

Fiscal Policy and Unemployment Rate in Nigeria: An Empirical Investigation

Chukwuemeka Nwamuo, Ph.D

Department of Economics, Rhema University, Aba, Nigeria

Abstract: The study investigated the impact of fiscal policy on unemployment rate in Nigeria. Time series data spanning from 1991 to 2020 which were sourced from the Central Bank of Nigeria (CBN) statistical bulletin and the World Development Indicators (WDI). The ARDL bounds testing approach to cointegration was used to analyse the data. Autoregressive Distributed Lag (ARDL) model and Error Correction Model (ECM) were utilized to address the main objectives of the study. The estimated short run coefficient result revealed that total public debt, total public expenditure and non-oil revenue all have a positive and significant impact on unemployment rate. The speed of adjustment for correcting disequilibrium from the previous year to equilibrium in current year is 14.92 percent as shown by the coefficient of ECM. The long run result of the study showed that there is a positive and significant impact between total expenditure (TEXP) and unemployment rate in Nigeria but a negative and significant impact between non-oil revenue (NOR) and unemployment rate in Nigeria. The long run result showed that there is no relationship between total public debt (TDBT) and unemployment rate in Nigeria while the short run result showed that total public expenditure has a positive and significant impact on unemployment rate while non-oil revenue has a negative and significant impact on unemployment rate in Nigeria. Based on these findings, the study recommends proper management of government expenditure by ensuring that capital expenditures are channeled towards productive sectors and ensure that there is transparency in the management of such fund.

Keywords: Unemployment, public expenditure, public debt, tax revenue

I. INTRODUCTION

Unemployment is among the most difficult and politically sensitive economic issues that policy makers face. High rates of unemployment generate intense public concern because its effect is direct and visible (Abel and Bernanke, 2005). Unemployment of labour is seen as a situation when there are people who are capable of working and also qualified by age, custom, law and other factors to work but cannot find jobs (Dimoji, Atorudibo and Onwuneme, 2013). Cown and Tabbarrok (2011) opined that one is unemployed only when one is willing and able to work but cannot find a job while Okafor and Obasi (2011) argued that unemployment arises when people within the age of the working population, who are able, willing and seek for jobs without finding any at the prevailing wage rate. Ahuja (2010) defined unemployment as a state of affairs when in a country there are a large number of able-bodied persons of working age who are willing to work but cannot find work at the

current wage levels. People who are either unfit for work for physical or mental reasons or do not want to work are excluded from the category of unemployed: one is counted as unemployed only if he or she is willing and able to work but cannot find a job. In Nigeria, unemployment rate has been on the increase over the years irrespective of adjustments in Nigeria's fiscal policy variables so as to reduce the level of unemployment, unfortunately, unemployment has still been on the increase. For instance, in 1991, unemployment rate was 3.1 percent but in 1999 it rose to 17.5 percent while in 2009 it rose further to 19.7 percent and further increased to 33.3 percent in 2020. The effect of this continued increase in unemployment rate includes increase in crime rate, decrease in standard of living, low economic activity waste of human resources civil disturbance and brain drain. Given that one of the objectives of fiscal policy is to eradicate unemployment (i.e., achieve full employment), the study therefore investigated the impact of fiscal policy on unemployment rate in Nigeria

II. LITERATURE REVIEW

2.1 Theoretical literature

2.1.1 Classical theory of unemployment

In the classical theory of unemployment labor market consists of demand and supply of labor. Demand for labor is a derived demand, obtained from the declining portion of the marginal product of labor. The demand curve is a negative function of real wage in that if wages increase the quantity demand for labor will decline and the opposite is correct. The supply of labor is derived from worker's choice whether to spend part of time working or not working (leisure). Supply of hours worked is a positive function of the real wage, because if the real wage rises, workers supply more hours of work. In equilibrium, demand and supply of labor are intersected at a clearing point that determines the equilibrium real wage rate and full employment. Unemployment would be nonexistent if it were not for the fact that wage-earners habitually stipulate for a rate of wages higher than the 'equilibrium' level." Full employment does not mean that there is no unemployment. Still frictional unemployment does exist at the going real wage rate. Frictional unemployment arises because of the dynamic nature of the labor markets, the availability of information, the search for better jobs, and random fluctuations in demand for labor such as closing of a plant and of opening of a new plant. Duration of frictional

unemployment is determined by the unemployment insurance benefits and the speed of the information (Mouhammad, 2012).

