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Does Monetary Policy Affect Unemployment in Nigeria?

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Abstract

There is no consensus among economists on the relationship between monetary policy and unemployment. The objective of this study is to determine the nature and extent to which monetary policy is related to unemployment in Nigeria from 1991 to 2022 using autoregressive distributed lag (ARDL) bounds test approach. The data of the growth rate of gross fixed capital formation and monetary policy rate are obtained from Central Bank of Nigeria Statistical Bulletin. The data of all the other variables are obtained from World Development Indicators. The monetarist view on the influence of monetary policy on unemployment is found in this study. The growth rates of money supply, banks' credit and gross fixed capital formation had a significant negative relationship with unemployment and population growth rate had a significant positive relationship with unemployment in Nigeria in the short run. The monetary policy rate and exchange rate had no relationship with unemployment in Nigeria in both the short run and long run. The decrease in the growth rates of money supply, banks' credit and gross fixed capital formation and an increase in population growth rate had led to an increase in unemployment in Nigeria.

Key Words: Monetary Policy, Aggregate Demand, Unemployment, ARDL Model, Nigeria

JEL Classification: E52, E24, C01

1. Introduction

Unemployment is the percentage of total labour force that are not engaged in self-employment or paid job at the prevailing wage rate. Unemployment has led to a fall in the standard of living, broken homes, prostitution, banditry and untimely deaths. The research outcomes of this study will enable us to formulate policies towards reducing unemployment in Nigeria. To reduce unemployment in Nigeria, we must identify its causal factors.

In Keynesian view, unemployment is caused by insufficiency of aggregate demand. They believe that expansionary monetary policy can be used to increase aggregate demand and solve the problem of unemployment. Monetary policy is the use of bank rate, open market operations, reserve requirements, selective credit controls and moral suasion to influence aggregate demand in order to achieve the three main macroeconomic objectives of full employment, price stability and steady growth of output.

The use of monetary policy to solve the problem of unemployment has been bedeviled by different theoretical views. In classical view, monetary policy has no influence on aggregate demand and unemployment. In Keynesian view, cheap monetary policy will increase aggregate demand and reduce unemployment. In Monetarist view, cheap monetary policy will increase aggregate demand and reduce unemployment in the short run when the economy is operating at less than full employment level but in the long run when the economy is operating at full employment level, the increase in aggregate demand will only lead to an increase in prices.

The divergent views about the nature of the relationships between monetary policy and unemployment have given rise to many confirmatory researches on this field of study. There is no consensus on the relationships between monetary policy and unemployment in Nigeria from previous studies. For example, the study by [1] indicates that monetary policy led to a reduction of unemployment rate in Nigeria and the study by [2] shows that monetary policy has no influence on unemployment rate in Nigeria. The differences in the previous research outcomes about the nature of the relationships between monetary policy and unemployment have cast doubt on the use of monetary policy in overcoming unemployment in Nigeria. The main objective of this study is to examine the nature and extent of the relationship between monetary policy and unemployment in Nigeria.

2. Literature Review

2.1 Classical view on monetary policy

Money according to the classicists is a veil. It is neutral in its effects on the economy. It simply affects the price level, but nothing else. An increase in the money supply leads to an increase in the price level, but the real income, the rate of interest and the level of real economic activity remain unaffected.

In the classical system, the main function of money is to act as a medium of exchange. It is to determine the general level of prices at which goods and services will be exchanged. This relationship between money and the price level is explained in terms of the quantity theory of money. The classical quantity theory of money states that the price level is a function of the supply of money. Algebraically, MV = PT where, M, V, P and T are the supply of money, velocity of money, price level and the volume of transactions (or real total output). The equation tells that the total money supply MV equals the total value of output PT in the economy. Assuming V (the velocity of money) and T (the total output) to be constant, a change in the supply of money (M) causes a proportional change in the price level (P) [3].

