

2.2.2 Theories of Unemployment

Marxist Theory of Unemployment

This theory was developed by Karl Marx in 1863. From his Theory of Surplus Value comes the quotation below: "It is the very way of the capitalist mode of production to over work a few employees while keeping the rest as a save armed force of unemployed homeless people "Karl Marx, (1863). Karl Marx, in this theory, assurances that unemployment is intrinsic inside the unstable capitalist system and periodic disasters of mass unemployment are to be expected .Capitalism to the Marxistsun justifiably controls the labour market by perpetuating unemployment which brings down worker's interest for reasonable wages. Workers are pitted against each other with the intention of expanding paybacks for their employees. In the conception of Karl Marx, the best way permanently eliminate unemployment isto eradicate capitalism and the system of forced rivalry for wages, and after that move tothe socialist or communist economic system. For the contemporary

Marxists, the presence of diligent unemployment is a proof of powerlessness of capitalism to guarantee full employment. Thesocio-economic distress the Nigerian residents confronted under imperialism (colonialism)led the population to clamor for socialism as advocated by the Marxists.The socialist movement was at first a response against out rageous poverty brought about by capitalism on the masses. It lays great stress on the state embarking on a broad programme of welfare for the people, "the program that would give social insurance to defend the masses against unemployment and economic grief"; for example, the post-independent Africa preached socialism. The NCNC government under Dr. Nnamdi Azikiwe and Dr. Michael Opara, preached "Welfares and Pragmatic Socialism". The Action Group, under Chief Obafemi Awolowo supported" Democratic Socialism" .Besides, in Ghana, under Dr. Kwame Nkrumah, many state industries were established (Udu and Agu, 2005).

Empirical Review

Njoku, Chris-Ejiogu, Ozurumba and Akujuobi (2020) examined 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. 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

Adewale (2018) in his study on 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 than one. 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 recommended the 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

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 $I(1)$. They 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 study recommended that borrowed funds by the government should be invested properly on capital and physical goods which will stimulate national incomes and create more jobs.

Agu (2015) used descriptive statistics and also adopted the method of ordinary least square in the multiple regression equation analysis. With gross domestic product as the dependent variable while the independent variables were expenditure on the following: general administration, education, health, agriculture, construction, transport and communication. The study revealed

that government expenditure tended to increase higher than revenue generation; investment expenditure far below recurrent expenditure while positive correlation exist between expenditure on government services on economic growth.

Methodology

3.1 Research Design

The study adopts linear regression analysis type of research design.

3.2 Sources and Nature of Data

The data to be used for the purpose of this research work were from secondary sources.

This data were obtained from Central Bank of Nigeria (2019) Statistical Bulletin and data from National Bureau of Statistics (2013).The World Economic Indicators (April 2014) among others.

The study covers a period of 2010 to 2020. The reason for the choice of the period is because of visible happenings in the economy with respect to macroeconomic variables, increased poor living standard in spite of the government application of fiscal policy over the years.

3.3 Model Specification

Fiscal policy has to do with the government's management of the nation's economy by varying the magnitude and content of taxation and public spending done with much regard to their impact on the economy. The model comprises equations of unemployment rate (Unem), fiscal policy rate (FPR), government revenue and government expenditure.

$$UNEM = \mathcal{F} (Gbor, Tax \& Gexp) \dots \dots \dots (i)$$

$$UNEM = b_0 + b_1Gbor + b_2Tax + b_3Gexp + Ut \dots \dots \dots (iii)$$

$$\text{LnUnem} + \text{Ln} b_1Gbor + \text{Ln} b_2Tax + \text{Ln} b_3Gexp + Ut \dots \dots \dots (iv)$$

Where;

Unem = Unemployment = Dependent Variable

Gbor = Government borrowing = Independent Variable

Tax = Taxation

Gexp = Government expenditure

4.0 Data Presentation and Analysis

4.1 Data Presentation from 1990 to 2020

Table 4.1

Data of the variables under study, Unemployment, Government expenditure, Taxation and Government Borrowing, 1990-2020

Year	UNEM	GEXP	TAX	GBOR
1990	3.5	36.22	3.6	298.61
1991	5.2	38.24	23	328.45
1992	3.4	53.03	48.8	544.26
1993	2.7	136.73	61.3	633.14
1994	2	89.97	76.8	648.81
1995	1.8	127.63	51.6	716.87
1996	3.8	124.29	14.3	617.32
1997	3.2	158.56	10.2	595.93
1998	5.2	178.1	11.9	633.02
1999	5.2	449.66	0.2	2577.37
2000	13.1	461.6	14.5	3097.38
2001	13.6	579.3	16.5	3176.29
2002	12.6	696.8	12.2	3932.88
2003	14.8	984.3	23.8	4478.33
2004	13.4	1032.7	10	4890.27
2005	11.9	1223.7	11.6	2695.07
2006	12.3	1290.2	8.5	451.46
2007	12.7	1589.27	6.6	438.89
2008	14.9	2117.36	15.1	523.25
2009	19.7	2127.97	13.9	590.44
2010	21.1	3109.38	11.8	689.84
2011	23.9	3314.51	10.3	896.85
2012	27.4	3325.16	12	1026.9
2013	24.7	3689.06	7.96	1387.33
2014	26.5	3426.9	7.98	1631.5
2015	10.4	3831.95	9.55	2111.51
2016	19.12	4160.11	15.37	3478.91
2017	20.42	4779.99	16.5	5787.51
2018	23.13	5675.19	12.1	7759.2
2019	29.13	6997.39	11.4	9022.42
2020	27.20	7894.30	11.69	9158.40