2.1.2 Keynesian theory of unemployment

The Keynesian theory of unemployment focuses on fiscal policy regulation like tax cut by creating the relationship between the government expenditure and unemployment. Keynes argued that expanding national income and then expanding employment can be achieved by reducing taxes. The tax was intended to stimulate expenditure on consumption and investment and thus lead to higher income and employment (Gebret, 2016).

2.1.3 Conceptual literature

Unemployment is the inability of those who are eligible, capable and willing to work, to find jobs to do. In other words, unemployment of labour takes place in an economy when there are people who are capable of working and also qualified by age, custom and other factors to work but cannot find jobs (Dimoji, Atorudibo and Onwuneme, 2013). Ahuja (2010) defined unemployment as a state of affairs when in a country there are a large number of able-bodied persons of working age who are willing to work but cannot find work at the current wage levels. People who are either unfit for work for physical or mental reasons or do not want to work are excluded from the category of the unemployed. Okafor and Obasi (2011) opined that unemployment arises when people within the age of the working population, who are able, willing and seek for jobs without finding any at the prevailing wage rate. Cown and Tabbarok (2011) opined that one is unemployed only when one is willing and able to work but cannot find a job. Miller (2004) defined unemployment as the total number of adults who are willing and able to work but have not found a job.

Mankiw and Taylor (2011) opined that unemployment rate can be measured as the percentage of the labour force that is unemployed while Gordon (1993) defined unemployment rate as the number of jobless individuals who are actively looking for work (or are on temporary layoff) divided by the total of those employed and unemployed. Hyman (2010) is of the opinion that unemployment rate measures the ratio of the number of people classified as unemployed to the total labour force. Schiller (2008) sees unemployment rate as the proportion of the labour force that is unemployed. Unemployment rate is also seen as the percentage of the civilian labour force that is unemployed. It is equal to the number of unemployed persons divided by the civilian force (Arnold, 2008). McEachern (2009) defined unemployment rate as the number of unemployed as a percentage of the labour force.

Unemployment may be classified into two basic categories: unemployment that results from deficient aggregate demand and all other unemployment due to frictions and labour market maladjustments. The latter in turn is often divided into

frictional, structural, seasonal, real wage, technological and cyclical unemployment. Deficient demand unemployment occurs when there is not enough aggregate demand to produce work for the whole labour force no matter how it is trained or deployed while frictional unemployment arises because it takes time and resources for workers to change jobs either voluntarily or involuntarily, even though suitable job vacancies exist and can be found without the worker to adjust his broad occupational status or his reservation wage. Structural unemployment exists when there is a mismatching between the unemployed and the available jobs in terms of geographic location, required skills or any other relevant dimension (Anyanwu and Oaikhenan, 1995). Mankiw (2008) argued that frictional unemployment is the unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills while structural unemployment is the unemployment that results because the number of jobs available in some labour market is insufficient to provide a job for everyone who wants one. According to Jhinghan (2016), seasonal unemployment results from seasonal fluctuations in demand while cyclical unemployment arises from due to cyclical fluctuations in the economy. When there is automation or displacement of old technology by a new one requiring less workers than before, there is technological unemployment.

Dimoji, Atorudibo and Onwuneme (2013), opined that the two basic methods of measuring the extent/degree or unemployment rate are household survey and labour exchanges. The household survey method of measuring unemployment rate is a good way that provides the accurate and current count of the unemployed persons, as long as the people give unbiased answers to the questions asked during the survey exercise. In the case of labour exchange offices, when people seek for work through these employment offices in state headquarters or big cities, a record of the unemployed is kept through their applications, in what is called active file. When a job is provided for any, the application is cancelled on the assumption that he is no more looking for job. At the end of a particular period, changes in the active file give a sensitive index of the unemployed in the labour market.

