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FISCAL POLICY AND EMPLOYMENT GENERATION IN NIGERIA

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Abstract:
This paper investigated the influence of fiscal policy on employment generation in Nigeria. The analyzed data, spanning 1981 to 2020 were obtained from the statistical bulletin of Nigeria's apex bank and the country's Bureau of Statistics. The Error Correction Model was applied as the main analytical tool. The results showed that aggregate government expenditure has a positive but insignificant influence on the employment rate. In addition, total tax revenue and external debt service have negative and insignificant influences on the employment rate in Nigeria. What this suggests is that fiscal policy tools of aggregate government expenditure, total tax revenue and external debt service have not effectively helped to increase the level of employment in Nigeria. Generating from the findings, this paper suggested that government should maintain fiscal prudence and ensure that total tax revenue is efficiently and effectively utilized to provide infrastructural facilities and social amenities that will help the various sectors of the economy to function very well thereby generating enough employment in the country.

JEL: O15; E24; J21; H60

Keywords: fiscal policy, employment, tax revenue and external debt service

1. Introduction

Full employment is one of the major goals of every economic system irrespective of its political arrangement. This goal is usually achieved through the formulation and implementation of economic policies, especially fiscal policy. Fiscal policy refers to the manipulation of expenditure resources and taxation powers by the government for the purpose of managing the economy (Umo, 2012). According to Conway (2009), fiscal policy refers to decisions a government takes about what to spend its money on, how to

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raise taxes and how much to borrow. It is concerned with how the agencies responsible for the conduct of fiscal policy manipulate a set of macroeconomic variables to achieve some desired objectives of the policy. Furthermore, fiscal policy can be expansionary or contractionary in nature. An expansionary fiscal policy involves an increase in government expenditure and/or decrease in taxes with the aim of stimulating aggregate demand and hence the economy. But the reverse is the case for contractionary fiscal policy. Thus, an expansionary fiscal policy is needed to fight unemployment and hence create employment for the populace (Abomaye-Nimenibo and Inmino, 2016 and Obayori, 2016).

In Nigeria, it is the duty of the central government to initiate policies that will help to achieve basic macroeconomic objectives, including full employment. As observed by Udeorah, Obayori and Krokeyi (2017), the mission to generate adequate employment opportunities for the increasing number of persons who are willing and able to work at the prevailing wage rate always preoccupies the attention of policymakers all over the world. This is usually mirrored in their policy thrusts, with the fundamental intent of creating an encouraging environment for job creation. Therefore, employment is generated when government provides job opportunities through tax revenue, as well as an increase in government expenditure to provide social and economic infrastructural amenities in the country. This implies that the provision of adequate infrastructural facilities through public funds will generate employment opportunities directly and the infrastructural facilities will also encourage the productive sectors to produce and provide employment opportunities for the labour force (Abdullahi, 2014 and Jhinghan, 2008). An observation of the revenue of Nigeria's government revealed that tax revenue as a percentage of government revenue has improved. For instance, in 2015 tax revenue was 44.59% of government revenue. It further increased to 46.66% in 2016. Government spending on employment-generating programmes has also increased over the years.

The importance of employment-generating programmes through fiscal actions to create employment in the country cannot be over-emphasized. Over the years, the various governments in Nigeria have initiated and implemented numerous macroeconomic policy options especially fiscal policy in an attempt to create employment in Nigeria. For instance, the introduction of the national directorate of employment (NDE) programme in 1986 by the Babangida administration aimed at creating jobs for the youths (assisting the unemployed in search of gainful employment), thereby reducing the incidence of unemployment in the country. In 2011, it was the Youth Enterprise with Innovation in Nigeria (YouWin). In 2012, the federal government launched the Public Works/Youth Employment (PW/WYE) Initiatives as a component of the Subsidy Reinvestment and Empowerment Programme (SURE-P). The scheme engaged 119,680 unskilled youth in labour-intensive activities across all the Local Government Areas in the country. Of this, 70,363 were enlisted under the Graduate Intensive Scheme. The graduate interns were made up of 50,231 males and 20,130 females. In the same year, the government also strengthened the Graduate Entrepreneurship Scheme (GES) (CBN, 2013). In 2013 and 2014, the government sustained the programmes for job creation, particularly the Graduate Entrepreneurship Scheme (GES). The thrust of the scheme was

