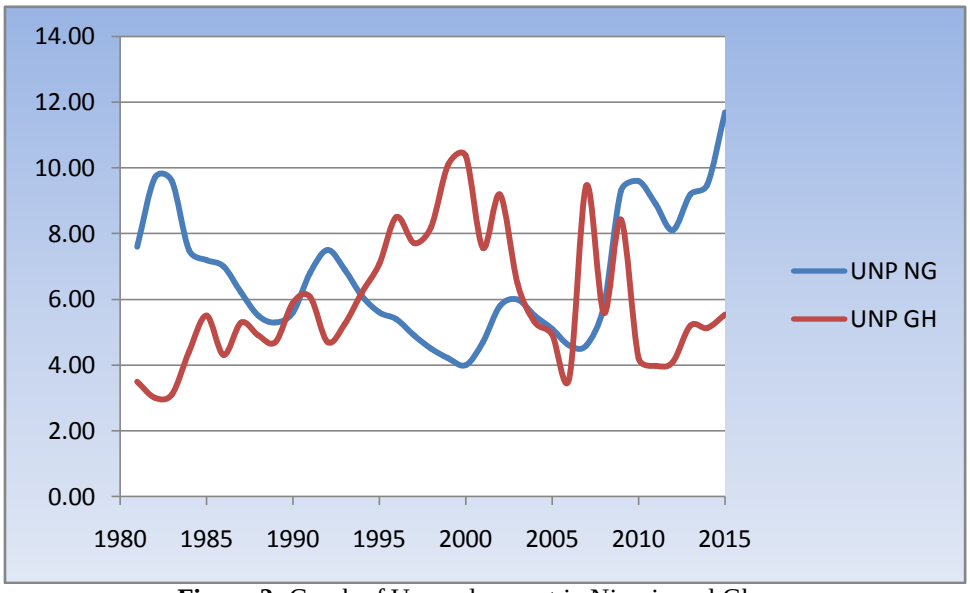

Figure 2: Graph of Unemployment in Nigeria and Ghana

Successful developing countries have experienced economic transformation process from primary production - diversified industrial production- sophisticated service industries, with sustainable progress to becoming knowledge based economies.Almostall African countries have remained primary producers, the only exceptions have being Mauritius and South Africa.

In response to the declining economic and social indicators for Sub Sahara African countries, their governments have taken fiscal and monetary policy measures to strengthen their economies. Nigeria and Ghana over the years have adopted expansionary fiscal policy measures which are expected to increase consumption and increase public and private sector investment leading to creation of more jobs. This increased consumption was expected to create a virtuous circle that generates more investment, consumption and employment in the economy. Some of the other fiscal policy measures adopted by Ghana and Nigeria over the years include: expansionary fiscal policy, the structural adjustment program, cutting down of government expenditure, taxing income and government borrowing (Omoniyi, 2018).

But, with the high level of unemployment, high poverty rate, declining Gross Domestic Product, recession and depression in most African economies especially Nigeria, it is clear that these fiscal policies have not achieved their target objectives.

Singh (2018) explained that the reduction in the level of unemployment in a country is the most difficult challenge facing every developing nation where majority of the people are poor. Reem (2009) explained that over the years, Nigeria, Ghana and other Sub-Sahara African countries have had fiscal policy

target on bridging the gap between the rich and the poor, through government revenue/tax and expenditure policies; redistribution of the total tax burden towards the rich via personal and corporate income taxes and reallocations of public spending to favor the poor and the marginalized groups aimed at reducing poverty and inequality. But the poor socio-economic condition of the people of Africa is so glaring. Poverty rate remained very high, with about 55percent of the Nigerian population estimated to be living below the $1 per day consumption bar (World Bank, 2014). In June 2018, Nigeria was declared the poverty capital of the world with over 86 million Nigeria living in extreme penury while unemployment rose to 23.1% in September 2018, Unemployment in Ghana stood at 6.71% while 23.4 of Ghana population live below the poverty line (UNDP, 2018).