Okafor and Obasi (2011) have identified the following factors as being responsible for unemployment in Nigeria: (a) inadequate industrial growth: In Nigeria there are no adequate industries that are capable of employing enough workers as to absorb increasing labour. (b) structure of the economy: In Nigeria the economy is structured in such a way that the people depend more on imported goods and services than locally produced goods and services, such that they boost employment for the countries from where they import while killing the home industries and reducing employment. (c) immobility of labour: this is one of the causes of involuntary or frictional unemployment in Nigeria. Many people may prefer to remain unemployed rather than accept to be geographically relocated especially if they are already biased about the places involved. (d) low level of education:

probably because of abject poverty in most West African countries, most people do not exceed primary and secondary levels of education. This in effect makes it difficult for such people to secure good paying jobs because they are unskilled. (e) poor system of education: education in Nigeria is such that emphasis is laid on certificate than real knowledge with the result that graduates are turned out yearly who rather than create jobs are always seeking for jobs and (f) population explosion: when the population of a country is too high it tends to produce many graduates who definitely do not match with the limited resources on ground, thereby resulting to unemployment. Arnold (2008) listed out the following as the factors responsible for unemployment: (i) Job losers: this is a person who was employed in the civilian labour force and was either fired or laid off (ii) Job leavers: this is a person employed in the civilian labour force who quits his or her job (iii) Re-entrant: this is a person who was previously employed, has not work for some time, and is currently re-entering the labour force. (iv) New entrant: this is a person who has never held a full- time job for two weeks or longer and is now in the civilian labour force for job.

The consequences of unemployment are as follows: (i) reduction in standard of living: unemployment increases dependency ratio in the society thereby reducing the standard of living as very few working population produce for greater number of the unemployed.(ii) unemployment increases crime rate: when large number of people are not employed, it leads to increase in crime rate and other vices as most of these unemployed people engage themselves in anything possible in other to make a living, thereby increasing such activities like armed robbery, hired assassination, alcoholism, prostitution and human trafficking among others. (iii) political and social unrest: increasing rate of unemployment threatens the peace and stability of the state or nation as most of the idle citizens especially the youths give themselves to be used as political thugs, some take to the street for mob activities.(iv) causes brain-drain in the economy: this involves the loss of highly skilled manpower through emigration. That is to say that due to lack of job opportunities, most highly trained, experienced skilled man power might migrate to other countries to search for jobs (Dimoji, Atorudibo and Onwuneme, 2013).

Anyanwu (1997) defined fiscal policy as that part of government policy concerning the raising of revenue through taxation and other means and deciding on the level and pattern of expenditure for the purpose of influencing economic activities or attaining some desirable macroeconomic goals. Ruffin and Gregory (1983) sees fiscal policy actions as changes in government expenditures or tax schedules for the purpose of achieving macroeconomic goals. Truett and Truett (1987) defined fiscal policy as government policies of taxing and spending designed to affect the equilibrium level of national income while Anyanwu (1997) defined fiscal policy as that part of government policy concerning the raising of revenue through taxation and other means and deciding on the level and pattern of expenditure for the purpose of influencing

economic activities or attaining some desirable macroeconomic goal. According to Njoku (2009) , fiscal policy refers to government actions as they affect government revenue receipts and expenditures Ahuja (2012) argued that we have two types of fiscal policy. They are discretionary fiscal policy and non-discretionary fiscal policy. Discretionary fiscal policy means the deliberate change in the government expenditure and taxes to influence the level of national output and prices while non-discretionary fiscal policy is a built-in tax or expenditure mechanism that automatically increases aggregate demand when recession occurs and reduces aggregate demand when there is inflation in the economy without any special deliberate actions on the part of the government. Okafor and Obasi (2011) categorized fiscal policy as expansionary fiscal policy and contractionary fiscal policy. Expansionary fiscal policy refers to budgeting which is aimed at stimulating economic activities through injecting more money into the economy. This is pursued through reduction in taxes and increasing government spending through implementation of public programmes and repayment of internal debt while contractionary fiscal policy refers to surplus budgeting which is aimed at discouraging the pace of economic activities through reduction of money in circulation to curb inflationary pressure.