to equip unemployed Nigerian graduates with the requisite skills to establish small and viable businesses of their choice. Strictly speaking, the intent of the training was to empower unemployed young graduates across the nation. In 2015, the government established micro-businesses and engaged more people in informal and low-skilled economic activities; the government also implemented self-reliance initiatives. Yet, the country has not generated enough employment for its citizens.

The efforts of the successive governments in Nigeria at using fiscal policy - favourable tax, external borrowing and productive spending in infrastructures in order to increase the level of employment in the country have not generated enough employment in the country. Udeorah, Obayori and Krokeyi (2017) argued that the employment rate has been very low and this makes the unemployment rate increased over the years in Nigeria. For instance, in 2009 and 2010, the national unemployment rate was 11.2 and 11.5 percent respectively. In 2011, the unemployment rate was 14.6 percent. The double-digit unemployment rate continued until it increased from 18.8% in Q3 2017 to 23.1% in Q3, 2018. The unemployment rate in Q2, 2020 was 27.1% (BNS, 2011 and CBN, 2010, 2011, 2017, 2018 & 2020). There is no doubt that the Nigerian economy has failed to create enough employment opportunities for citizens who are willing and able to work at the prevailing wage rate. Therefore, it is important to investigate the impact of fiscal policy on employment in Nigeria. The remaining part of this paper is organized thus: part II duels on theoretical and empirical reviews, part III contains methodology, part IV duels on empirical results, while part V contains conclusions and recommendations.

2. Theoretical and Empirical Review

According to the Keynesian theory, the equilibrium level of income and output in an economy depends on the economy's aggregate demand for output. If aggregate demand is not sufficient to call forth the level of output that requires the employment of all available workers and other factors for its production, unemployment results, and production (of goods and services) is below its potential. If aggregate demand is just sufficient, full employment results, and production is at its full potential. If aggregate demand is excessive, inflation results as well as full employment. Any level of output, ranging from that which calls for full employment of the labour force to that which imposes idleness on a large part of the labour force is a possible equilibrium level.

Given this wide range of possible equilibrium levels, the actual equilibrium level in any time period is determined by the aggregate demand for that period. The policy implication of the Keynesian theory is that government should intervene in the economy when necessary. It should design and use specific policies especially fiscal policy to deal with departures from full employment. Following the Keynesian idea, an increase in government spending and a decrease in taxes will contribute meaningfully to a reduction in unemployment in the country. Thus, it will create a substantial level of employment in the country. Accordingly, the Keynesian theory of employment is functionally specified in this study as EMR = f(FP) ..... (1), where; EMR is the rate of employment, and FP is fiscal policy variables (government spending, tax revenue and external debt service).

From equation one, an increase in government spending will help to boost the level of employment in an economy (Akpakpan, 1999, and George-Anokwuru, Olisa, & Obayori, 2020).

Moreover, empirical findings on the relationship between fiscal policy measures and employment have been uneven. Antonio and Ilian (2001) used the vector auto-regression to investigate the influence of fiscal policy on consumption and employment. The result revealed that positive innovations in government outlays are followed by robust and persistent increases in employment and consumption. The effects are particularly noticeable when the wage expenses of the government increase. The researchers also compared these outcomes with several variations of a standard real business cycle model and found out that the positive association in the responses of consumption and employment cannot be matched by the model under plausible assumptions for the values of the calibration parameters.

