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IMPACT OF DOMESTIC INVESTMENT AND UNEMPLOYMENT ON NIGERIA'S ECONOMIC GROWTH

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Abstract

This study examined the impact of domestic investment and unemployment on economic growth in Nigeria for the period 1980 and 2022. The study employed the Autoregressive Distributed Lag (ARDL) bound test and the diagnostics tests to determine the reliability of the models and results obtained. The independent variables considered in the study are gross fixed capital formation (GFCF), unemployment rate (UNER), inflation rate (INFR), exchange rate (EXR), and interest rate (INR), while the dependent variable is economic growth proxy by real gross domestic product growth rate (RGDPgr). The findings revealed that gross fixed capital formation (GFCF) had positive and significant impact on the economic growth in Nigeria while unemployment had negative and significant impact on the economic growth in Nigeria. The study recommends the conscious accumulation of capital goods through budgetary provisions and aggressive pursuit of industrialization in order to generate more employment and reduce the negative impact of unemployment in Nigeria. As Nigeria charts its economic course, the study provides valuable insights for policymakers, guiding the formulation of strategies that promote stability and pave the way for robust and sustainable economic growth.

Keywords: *Capital goods, economic growth, inflation rate, unemployment*
JEL Classification Codes: *D24; E31; J65; O4*

1. Introduction

Economic growth is the major challenge faced by most developing countries which include Nigeria as a country. Nigeria overall economic performance since independence in 1960 has been decidedly unimpressive due to unstable growth rate. For instance, real gross domestic product fell to 3.3% in 2022 from 3.6% in 2021, unemployment remains high at 33.3% and inflation peaked at a two-decade high of 18.8% fuelled by energy and food price increases and pass-through effects of exchange rate depreciation. The Central Bank of Nigeria successively raised the policy rate which peaked at 16.5% in November 2022 from 11.5% at the start of the year, to tame rising inflation (African Economic Outlook, 2023; National Bureau of Statistics [NBS], 2023). Thus, in 1999, the unemployment rate

was 17.5%, while in 2007 the rate of unemployment had reduced marginally to 12.7%. From 1999 to 2007, the rate of unemployment averaged at 13.1% – still quite high, bearing in mind that 5% is perceived as the accepted rate. In 2008, the rate of unemployment was almost 14.9% and rose drastically to about 23.9% in 2011. The unemployment rate has been rising from 1980 to date because as at May 2023, the rate of unemployment and inflation stood at 40.6% and 22.4% respectively (NBS, 2023).

The objective of every sovereign nation like Nigeria is to improve the standard of living of its citizenry and promote economic growth of the country via objective and policy variables of macroeconomic. Economic growth is the prime priority of macroeconomic policy in any country Nigeria inclusive. Nigeria is richly blessed with abundant human and natural resources, but still finds itself battling with crisis, high unemployment and inflation rates, inadequate infrastructure, exchange rate fluctuations, lack of confidence in currency valuation etc. due to general mismanagement of the economy resources and macroeconomic variables. Antwi, Mills and Zhao, (2013) argue that macroeconomic policies and variables are necessary for long-term sustainable economic growth. Thus, different administration of government in their own capacities had embarked on various macroeconomic policies to control inflation, exchange rate stability and reduce the rate of unemployment in the country in order to boost the country's gross domestic product (GDP). However, government efforts have not yielded the desired results as these problems are known to be skyrocketing rather than plummeting and Nigeria's economic growth has not been impressive and sustainable.

The problem of inflation in Nigeria was brought about by the oil glut in 1981, which resulted into balance of payment deficits leading to foreign exchange crisis that necessitated various measures of import restrictions. These restrictions reduced raw materials for domestic production and spare parts for machinery operation. The resultant shortage of goods and services for local consumption spurred the inflation rate to rise from 20% in 1981 to 39.1% in 1984 (Itua, 2000). According to Pétursson, (2008) a balance should be maintained between high level of inflation and zero level of inflation in order to facilitate economic growth. He concluded that the problem of inflation is not peculiar to a country but affects the entire world.