2.1.4 Empirical literature

Gachari and Korir (2020) investigated the effect of fiscal policy on unemployment in Kenya. The purpose of the study was to determine the effect of fiscal policy of government expenditure on unemployment. The other fiscal policy aggregate variables considered from the literature reviewed are gross domestic product growth rate, inflation rate and population growth rate. The study used appropriate regression model and techniques as applied in Baxter and King (1993) with adjustments. To achieve the objective, data on unemployment rates was collected from KNBS annual reports and other annual reports while data on fiscal policy was obtained from KNBS, economic outlook reports and relevant ministries publications. The data was subjected to diagnostic tests before any analysis including unit root test, normality, autocorrelation, heteroscedasticity, and multicollinearity to ensure sound results. The study established that the models conformed to the theoretical foundations although the variables were not statistically significant. Variables used in the model of government expenditure and unemployment were found to be jointly significant with the model explaining 74 percent of all the variations. From the analysis, the study recommended that government has to explore other means of employment creation that match Kenya's level of economic growth.

Medee and Nenbee (2011) investigated the impact of fiscal policy variables on Nigeria's economic growth between 1970 and 2009. In order to reduce the problem of stationarity usually associated with time series data, the study adopted the arcane method of Vector Auto Regression (VAR) and error correction mechanism techniques. The result of the study

revealed that there exist a long-run equilibrium relationship between economic growth and fiscal policy variables in Nigeria. Also, own shocks constitute a significant source of variations in economic growth, the forecasted errors in the short-run, range from 76 percent to 100 percent over a 10 years horizon while the response of the GDP to one standard innovation in government expenditure is negative in the short-run except in period 2. Furthermore, tax revenue shocks have effect on the GDP in the short and long run. Above all, the response of GDP to one standard innovation in capital inflow is positive in the short-run. The study among others recommended that government should formulate and implement viable fiscal policy options that will stabilize the economy. This could be achieved through the practice of true fiscal federalism and the decentralization of the various levels of government in Nigeria.

Egbulonu and Amadi (2016) examined the relationship between fiscal policy and unemployment rate in Nigeria for the period 1970 to 2013. Data for the study were sourced from the National Bureau of Statistics (NBS) and the Central Bank of Nigeria (CBN) Statistical Bulletin (various editions), and consists of Government Expenditure, Government Debt Stock (as proxy for Government borrowing), Government Tax Revenue and Unemployment rate. The data were tested for Stationarity using Augmented Dickey-Fuller (ADF) Unit Root test. The test revealed that all the variables used in the study are stationary at their first difference. The data were also subjected to co-integration test in order to know whether using the variables together in the model would produce reliable results. The test revealed that a long run relationship between unemployment rate and fiscal policy tools used in the study which satisfy the condition for fitting a parsimonious Error Correction Model (ECM) to the data. The study found a negative relationship between fiscal policy tools (government expenditure and government debt stock) and unemployment rate in Nigeria while government tax revenue exhibited a positive relationship with unemployment rate. This means that increase in tax rate reduces employment in Nigeria. The results also reveal that, there exist a long-run equilibrium relationship between unemployment and fiscal policy in Nigeria. The study recommended among others that government should increase her capital expenditure mostly on infrastructure as this will help improve national income and create more employment in the economy.

Ejemezu and Agu (2021) examined the impact of fiscal policy instrument on unemployment in Nigeria using time series annual data from 1990- 2020. The study used secondary data obtained from the CBN annual statistical bulletin. Fiscal policy instrument was proxy government expenditure, government borrowing and Taxation. The data were analysed using ADF unit root test, co-integration test and ARDL Model. The study found that government borrowing has a positive and no significant effect on unemployment in Nigeria, taxation has a positive and no significant impact on unemployment in Nigeria, government expenditure has a

positive and no significant impact on unemployment in Nigeria. The study recommended that government should aggressively focus on investment, employment generation and economic growth that has mechanism to improve standard of living. Expansionary fiscal policy should be encouraged as it plays vital role in the development process of an economy.