In the United States, Michele (2005) used a quantitative technique to explore the impact of fiscal policy shocks on employment. The result revealed that consumption expenditure and fiscal shock lead to a considerable increase in both the number of hours worked and output for the government. It also showed that shock in government employment expenditure acts as a transfer payment for households, thereby dampening substantially the wealth effect on consumption and labor supply associated with fiscal shocks.

Tagkalakis (2006) used a quantitative technique to examine the dynamic reaction of employment, average hours, and real wages to macroeconomic policy shocks in the UK in the period 1970 Q1–2003 Q1. The finding revealed that a shock of government spending leads to a decrease in employment and hours, whereas real wages rise.

Pappa (2009) used structural VAR to examine the transmission of fiscal shock in the labour market in United States. The researcher found out that shocks to government investment and consumption increase actual employment and wages in the aggregate and at the state level, but shocks to government employment give mixed results, they increase real wage and employment in the aggregate, but they reduce employment in 1/3 of the US States considered.

Also, with the aid of quantitative technique, Monacelli, Perotti and Trigari (2010) investigated the effects of fiscal policy on labour market in United States. The findings revealed that an increase in government outlay of one percent of gross domestic product produces output and unemployment multipliers, respectively, of about 1.2-1.5 percent (at one year and two-year horizon, respectively) and 0.6% points (at the top). Hours and employment also rise significantly following a government outlay shock, with a peak response of about 1.5 percent.

Danjuma and Bala (2012) used descriptive statistics to survey the role of governance in job creation in Nigeria. The study revealed that unemployment in Nigeria generated tension and animosity between the people as well as other social vices like prostitution and armed robbery.

Anthanasios (2013) employed the SVAR technique to examine the unemployment effects of fiscal policy in Greece. The findings showed that the impact of cuts in

government purchases and government utilization on unemployment and output (growth) is sizable, while the impact of government speculation is to a lesser degree. An increase in tax was found to decrease output and increases the unemployment rate.

Bova, Kolerus and Tapsoba (2015) used a panel of 34 OECD countries from 1985 to 2013 to investigate the role of fiscal policies in the changing aspects of labor market. This was done through the lenses of Okun's Law; the researchers evaluated how the instruments of fiscal policy as well as fiscal consolidation and expansion episodes affect labour market outcomes. The findings revealed that fiscal consolidation has a sizeable, positive and strong impact on Okun's coefficient. This effect is particularly robust for spending-based consolidations, signifying that a reduction in the size of the government increases the responsiveness of employment to output and is not altered by an expansionary or recessionary position in the business cycle. Interestingly, the result also revealed that fiscal expansion has no impact on Okun's coefficient.

Andrea (2015) analyzed a panel of 17 OECD countries to find out whether fiscal policy is able to affect the trend of employment rate, triggering hysteresis independently from GDP behaviour from 1980 to 2009. The effects of fiscal policy were estimated with an SVAR. The finding revealed that fiscal shock can modify the employment equilibrium level even without influencing the potential output. The fiscal multiplier for the employment rate trend after years was negative.

Attahir (2016) examined the impact of fiscal policy shocks on output and unemployment in Nigeria from 1981 to 2015 using the SVAR technique. The SVAR model showed that shock in government expenditure has a positive effect on output. Also, revenue shock was found to exert a positive effect on output. At the same time, revenue shock increased employment generation as the result revealed the effect of revenue shock on unemployment to be negative.

Udeorah, Obayori and Krokeyi (2017) examined fiscal policy and employment in Nigeria. The objectives of the study were to: determine the causal relationship between government expenditure, tax revenue and employment in Nigeria from 1980 to 2015. The result of the granger causality test revealed a unidirectional causality between the government expenditure and employment; as well as government tax revenue and employment. This means that government expenditure and tax revenue granger caused employment in Nigeria during the period of study. Thus, the finding validates Keynes's assumptions that an increase in government spending and reduction in tax will help to generate employment.