Therefore, the objective of this study is to examine the effect of fiscal policy (Tax Revenue, Oil Revenue, Capital Expenditure, Recurrent Expenditure, deficit financing) on Unemployment in Sub Saharan Africa with emphasis on Nigeria and Ghana.

UNEMPLOYMENT AND ITS ECONOMIC IMPLICATION

Unemployment is believed to be a macro-economic problem facing any developing country. It arises as a result of non-availability of jobs in relation to the growth of the population of economy of a country.

Unemployment has been a serious economic challenge and has been categorized as one of the serious hindrances to social progress and the major cause of poverty mostly in Nigeria. Apart from its huge waste of a country's man power resource, it leads to welfare loss of lower output as well as leading to lower income as well as reducing the well-being of the people (Petrakos, et al, 2007).Medee and Nembee (2011) believe that unemployment brings about economic waste and cause human suffering and has direct effect on poverty which is the root cause of other socio-economic problems facing any developing country.

Solow (1960) believed that unemployment is as a result of the inability of a nation to develop and utilize the nation's manpower resources effectively in both the rural and urban sectors.

Briggs (1973) defined unemployment as the difference between the labor force at current wage rate and working conditions and the amount of labor not hired at these rates in any country.

Therefore, unemployment leads to migration of labor forces in developing countries from rural to urbanand to other developed countries of the world in search for jobs. This leads to brain drain in Nigeria and to the destruction of the productive labor potentials of the migrants for majority.This high rate of migration to other countries has led some Nigerians who traveled aboard in search of jobs into criminal activities like drug peddling.

There is an inverse relationship between Unemployment and economic growth, it has also been discovered that growth response to unemployment rate varied among different sectors of the Nigerian economy. Like employers in industrial sector use cheaper less labor to accept high volume of production which in turn increases the unemployment level in the country (Aghion&Howit(2009). According to Musgrave (1969), there are two main strategies for reducing the rate of unemployment in a country. These strategies include:

Demand side fiscal policy measure which reduces demand deficient unemployment (unemployment as a result of recession) and Supply side measurethat is aimed at reducing structural unemployment(Abata, Kehinde, Borarinwa, 2012)

THE EFFECT OF UNEMPLOYMENT ON ECONOMIC DEVELOPMENT:

Unemployment is one of the fundamental challenges facing Nigeria at the moment as it is directly related to poverty and under-development. Research has shown that unemployment was high in the 1980s, but the available reports from various bodies gave evidence of joblessness in this decade are clear indications that there was no time Nigeria has conquered unemployment in their history. So, unemployment has been a serious challenge since independence in the 1960's (Eze and Ogiji 2012). They also observed that, one cannot conclude that the government at one level or the other has not done enough to reduce unemployment in Nigeria. They maintained that government over the years have created the National Directorate of Employment (NDE) and its skills acquisition programs: NAPEP, PAP, the SURE-P, YOUWIN and other intervention programs aimed at enhancing economic growth and generate jobs in Nigeria. According tpEzeand Ogiji (2012), despite the government's claimof strong economic growth rate measuring at 6% or 6.5% GDP growth since 2005 till date, there seem to be no evidence of job creation (Babalola and Aminu 2012).

This is apparently ironical, a situation of more than three decade of strong real GDP growth of 6.5%, and in the same period, unemployment rate continued rising at an annually from 11.9% in 2005 to 19.7% in 2009, and 37% in 2013 (Babalola and Aminu 2012). The apparent economic growth has not transmitted to economic development in Nigeria. The rate of poverty continued to rise continuously, the industries are not performing, technological development is still at their lowest stage of development, income redistribution is highly unequal, and maternal-mortality rate and child mortality rate are so high.In fact, Nigeria development index is still very low (Chuku, 2015).