2.2 The Keynesian view on monetary policy

In the typical Keynesian analysis, monetary policy affects output and income through the interest rate. For example, the Fed can use an open market operation to buy bonds, increase the money supply, and drive down interest rates. At lower interest rates, a greater level of investment is forthcoming, driving up total planned expenditure. Higher total expenditure causes output and income to rise through the multiplier process, increasing employment [4]. The Keynesians put strong emphasis on lending in the transmission mechanism from money supply to employment.

2.3 The Monetarist View on Monetary Policy

In the monetarist view, when the Fed expands the money supply, individuals and banks find that their nominal money balances are in excess of what they want to hold. Remember that nominal money demand depends primarily on money income according to the quantity theory equation, $M^d = kPY$. If we plot the demand for money as a function of money income, it will be a straight line with a positive slope of k and an intercept of zero. Since the money supply is given (determined by the Fed), it can be represented as a horizontal line, M^s_1. Figure 13-1 shows the supply and demand for money [4].

Now the Fed increases the money stock to M^s_2. At the current level of money income, PY_1, money supply exceeds money demand. People attempt to spend their excess cash balances. As they do, the level of money income will tend to rise. This process will continue until people are satisfied with their larger cash balances as a fraction of a larger PY. Money demand is plotted as a function of money income. A shift in M^s will raise money income (PY) from $(PY)_1$ to $(PY)_2$ [4]. The monetarists put strong emphasis on spending in the transmission mechanism from money supply to national income and employment.

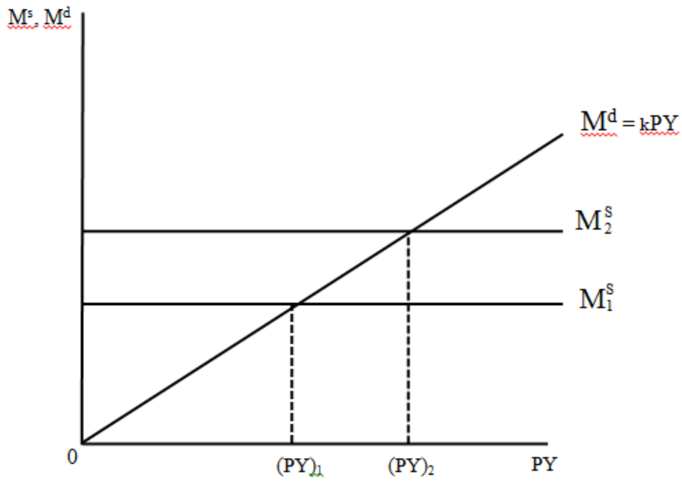

Figure 13-1 Money Supply and Demand
Source: Amacher and Ulbrich, 1986: 293

2.4 Empirical Literature

There were many previous studies on monetary policy and unemployment in developing and developed countries of the world. The effect of unanticipated money growth and unemployment in the Philippines from 1979 to 2022 was investigated using an error-correction model [5]. It was found that the current and lagged values for narrow money supply had no significant effect on unemployment but the current value for broad money supply had a significant positive effect on unemployment even though the lagged variables are not. The results imply that an increase in unanticipated money may help contribute to increasing unemployment in the Philippines.

The effect of monetary policy on natural unemployment rate in Indonesia from 2008 to 2023 was examined using a multiple linear regression analysis with monthly time series data [6]. The results show that real interest rate and money supply had a significant positive effect on unemployment rate and real exchange rate had a significant negative effect on unemployment rate. The result implies that an increase in money supply contributed to an increase in unemployment rate in Indonesia and this is not in line with economic theory.

The monetary transmission model between the monetary policy and the labor market variable of unemployment in Romania from 2007 to 2018 was analyzed employing the vector autoregression function of impulse response from 2007 to 2018 with monthly dataset [7]. The results of the data show that, the external shocks have an important impact especially on the Romanian interest rates but also on the domestic production; however, the impact is not significant on unemployment, which proves the resilience of the domestic labor market. The central bank policy rate has a stabilizing effect on the unemployment rate in case of an increase in the euro area policy rate.