In an attempt to examine the influence of fiscal policy and occupational employment dynamics, Christian, Falko and Roland (2017) employed a vector-autoregressive model and document substantial heterogeneity in occupational employment dynamics in reaction to the shocks of government outlay. Their findings revealed that employment rises most robustly in service, sales, and office ("pink-collar") occupations. On the other hand, employment in blue-collar occupations is barely affected by fiscal incentives which are striking in light of its robust exposure to the cycle and its long-run decline due to technical variation and globalization. They also provided evidence that occupation-specific variations in the demand for labour are keys to

understanding these outcomes and developing a business-cycle model that explains the heterogeneous occupational employment dynamics as a consequence of variances in the short-run substitutability between labour and capital services across jobs or professions.

Olukayode and Olorunfem (2018) investigated the impact of fiscal policy instruments on employment generation in Nigeria from 1980 to 2015. The study used the Augmented Dickey-Fuller test, Engel Granger cointegration test for long-run association and ordinary least squares estimates. The findings showed amongst others that government expenditure has the potential of creating more jobs if they were expended on appropriate capital projects that are capable of facilitating employment creation and linking rural-urban centres smoothly and not encouraging migration. The manufacturing sector also has the prospect of alleviating jobless growth, likewise the agriculture sector if policies are targeted at raising their outputs.

George-Anokwuru, Olisa and Obayori (2020) investigated the correlation between fiscal policy variable – value-added tax and employment generation in Nigeria from 1999 to 2019 using the Dynamic Ordinary Least Squares technique. The finding revealed that value-added tax has a direct link with the employment rate. Also, custom cum excise duties have a significant impact on employment generation in Nigeria.

3. Methodology

Secondary data from 1981 to 2020 were obtained from the statistical bulletin of Nigeria's apex bank and the country's Bureau of Statistics (NBS) to investigate the impact of fiscal policy on employment in Nigeria. In specifying the empirical model, the study relied on the Keynesian theory. Variables such as total government expenditure and government tax revenue were identified as the key fiscal policy variables explaining the rate of employment.
That is,

$$EMR = F(TGE, TTR, EDS) \quad (1)$$

The Log linear form of (2) produced;

$$EMR_t = \varphi_0 + \varphi_1 LnTGEt + \varphi_2 LnTTRt + \varphi_3 LnEDSt + \varepsilon_t \quad (2)$$

Were EMR is the unemployment rate, TGE is total government expenditure, TTR is total government tax revenue, EDS is external debt service, ε is *the* error term which denotes other variables not included in the model, t is the period of time, φ_0 is the intercept and Ln is the natural logarithm. The parameter estimates are expected to behave in line with φ_1 *and* $\varphi_2 > 0$; while $\varphi_3 < 0$.

3.1 Techniques of Analysis

The methods that were employed to analyze the data are Descriptive Statistics, unit root test via Augmented Dickey-Fuller test and the Error Correction Model.

3.2 Unit Root Test

The unit root test encompasses testing the order of integration of the individual series in a model. The unit root test used in this study is the Augmented Dickey-Fuller (ADF). The general form of ADF is estimated by the following regression

$$\Delta LS_t = \alpha_0 + \alpha_1 LS_{t-1} + \Sigma\alpha_1\Delta LS_i + \delta_t + u_t \quad (3)$$

Where: LS is a time series, t is a linear time trend, Δ is the first difference operator, α_0 is a constant, n is the optimum number of lags in the independent variables and u is the random error term.

3.3 Co-integration Test

Co-Integration is an econometric technique used for testing the correlation between non-stationary time series data. Two variables are said to be Co-Integrated if they have a long-run or equilibrium relationship between them (Gujarati, 2007). Hence, the co-integration technique has been developed to address the problem of spurious correlation often associated with some time series data. This study used Johansen co-integration procedure.

