

## **Determinants of Domestic Investment: Evidence from Nigeria**

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### **Abstract**

This study identified and examined key economic variables that determine domestic investment in Nigeria. The data used was obtained from Central Bank of Nigeria Statistical Bulletin and World Development Indicators for the period between 1991 to 2021. The Augmented Dickey Fuller unit root test was employed to determine the stationarity of the variables and the results revealed that the variables were stationary at levels and first difference. The ARDL model was then employed to determine the long run and short run dynamics of the variables. Findings shows that a long run relationship exists among the variables as the F statistic from the bounds test exceeds the upper bound critical value at 1% and 5% levels of significance respectively. Furthermore, short run dimension of the result shows that domestic savings significantly increased investment in Nigeria while trade openness, inflation and government expenditure significantly reduced domestic investment. In the long run however, the result shows that the Nigerian domestic investment dynamics only responds significantly but negatively to trade openness. The study recommends the need for government to formulate and implement effective trade and monetary policies that will ensure positive impact on the Nigerian investment. It also recommends that government should increase spendings on capital expenditure, this will create enabling environment for Nigerian domestic investors to succeed.

**Keywords:** ARDL model; bounds test; domestic investment; Nigeria

**JEL Classification Codes:** E22; E60; O11

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## **1.0 Introduction**

Domestic investment is a very pertinent and unavoidable feature in any economy. One of the important things in managing finances is setting aside income for investment as capital is a very crucial requirement for any financial investment. However, investment is not only about money, capital and shares as there are many other resources such as time, energy and capabilities which can be invested to achieve set goals in life endeavors (Amade *et al.*, 2022; Umar & Zakari, 2020). It has been argued that investment plays a very significant role in the functioning of both developed and developing economies and the expansion of the productive capacity of an economy (Agbarakwe, 2019; Ghassemi, 1996). In that, it drives growth and triggers development (Ikpesu, 2019; Ojong, Ogar, & Arikpo, 2018), raise the level of employment/provide more jobs, promote production techniques, and enhance income level and standard of living (Meyer & Sanusi, 2019; Ali & Shaheen, 2016; Ojong, Ogar, & Arikpo, 2018).

According to Kukaj and Ahmeti (2016) and also Oyedokun & Ajose (2018), one of the most significant factors influencing growth in developing countries is the importance of investment. Investment can therefore encourage the anticipated growth in emerging economies. Additionally, there have been increases in local investment and inflows of foreign direct investment (FDI) into developing nations. Over the past four decades, there has also been an increase in the amount of foreign direct investment going into emerging nations (Amade *et al.*, 2022; Ijirsha *et al.*, 2019; Ullah, Shah & Khan, 2014; Imoisi, Abuo & Sogules, 2015).

Nigeria is one of the largest economies in Africa having a population of over 200 million people. Despite its huge potential and large market base, the Nigerian economy is characterized by low levels of investment and this has hindered the growth and development of the economy. Many macroeconomic growth problems Nigeria is facing today and the reason for which demand side rather than supply side monetary policies, wrongly applied, are not effective to curb inflation is simply due to lack of productivity and low levels of investment. Today, the Nigerian economy is still food insecure, with a poverty rate as high as 45%, unemployment rate of 37% and inflation levels at 30% (The Authority, 2023; Kenton, 2022; Nkwagu *et al.*, 2021). Nigeria is fraught with very high import dependency, as it imports more than it produces for exports and for domestic consumption (Omolola *et al.*, 2023).

Agbarakwe (2019) and Oyedepo (2016) has however suggested that one of the most effective tools for reducing poverty is investment and increased production of goods and services. Increased investment is also known to lead to more chances for the poor to improve their income levels and standard of living culminating from reduced unemployment and faster growth. In other words, inadequate levels of investment or capital formation are the main cause of suboptimal growth rates, unemployment, low - income levels, income inequality, and poverty (Aliyu and Zakari, 2020).

Despite the necessity of investment, one crucial characteristic of investment is its volatility. According to Anushree (2019), investment is the most volatile component of aggregate effective demand and has a tendency to fluctuate more than other aggregate demand components (Hassett, 2020). This may be due to the fact that the fundamental factors that influence investment, interest rates, capital costs, and expected returns variate as well. However, a little change in investment tends to lead to considerably larger changes in employment, output level, aggregate demand, and other macroeconomic variables, which frequently have significant effects on the economic policies

of the government (Ghassemi, 1996). Evidently, despite the fact that government policy attempts to increase domestic investment frequently fail, this insight was perhaps responsible for the rise in research on the key elements that affect the level of investment in countries (Ojong, Ogar, & Arikpo, 2018; Agbarakwe, 2019). Government interventions to control current inflation in the economy using demand side monetary policies have also failed due to low levels of production in the economy (Omolola *et al.*2023).