Unemployment according to ILO, is the biggest threat to social stability in any developing countries (including Nigeria), putting the global rate at 12.6% in 2011 (ILO, 2012). When compared with other Sub Saharan African Countries, Nigeria's unemployment crisis is more serious than others. For example, South Africa's unemployment rate stood at 25.2%, and in Ghana was about 14% in 2010, while Nigeria was around 37% in 2010. World Bank statistics has estimated the unemployment rate in Nigeria at 22 percent, while the youth unemployment rate stood at 38 percent. The report has shown that the age bracket of 15-35 years olds account for more than 60 percent of the Nigeria's population rate and 30 percent constitute the work force. The report also indicates that 4 million people enter into the Nigerianlabor market each year (Chuku, 2015). Indeed, the situation is pathetic as the country is blessed with abundant human and natural resources capable of generating employment for the teeming populationof Nigeria. The fundamental questions is that why is the rate of unemployment on the increase with more than a 7 percent (GDP) economic growth rate?

In the same vein, Ogbole, et al. (2011) argued that Nigeria with half the population of almost half of West Africa with abundant natural resource and humanendowments has the potential to be the source of growth and prosperity for the whole world like India. It is clear that Nigeria's current economic performance is worrisome and falls short of the expectations of over 66% of Nigeria's citizens (Ogbole, et al 2011).

The level of unemployment in Nigeria continues to grow geometrically each year despite government increase in expenditure, revenue and borrowing. Ogiogio (1996) stated that Nigeria will have no other parameter of measuring economic development than improved welfare of the people; unless there is enhanced employment for its teemingyouths. The World Bank (2017) reported that continuously, enhanced employment and productivity have been central to the wonderful performance of Japan and other Asian countries.

This means that absence of such employment growthis responsible for Nigeria's under development and increased poverty rate.

One of the most important means of reducing unemployment crisis in Nigeria should be acceleration of the growth capacity of the country's economy. Over the last three decades, the performance of the Nigerian economy has not been impressive resulting to underutilization of both human and material resources. Therefore, the need to stimulate economic growth and development in Nigeria with all commitments cannot be over-emphasized (Eze and Oiji 2013).

II. Empirical Review:

In the work of Devarajan,*et al.* (1996),on the relationship between the public expenditure and economic growth,using a simple, analytical model, their result showed the conditions under which government spending can increase economic growth rate of an economy. Their findings revealed that expenditures that were normally considered productive were unproductive if there was an excessive amount of them.

Glommand& Ravikumar (1994) in their work on the effect of government expenditure oninfrastructure and education on economicgrowth. The result showeda positive correlation between growth and productive expenditure on infrastructure and educationanda significant negative correlation withgovernment consumption and distortionary taxes rate.

Abdullah,*et al.* (2008), in their research, using the Cointegrationmechanism in establishing a long run relationship between fiscal policy and economic growth, the result found a positive and significanteffect of health and education expenditure, aggregate of government expenditure and aggregate of fiscal policy on real per capita Gross Domestic Product. Their result also show that that theexpenditure on defense, distortionary taxation and budget balance have significant on real per capita GDP.

Barro and Sala (1992) in their research found that public spending on education, health, and other services contributes indirectly toraising the marginal productivity of private sectors through their contribution on human capital accumulation.

Chen and Gupta (2006) studied the effect of government expenditure on health and education and other factors effect on economic growth (GDP). The results revealed that government expenditure on health and education has significant negative coefficients but is small in absolute value.

Landau (1983) in their research, using cross-sectional data of 104 countries showed a negative relationship between public consumption as a share of the Real Gross Domestic Product and growth per capita. Barro (1989), with data from 98 countries in the post- World War II period, revealed that government consumption reduces per capita growth, while public investment does not significantly affect economic growth.

Levine &Renelt (2016) found that most results previous studies on the relationship between long-run economic growth and fiscal policy indicators are fragile to little changes in the conditioning set.

Easterly &Rebello (1993) in their research using data from 100 countries for the period 1970-1988 and panel data from 28 countries for 1870-1988. Their result revealed that public transportation, communication and educational investment have significant positive coefficients anddirectly correlated with growth of per capita income and total public investment negatively correlated with growth of per capita income, they found that fiscal policy variables are highly correlated with income levels and fiscal variables are potentially endogenous.

Cashin (1995) in their study on fiscal policy, estimated a positive relationship between government transfers, public investment and economic growth and a negative relationship between distortionary taxes and economic growth from the data set for 23 developed countries between 1971 and 1988.