The relationship between monetary policy and unemployment in Pakistan from 1977 to 2019 was examined utilizing ARDL technique [8]. They found that money supply had an insignificant negative relationship with unemployment in Pakistan in both the short run and long run. The results indicate that monetary policy had no relationship with unemployment in Pakistan.

The relationship between monetary policy and unemployment rate in Nigeria from 1986 to 2018 was evaluated using ARDL technique [1]. They found that cash reserve ratio and monetary policy rate had an insignificant positive relationship with employment rate and; broad money supply had a significant positive relationship with employment rate in Nigeria. The result shows that money supply has a significant negative relationship with unemployment rate in Nigeria.

The role of money supply in determining unemployment rate was examined in Nigeria [9]. A nonlinear autoregressive distributed lag (NARDL) model was employed to examine the pass-through effect of the growth in money supply into unemployment rate using time series data over the period 1985 to 2015. The result reveals that there is a significant pass-through effect of the money supply growth to unemployment rate in the long run.

The effect of macroeconomic policies on unemployment and poverty rates in Nigeria from 1980 to 2013 was examined with implication to achieving inclusive growth [2]. The study adopted the Ordinary Least Square (OLS) technique. The study observed that among macroeconomic policy variables only exchange rate significantly influenced unemployment rate while only fiscal policy significantly influenced poverty rate. This implies that present macroeconomic policies in Nigeria do not guarantee the attainment of inclusive growth in Nigeria.

2.4 Weakness of Previous Studies

According to [3], the instruments of monetary policy affect the level of aggregate demand through the supply of money, cost of money and availability of credit. In Keynesian view, the increase in aggregate demand causes output and income to rise through the multiplier process, increasing employment. Therefore, the study on monetary policy and unemployment should examine how money supply, monetary policy rate and domestic credit to private sector by banks have affected unemployment. One or two variables through which the instruments of monetary policy affect the level of aggregate demand and unemployment are usually omitted in the models of previous studies in Nigeria.

3. Methodology

3.1 Theoretical Framework of the Study

The theoretical framework of the study is the monetarist view on the influence of monetary policy on unemployment. The monetarists believe that an expansionary monetary policy causes an increase in aggregate demand and a reduction in unemployment in the short run when the economy is operating at less than full employment level. They believe that an expansionary monetary policy causes an increase in aggregate demand but it has no influence on unemployment in the long run when the economy is operating at full employment level. According to them, an increase in aggregate demand due to expansionary monetary policy will lead to an increase in prices in the long run.

3.2 Method of Data Analysis

This study employs ARDL bounds test proposed by [10] to examine the cointegration relationship between monetary policy and unemployment in Nigeria from 1991 to 2022. The choice of this technique is due to the advantages it has over other methods of cointegration. Approach of ARDL is utilized irrespective of the characteristics of stationarity pertaining variables that are series whether purely I(0) 0r I(1) hence testing unit root are only conducted to check variables stationary beyond I(1). This means that the problem of non-stationarity is addressed which is associated in time series data. Modeling the approach with the recommended lags number also addresses challenges of autocorrelation and endogeneity. These advantages have led to its wide application in numerous studies recently [11]. Application of the ARDL method techniques derives estimates that are not biased of the model in the long period [12]. The method is also simple to apply and also allows the associations of cointegration to be regressed by OLS upon identification of the order of lagging the model. Cointegration also considers both long run and short run effects [13].

3.3 Model Specification

This study adapts the model utilized by [8]. This paper substitute monetary policy rate for budget deficit in their model because the objective of this study is to examine the influence of monetary policy on unemployment in Nigeria. This paper also substitute growth rate of gross fixed capital formation for growth rate of GDP in their model because of the belief that unemployment in Nigeria is as a result of the shortage of capital stock to employ the growing labour force. So, the functional form of the model for this study is as stated in equation (1) below.

$$\mathrm{UNE} = \mathrm{f}(\mathrm{BMG}, \mathrm{DCB}, \mathrm{MPR}, \mathrm{EXR}, \mathrm{GFC}, \mathrm{PGR}) \quad (1)$$