The adoption of the Structural Adjustment Program (SAP) in 1986 initially led to a temporary reduction in fiscal deficits, as the government reduced subsidies and its role in the economy. However, during the SAP period, Nigeria witnessed a significant decline in its economic performance. The

gross domestic product (GDP) growth rate, for instance, dropped from 8.3% in 1990 to just 1.2% in 1994 (Adesina, 1998). Meanwhile, inflation surged from 7.5% in 1990 to a staggering 57.0% in 1994, further rising to 72.8% in 1995, driven by increased lending rates, guided deregulation policies, and the delayed effects of fiscal indiscipline (Ekpo & Umoh, 2007).

This economic downturn had profound effects on employment and consumption in Nigeria. Rising unemployment, coupled with declining income levels, led to reduced consumer spending, which, in turn, caused a decrease in production as firms struggled to sell their goods (Olubukola, 2010). This reduction in output contributed to the slowdown in the nation's economic growth. Since the introduction of SAP in 1986, the Nigerian economy has become more exposed to market forces and their associated challenges (Iyoha & Oriakhi, 2002). The Nigerian economy had to deal with problems of high inflation rate and unstable economic growth, high and increasing rate of unemployment, trade imbalances, unstable exchange rate and high interest rate which had adversely affected economic growth in Nigeria (Abdul & Marwan, 2013).

Unemployment also has social consequences as it increases the rate of crime. Also, being without a job in Nigeria, is as good as losing your self-respect and self-esteem among the people of your age bracket. The proportion of workers who are unemployed shows how well a nation's human resources are used and serves as an index of economic movement (positive or negative). Nigeria's capital formation has been erratic, which could be the cause of the country's lack of proper social infrastructure, including roads, electricity, and medical facilities. It follows that the early hope for public sector changes has not materialised because Nigeria's economy is still growing at a slow pace.

Furthermore, researchers attempt to understand the effect of technological goods and unemployment on economic growth in Nigeria has resulted in conflicting opinions. The existing studies disagreed both in the line of significance and direction of relationship. Despite agreeing that economic performance responds to macroeconomic variables, these studies are at variance as to the direction of the effects. For instance Holden and Sparman (2013); Pitia and Lado (2015); Paul and Akindele (2016) argued that all the macroeconomic variables they employed have a negative effect on economic growth in both the long and short run suggesting that growing money supply, interest rate, inflation, exchange rate and credit extension will rather hamper growth in Nigeria as against the belief from studies like Onwanchukwu, (2015), Ozei, Sezgin, Topkaya, (2013), opined that macroeconomic variables enhance

economic growth of the Nigeria economy. A number of studies outrightly argued that domestic investment and unemployment have no effect on economic growth (Dankumo, 2020; Khan, 2020). Aroriode and Ogunbadejo, (2014), noted that interest rate, exchange rate and inflation rate are not statistically significant tools for enhancing economic growth. High inflation is an indicator that shows that if the Nigeria economy is not control properly and this will lead to slow or hinder economic growth in Nigeria. Due to a gradual decrease in capital formation, Nigeria's economic growth has not been strong enough or at a fast enough pace (Oloyede, 2001). According to Okonkwo (2010), insufficient capital accumulation is the primary barrier to Nigeria's goal of sustainable economic growth.

The scenario described above is alarming, far from satisfying, and unmistakably indicative of a failing economy. More so, over the last few decades the macroeconomic variables and the economic growth relationship became the hot issue among researchers. Therefore, the current study is conducted to fill the gap in the literature on the relationship between key macroeconomic variables such unemployment and capital formation and economic growth which is believed that it will be helpful for the policy makers to formulate a suitable policy. Literally, it can be seen that different macroeconomic variables influence economic growth of a nation. But, the magnitude and direction of the influence may vary depending on particular economy. Therefore, this study attempts to explore the impact of domestic investment and unemployment on economic growth in Nigeria.