Moreover, the basic argument of Johansen's procedure is that the rank of the matrix of variables can be used to determine whether or not the two variables are co-integrated. A lack of co-integration suggests that such variables have no long-run relationship. According to Johansen (1998), the general form of co-integration is given by:

$$y_t = \mu + \Delta_1 y_{t-1} + - - - + \Delta P\, y_{t-p} + u_t \quad (4)$$

Where: Y_t is an nx1 vector of variables that are integrated of order commonly denoted (1) and U_t is an nx1 vector of innovations. However, an extension of this in the co-integration technique is the Error Correction Mechanism (ECM) (Engle and Granger, 1987). These authors have established that Co-integration is a sufficient condition for an Error Correction Model formulation.

3.4 Error Correction Model

If co-integration is proven to exist, then the next step requires the construction of the Error Correction Mechanism (ECM) to model the dynamic relationship. The purpose of the ECM is to indicate the speed of adjustment from the short-run equilibrium to the long-run equilibrium state. The greater the co-efficient of the parameter, the higher the speed of adjustment of the model from the short-run to the long-run.

We represent the model specification with an error correction form that allows for the inclusion of long-run information thus, the ECM can be formulated as follows:

$$\Delta Q_t = \beta_{10} + \Sigma\, \beta_{11t}\Delta Q_{t-1} + \Sigma\, \beta_{12t}\Delta Y_{t-1} + \Sigma\, \beta_{13t}\Delta Z_{t-1} + \delta_1 ECM_{t-1} + U_{1-t} \quad (5)$$

Where; Q is the dependent variable, $\beta_1 - \beta_2$ are the slope parameters, $Y_1 - Y_3$ are the set of explanatory variables, $\delta 1ECM_{t-1}$ is the coefficient of ECM, Δ is change and μ is the disturbance term. Based on our model 2, the dynamic (error correction) representation is given below:

$$\Delta EMR_t = \beta_0 + \Sigma\ \beta_1 \Delta EMR_{t-1} + \Sigma\beta_2 \Delta GTR_{t-1} + \Sigma\beta_3 \Delta TTR_{t-1} + \Sigma\beta_4 \Delta EDS_{t-1} + \delta_1 ECM_{t-1} + \mu_{1-t} \quad (6)$$

Note the variables as earlier defined.

4. Empirical Results

4.1 Descriptive Statistics for Underlying Series

This study used descriptive statistics to describe the basic features of the data in the study. Specifically, the essence of descriptive statistics is to ascertain the stability of the time series.

Table 1: Descriptive Statistics Result

	EMR	TGE	TTR	EDS
Mean	10.50400	2592220.	4276925.	146765.4
Median	9.530000	1563600.	4674085.	61530.18
Maximum	18.18000	12691234	10654725	1165895.
Minimum	6.840000	60268.20	98102.40	27850.81
Std. Dev.	3.372261	2853353.	3321601.	247733.1
Skewness	0.772094	1.753342	0.092431	3.248876
Kurtosis	2.516649	6.468948	1.604309	12.72996
Jarque-Bera	3.272682	30.41303	2.477660	171.1161
Probability	0.194691	0.000000	0.289723	0.000000
Observations	30	30	30	30

Source: Computed by the researcher using E-Views 9 (2021).

The descriptive statistics reported in Table 1 indicate that employment rate (EMR), total government expenditure (TGE) total tax revenue (TTR) and external debt service (EDS) averaged 10.50400, 2592220, 4276925 and 146765.4 respectively. The standard deviation reveals that the employment rate and total tax revenue converged around their mean. While total government expenditure and external debt service did not converge around their respective mean.

The Skewness test result shows positive values for all the series, meaning that they have high tails. Total tax revenue is platykurtic relative to normal since its value for kurtosis 1.604309 is less than 3. This suggests that the variable has short and thin tails, and its central peak is lower and broader. Moreover, total government expenditure and external debt service have leptokurtic distributions relative to normal, since their values for kurtosis 6.468948 and 12.72996 respectively are more than 3. This indicates a flatter than normal distribution and the variables have large tails. That is, they have longer and fatter tails, and their central peaks higher and sharper. At the same time, the employment

rate is mesokurtic since its value for kurtosis is approximately three. This means that it has a normal curve – it is neither flat nor peaked.