Where UNE is unemployment, BMG is broad money growth, DCB is growth rate of domestic credit to private sector by banks, MPR is monetary policy rate, EXR is exchange rate, GFC is growth rate of gross fixed capital formation, PGR is population growth rate, and f is functional notation. The following autoregressive distributed lag, ARDL (m, n, r, s, u, v, x) model in equation (2) is estimated in order to test the cointegration relationship between unemployment and monetary policy as well as three control variables, namely: exchange rate, growth rate of gross fixed capital formation, and population growth rate.

$$\Delta UNE_t = B_0 + \sum_{i=1}^{m} B_{1i}\ \Delta UNE_{t-i} + \sum_{i=0}^{n} B_{2i}\ \Delta BMG_{t-i} + \sum_{i=0}^{r} B_{3i}\ \Delta DCB_{t-i} + \sum_{i=0}^{s} B_{4i}\ \Delta MPR_{t-i} + \sum_{i=0}^{u} B_{5i}\ \Delta EXR_{t-i} + \sum_{i=0}^{v} B_{6i}\ \Delta GFC_{t-i} + \sum_{i=0}^{x} B_{7i}\ \Delta PGR_{t-i} + \lambda_1 \mathrm{L}BMG_{t-1} + \lambda_2 \mathrm{L}DCB_{t-1} + \lambda_3 \mathrm{L}MPR_{t-1} + \lambda_4 \mathrm{L}EXR_{t-1} + \lambda_5 \mathrm{L}GFC_{t-1} + \lambda_6 \mathrm{L}PGR_{t-1} + \mu_t \quad (2)$$

Where Δ is first difference operator, B_0 is constant term, B_{1i} is lagged value of error correction model (ECM_{t-1}), B_{2i} - B_{7i} are the regression coefficients of the explanatory variables in the short run, λ_1 - λ_6 are the regression coefficients of the explanatory variables in the long run, and μ_t is white noise error term. The m, n, r, s, u, v, and x are the autoregressive lag orders of the variables UNE, BMG, DCB, MPR, EXR, GFC, and PGR respectively.

3.4 Estimation Techniques

The unit root test is conducted to check variables stationary beyond I(1). There are two steps in testing the cointegration relationship between unemployment and its explanatory variables. First, equation 2 is estimated by OLS technique. Second, the presence of cointegration can be traced by restricting all estimated coefficients of lagged level variables equal to zero. That is, the null hypothesis is $\lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = \lambda_6 = 0$ against its alternative hypothesis $\lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq \lambda_5 \neq \lambda_6 \neq 0$. If the computed F-statistics is less than lower bound critical value, then we do not reject the null hypothesis of no cointegration. Conversely, if the computed F-statistics is greater than upper bound critical value, then we reject the null hypothesis and conclude that there exists steady state equilibrium between the variables under study. However, if the computed value falls within lower and upper bound critical values, then the result is inconclusive [14]. If the variables are cointegrated, then ARDL model can be estimated.

3.5 Data Sources and Description

The empirical analysis is conducted using annual data. The time span covered is 1991 to 2022. Total unemployment (% of total labour force) is the dependent variable. The independent variables are: broad money growth, domestic credit to private sector by banks (% of GDP), monetary policy rate, official exchange rate (₦ per US$, period average), growth rate of gross fixed capital formation, and population growth rate. The growth rate of gross fixed capital formation was computed from Central Bank of Nigeria (CBN) Statistical Bulletin. The data of monetary policy rate is obtained from CBN Statistical Bulletin. The data of all the other variables are obtained from World Development Indicators.

4. Results

4.1 Unit Root Test

The unit root test is conducted to check variables stationary beyond I(1) [15] and the results obtained are presented in Table 1. All the variables except UNE, EXR and PGR are stationary at level. The UNE, EXR and PGR are stationary at first differences. Since the variables are of different order of integration, I(0), and I(1), the ARDL bounds test approach is applied to determine the relationship between unemployment and its explanatory variables.