2. Literature Review

2.1 Basic Theories

Uzawa–Lucas Model

In 1965, Uzawa proposed an endogenous growth model that narrowed down on human capital investments causing long-term growth in an economy. Uzawa developed an endogenous growth model based on investment in human capital which was used by Lucas. Lucas makes the assumption that spending money on education results in the creation of human capital, which is a key factor in the process of growth. Further, in 1988, Lucas contributed to the idea that investing in education is necessary for increasing the productivity of human capital. Lucas proposed internal training of workers (to improve production). The Uzawa-Lucas Model is presented as follows:

$$Y_i = A(K_i) \times (H_i) \times H^e \qquad (2.1)$$

where, A is the technical coefficient.; K_i is the physical capital; H_i is the human capital and H^e denotes the economy's average level of human capital.

2.2 Empirical Review

Ogosi et al. (2022) investigated the macroeconomic factors that influence Nigeria's economic growth from 1991 to 2019. The study utilized both simple linear and multiple regression analysis, with GDP, unemployment, inflation and FDI serving as the variables of the model. Adopting the error correction model (ECM) and the Johansen cointegration test techniques, the findings revealed that while inflation had a negative impact on economic growth, unemployment and foreign direct investment had favourable effects. In order to determine whether there are long term relationships between key macroeconomic variables and how they affect economic growth, Gisaor, Bobbo, and Danjuma (2021) empirically tested the validity of Okun's law in Nigeria using time series data from 1970 to 2018 and the ARDL bounds test approach. As a result, Okun's law was found not to be applicable in Nigeria, even though Nigeria had a high unemployment rate and relatively high economic growth in the period.

Osunkwo (2021) researched how capital formation affected Nigeria's economic growth between 1980 and 2017. The variables used in the analysis were interest rate (INTR), gross fixed capital formation (GFCF), and GDPP. The economic growth and GFCF were found to be stationary at the second difference. The order of integration was ascertained using the Johansen cointegration test, and the speed of adjustment to equilibrium was ascertained using ECM. The empirical results indicate that, over the period under examination, interest rates had a negative impact on economic growth in Nigeria, while capital formation had a significant positive impact.

Jabaru and Jimoh (2021) examined the impact of some selected macroeconomic variables on economic growth in Nigeria for a period from 1980 – 2017. The variables include gross domestic product (GDP) as dependent variable to represents the economy while the independent variables are unemployment rate, inflation rate, exchange rate, foreign direct investment, population growth rate, age dependency ratio and crude oil exports. The result showed that at 5% significance level, only exchange rate and population growth rate significantly affect the economic growth in Nigeria economy within the study periods. Unemployment rate and crude oil exports were found to be collinear; likewise exchange rate and foreign direct investment. The study established that unemployment rate, inflation rate and crude oil exports had negative impacts on GDP while exchange rate, foreign direct investment, population growth rate and age dependency ratio had positive impacts on GDP over the period reviewed.

Dankumo (2020) used data over a 22-year period (1997 to 2017) to examine if Okun's Law (a negative correlation between unemployment and growth) holds true in Nigeria. They did this by applying the ARDL bounds test approach. The results demonstrated that there was a negative relationship between Nigeria's economic growth and unemployment. Khan (2020) used the OLS to investigate the relationship between unemployment and Nigerian economic growth from 1999 to 2015. Based on the results, unemployment has an insignificant effect on economic growth; for every 1% increase in unemployment, GDP is reduced by 0.04. Obele (2019) used the OLS and ECM to investigate the relationship between unemployment and economic growth in Nigeria between 1986 and 2008. The study's findings demonstrated a persistent link between work and growth. This study supports the notion that high unemployment impedes Nigeria's economic progress, with a one percent increase in unemployment translating into an 11.56% drop in GDP.

Ajose and Oyedokun (2018) analysed the impact of capital accumulation on Nigeria's economic growth from 1980 to 2016. To ascertain the causal relationship between capital formation and economic growth in Nigeria, the Granger causality test was also employed. The findings also demonstrate a causal association between capital production and economic growth in Nigeria over the study period, as well as a long-term substantial relationship between the variables analysed. Additionally, a negative, non-significant link between Nigeria's capital formation and economic growth was found by the results.