Abdurrauf (2015) in his study on Fiscal Policy and Economic Development in Nigeria showed that government recurrent expenditure and government investment have significant positive impact on economic development in both the short and long run. Capital expenditure has a short run positive effect but not in the long run. Tax revenue had an inverse significant effect in both short and long run noneconomic development. The speed of adjustment to equilibrium was found to be high and was consistent by assuming a negative coefficient.

O'Nwachukwu (2017) examined the determinants of unemployment rate in Nigeria from 1980 to 2016 using Unemployment rate as dependent variable and explanatory variables which includes: Government Expenditure, Inflation Rate, First Lag of Unemployment, Population and Real Gross Domestic Product.. The result shows that Government Expenditure, Inflation Rate and Population are statistically significant in explaining changes in unemployment in Nigeria for the period under review. But, the lag of unemployment and Real Gross Domestic Product were not statistically significant in explaining unemployment in Nigeria. The study recommends increased budgetary allocation to capital expenditure, and strict monitoring of awardedcontract projects to ensure compliance and completion. Singh, (2018) studied the effects of inflation on GDP and unemployment rate in India using 2011-2018. The study reveals that inflation insignificantly influences GDP and unemployment and the correlation coefficient was negative. The correlation between unemployment and inflation was positive with a 0.477 value and it is no statistically significant even at 10% level of significance. The correlation between GDP and unemployment rate was found to be statistically insignificant with a value of 0.196 at 10 percent level of significance.

Adewale(2018) in his studyon the Analysis of Effectiveness of Monetary and Fiscal Policy Instruments in Stabilizing Economy: Evidence from Nigeria using the Error Correction Mechanism (ECM). The results show that, there is long run equilibrium relationship between monetary/fiscal policy and economic growth (GDP) in Nigeria. The ECM has the expected negative coefficient and is less thanone. This confirmed that a long run positive relationship exist between money supply, government spending and government revenue while interest rate and budget deficit have significant negative relationship with economic growth in Nigeria for the period under review. The research recommendedthe effective use of money supply and government expenditure as main instruments of monetary/fiscal policy in Nigeria in order to enhance the economic growth in the country.

III. Research Method:

This research will made use of data collected from secondary sources. Secondary data constitutes the main data needed for this work. The needed data were collected from Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, Bank of Ghana Statistical Bulletin 2018, Ghana Statistical Services, International Monetary (IMF) Fund financial statistics YearBook and World Bank's African Database (CD – ROM).

The data collected will be analyzed using:

i. Philips-Perron Unit root test to determine if the variables are stationary at level, first difference or at second difference to avoid spurious regression results.
ii. Johansen Cointegration test: This was conducted to determine if there are cointegrating equations in the model that suggests the existence of a short run or long run relationship in the model.
iii. Error Correction Model: This was conducted to confirm if a long run relationship exist in the model and to estimate the coefficients of the explanatory variables in the model.

This study shall build multiple regression models and make use of econometric procedure in estimating the relationship between fiscal policy and Unemployment reduction in Sub Sahara Africa. Equation i below is for Nigeria while equation ii is for Ghana.Therefore, the functional forms of the models are specified as follows:

$$\mathbf{UNPn = B_0 + B_1 OREVn_t + B_2 TAXREVn_t + B_3 CEXPn_t + B_4 REXPn_t + B_5 DEFn_t + U_t \ldots\ldots..(i)}$$

$$\mathbf{UNPg = B_0 + B_1 OREVg_t + B_2 TAXREVg_t + B_3 CEXPg_t + B_4 REXPg_t + B_5 DEFg_t + U_t \ldots\ldots..(ii)}$$

Where:
UNP= Unemployment rate
OREV= Oil Revenue
TAXREV= Tax Revenue,
CEXP= Capital Expenditure,
REXP= Recurrent Expenditure,
DEF= Deficit Financing
g= Ghana

n= Nigeria
B_0= constant
β_1-B_5= parameters to be estimated from the regression equation
μ_1= random error term.