Source: CBN Statistical Bulletin, 2021

2. Data Analysis and Interpretation

4.2 Descriptive Statistics

Table 4.2

	LGBOR	LGEXP	LTAX	LUNEM
Mean	7.189947	6.726025	2.532637	2.342640
Median	6.934300	7.109634	2.493205	2.572612
Maximum	9.107468	8.853437	4.341205	3.371769
Minimum	5.699138	3.589611	-1.609438	0.587787
Std. Dev.	0.995034	1.646754	1.009842	0.860390
Skewness	0.364905	-0.494702	-1.904482	-0.626597
Kurtosis	1.836758	1.947489	10.65617	2.072430
Jarque-Bera	2.435767	2.695319	94.45326	3.139892
Probability	0.295856	0.259848	0.000000	0.208056
Sum	222.8884	208.5068	78.51174	72.62185
Sum Sq. Dev.	29.70275	81.35397	30.59342	22.20812
Observations	31	31	31	31

Table 4.3 Summary of Unit Root Test

Variables	Augmented DF	Critical value @5%	Prob	Order of Integration
LGBOR	-5.207840	-2.971853	0.0002	I(1)
LGEXP	-7.608619	-2.967767	0.0000	I(1)
LTAX	-8.042609	-2.967767	0.0000	I(1)
LUNEM	-6.757197	-2.967767	0.0000	I(1)

Source: Author's computation from E-views result, 2021

Table 4.2 shows the test for stationary properties of the series following the Augmented Dickey Fuller statistics. It indicates that all the variables have unit root but attained stationarity at first difference with the ADF statistics for the respective variables being more negative than the critical values at 5% level of significance. The reported p-values are less than 0.05. Hence the null hypothesis of the presence of unit root in all the variables convincingly rejected.

More so the variables are all integrated of the same order and significantly co-integrated among the variables under study as opined by Engle and Granger (1985). They argue that when time series data are integrated of the same order $I(1)$, the data series tend to co-integrate. This implies that their short-run relationship is sustainable in the long-run.

4.3 Co-integration Test

Seeing that the series was integrated of same order $I(1)$ suggesting the presence of a unit root, there was the need to determine if there is the existence of long-run relationship by conducting a

co-integration test among the variables. In order to establish the long –run equilibrium relationship, the study employed the Johansen co-integration method.

Table 4.4 Johansen Co-integration Test

Date: 10/19/21 Time: 20:30
Sample (adjusted): 1992 2020
Included observations: 29 after adjustments
Trend assumption: Linear deterministic trend
Series: LGBOR LGEXP LTAX LUNEM
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.537751	51.95335	47.85613	0.0196
At most 1	0.483785	29.57546	29.79707	0.0530
At most 2	0.220243	10.39974	15.49471	0.2512
At most 3	0.104021	3.185324	3.841466	0.0743

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Most appropriate Lag Table 4.5

VAR Lag Order Selection Criteria
Endogenous variables: LUNEM
Exogenous variables: C LTAX LGEXP LGBOR
Date: 03/20/21 Time: 10:17
Sample: 1986 2020
Included observations: 31

Lag	LogL	LR	FPE	AIC	SC	HQ
0	5.029036	NA	0.054868	-0.066389	0.118641	-0.006074
1	62.12409	95.77234	0.001473	-3.685425	-3.454137	-3.610031
2	67.46502	8.614415*	0.001116	-3.965485	-3.687939*	-3.875012*
3	68.53541	1.657379	0.001114*	-3.970027*	-3.646223	-3.864475
4	68.86340	0.486683	0.001168	-3.926671	-3.556609	-3.806040

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

From the above table, lag length 3 has the lowest lag length value of -3.970027 in respects to Akaike information criterion. Thus our equation will be based on 3 lag lengths.

Because there is one co-integration we are subjected to use ARDL model.