Longe and Omitogun (2017) used data sets from 1986 to 2015 to assess the effect of unemployment on the growth of Nigeria's economy through the use of the VAR model. Among other things, their findings demonstrated a sustained correlation between GDP, inflation and unemployment. They also showed that he rate of inflation and unemployment had a significant impact on the country's economic growth. From 1970 to 2016, Sunusi and Ahmad (2017) examined how unemployment affected Nigeria's economic growth. The study utilized ECM and Granger causality test and the outcome demonstrated that unemployment and economic growth in Nigeria are correlated over the long term. Long-term and short-term economic growth is positively impacted by the unemployment rate. Granger causality demonstrates that there is a unidirectional causal relationship between economic growth and unemployment.

Onwachukwu (2015) examined the impact of unemployment on the economic growth in

Nigeria. The study used time series data from 1985 to 2010. The study employed OLS method. The result showed that unemployment has significant negative effect on economic growth in Nigeria. It was also observed that the inflation has an insignificant negative effect on the economic growth in Nigeria. Ozei, Sezgin, and Topkaya (2013) investigated the relationship between economic growth and unemployment relationship in seven industrialized countries (G7) countries. Panel regression analysis was used to analyse data from 2000-2011. The results of the study revealed that while the productivity and economic growth variables have significant and strong effects on the reduction of unemployment in three-crisis period. This effect of productivity becomes insignificant and small after the crisis, whereas the effect of economic growth as a decreasing effect over unemployment continues and its impact level rises.

3 Methodology

3.1 Model Specification

The model used for the study was the adaptation and modification from the work of Jabaru and Jimoh (2021) that examined the effect of selected macroeconomic variables on the Nigeria economy. The Model is stated thus:

GDP= f (UR, IR, ER, FDI, PGR, ADR, COE) (3.1)

Where; GDP = gross domestic product; f = functional relationship; UR = unemployment rate; IR = inflation rate; ER = exchange rate; FDI= foreign direct investment; PGR = population growth gate; ADR =age dependency ratio; COE = crude oil exports.

The model of Jabaru and Jimoh (2021) was adapted and modified by introducing the core macroeconomic variables that capture the variables that explained domestic investment and unemployment rate in relation to economic growth. The independent variables are gross capital formation, (to capture domestic investment), unemployment rate, inflation rate, exchange rate and interest rate; and while real gross domestic product growth rate is the dependent variable used to measure economic growth. The functional form of the adapted and modified model is specified as**;**

$$\mathbf{RGDPgr = f\ (GFCF, UNER, IFR, EXR, INR)} \quad \mathbf{(3.2)}$$

The econometric equation model becomes:

$$\mathbf{RGDPgr = \beta_0 + \beta_1 IFR + \beta_2 EXR + \beta_3 INR + \beta_4 UNER + \beta_5 GFCF + \mu} \quad \mathbf{(3.3)}$$

Stating the ARDL equation from Equation (3.3), the model becomes;

$$\mathbf{RGDPgr_{t-1} = \beta_0 + \Sigma\beta_1 IFR_{t-1} + \Sigma\beta_2 EXR_{t-1} + \Sigma\beta_3 INR_{t-1} + \Sigma\beta_4 UNER_{t-1} + \Sigma\beta_5 GFCF_{t-1} + \mu} \quad \mathbf{(3.4)}$$

Where, RGDPgr = Real gross domestic product growth rate; IFR = inflation rate;

EXR = exchange rate; INR = interest raate; UR = unemployment rate; GFCF = gross fixed capital formation; β_0 = intercept; β_1 - β_5 = coefficients of the independent variables; μ = stochastic disturbance (error) term. The a priori expectations for the coefficients in the model are stated thus; $\beta_1 < 0$, $\beta_2 > 0$, $\beta_3 < 0$,$\beta_4 < 0$ and $\beta_5 > 0$

3.2 Estimation Techniques and Procedure

The data were analysed with econometric techniques involving descriptive statistics, Augmented Dickey Fuller (ADF) test was employed to test for stationarity in order to check for spurious regression in a model. The Autoregressive Distributive Lag (ARDL) Bounds test for cointegration was applied because it is capable of handling both stationarity at level I(0) and first difference I(1). The ARDL method also provides consistent results for small sample data.