Attahiru (2016) investigated the effect of fiscal policy shocks on output and unemployment in Nigeria under the Keynesian framework by employing the Structural Vector Autoregression (SVAR) methodology to analyse annual series on the relevant variables for the period 1981-2015. Augmented Dickey Fuller (ADF) test for unit root result shows all variables to be integrated of order one and Johansen Cointegration test confirms the presence of long run association among the variables. Findings of the SVAR model shows shock in public expenditure as having a positive long-lasting effect on output. Revenue shock was found to exert a positive effect (lower than that of public expenditure shock) on output. However, the effect of revenue shock on unemployment was found to be negative but short-lived. The study suggested that government should restructure its spending pattern by allocating more to productive expenditure.

Obayori (2016) investigates fiscal policy and unemployment in Nigeria. The main objective of the study was to examine the impact of government capital and recurrent expenditure on unemployment rate in Nigeria. The study utilized aggregate annual data from 1980 to 2013. The data was analyzed with the co-integration and ECM methods. The findings are: the test for stationarity using Augmented Dickey Fuller (ADF) showed that all the variables were stationary at various levels. The Johansen-Juselius co-integration employed in testing for long run equilibrium relationship among the variables indicated that cointegrating relationship was found among the variables. The parsimonious ECM result reveals that the two independent variables (Government Capital and Recurrent Expenditure) have both negative and significant relationship with unemployment in Nigeria. The result also revealed a long run relationship between fiscal policy and unemployment, as depicted by both the sign and the statistical significant of the coefficient of the ECM.. Based on these findings, the study recommended amongst others that expansionary fiscal policy should be encouraged as it plays a vital role in the development process of an economy

Emad and Yuriy (2020) examined how the unemployment rate responds to fiscal policy shocks. The study used annual time series data for the period from 1976 to 2018 collected from the World Bank and the international monetary fund. Based on Blanchard and Perotti approach, the study used a five-variable structural vector autoregressive (SVAR) model with the impulse response function (IRF) tool. The main findings of the study were that at the earlier stages, a one standard deviation shock to the government spending decreases the unemployment rate until the period two, then it started to increase until reached to zero in period ten which

means a positive shock to government spending has a negative impact unemployment rate. At the earlier stages, a one standard deviation shock to the tax revenue temporarily decreases the unemployment rate, then it increases after the period two until it hits the zero level in the period six after that it became positive which means that in the long run, a positive shock to tax revenue has a positive impact on the unemployment rate. The study recommended that the Egyptian government should run an expansionary budget to decrease the unemployment rate.

III. METHODOLOGY

Multiple regression analysis was used in the study. Time series data spanning from 1991 to 2020 was sourced from the Central Bank of Nigeria statistical bulletin and national bureau of statistics (various editions). The data were analysed using E-views 10

3.1 Model specification

In order to investigate the impact of fiscal policy on unemployment rate in Nigeria, the model for this study was specified thus;

$$UNEMP = f(TDBT, TEXP, NOR) \text{_____} (1)$$

Where:

UNEMP =Unemployment rate

TDBT = Total public debt

TEXP = Total public expenditure

NOR= Non-oil revenue

The model in its econometric linear form can be written as:

$$UNEMP = b_0 + b_1TDBT + b_2TEXP + b_3NOR + U \text{_____} (2)$$

U = stochastic or random error term

bo = constant intercept

b₁ – b₃ = coefficients of associated variables

The model in the log linear form can be expressed as:

$$\text{LogUNEMP} = b_0 + b_1\text{LogTDBT} + b_2\text{LogTEXP} + b_3\text{LogNOR} + U \text{_____} (3)$$

Where: Log = natural logarithm

The theoretical expectations about the signs of the coefficients of the parameters are as follows: b₁>0, b₂<0, b₃>0.

The Augmented-Dickey Fuller (ADF) unit root test was employed to ensure data stationarity and avoid the problem of spurious regression since the data for the analysis is time series. Bound test was applied to determine the existence of long run equilibrium relationship among the variables.