Furthermore, the probability of Jarque-Bera statistics suggests that employment rate and total tax revenue are normally distributed at 5% level while total government expenditure and external debt service are not normally distributed at 5% level as their deviation from normality, as measured by the test statistic, is statistically significant. Therefore, the study concludes from the revealed statistical properties of the time series that some of the variables are not normally distributed, which may have resulted from the problem of a unit root. This necessitated the unit root test for stationarity as shown in Table 2.

Table 2: Results of ADF Unit Root Test

Variables	ADF Test	Critical Values			Order of Integration
		Critical Value 1%	Critical Value 5%	Critical Value 10%	
EMR	-7.528713	-3.699871	-2.976263	-2.627420	1(1)
TGE	-5.484263	-3.699871	-2.976263	-2.627420	1(1)
TTR	-5.954604	-3.699871	-2.976263	-2.627420	1(1)
EDS	-5.205684	-3.699871	2.976263	-2.627420	1(1)
Note: EMR, TGE, TTR and EDS as earlier defined.					

Source: Authors' Computed Result from E-views 9 (2021).

The stationarity - unit root test result reveals that none of the variables was stationary at level. All the variables were stationary at first differences 1(1). That is, they became stationary after first differencing. The results of the variables being stationary at 1(1) make it inappropriate for the application of the Ordinary Least Square (OLS) method, therefore the tests to determine the long-run relationship can be achieved with the aid of the Johansen Co-integration test which is presented in Table 3.

4.2 Test for Co-integration

Co-integration is conducted based on the test proposed by Johansen. According to Iyoha and Ekanem (2002), co-integration deals with the methodology of modeling non-stationary time series variables. For detailed results of the Johansen Co-integration, see Table 3.

Table 3: Johansen Test for Co-integration

Eigen Value	Trace Statistic	5% Critical Value	Prob. **	Hypothesis of CE(s)
0.606900	57.78746	55.24578	0.0294	None *
0.408339	31.64412	35.01090	0.1097	At most 1
0.361820	16.94913	18.39771	0.0788	At most 2
0.144604	4.373347	3.841466	0.0365	At most 3 *

Source: Computed Result Using (E-Views)

Table 3 indicates that there are two Co- integrating equations because two of the Trace Statistic(s) are larger than the critical value at 5%. Therefore, there is a long-run relationship among the variables which prevents them from wandering apart without bound. Given that there are two Co-integrating equations, the requirement for fitting in an Error Correction Model is satisfied. The Error Correction Mechanism (ECM) intends to validate the presence of a long-run relationship and incorporate the short-run dynamics into the long-run equilibrium relationship.

Table 4: Parsimonious Error Correction Model

Dependent Variable: D(EMR)
Method: Least Squares
Date: 11/22/21 Time: 12:27
Sample (adjusted): 1994 2019
Included observations: 26 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.009838	0.274605	-0.035828	0.9718
D(EMR(-1))	0.303535	0.268113	1.132113	0.2724
D(EMR(-2))	0.017028	0.179441	0.094894	0.9254
D(EMR(-3))	0.207163	0.160414	1.291423	0.2129
DLOG(TGE(-2))	0.008527	0.665780	0.012808	0.9899
DLOG(TTR(-2))	-0.370397	0.554381	-0.668128	0.5125
DLOG(EDS(-2))	-0.176999	0.295818	-0.598337	0.5571
ECM(-1)	-1.131927	0.283263	-3.996031	0.0008

R-squared	0.670490	Mean dependent var	-0.265000
Adjusted R-squared	0.542347	S.D. dependent var	1.372858
S.E. of regression	0.928739	Akaike info criterion	2.937682
Sum squared resid	15.52602	Schwarz criterion	3.324789
Log likelihood	-30.18987	Hannan-Quinn criter.	3.049155
F-statistic	5.232358	Durbin-Watson stat	2.029679
Prob(F-statistic)	0.002164		

Source: Computed Result Using (E-Views).