4. Data Presentation and Discussion of Results

This section covers the descriptive statistics, stationarity test and autoregressive distributed lag (ARDL) bound test which are presented in turns.

4.1. Presentation and Interpretation of Results

4.1.1. Descriptive Statistics

This section provides the individual characteristics of the data set.

Table 4.1: Descriptive Statistics

	RGDPGR	UNER	EXR	GFCF	IFR	INR
Mean	4.520930	13.16884	124.3419	13407.75	25.49302	10.10465
Median	4.800000	9.780000	120.0000	8730.800	15.20000	10.00000
Maximum	7.900000	34.00000	419.0000	44414.00	77.60000	20.00000
Minimum	1.900000	4.300000	0.620000	1175.300	6.000000	1.000000
Std. Dev.	2.251514	8.228065	120.7095	12520.18	21.73436	5.599275
Skewness	-1.281339	0.989506	0.977521	1.007725	1.290301	-0.002550
Kurtosis	4.925739	3.818925	3.215361	3.886162	3.119054	3.896920
Jarque-Bera	18.41079	7.075780	6.931189	7.301037	11.95701	2.180120
Probability	0.070100	0.069075	0.081254	0.075978	0.062533	0.396196
Sum	194.4000	566.2600	5346.700	576533.1	1096.200	434.5000
Sum Sq. Dev.	212.9112	2843.444	611973.0	6.58E+09	19840.06	1316.779
Obs	43	43	43	43	43	43

Source: Researchers Computation (2023) using E-Views 9.0

Table 4.1 summarizes the descriptive statistics for the variables. It shows that the average value of RGDP growth rate is approximately 4.52 with a standard deviation of 2.25 and it ranges between 4.80 and 1.90. Unemployment rate has an average value of 13.17 with a standard deviation of 8.23 ranging from 9.78 to 4.30. Exchange rate has an average value of 124.34 with a standard deviation of 120.71 ranging from 120 to 0.62. Gross fixed capital formation (GFCF) grew in an average value of 13407.75 with a standard

deviation of 12520.18 ranging from 8730.8 to 1175.30. Inflation rate (INF) has an average value of 25.49 with a standard deviation of 21.73 ranging from 15.20 to 6.0. Interest rate has an average value 10.11 with a standard deviation of 5.60 ranging from 10.0 to 1.0.

The Jarque-Bera test statistics for all variables are not significant, which indicates that the distributions are not significantly different from a normal distribution as the p-values for all variables are greater than 0.05, which is the level of significance. Furthermore, for most of the variables, the skewness is slightly positive, which indicates the tendency of the distributions slightly skewed to the right. The kurtosis exceeds '3' for all variables, which indicates that the distributions are peaked (leptokurtic) relative to the normal. The number of observations used for calculating these statistics is 43 for all variables. Overall, the descriptive statistics indicate that the distributions the variables are fairly symmetrical and approximately normally distributed.

4.1.2. Correlation Analysis

It is conducted to show whether there is multicollinearity in the model or not.