IV. RESULTS AND DISCUSSION

Table 1: Result of Augmented Dickey-Fuller unit root test

Variable	ADF test statistic	1% critical value	5% critical value	10% critical value	Order of integration
LOG(TDBT)	-4.078633	-3.689194	-2.971853	-2.6265121	1(1)
LOG(TEXP)	-7.728961	-3.689194	-2.971853	-2.625121	1(1)
LOG(NOR)	-8.7233821	-3.689194	-2.971853	-2.625121	1(1)
LOG(UNEMP)	-3.389460	-3.769597	-3.004861	-2.642242	1(0)

Source: Author’s computation using EViews 10

The Augmented Dickey-Fuller unit root test result presented on table 1 showed that all the variables in the model, (LOGTDBT, LOGTEXP and LOGNOR.), were all stationary at their first difference except Log (UNEMP) that was stationary at level. This is because their various ADF test statistics were greater than their various 1%, 5% and 10% critical values in absolute terms.

Table-2: ARDL Bounds Test

Sample: 1991-2020		
Included observations: 26		
Null Hypothesis: No long run -relationships exist		
Test Statistic	Value	K
F-statistic	12.76493	3
Critical value bounds		
Significance	1(0) bound	1(1) bound
10%	2.37	3.2

5%	2.79	3.67
2.5%	3.15	4.08
1%	3.65	4.66

Source: Author’s computation using EViews 10

The unit test result showed that the data employed in the work is a combination of 1(0) and 1(1) meaning that the date set is a combination of stationarity and non- stationarity data as a result the applied Bound test to determine the existence of long- run equilibrium relationship among the variables. Table 2 shows that there is a presence of co-integrating relationship among the Variables in the model since the Null hypothesis of no long run relationship could not be accepted because the upper and lower Critical Value Bounds at all level of significance is less than the value of F-Statistic. This implies that UNEMP, TDBT, TEXP and NOR have a long run relationship. This justifies the need to estimate both short run and long run relationship among these variables in this study.

Table 3: Estimated Short Run ARDL (4, 4, 4, 4)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(TDBT(-1))	0.721474	0.127209	5.671583	0.0013
DLOG(TDBT(-2))	1.360193	0.212005	6.415860	0.0007
DLOG(TDBT(-3))	0.144334	0.115398	1.250759	0.2576
DLOG(TEXP)	0.034836	0.201196	0.173143	0.8682
DLOG(TEXP(-1))	-5.537594	0.567671	-9.754934	0.0001
DLOG(TEXP(-2))	-6.225631	0.652273	-9.544519	0.0001
DLOG(TEXP(-3))	-3.088323	0.381726	-8.090426	0.0002
DLOG(NOR)	-0.517641	0.168134	-3.078741	0.0217
DLOG(NOR(-1))	0.948324	0.143141	6.625107	0.0006
DLOG(NOR(-2))	0.040326	0.097418	0.413953	0.6933
DLOG(NOR(-3))	0.683194	0.164965	4.141452	0.0061
DLOG(UNEMP)	1.398355	0.283205	4.937605	0.0026
DLOG(UNEMP(-1))	-0.037917	0.363759	-0.104236	0.9204
DLOG(UNEMP(-2))	-3.556127	0.659911	-5.388802	0.0017
DLOG(UNEMP(-3))	-6.010249	0.862778	-6.966162	0.0004
ECM(-1)*	-1.492248	0.144685	-10.31380	0.0000
R-squared	0.942864	Mean dependent var	0.127041	
Adjusted R-squared	0.857160	S.D. dependent var	0.277067	
S.E. of regression	0.104715	Akaike info criterion	-1.399883	
Sum squared resid	0.109653	Schwarz criterion	-0.625670	
Log likelihood	34.19848	Hannan-Quinn criter.	-1.176938	
Durbin-Watson stat	1.941854			

Source: Author's computation using EViews 10

The estimated short-run coefficient result as showed in table 3 revealed that TDBT, one period lag of TEXP, two periods lag of TDBT and three periods lag of TDBT all have a positive and significant impact on unemployment rate while TEXP has positive but insignificant impact with unemployment rate. The result also showed that one period lag of TEXP, two periods lag of TEXP and three periods lag of TEXP all have a negative and insignificant impact on unemployment rate while NOR has a negative and significant impact with unemployment rate. The result also showed that one period lag of NOR and three periods lag of NOR have a positive and significant impact on unemployment rate while two periods lag of NOR has a positive and insignificant impact on unemployment rate.