Table 1: Results of Augmented Dickey-Fuller Unit Root Test

Variables	Levels		First Differences		Order of Integration
	ADF-Statist	Prob*	ADF-Statistic	Prob*	
UNE	0.406616	0.9986	-6.835326	0.0000	I(1)
BMG	-3.1176	0.0355	-	-	I(0)
DCB	-3.5388	0.0531	-	-	I(0)
MPR	-3.0634	0.0400	-	-	I(0)
EXR	-0.3064	0.9868	-4.2531	0.0111	I(1)
GFC	-6.1511	0.0001	-	-	I(0)
PGR	-1.951122	0.6089	-5.159835	0.0009	(1)

Test critical values: 1% level -3.6617
5% level -2.9604
10% level -2.6192

*Mackinnon (1996) one sided p-values

Source: Authors' Computation Using E-view 10

4.2 Lag Length Selection

The results of VAR lag order selection criteria are presented in Table 2. The sequential modified LR test statistic (LR), Final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ) indicate a maximum lag length 1 at 5 percent level of significance. Since the value of FPE (4.0E-07) at lag 1 is the smallest out of the values indicated by these five criteria, the ARDL model is estimated at a maximum lag length 1 based on Final prediction error criterion.

Table 2: Results of VAR Lag Order Selection Criteria

Lag	LR	FPE	AIC	SC	HQ
0	NA	0.0007	4.2442	4.4274	4.3049
1	232.1562*	4.0E-07*	3.3540*	2.4379*	3.0504*
2	16.7260	5.64E-07	-3.0812	-1.432	-2.5347

*Indicates Lag Order Selected by the Criterion

Source: Author's Computation Using E-view 10

4.3 Cointegration Test

The results of ARDL bounds test to cointegration are presented in Table 3. The computed F-statistics (5.60) is greater than upper bound critical value at 10%, 5%, 2.5% and 1% levels of significance. Therefore, the null hypothesis of no co-integration is rejected and the alternative hypothesis of the existence of a co-integrating relationship among the variables is accepted. The rejection of the null hypothesis implies that there exists a long run relationship between unemployment and all the explanatory variables that are included in the model. Since there is a proof of a long run relationship between unemployment and its explanatory variables, the ARDL model is estimated.

Table 3: Results of ARDL Bounds Test

F-Bounds Test Null Hypothesis: No levels relationship				
Test Statistic	Value	Significance	I(0)	I(1)
F-statistic	5.60	10%	1.99	2.94
		5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

Source: Author's Computation Using E-view10

4.4 Autoregressive Distributed Lag Estimates

4.4.1 Short-Run Autoregressive Distributed Lag Estimates

The ARDL short run regression results of UNE are presented in Table 4. The regression coefficients of all the explanatory variables except population growth rate are negative. The regression coefficient of population growth rate is positive. The broad money growth, domestic credit to private sector by banks and growth rate of gross fixed capital formation had a significant negative relationship with unemployment in Nigeria in the short run. The population growth rate had a significant positive relationship with unemployment in Nigeria in the short run. The monetary policy rate and exchange rate had an insignificant negative relationship with unemployment in Nigeria in the short run. As broad money growth, domestic credit to private sector by banks, and growth rate of gross fixed capital formation increase, unemployment reduces and it increases as population growth rate increases.

The lagged value of error correction model (ECM_{t-1}) is -0.081326. It is negative and less than one in absolute term and it is statistically significant because its p-value is less than 5 percent. The negative sign of the error correction term indicates a backward movement toward long run equilibrium from short run disequilibrium. Table 4 reveals that the deviation of the model in the short run from long run equilibrium is corrected by 8.13 percent in one year.

The coefficient of determination is 95 percent. This means that 95 percent variation in unemployment is explained by broad money growth, domestic credit to private sector by banks, monetary policy rate, exchange rate, growth rate of gross fixed capital formation, and population growth rate in Nigeria and 5 percent variation in unemployment is explained by other factors outside the model. The F-statistic of 18.15 and p-value of F-statistic of zero percent shows that the overall regression model is statistically significant. The Durbin-Watson statistic is 2.00. This result shows that the estimated regression model is free from autocorrelation.