Table 4.2: Correlation Matrix

	LNRGDPGR	LNINR	LNIFR	LNGFCF	LNEXR	LNUNER
LNRGDPGR	1.000000	0.268368	0.037105	-0.142180	-0.146907	-0.080793
LNINR	0.268368	1.000000	-0.374002	-0.134482	0.054267	-0.236376
LNIFR	0.037105	-0.374002	1.000000	-0.426394	-0.378383	-0.394542
LNGFCF	-0.142180	-0.134482	-0.426394	1.000000	0.037423	0.033420
LNEXR	-0.146907	0.054267	-0.378383	0.037423	1.000000	0.028025
LNUNER	-0.080793	-0.236376	-0.394542	0.033420	0.028025	1.000000

Source: Researchers Computation (2023) using E-Views 9.0

From the correlation matrix of Table 4.2, log values of gross domestic product growth rate has positive correlation with interest rate and inflation rate while negatively correlated to gross fixed capital formation, exchange rate and unemployment rate, On the other hand, interest rate has positive correlations with growth rate of real GDP and exchange rate but negatively correlated to inflation rate, gross fixed capital formation and unemployment rate. Inflation rate is negatively to all variables except the growth rate of gross domestic product. Gross fixed capital formation is correlated to exchange rate and unemployment rate while negatively correlated to other variables. Exchange rate is negatively correlated real GDP growth rate and inflation rate while positively correlated to other variables. Lastly, the variable unemployment rate is positively rate to exchange rate and gross fixed capital

formation while negatively correlated to other variables.

4.1.3. Unit Root Test

The unit root test was conducted to ensure stationarity of the variables in order to guard against spurious regression. The result is presented in Table 4.3.

Table 4.3: Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	At Levels				At First Difference			
	ADF	95% Critical Value of ADF	P value	Status	ADF	95% Critical Value of ADF	P value	Status
INR	-0.383956	-2.933158	0.9027	N.S	-4.688160	-2.935001	0.0005	S
IFR	-1.706115	-2.933158	0.4209	N.S	-5.549500	-2.935001	0.0000	S
RGDPgr	-5.276811	-2.933158	0.0001	S	-10.42199	-2.935001	0.0000	S
UNER	-0.075485	-2.933158	0.9455	N.S	-6.740690	-2.935001	0.0000	S
EXR	1.187034	-3.520787	0.9076	N.S.	-5.770481	-3.526609	0.0000	S
GFCF	9.875806	-2.933158	1.0000	N.S	-5.363558	-3.523623	0.0004	S

Source: Researchers Computation (2023) using E-Views 9.0

N.S = Non-Stationary; S = Stationary

The estimation results revealed that all the variables were not stationary at levels; but became stationary after first differencing at 5% critical value. Precisely, the estimated result in the Table **3** found only RGDPgr to be stationary at level as shown by it corresponding values of ADF test statistics, critical values and p-value. However, upon first differencing, all variables became stationary. Thus RGDPgr was integrated of order zero i.e I(0) while other variables were integrated of order one i.e. I(1). Having examined the stationarity state of the variables, it is imperative henceforth we conduct the Bound cointegration test since the variables are integrated in different orders, which is the basis for using ARDL approach.

4.1.4. Bound Testing

Considering the fact that the variables are of mixed order of integration as indicated by the ADF unit root test, thus, we employ the use of the Autoregressive Distributed Lag (ARDL) Bound test to check for the existence of long run relationship between the variables. The summary of the test result is presented in the Table 4.4.

Table 4.4: ARDL Bounds Test for Co-integration

Test Statistics	**Value**	
F-Statistic	**4.722379**	
Critical Value Bounds		
Significance	I(0)	**I(1)**
10%	1.81	**2.90**
5%	2.140	**3.340**
1%	**2.820**	**4.210**

Source: Researchers Computation (2023) using E-Views 9.0.

The F-statistic value is compared to the higher I(1) and lower I(0) critical bound values in the ARDL Bound test, as shown in Table 4.4, to determine whether co-integration among the variables occurs. A lower critical bound of I(0) indicates the absence of co-integration between the variables; an upper critical bound of I(1) indicates the presence of co-integration; and an F-statistic falling between the lower and upper I(0) and I(1) bound critical values indicates an inconclusive result. Based on the result, which indicates that at all significant levels the F-statistic value is greater than the upper critical bound value, it was thus concluded that there is a significant long-run link between the variables.

4.1.5. ARDL Result

Tables 4.5 and 4.6 showed the ARDL model's output, which makes it possible to estimate the model's long- and short-run coefficients simultaneously.