The error correction model (ECM) which shows the speed of adjustments back to equilibrium in the estimated model is correctly sign and is significant. The speed of adjustment for correcting disequilibrium from the previous year to equilibrium in current year is 14.92 percent as shown by the coefficient of ECM. In another words, this implies that an approximately 14.92 percent of disequilibrium from the previous year's shock converge to the long-run equilibrium in the current year.

Table 4: Estimated Long Run Coefficient of ARDL (4, 2, 3, 3) Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(TEXP)	2.628696	0.734229	3.580210	0.0116
LOG(NOR)	-2.225260	0.685122	-3.247975	0.0175
LOG(UNEMP)	1.520260	1.112058	1.367068	0.2206
C	2.789230	1.471491	1.895513	0.1068
EC = LOG(TDBT) - (2.6287*LOG(TEXP) - 2.2253*LOG(NOR) + 1.5203				
*LOG(UNEMP) + 2.7892)				

Source: Author's computation using EViews 10

The estimated long run coefficient result in table 4 showed that total public debt (TDBT) has no impact with unemployment rate while total public expenditure (TEXP) has a positive and significant impact with unemployment rate. The result also showed that non-oil revenue (NOR) has a negative and significant impact on unemployment rate. The result also showed that a percentage increase in total public expenditure will on the average bring about 2.628696 percent increase in unemployment rate while a percent increase in non-oil revenue will on the average bring about 2.225260 percent reduction in unemployment rate.

V. SUMMARY AND RECOMMENDATIONS

The study examined the impact of fiscal policy on unemployment rate in Nigeria for the period 1991–2020. The estimated short run coefficient result revealed that TDBT, TDBT in one period lag, TDBT in two periods lag and TDBT in three periods lag all have a positive and significant impact on unemployment rate in Nigeria. TEXP has positive but insignificant impact with unemployment rate. The result also showed that one period lag of TEXP, two periods lag of TEXP and three periods lag of TEXP all have a negative and insignificant impact on unemployment rate while NOR has a negative and significant impact with unemployment rate. The result also showed that one period lag of NOR and three periods lag of NOR have a positive and significant impact on unemployment rate two periods lag of NOR has a positive and insignificant impact on unemployment rate. The long run result showed that TEXP has a positive and significant impact on unemployment rate. The result also revealed that NOR has a negative and significant impact on unemployment rate in Nigeria while TDBT has no impact on unemployment rate in Nigeria. The error correction model (ECM) which shows the speed of adjustments back to equilibrium in the estimated model is correctly sign and is significant. The speed of adjustment for correcting disequilibrium from the previous year to equilibrium in current year is 14.92 percent as shown by the coefficient of ECM. In another words, this implies that an approximately 14.92 percent of disequilibrium from the previous year's shock converge to the long-run equilibrium in the current year.

VI. RECOMMENDATIONS

The long run result of the study showed that there is a positive and significant impact between total expenditure (TEXP) and unemployment rate in Nigeria but a negative and significant impact between non-oil revenue (NOR) and unemployment

rate in Nigeria. The long run result showed that there is no relationship between total public debt (TDBT) and unemployment rate in Nigeria While the short run result showed that total public expenditure has a positive and significant impact on unemployment rate while non-oil revenue has a negative and significant impact on unemployment rate in Nigeria. Based on these findings, the study recommends that government expenditure should be channeled towards productive sectors as this will help to generate more employment opportunities. Government should also maximize all its non-oil revenue ventures as this will help also to help to reduce unemployment. Government should also ensure that its borrowing is mainly for capital projects that have can create jobs