Nigeria is lagging behind with respect to domestic investment but investment seems to be the only way out of her monocultural economy and dependence on importation of both food and non -food products and seriously fluctuating exchange rate. Against this backdrop, this study was carried out with the use of up – to – date data to identify and examine macroeconomic variables that determine domestic investment in Nigeria and thereby proffer policy recommendations for its improvement and implementation.

The remainder of this study is organized as follows; Section 2 hosts the literature review of the study while section 3 contains the methodology of the study which comprises the data source and description, model specification, estimation techniques and procedures for data analysis. Results and discussion are in section 4 while section 5 hosts the summary, conclusion and recommendation of the study.

## **2. Literature Review**

### **2.1 Empirical Review**

Amade *et al.*, (2022) evaluated the interaction between domestic investment, foreign direct investment and economic growth in Nigeria. Explanatory variables used in the model are domestic investment, foreign direct investment, exchange rate, and interest rate. Using secondary time series data from 1981 to 2018 obtained from Nigerian Central Bank Statistical Bulletin and World Development Indicators, Autoregressive Distributed Lags (ARDL) technique was employed in estimating the short term and long run dynamics of the model. Findings revealed that foreign direct investment and interest rate are the only significant determinants of real GDP in the short term, while the significant long run exponents are domestic investment, foreign direct investment and exchange rate. Additionally, the Granger Causality test showed that both domestic investment and foreign direct investment cause economic growth. The study therefore recommended that policy makers initiate polices that will encourage local investment while normalizing exchange rate and growth enhancing trade operations.

Ugah (2022) similarly examined the macroeconomic determinants of domestic savings in Nigeria. Time series data gathered from Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, and International Monetary Fund bulletins for the period between 1990 and 2019 was used for the study. After the data was subjected to unit root test, all the variables were stationary at first difference. Thereafter, Johansen co-integration test, and ECM regression technique was used for data analysis. The outcome of the analysis revealed that there exists a long run association between the variables. Furthermore, the result of the Error Correction Model revealed that deposit rate and inflation rate in Nigeria negatively affect domestic savings in Nigeria. While financial deepening was found to negatively and statistically affect domestic savings in Nigeria, income level was revealed to have a positive and significant impact on domestic savings in Nigeria. Conclusively the study showed that income level, deposit rate, financial deepening and inflation rate determines the volume of domestic savings in Nigeria – positively or negatively. It was

recommended that the government and monetary authorities should implement sound policies and provide an enabling environment to foster domestic savings that will help to increase the level of economic growth in Nigeria.

Similarly, Oyedokun & Ajose (2018) investigated the impact of domestic investment on economic growth in Nigeria. The model was subjected to Johansen co-integration test in order to determine the long run relationship between domestic investment, and economic growth for the period between 1980 and 2016. The Granger causality test was also used to determine the causality between domestic investment, and economic growth in Nigeria for the same period. The results revealed that a long run significant relationship exists between the explanatory variables examined and economic growth. Domestic investment was found to positively and significantly influence real gross domestic product. Granger causality test also reveal that domestic investment granger cause economic growth in Nigeria. The study recommended that government should create enabling environment for domestic investment to rise through the adoption of macroeconomic policies that will boost investment opportunities in Nigeria.

In the same vein, David, Sakanko and Obilikwu (2020) asserted that the mainstay of any country's economic development is investment. Nigeria has been identified as having low savings and even lower investment levels. This fact serves as the foundation for one of the country's main goals, which is to promote an environment that encourages sustainable economic growth. A balance between investment and other factors that influence investment is necessary for the stimulation of sustainable economic growth.

Correspondingly, Charles, Nenbee, and Krama (2018) used time series data from secondary sources on the unemployment rate (UNE), a proxy for employment generation, and government expenditure on education and community services to study the impact of public investment in the social sector on employment generation in Nigeria between 1980 and 2016. The result of the study shows that while government spending on education (EDU) is correctly signed and statistically significant, spending on health (HTH) and spending on other social and community services (COM) is incorrectly signed but statistically significant at the 5 percent level. This suggests that throughout the study period, neither government expenditure on health (HTH) nor government expenditure on other social and community services (COM) led to the creation of jobs in Nigeria. Based on these conclusions, the study suggested that the Nigerian government support the health and education sectors by increasing financing and making sure the resources are appropriately managed and put to use in the creation of health and education services.