Table 4.5: Autoregressive Distributed Lag (ARDL) Long Run Estimate (1980–2022)
Dependent Variable: D(LNRGDPGR)

Variable	**Coefficient**	**Std. Error**	**t–Statistic**	**Prob.**
C	5.329691	4.035396	1.320736	**0.2094**
LNRGDPGR(-1)	0.780357	0.313308	2.490699	**0.0271**
LNIFR(-1)	-0.324124	0.090893	-3.565998	**0.0034**
LNINR(-1)	0.190384	0.694225	2.742406	**0.0168**
LNEXR(-1)	0.155962	0.050124	3.111523	**0.0083**
LNUNER(-1)	-0.609599	0.213273	-2.858309	**0.0134**
LNGFCF(-1)	0.003644	0.001537	2.370303	**0.0339**
LNGFCF	-0.001516	0.001492	-1.015858	**0.3282**
LNIFR	0.228766	0.088133	2.595695	**0.0222**
LNINR	-0.772398	0.388207	-1.989657	**0.0681**

LNUNER	1.106643	0.356979	3.100022	**0.0084**
LNEXR	-0.092940	0.044206	-2.102420	**0.0556**
R-squared				**0.99**
Adj. R-squared				**0.988**
F-statistic				**451.5096**
Prob.(F-sta)				**0.000000**

Source: Researchers Computation (2023) using E-Views 9.0

Table 4.6: Autoregressive Distributed Lag (ARDL) Short Run Estimate (1980–2022)

Dependent Variable: D(RGDPGR)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.316976	0.595169	0.532581	0.5981
D(RGDPGR(-1))	-0.086225	0.204457	0.421726	0.6761
D(UNER(-1))	-0.037599	0.132691	-0.283361	0.7788
D(EXR(-1))	0.026884	0.016622	1.617441	0.1159
D(IFR(-1))	0.008832	0.046646	0.189347	0.8511
D(INR(-1))	-0.070004	0.102087	-0.685732	0.4980
D(GFCF(-1))	-0.000498	0.000447	-1.114739	0.2735
ECM(-1)	-0.926503	0.253055	-3.661275	0.0009

R-squared 0.537579	Mean dependent var 0.087692	Prob(F-statistic) 0.000576
Adj. R-squared 0.433161	S.D. dependent var 3.090139	
S.E. of regression 2.326526	Akaike info criterion 4.707311	
Sum squared resid 167.7944	Schwarz criterion 5.048555	
Log likelihood -83.79257	Hannan-Quinn criter. 4.82974	
F-statistic 5.148348	Durbin-Watson stat 1.943706	

Source: Researchers Computation (2023) using E-Views 9.0

4.3 Discussion of Findings

The above ARDL regression result investigates the impact of domestic investment and unemployment on economic growth in Nigeria from year 1980 to 2022 which can be discussed as follows. The result shows a negative relationship between inflation rate (IFR) and growth rate of real GDP in Nigeria. Precisely, the analysis shows that a percentage increase in inflation rate will lead to a 32.4% decrease in the growth rate of

real GDP. In other words, the result shows that an increase in inflation rate will further worsen the growth rate of real GDP in the country. This can be economically explained by the fact that an expansionary monetary policy will lead to too much money circulating in the economy and chasing few goods which could further lead to inflation thereby worsening real GDP growth rate in the country. This finding however conforms to a priori expectation in the model.

Furthermore, interest rate (INR) from the analysis was found to be positively related to the growth rate of real GDP in Nigeria, as a percentage increase in interest rate leads to a corresponding 19% increase in real GDPgr in Nigeria, which however negates the a priori expectation of the model. Exchange rate (EXR) in Nigeria was found to be positively related to real GDPgr such that a percentage increase in exchange rate leads to 15.6% increase in the growth rate of real GDP in the country. This however conforms to the a priori expectation of the model. Unemployment rate (UNER) in Nigeria was found to be negatively related to the growth rate of GDP such that a percentage increase in the unemployment rate leads to a 61% decrease in real GDPgr which conforms to the a priori expectation of the model. While gross fixed capital formation (GFCF) in Nigeria was found to be positively related to real GDPgr such that a percentage increase in GFCF leads to a 0.36% increase in real GDP growth rate in the country. This however conforms to the a priori expectation of the model.