Table 4: ARDL Short Run Regression Results of UNE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.187865	4.148340	-0.045287	0.9646
D(BMG)	-0.017968	0.004277	-4.200871	0.0010
DCB(-1)	-0.083697	0.031148	-2.687093	0.0186
MPR	-0.027482	0.025402	-1.081887	0.2990
EXR(-1)	-8.03E-05	0.001240	-0.064763	0.9493
D(GFC(-1))	-0.014243	0.006082	-2.341795	0.0358
D(PGR)	6.530102	2.136173	3.056917	0.0092
UNE(-1)	-0.081326	0.029906	-2.719360	0.0113

R-squared: 0.95 F-statistic: 18.15 Prob(F-statistic): 0.00 Durbin-Watson stat: 2.00

Source: Author's Computation Using E-view 10

4.4.2 Long-Run Autoregressive Distributed Lag Estimates

The ARDL long run regression results of UNE are presented in Table 5. The broad money growth, domestic credit to private sector by banks, monetary policy rate, and exchange rate had an insignificant negative relationship with unemployment in Nigeria in the long run. The growth rate of gross fixed capital formation and population growth rate had an insignificant positive relationship with unemployment in Nigeria in the long run. These results align with the monetarist view that monetary policy does not have influence on real variables such as output and employment in the long run.

Table 5: ARDL Long Run Regression Results of UNE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BMG	-0.048570	0.029079	-1.670282	0.1188
DCB	-0.147193	0.083015	-1.773089	0.0996
MPR	-0.048330	0.037658	-1.283406	0.2218
EXR	-0.000141	0.002242	-0.062987	0.9507
GFC	0.056287	0.044579	1.262638	0.2289
PGR	2.707394	3.316548	0.816329	0.4290

Source: Author's Computation Using E-view 10

4.5 Post-Estimation Tests

The results of post-estimation tests are presented in table 6. The histogram normality test was conducted in order to ascertain the normal distribution of the residuals. The value of Jarque-Bera statistic is 0.4219. The p-value of Jarque-Bera statistic is 0.8098 and it is greater than 0.05. The null hypothesis that the residuals are normally distributed is accepted.

The Breusch-Godfrey Serial Correlation LM test was conducted in order to verify the serial correlation among the residuals. The value of F-statistic is 0.4723. The p-value of F-statistic is 0.6356 and it is greater than 0.05. These results show that there is no significant serial correlation among the residuals. The null hypothesis that there is no serial correlation among the residuals is accepted.

Breusch-Pagan-Godfrey heteroskedasticity test was conducted in order to ascertain the constant variance of residuals. The value of F-statistic is 0.2374. The p-value of F-statistic is 0.6302 and it is greater than 0.05. These results show that there is no significant heteroskedasticity among the residuals. The null hypothesis that the variance of the residuals is constant across all levels of the independent variables is accepted.

Ramsey RESET test was conducted in order to test for model misspecification. The value of F-statistic is 0.1576. The p-value of F-statistic is 0.6946 and it is greater than 0.05. These results indicate that the F-statistic is not statistically significant and so the null hypothesis that the model is correctly specified is accepted.

The variance inflation factors were estimated in order to test for multicollinearity among the independent variables. The centered average variance inflation factor is 1.2437. It is approximately equal to one (1) indicating that there is no correlation among the independent variables. The null hypothesis that there is no multicollinearity among the independent variables in a regression model is accepted.

The CUSUM test was conducted in order to verify whether the ARDL regression model is stable. The CUSUM test shows that the ARDL model is stable at 5 percent level of significance. The null hypothesis that the ARDL model is stable is accepted. The ARDL model has passed all the diagnostic tests. Therefore, the results obtained from this study can be used to predict the extent at which monetary policy is related to unemployment in Nigeria.