Similarly, Using the ordinary least squares regression method, George-Anokwuru (2017) looked at the link between interest rates and domestic private investment in Nigeria from 1980 to 2015. The results demonstrated a negative relationship between real and prime loan rates and private domestic investment that is statistically significant at 5%. He finished by recommending, among other things, that monetary authorities should support policies to enhance deposits and also make loanable money available as this is essential for supporting private domestic investment in Nigeria. Consequently, Fatoumata (2017), looked at the effect of interest rates on economic growth in Nigeria from 1990 to 2013. His major findings revealed that an increase in the rate of interest on loans had a slight negative effect on growth. However, he went on to say that by cutting the interest rate, domestic investment will be stimulated and economic growth will subsequently be enhanced.

Atuma, Odo, and Nweze (2017) equally examined the relationship between domestic investment, capital formation, and economic growth. Their findings demonstrated a long-term, meaningful relationship between domestic investment, capital formation, and economic growth in Nigeria. The study recommended that government must embrace macroeconomic policies that would stimulate the economy and offer investment opportunities in order for domestic investment to flourish.

Similarly, Vector Error Correction Technique was used on annual time series data by Osabuohien, Soogun, and Urhie (2017) to highlight the relative relevance of domestic investment (DI) and foreign direct investment (FDI) on economic performance in Nigeria between the period 1980 and 2016. The study data was sourced from the Central Bank of Nigeria Statistical Bulletin and findings indicated that both domestic investment (DI) and foreign direct investment (FDI) had a significant impact on Nigeria's economic performance; however, domestic investment was found to have a much greater influence than foreign direct investment, with a pronounced difference in both the level of significance and size. Thus, the study's recommendations included the need for the government to foster an environment that will, on the one hand, enable domestic investors to prosper and, on the other, be complemented by foreign investment.

Igyo, Simon, and Iorlumun (2016) used time series data for a period of 31 years to analyze the effect of deposit money banks' credit on investment in Nigeria. Their empirical findings revealed that both total deposit money banks credit and interest rate exert a favorable and significant influence on investment in Nigeria. Therefore, the study recommended that more efforts be made to increase the availability of medium and long-term loans to the productive sectors, such as the manufacturing sector, agricultural sector, and small and medium enterprises as they constitute an integral growth process by significantly reducing the interest rate on credit facilities granted to the private sector.

Iya and Aminu (2015) equally employed the Error Correction Model (ECM) to estimate the effects of both domestic investment and foreign direct investment on economic growth in Nigeria. Findings from the study revealed that Nigeria's economic growth was positively influenced by foreign direct investment (FDI), domestic investment (DIN), the total foreign exchange rate (TEX), and trade liberalization (TP). They advised that the government and relevant authorities make a determined effort to develop policies aimed at fostering an environment that is favorable for investment so that both Nigerian and foreign investors will be encouraged to increase their inclination to invest in the nation.

Using an error correction mechanism, Duruechi and Ojiegbe's (2015) study looked at the factors that influenced investments in the Nigerian economy between 1990 and 2013. The empirical findings indicated that investments, inflation, government spending, exchange rates, and interest rates had a long-term link. The study also makes the assumption that only government spending has a substantial impact on investment in Nigeria, leading it to draw the conclusion that investment in Nigeria is still very low and should be promoted to have a good impact on the economy as a whole. Since they are crucial components for boosting investments in Nigeria, the government should evaluate its policies on investments and pay more attention to the factors that determine them, such as inflation rate, exchange rate, government spending, and interest rate.

### 3.0 Methodology

#### 3.1 Data Source and Description

Secondary data was used in this research work and information was obtained from the 2021 Central Bank of Nigeria (CBN) statistical bulletin and World Development Indicators (WDI). Annual time series data for the period between 1991 and 2021 was utilized to fulfill the objectives of the study.

#### 3.2 Model Specification

The model specified domestic investment (DINV) as the dependent variable while other variables such as domestic savings (DS), Inflation (INF), Interest rate (INT), Government Capital expenditure (GEX), Credit to private sector (CPS) and Trade openness (TRDOP) were the independent variables. The functional or mathematical model specified for this study is expressed as:

$$DINV = f(DS, INF, INT, GEX, CPS, TRDOP) \quad (1)$$

Statistically, equation two can be expressed as:

$$DINV = \beta_0 + \beta_1 DS_t + \beta_2 INF_t + \beta_3 INT_t + \beta_4 GEX_t + \beta_5 CPS_t + \beta_6 TRDOP_t + \varepsilon_t \quad (2)$$

Where:

DINV	=	Domestic Investment
DS	=	Savings
INF	=	Inflation
INT	=	Interest Rate
GEX	=	Government Expenditure
CPS	=	Credit to private Sector
TRDOP	=	Trade Openness
$\beta_0$	=	Intercept (or regression constant)
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and $\beta_6$	=	regression parameters.