The parsimonious ECM result as shown in Table 4 suggests evidence of error correction. The coefficient of the ECM has the hypothesized negative sign and is statistically significant at the conventional level (i.e., 5%). This implies that deviations from the short-term employment rate adjust quickly to long-run equilibrium. That is, the long-run equilibrium can almost immediately be restored should there be a short-run distortion in the rate of employment to reduce unemployment. Strictly speaking, the result revealed that disequilibria in the EMR in the previous year were corrected for in the current year. It, therefore, follows that the ECM could rightly correct any deviations from the short-run to long-run equilibrium relationship between the employment rate and the explanatory variables (total government expenditure, total tax revenue and external debt service).

In addition, the R^2 value of 0.67% showed that the model is a good fit. Thus, about 67 percent variation in employment rate is explained by the systematic changes in the independent variables (total government expenditure, total tax revenue and external debt service) while the remaining 33 percent is explained by factors exogenous to the model but captured as other variables not included in the model. Put differently, the remaining 33 percent is captured by the error term. In addition, the reason why the R^2 is 67% and the error term captures 33% is because there are other explanatory variables that control employment which was omitted in the model. This happened because the number of variables that control employment is too long to be placed in a single model. In this study, variables were selected in line with the topic, conceptual, empirical and theoretical literatures reviewed. However, according to Chris (2008), R^2 never fall if more regressors are added to the regression, implying that by following it, the researcher will typically end up with a large model, containing a lot of marginally significant or insignificant variables. Therefore, adding more variables to a multiple regression model may be misleading. Strictly speaking, the overall fit is satisfactory given the R^2 of 67%. This also means that the model fits the data better. At the same time, the Durbin Watson statistic value of 2.029679 suggests that the model is free from autocorrelation.

Furthermore, the coefficient of total government expenditure is positive and statistically not significant. What this suggests is that though total government expenditure has a positive relationship with the employment rate, it has lesser implication in spurring an increase in employment during the period of study.

The coefficient of total tax revenue is negative and statistically not significant. This means that a percentage increase in total tax revenue will reduce employment in Nigeria by 0.370397%. The result also suggests that total tax revenue as a fiscal policy tool has not significantly contributed to increasing employment during the period of study. The above finding may not be far from the truth, because total tax revenue has not been effectively utilized to provide adequate infrastructural facilities that will help the various sectors of the economy to function very well thereby generating enough employment in the country. There is no doubt that the Nigerian economy has failed to generate enough employment for citizens who are willing and able to work at the prevailing wage rate. A careful observation of the Nigerian economy revealed that there is a high level of unemployment in the country. This result refutes the empirical work of Udeorah, Obayori and Krokeyi (2017) who reported that government taxation significantly increases the rate of employment in Nigeria.

The coefficient of external debt service is negative and statistically not significant. This means that a percentage increase in external debt service will reduce employment in Nigeria by 0.176999%. The result also suggests that external debt service has not significantly contributed to increasing employment during the period of study. The reason for this is that national debt is sometimes financed by selling bonds to the public, which tends to crowd out private investment. This has led to the loss of income and employment which additional private investment might have made possible in the country.

4.4 Post Estimation Diagnostic Tests Results

Diagnostic tests were conducted in this study to verify whether or not the estimated model is reliable for policy prediction or recommendation purposes. This study specifically employed the Wald test for the coefficient of restriction and the normality test for the diagnostics or post-estimation analyses. The various test results are hereby reported below:

4.5 Wald Test

The Wald test is applied to confirm if the coefficients of the causal variables in each of the ECM models are jointly significant. The F-statistic in Table 5 was utilized to ascertain this.