The coefficient of determination (R^2) and its adjusted counterpart (R-squared bar) show a high predictive power of the model with coefficients of 99.1% and 98.8% respectively. In other words, the R-squared adjusted shows that 98.8% of the systemic variations of the dependent variable can be explained by the independent variables of the model, which is a good fit for the study, with only less than 2% explained by the stochastic error term. Using the rule of the thumb, all the variables; IFR, INR, EXR, UNER, GFCF have absolute values of t-statistic greater than 2 which show that they are statistically significant in the model, which were further confirmed by their respective prob-values (0.0034, 0.0168, 0.0083, 0.0134 and 0.0339) lesser than 0.05 at 5% level of significance. The F-statistic value of 451.5096 with a p-value of 0.0000 revealed the significance and adequacy of the ARDL model.

The result depicts a negative relationship between inflation rate (IFR) and growth rate of real GDP in Nigeria. Interest rate (INR) was found to be positively related to the growth rate of real GDP in Nigeria; a percentage increase in interest rate leads to a corresponding 19% increase in real GDPgr in Nigeria. Exchange rate (EXR) in Nigeria was

found to be positively related to real GDPgr; a percentage increase in exchange rate led to 15.6% increase in the growth rate of real GDP in the country. This result conforms with the International Fisher Effect theory of interest rate suggesting that a country with higher interest rate should also have a higher inflation rate which, in turn, makes the real value of the country's currency decrease over time. Unemployment rate (UNER) in Nigeria was found to be negatively related to the growth rate of GDP such that a percentage increase in the unemployment rate led to a 61% decrease in real GDPgr. The result conforms to the Okun's theory of unemployment which opined that unemployment has negative correlation with economic growth. More so, gross fixed capital formation (GFCF) in Nigeria was found to be positively related to real GDPgr such that a percentage increase in GFCF leads to a 0.36% increase in real GDP growth rate in the country which is affirmation of most growth theories factoring capital as a necessary and sufficient condition for economic growth.

5. Conclusion and Recommendations

The study concludes that the positive impact of gross fixed capital formation on real GDP growth rate highlights the pivotal role of sustained investment in capital assets and stable exchange rate environment is crucial for fostering economic growth, aligning with expectations. As Nigeria charts its economic course, the study's conclusions provide valuable insights for policymakers, guiding the formulation of strategies that promote stability, encourage investment, and pave the way for robust and sustainable economic growth.

The negative impact of unemployment on real GDP growth rate and inflation rate on real GDP growth rate underscores the imperative of maintaining price stability and implementation of targeted strategies to reduce unemployment rates in order to fostering economic resilience and sustained growth in Nigerian. Based on the findings of the study, the study recommended the implementation of targeted strategies to reduce unemployment rates. Policymakers should prioritize initiatives that enhance skills development, education, and job creation. Public-private partnerships can play a pivotal role in fostering a conducive environment for employment generation, ultimately contributing to improved economic growth. To capitalize on the positive relationship between gross fixed capital formation and real GDP growth rate, policymakers should implement policies that encourage sustained investment in capital assets. This may involve creating a favourable business environment, providing incentives for private sector investments, and prioritizing infrastructure development.

Given the adverse impact of inflation on real GDP growth rate, the study recommends a vigilant and proactive approach to inflation management and Monetary Policy. Continuous monitoring of inflationary pressures and swift policy adjustments will be essential to mitigate the negative effects on GDP growth. Building on the positive correlation between exchange rates and real GDP growth rate, the study recommends a focus on maintaining a stable exchange rate environment. Ongoing monitoring of external economic factors and timely interventions to address imbalances will be crucial to sustaining a favourable exchange rate environment.

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