RESULTS AND INTERPRETATION
UNIT ROOT TEST:
To address the issue of spurious regression results usually associated with non-stationary time series data, the research carried out Philips-Perron test and the results are summarized in tables 1 and 2 below:

Table 1: Summary of Philips-Perron Unit Root Test (Nigeria):

VARIABLES	PHILIPS-PERRONTEST STATISTICS (PROB.)	CRITICAL VALUES @ 5%	ORDER OF INTEGRATION
CEXP	--7.375046 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE
DEF	-7.514173 (0.0000)	-2.963972	STATIONARY @ FIRST DIFFERENCE
OREV	-5.813461 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE
REXP	-7.552258 (0.0000)	-2.967767	STATIONARY @ FIRST DIFFERENCE
TAXREV	-5.492292 (0.0001)	-2.963972	STATIONARY AT FIRST DIFFERENCE
UNP	-7.294710 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE

Source: Researchers computation using E-View version 10.

The results of the Philips-Perron Unit root test as shown in table 1 above show that all the variables: Capital Expenditure (CEXP), Oil Revenue (OREV), Tax Revenue (TAXREV), Unemployment rate (UNP), Deficit Financing (DEF) and Recurrent Expenditure (REXP) are stationary at first difference. The research therefore rejects the null hypothesis, and concludes that there is no unit root in the variables.

Table 2: Summary of Philips-Perron Unit Root Test (Ghana):

VARIABLES	PHILIPS-PERRON TEST STATISTICS (PROB.)	CRITICAL VALUES @ 5%	ORDER OF INTEGRATION
CEXP	-6.490875 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE
DEF	-6.285606 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE
GDP	-6.107638 (0.0000)	2.963972	STATIONARY AT FIRST DIFFERENCE
HDI	-5.455940 (0.0001)	-2.963972	STATIONARY AT FIRST DIFFERENCE
OREV	-4.644390 (0.0008)	-2.963972	STATIONARY AT FIRST DIFFERENCE
POV	-4.524522 (0.0012)	-2.963972	STATIONARY AT FIRST DIFFERENCE
REXP	5.110498 (0.0002)	-2.963972	STATIONARY AT FIRST DIFFERENCE
TAXREV	-4.544339 (0.0011)	-2.963972	STATIONARY AT FIRST DIFFERENCE
UNP	-6.450291 (0.0000)	-2.963972	STATIONARY AT FIRST DIFFERENCE

Source: Researchers computation using E-View version 10

The results of the Philips-Perron Unit root test as shown in table 2 above show that Capital Expenditure (CEXP),), Oil Revenue (OREV), Tax Revenue (TAXREV) and Unemployment rate (UNP), Deficit Financing (DEF) and Recurrent Expenditure (REXP) for Ghana are stationary at first difference. The research therefore rejects the null hypothesis, and concludes that there is no unit root in the variables.

COINTEGRATION TEST RESULTS:
This section presents the results of the Johansen Cointegration test conducted to determine if a short run or long run relationship exist between the dependent variable and the explanatory variables.

Table 3 Johansen Cointegration Result: NIGERIA. Dependent variable: Unemployment (UNP)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.890103	149.6706	69.81889	0.0000
At most 1 *	0.874456	90.04883	47.85613	0.0000
At most 2 *	0.521404	34.02112	29.79707	0.0154
At most 3	0.381306	14.12484	15.49471	0.0796
At most 4	0.042086	1.160940	3.841466	0.2813

Source: Researchers computation using E-View version 10

The result in table 3 above shows the existence of 3 cointegrating equations at 5% level of significance which suggest that a long run relationship exist between fiscal policy variables (Tax Revenue, Oil Revenue, Capital Expenditure, Recurrent Expenditure and Deficit Financing) and Unemployment in Nigeria. It is in line with the a priori expectation that a long run relationship exist between fiscal policy and unemployment in Nigeria.