Table 6: Results of Post-Estimation Tests

Test Conducted	Technique	Stat.	P-value	Conclusion
Normality test	Jarque-Bera	0.4219	0.8098	Residuals are normally distributed
Autocorrelation test	Breusch-Godfrey Serial Correlation LM Test	0.4723	0.6356	No serial correlation among the residuals
Heteroskedasticity Test	Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.2374	0.6302	There is constant variance of residuals
Model misspecification test	Ramsey RESET Test	0.1576	0.6946	Model is correctly specified
Multicollinearity Test	Variance Inflation Factors	1.2437		Independent variables are not correlated
Stability Test	CUSUM		0.05	Model is stable

Source: Author's Computation Using E-view 10

5. Discussion

The broad money growth, domestic credit to private sector by banks and growth rate of gross fixed capital formation had a significant negative relationship with unemployment in Nigeria in the short run. The population growth rate had a significant positive relationship with unemployment in Nigeria in the short run. The monetary policy rate and exchange rate had no relationship with unemployment in Nigeria in the short run. The broad money growth, domestic credit to private sector by banks, monetary policy rate, exchange rate, growth rate of gross fixed capital formation, and population growth rate had no influence on unemployment in Nigeria in the long run.

The results of the investigation align with the monetarist view that monetary policy affects unemployment in the short run but it does not have influence on real variables such as output and employment in the long run. The result is in tandem with [1] who found that money supply had a significant negative relationship with unemployment rate in Nigeria. The research outcome of this study does not align with [9] who found that there is a significant pass-through effect of the money supply growth to unemployment rate in Nigeria in the long run.

The monetary policy rate does not have influence on unemployment in Nigeria during the period under investigation. The monetary policy rate influences unemployment through changes in interest rate and investment. The monetary policy rate will not have any influence on unemployment if investment does not respond to changes in interest rate. The idea of targeting the interest rate in order to increase investment is not in tandem with the business decision to invest [16]. According to [17] as cited by [4], the interest rate is not an important factor to consider in the business decision to invest. Investment is mainly influenced by profit expectation and the risk associated with investment rather than interest rate. Investors are willing to under-take investment if they expect high return on investment even if the interest rate is very high. The investors will not be tempted to under-take investment if the risk associated with the investment is very high even though the interest rate is very low. The final demand, existing stock of capital and availability of new technology also play a role in the business decision to invest. The finding that monetary policy rate does not have influence on unemployment is in conformity with [2] who found that monetary policy had no significant influence on unemployment rate in Nigeria.

The money supply and banks' credit are the veritable monetary policy instruments that can be used to solve the problem of unemployment in Nigeria in the short run. We all live in the short run. In the long run we are all dead [17]. The expansionary monetary policy that can overcome the problem of unemployment in the short run should be put in place for Nigeria.

Unemployment does not depend on monetary policy alone. It also depends on the growth rate of gross fixed capital formation and population growth rate. There is unemployment in Nigeria because the gross fixed capital formation is inadequate to absorb the growing labour force.

6. Conclusions and Policy Implications

The money supply and banks' credit are veritable monetary policy instruments that influence unemployment in Nigeria. The decrease in the growth rates of money supply, banks' credit to the private sector by banks and gross fixed capital formation and an increase in population growth rate had led to an increase in unemployment in Nigeria. Unemployment in Nigeria will be reduced if the growth rates of money supply, domestic credit to private sector by banks, and gross fixed capital formation are increased. Unemployment will also be reduced in Nigeria if the gross fixed capital formation is increased to absorb the growing labour force and; population should grow at the same rate with gross fixed capital formation so that unemployment will be avoided. The Central Bank of Nigeria should ensure that the growth rates of money supply and domestic credit to private sector by banks are increased in order to reduce unemployment in Nigeria.

7. Limitations of the Study

This study did not investigate the channels through which monetary policy is transmitted to unemployment in Nigeria. This study also did not investigate the extent to which technological advancement, Political factor, religious beliefs, cultural practices, personal influence and relation have affected unemployment in Nigeria. These issues should be investigated in future studies.

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