Table 5: Wald Test Result

Wald Test:
Equation: Untitled

Test Statistic	Value	Df	Probability
F-statistic	144.1264	(4, 18)	0.0000
Chi-square	576.5055	4	0.0000

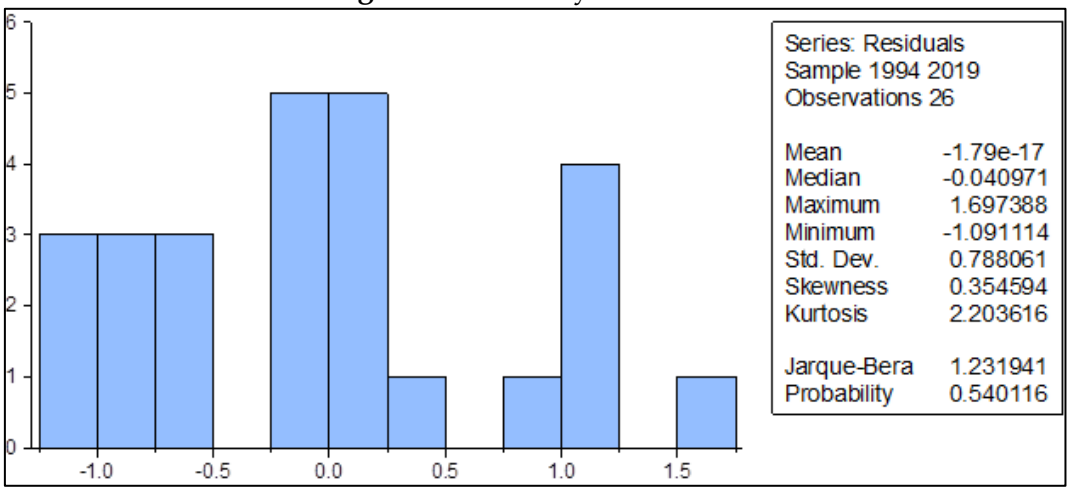
Source: Authors' Computed Result from (E-views 9.0)

The result in Table 5 shows that the F-statistic is approximately 144 and the probability value of 0.0000 is less than 0.05 at the conventional 5 per cent level. Therefore, all the independent variables used in the model are jointly important in explaining the employment rate in Nigeria during the period of study.

4.6 Normality Test Result

The Jarque-Bera statistic was applied to examine whether the error term in the employment rate model is normally distributed at 5 per cent significance level.

Figure 1: Normality Test Result



Source: Computed by the researcher using E-Views 9 (2021).

The result shown in Figure 1 depicts that the error term is normally distributed at the conventional level (i.e., 5%). This is because the probability value of the Jarque-Bera statistic of approximately 0.54 is greater than the 0.05% conventional level. This implies that the Jarque-Bera statistic hypothesis of normally distributed residuals in the ECM model is accepted.

5. Conclusion and Recommendations

Lack of employment denies the poor income which constitutes an important means of livelihood. The role of government in stabilizing the economy in order to generate employment is critical to poverty reduction. Therefore, this study examined the effect of the government's fiscal policy on employment in Nigeria. The study employed descriptive statistics, unit root test via Augmented Dickey-Fuller test, Johansen cointegration and the Error Correction Model. The results showed that total government expenditure has a positive and insignificant effect on the employment rate in Nigeria during the period of study. At the same time, total tax revenue and external debt service have a negative and insignificant effect on the employment rate in Nigeria during the period of study.

This means that fiscal policy tools of total government expenditure, total tax revenue and external debt service have not effectively helped to increase the level of employment in Nigeria. Based on these findings, the study recommends that government should maintain fiscal prudence and ensure that total tax revenue is efficiently and effectively utilized to provide infrastructural facilities and social amenities that will help the various sectors of the economy to function very well thereby generating enough employment in the country.

Conflicts of Interest Statement

The author declares no conflicts of interest.

About the Author

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