Table4: Johansen Cointegration Result: Dependent Variable: Unemployment (GHANA)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.800375	100.7677	69.81889	0.0000
At most 1 *	0.650640	52.42830	47.85613	0.0175
At most 2	0.429366	20.87873	29.79707	0.3652
At most 3	0.105206	4.048484	15.49471	0.8996
At most 4	0.023507	0.713625	3.841466	0.3982

Source: Researchers computation using E-View version 10

The result in table 4 above shows that there are at most 2 (two) cointegrating equations in the model at 5% level of significance. The result shows that there is a long run relationship between fiscal policy and Unemployment in Ghana.

IV. Results Of The Vector Error Correction Model:

This section presents the long run equations from the results of the Vector Error Correction Mechanism. The results of the Johansen Cointegration test in tables 3 and 4 above suggest that a long run relationship exist between fiscal policy and economic development in Sub Saharan Africa. So to estimate the long run equations and the speed of adjustment from short run dynamics to their long run static disposition, and to confirm the long run relationship, the Vector Error Correction Mechanism is adopted. The table below shows the summary of the coefficients of the long run relationship obtained from the Vector Error Correction Model:

Table 5: Summary of Vector Error Correction Model Results (Long Run Equation)

	UNEMPLOYMENT	
	NIG.	**GHANA**
VARIABLES	**COEF. (T.STAT)**	**COEF. (T.STAT)**
SPEED OF ADJ.	**-0.0146 (long run)**	**-0.0388 (long run)**
UNP_{t-1}	-0.01457 (-0.1062)	**-0.0388 (-0.599)**
$TAXREV_{t-1}$	**2.8378 (0.528)**	**-0.242 (-1.595)**
$OREV_{t-1}$	**69.617 (2.5514)**	**64.411 (1.073)**
$CEXP_{t-1}$	**6.1891 (1.439)**	-0.1729 (-2.483)
$REXP_{t-1}$	**7.5922 (0.801)**	-1.9366 (-6.086)
DEF_{t-1}	-8.9951 (-1.21)	-53.863 (-0.597)
F-Stat (Prob.)	1.0689 (0.4292)	2.7979 (0.02803)

Source: Researchers computation using E-View version 10

FISCAL POLICY AND UNEMPLOYMENT REDUCTION (NIGERIA)

The Equation of the Error Correction Term and the long run model that explains the long run relationship between fiscal policy and unemployment reduction in Nigeria is shown in equation iii below:

$$UNPNn_t = -0.01457UNPn_{t-1} + 2.378TAXREVn_{t-1} + 69.617OREVn_{t-1} + 6.189CEXPn_{t-1} + 7.5922REXPn_{t-1} - 8.995DEFn_{t-1} + 56.995 \ldots\ldots\ldots iii$$

The result in equation iii above shows that units change in Tax Revenue results toa 2.378 unit change in unemployment on average ceteris paribus in the long run. On the other hand, a unit change in Oil Revenue is associated with a 69.62 unit change in the level of unemployment in Nigeria in the long run on average ceteris paribus at a significant level of 5%. A unit change in government capital expenditure is associated with a 6.189 unit change in unemployment in Nigeria in the long run on average ceteris paribus. A unit change in Recurrent Expenditure on the long run is associated with a 7.59 unit change in the rate of unemployment in Nigeria on average ceteris paribus. A unit change in Deficit financing is associated with an 8.995 unit variation in the level of unemployment in Nigeria in the long run on average ceteris paribus. The previous period's deviation from long run equilibrium is corrected in the current period at an adjustment speed of1.5% percent in the short run.

FISCAL POLICY AND UNEMPLOYMENT REDUCTION (GHANA)

The Equation of the Error Correction Term and the long run model that explains the long run relationship between fiscal policy and unemployment reduction in Ghana is shown in equation iv below:

$$UNPGn_t = -0.0388UNPg_{t-1} - 0.241695TAXREVg_{t-1} + 64.411OREVg_{t-1} - 1.1729CEXPg_{t-1} - 1.9366REXPg_{t-1} - 55.8623DEFg_{t-1} - 10.942 \ldots\ldots\ldots iv$$

In the long run, a unit change in Tax revenue in the long run is associated with a 0.242 unit variation in unemployment in Ghana on average ceteris paribus. Meanwhile, a unit change in Oil Revenue in Ghana is associated with a 64.411 unit change in the rate of unemployment in the long run on average ceteris paribus. A unit change in Capital expenditure in Ghana is associated with a 1.173 unit variation in the rate of unemployment in the long run in Ghana on average ceteris paribus.A unit change in Recurrent Expenditure is associated with a 1.9366 unit variation in unemployment rate in Ghana in the long run on average ceteris paribus. Also,a unit change in Deficit Financing is associated with a 53.863 unit variation in unemployment in Ghana on average ceteris paribus in the long run.The previous period's deviation from long run equilibrium is corrected in the current period at an adjustment speed of 4.1% percent in the short run.