REFERENCES

- [1] Abel, A.B and Bernanke, B.S (2005). *Macroeconomics*. Pearson Education, Inc.
- [2] Ahuja, H. L. (2010). *Macroeconomics Theory and Policy*. Chand.&Company Ltd.
- [3] Ahuja, H.L (2012). *Modern Economics*. S.Chand & company PVT. Ltd
- [4] Anyanwu, J.C (1997). *Nigerian Public Finance*. Joanee Educational Publishers Ltd.
- [5] Anyanwu, J.C and Oaikhenan, H.E (1995). *Modern Macroeconomics: Theory and Applications in Nigeria*. Joanee Educational Publishers Ltd.
- [6] Arnold, R.A (2008). *Macroeconomics*. Thomson South Western.
- [7] Attahiru, B.A (2016). Dynamic effects of fiscal policy on output and unemployment in Nigeria: An econometric investigation. *CBN Journal of Applied Statistics*, 7(2), 101 – 122.
- [8] Cown, T and Tabbarrok, A (2011). *Modern Principles of Economics*. Worth Publisher.
- [9] Dimoji, F.A; Atorudibo, A and Onwuneme, L.N (2013). *Principles of Macroeconomics: An Introductory Text*: Zemek Publishers.
- [10] Egbulonu, K.G and Amadi, K.W (2016).Effect of fiscal policy on unemployment in the Nigerian economy. *International Journal of Innovative Finance and Economics Research*, 4(3), 1-7.
- [11] Ejemezu, C.I and Agu, B.O (2021).Impact of fiscal policy instruments on unemployment in Nigeria. *Global Scientific Journals*, 9(11), 270 – 284.
- [12] Emad, A.M.O and Yuriy, B (2020).The impact of fiscal policy on the unemployment policy rate in Egypt.*Montenegrin Journal of Economics* 16(4), 199 – 209.
- [13] Gachari, J.M and Korir, J.K (2020).Effect of fiscal policy on unemployment in Kenya. *IOSR Journal of Economics and Finance*, 11(1), 19 – 31.
- [14] Gebret, S.T (2016). Theory of unemployment and its application in Ethopia: A Review. *IJRDO- Journal of Agriculture and Research* 2(12), 37 – 55.
- [15] Gordon, R.J (1993). *Macroeconomics*. Harpers Collins College Publisher.
- [16] Hyman, D.N (2010). *Macroeconomics*. Pearson Addison Wesley.
- [17] Jhingan,M.L (2016). *Macroeconomic Theory* :Vrinda Publications (P) Ltd.
- [18] Mankiw and Taylor (2011). *Macroeconomics*. Thomson South Western.
- [19] Mankiw, N.G (2008). *Principles of Economics*.Thomson.
- [20] McEachern, W.A (2009). *Macro Econ*. Thomson South Western.
- [21] Medee.P.N and Nenbee, S.G (2011). Econometric analysis of the impact of fiscal policy variables on Nigeria's economic growth (1970 - 2009). *Africa Research Bulletin Economic Financial and Technical Series* 2(1), 171-183.
- [22] Miller, R.L (2004). *Economics Today: The Macroeconomic View*. Pearson Addison Wesley.
- [23] Mouhammed, A.U (2012). Important theories of unemployment and public polices; *Journal of Applied Business and Economics*, 13(2), 156 – 166.
- [24] Njoku, P.O (2009) *Public Finance. Sources, Administration and Management*. El'demak Publishers.
- [25] Obayori, J.B (2016). Fiscal policy and unemployment in Nigeria. *The International of Social Sciences and Human Invention*, 3(2), 1887 – 1891.
- [26] Okafor, J.C and Obasi, A (2011). *Fundamentals of Macroeconomics*. Hipuks Additional Press.
- [27] Okafor, J.C and Obasi, A (2011). *Fundamentals of Macroeconomics*. Hipuks Additional Press.
- [28] Schiller, B.R (2008). *The Macroeconomics Today*. McGraw-Hill/Irwin
- [29] Truett, L.J and Truett, D.B (1987). *Macroeconomics*. Times/Mosby College Publishing.