Table 4.6 ARDL MODEL

Dependent Variable: LUNEM
 Method: ARDL
 Date: 10/19/21 Time: 21:38
 Sample (adjusted): 1994 2020
 Included observations: 27 after adjustments
 Maximum dependent lags: 4 (Automatic selection)
 Model selection method: Akaike info criterion (AIC)
 Dynamic regressors (4 lags, automatic): LGBOR LTAX LGEXP
 Fixed regressors: C
 Number of models evaluated: 500
 Selected Model: ARDL(1, 0, 2, 4)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LUNEM(-1)	0.347388	0.203714	1.705272	0.1075
LGBOR	0.001215	0.064427	0.018853	0.9852
LTAX	0.051879	0.097959	0.529596	0.6037
LTAX(-1)	-0.107328	0.065492	-1.638800	0.1208
LTAX(-2)	-0.091229	0.067430	-1.352943	0.1949
LGEXP	0.507587	0.474282	1.070222	0.3004
LGEXP(-1)	0.096018	0.420742	0.228211	0.8224
LGEXP(-2)	-0.420150	0.412370	-1.018865	0.3234
LGEXP(-3)	0.502739	0.294775	1.705497	0.1074
LGEXP(-4)	-0.355113	0.240811	-1.474658	0.1597
C	-0.442024	0.730642	-0.604980	0.5537
R-squared	0.932820	Mean dependent var	2.500126	
Adjusted R-squared	0.890833	S.D. dependent var	0.803749	
S.E. of regression	0.265562	Akaike info criterion	0.477632	
Sum squared resid	1.128374	Schwarz criterion	1.005566	
Log likelihood	4.551963	Hannan-Quinn criter.	0.634615	
F-statistic	22.21668	Durbin-Watson stat	2.177721	
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent tests do not account for model selection.

The ARDL method result as presented in table 4.6 above, show that the coefficient of determination (R-square) is ‘a good fit’ indicating that 93 percent of the variations in RGDP are determined by the combine effect of changes in the explanatory variables – GBOR,GEXP and TAX indicators. The F- statistics (22.21668) confirms further that these explanatory variables are jointly and statistically significant in explaining the variations in the UNEM of Nigeria. The

selected explanatory variables such as GBOR, GEXP and TAX are positively signed but not significant. A cursory look at the diagnostics test suggests no possible spurious regression (Durbin Watson (DW) statistics ratio (2.177721) and R-square (0.93) which implies time-dependency of these variables at this level.

4.4 Test of Hypotheses

4.5.1 Hypothesis One

Re-Statement of Hypothesis:

H₀₁: Government Borrowing has no significant effect on Unemployment in Nigeria

H_{a1}: Government Borrowing has no significant effect on Unemployment in Nigeria

Decision

Using table 4.6; the decision criterion is not to reject the null hypothesis if the probability of t - statistics is > 0.05 level of significance. Otherwise reject the null hypothesis and accept the alternate hypothesis accordingly. Table 4.6 shows a positive coefficient of 0.001215) and the probability value of t – statistics of $0.9852 > 0.05$ level of significance; therefore, we do accept the null hypothesis and conclude that Government Borrowing has a positive and no significant effect on Unemployment in Nigeria

4.5.2 Hypothesis Two

Re-Statement of Hypothesis:

H₀₂: Taxation has no significant impact on unemployment in Nigeria.

H_{a2}: Taxation has significant impact on unemployment in Nigeria.

Decision

Using table 4.6; the decision criterion is do not reject the null hypothesis if the probability of the t-statistics is > 0.05 level of significance; otherwise, reject the null hypothesis and accept the alternate hypothesis accordingly. Table 4.6 shows a negative coefficient of 0.051879 and the probability of the t- statistic of $0.6037 > 0.05$ level of significance; therefore we reject the alternative hypothesis and conclude that Taxation has a positive and no significant impact on Unemployment in Nigeria

4.5.3 Hypothesis Three

Re-statement of hypothesis

H₀₃: Government Expenditure has no significant effect on Unemployment in Nigeria

H_{a3}: Government Expenditure has significant effect on Unemployment in Nigeria

Decision

Using table 4.6; the decision criterion is do not reject the null hypothesis if the probability of the t-statistics is > 0.05 level of significance; otherwise, reject the null hypothesis and accept the alternate hypothesis accordingly. Table 4.6 shows a positive coefficient of 0.507587 and the probability of the t- statistic of $0.3004 > 0.05$ level of significance. Therefore we reject the the alternative hypothesis and conclude that Government Expenditure has a positive and no significant impact on Unemployment in Nigeria.

5.0 Summary of Findings, Conclusion and Recommendations

5.1 Summary of Findings

- (i) Government Borrowing has a positive and no significant effect on Unemployment in Nigeria
- (ii) Taxation has a positive and no significant impact on Unemployment in Nigeria
- (iii) Government Expenditure has a positive and no significant impact on Unemployment in Nigeria.

5.2 Conclusion

The study has examined the impact of Fiscal Policy on Unemployment in Nigeria 1990-2020. Against this background, we specifically sought among others to determine the effect of Government Borrowing unemployment in Nigeria, examine the impact of Taxation on unemployment in Nigeria, and determine the impact of Government Expenditure on unemployment in Nigeria. Our analyses was based Unit Root test, Johansen co-integration and ARDL technique using annual data set from 1990- 2020 showed that Government Borrowing has positively and non significantly affected unemployment in Nigeria. Taxation exert positive but no significant impact on unemployment in Nigeria, Government Expenditure positively and non significantly impacted unemployment in Nigeria.

In inclusion this means that Fiscal Policy has contributed to the problem of sustainable employment in Nigeria.

5.3 Recommendations

- Government should aggressively focus on investment, employment generation and economic growth that has mechanism to trickle does to the masses.
- Expansionary fiscal policy should be encouraged as it plays vital role in the development process of an economy.

- Government should encourage investors by reducing tax rates on corporate and personal income tax

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