TEST OF HYPOTHESIS:

H_0: There is no significant effect of Fiscal Policy on unemployment in Sub Saharan Africa.

NIGERIA:

This hypothesis was tested using VECM least squared result in table 6 below.

Table 6: REGRESSSION RESULTS (Dependent Variable: UNEMPLOYMENT) NIGERIA:

R-squared	0.348310		
Adjusted R-squared	0.022465		
F-statistic	1.068944	Durbin-Watson stat	2.147024
Prob(F-statistic)	0.429168		

Source: Researchers computation using E-View version 10

R-squared result shows that a weak relationship exists between fiscal policy and unemployment in Nigeria. This indicates a 34.8% relationship existing between fiscal policy and unemployment in Nigeria. The adjusted R-square shows that the model accounts for about only 2.25% of the total variation in the model on average ceteris paribus. F-statistic value of 1.069(Prob. 0.42928) is not statistically significant at 5% level of significance. This contradicts the Johansen Cointegration test result which shows that there at most three (3) cointegrating equations that suggested a long run relationship existing between fiscal policy and unemployment in Nigeria.

The research therefore, accepts the null hypothesis and concludes that Fiscal Policy has no significant effect on unemployment in Nigeria. This result contradicts existing literature, the a priori expectation and the results of Obayori, (2016), Egbulonu, &Amadi, (2016), in their work titled: Effect of Fiscal Policy on Unemployment in Nigeria; which revealed that a long run relationship exists between fiscal policy and unemployment in Nigeria.

GHANA:

There is no significant effect of Fiscal policy on Unemployment in Ghana.

This hypothesis was tested using the VECM least squares results shown in table 7 below.

Table 7: VECM LEAST SQUARES RESULTS (Dependent Variable: UNEMPLOYMENT) GHANA:

R-squared	0.515942		
Adjusted R-squared	0.331540		
F-statistic	2.797908	Durbin-Watson stat	2.082031
Prob(F-statistic)	0.028028		

Source: Researchers computation using E-View version 10

In testing the hypothesis of no relationship between fiscal policy and unemployment in Ghana using the result in table 7 above, The R-Square value is 0.5159, shows that a 51.6% relationship exist between fiscal policy and unemployment in Ghana. The Adjusted R-Squared value of 0.3315 indicates that the model accounts for about 33.2% of the total variation in Unemployment in Ghana for the period under review on average ceteris paribus. Durbin-Watson Statistics of 2.08 confirms the absence of serial correlation in the model. The F.statistics of 2.7979 (prob.0.028) is statistically significant at 5% level of significance. The research therefore, rejects the null hypothesis and conclude that a significant long run relationship exist between fiscal policy and unemployment in Ghana.

V. Discussion Of Major Findings

FISCAL POLICY AND UNEMPLOYMENT IN NIGERIA:

Fiscal Policy can reduce unemployment by increasing aggregate demand and the rate of economic growth. This is achieved when government pursue expansionary policy by cutting taxes and increasing expenditure. To establish is a long run or short run relationship exist between fiscal policy and unemployment reduction in Nigeria, the Johansen Cointegrationg test was adopted. Comparing the Trace statistics with the 5% critical value, result indicates at most three (3) cointegrating equations. This suggests that the relationship may be a long run effect. So, the Vector Error Correction Mechanism was adopted which confirmed that the relationship between fiscal policy and unemployment in Nigeria has a long run effect. But, the R-Squared value of 0.3483 shows a weak relationship existing between fiscal policy and unemployment in Nigeria. The Adjusted R-Squared shows that the model accounts for only 2.2% of the total variation in the model on average ceteris paribus. The f.stat.value of 1.0689 (prob. 0.4292) is not statistically significant at 5% level of significance.This means that the long run relationship existing between fiscal policy and unemployment is not statistically significant in the long run. The main goals of fiscal policy are to reduce unemployment, reduce poverty and encourage economic growth. But in the case of Nigeria, it has no significant effect. Unemployment has a very severe effect on the economy as it impacts on the government's ability to create income and it reduces economic activities. When unemployment is high, fever people are paying taxes, with fewer people having disposable income to spend on goods and services. When consumer spending is low, business growth and expansion are affected with in turn hampers economic growth. The individual explanatory variables (Tax Revenue, Oil Revenue, Capital Expenditure, Recurrent Expenditure and Deficit Financing) have their t.statistic probabilities greater than 0.05. So, the individual explanatory variables (Tax Revenue, Oil Revenue, Capital Expenditure, Recurrent Expenditure and Deficit Financing) have no significant effect on unemployment in Nigeria in the long run. This conforms to the research of Obayori, (2016)on fiscal policy and Unemployment in Nigeria, which shows the long run relationship between fiscal policy and unemployment, is not statistically significant at 5% level of significance. If fiscal policy has no significant long run effect on unemployment in Nigeria, no need to wonder why unemployment is on the rise in Nigeria.

FISCAL POLICY AND UNEMPLOYMENT IN GHANA:

The result of the Johansen Cointegration test suggest a long run relationship between fiscal policy and unemployment in Ghana with the result showing that there are at most two (2) cointegrating equations in the model that explains the relationship between fiscal policy and unemployment in Ghana. To estimate the long run equations the Vector Error Correction Mechanism (VECM) was adopted, putting into consideration the number of cointegrating equations in the model. The VECMconfirms that a long run relationship exist between fiscal policy and unemployment in Ghana. The VECM least squares result shows R-Squared value of 0.516, Adjusted R-Squared of 0.3315. This means that the model is the long run relationship between fiscal policy and unemployment in Ghana is strong. But, the model accounts for only 33.2% of the total variation in Unemployment in Ghana for the period under review on average ceteris paribus. The F.statistic value of 2.7979 with probability of 0.0280 is statistically significant at 5% level of significance. This means that the explanatory variables jointly have a significant long run effect on unemployment in Ghana. This is in line with the research work of Obayori, (2016). But, t. statistic values of the individual explanatory variables (Tax Revenue, Oil

Revenue, Capital Expenditure, Recurrent Expenditure and Deficit Financing) are not statistically significant in explaining the long run variation in the model.

VI. Conclusion And Recommendations:

The research therefore concludes that Fiscal policy has no significant short run effect on unemployment in Nigeria, while fiscal policy has a significant long run effect on unemployment in Ghana. The outcome of this research has revealed the contribution of fiscal policy to the reduction of unemployment in Sub Saharan Africa with emphasis on Ghana and Nigeria. The results are not impressive and pronounced as expected as fiscal policy instrument (Tax revenue, Oil Revenue, Capital Expenditure, Recurrent Expenditure and Deficit Financing) have not yielded the expected result towards reducing unemployment in Sub Saharan Africa. The implication is that Nigeria and Ghana have not fully utilized the instruments of fiscal policy in solving the macro economic problems facing the region. They are yet to exploit the full potentials of fiscal policy by channeling their expenditure toward unemployment reduction in the region.

Based on the findings, the following recommendations are made:

Fiscal policy has no significant short run effect on unemployment in Nigeria, while fiscal policy has a significant long run effect on unemployment in Ghana. Therefore, there is an urgent need to increase expenditure on in productive ventures that are labor intensive which would increase employment and improve productive opportunity among the poor and the non-poor in Sub Saharan Africa and ensure that funds for these developmental sectors are properly utilized. Again, there is need to strengthen, criminalize corruption and institutionalize the fight against corruption in Africa. This would tackle the high level of corruption found in public offices in Sub Saharan Africa.

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