Hypothesis

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq 0$$

Econometrically, we can estimate the stochastic model as:

$$\log DINV = \beta_0 + \beta_1 \log DS_t + \beta_2 INF_t + \beta_3 INT_t + \beta_4 \log GEX_t + \beta_5 \log CPS_t + \beta_6 \log TRDOP_t + \varepsilon_t \quad (3)$$

Where  $\varepsilon_t$  = Error term

The model is a semi log model. This was done to normalize the data. The ARDL form can be expressed as:

$$\begin{aligned} LOGDINV = & \beta_0 + \beta_1 LOGDINV_{t-1} + \beta_2 LOGDS_{t-1} + \beta_3 INF_{t-1} + \beta_4 INT_{t-1} + \beta_5 LOGGEX_{t-1} + \\ & \beta_6 LOGCPS_{t-1} + \beta_7 TRDOP_{t-1} + \sum_{k=1}^n \alpha_1 LOGDINV_{t-k} + \sum_{k=0}^n \alpha_2 LOGDS_{t-k} + \sum_{k=0}^n \alpha_3 INF_{t-k} + \\ & \sum_{k=0}^n \alpha_4 INT_{t-k} + \sum_{k=0}^n \alpha_5 LOGGEX_{t-k} + \sum_{k=0}^n \alpha_6 LOGCPS_{t-k} + \sum_{k=0}^n \alpha_7 TRDOP_{t-k} \end{aligned} \quad (4)$$

Where:

$\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7$  = regression parameters

### 3.3 Estimation Techniques and Procedure

ARDL model and Error Correction model (ECM) were the methods of analysis used in this study. This approach is most suitable for a model where the unit root test result showed that the variables were stationary at a mixture of level I (0) and first difference I (1). The ARDL model has the ability to account for both the short run and long run effects of the independent variables on the dependent variable.

## 4.0 Results and Discussion

### 4.1 Pre-Estimation Result

The pre-estimation result is presented in this section with the test for stationarity. Augmented Dickey-Fuller unit root tests showed that Domestic investment, Domestic savings, Inflation, Interest rate, Credit to private sector, Government expenditure and Trade openness were stationary at level I (0) and first difference I (1). The summary of the result is on Table 1 below

**Table 1: Result of Stationarity (Unit Root) Test**

Variable	ADF Statistic	1% Critical Values	5% Critical Values	10% Critical Values	Order of Integration	p-Value
LOGDINV	-5.020309	-4.394309	-3.612199	-3.243079	I(0)	0.0026
LOGDS	-6.668176	-3.737853	-2.991878	-2.635542	I(1)	0.0000
INF	-7.860017	-3.724070	-2.986225	-2.632604	I(0)	0.0000
INT	-6.856742	-3.737853	-2.991878	-2.635542	I(1)	0.0000
CPS	-4.269680	-3.769597	-3.004861	-2.642242	I(1)	0.0033
GEX	-4.604506	-4.416345	-3.622033	-3.248592	I(0)	0.0067
TRDOP	-5.608872	-3.737853	-2.991878	-2.635542	I(1)	0.0001

### 4.2. Co-Integration Test

From the unit root test results, it is shown that the variables in the model are stationary at level I (0) and first difference I (1). Consequently, it is still important to test for the presence of long-run relations among the variables so as to affirm the result of the unit root test i.e., co-integrating relationship. Co-integration test was carried out to establish the existence of a long-run association

between the variables. The Autoregressive distributed lag model (ARDL) was used for the analysis and the results are presented on Table 2 below.

**Table 2: ARDL Bound Test Result**

Test statistic	Value	K	
<b>F Statistics</b>	5.071500	6	
<b>Critical value bond</b>			
<b>Significance</b>	<b>I (0)</b>	<b>I (1)</b>	<b>Decision</b>
10%	1.99	2.94	Long-run relationship
5%	2.27	3.28	Long-run relationship
2.5%	2.55	3.61	Long-run relationship
1%	2.88	3.99	Long-run relationship

A long run relationship is known to exist among variables if the value of the F-statistics is greater than the value of the upper bound (Peasaran & Shin, 1999). The result on Table 4 confirms that there is an established long run relationship between the variables specified in the model. This is because the F-statistics at 5.0715 exceeds the upper critical bound value at 1%, 2.5% and 5% levels of significance. After the confirmation of the existence of a stable long run relationship among the estimated variables we go further to estimate the short run and long run parameters of the variables and the result is presented on Table 3 and 4.

#### **4.3 Error Correction Model for Determinants of domestic Investment in Nigeria.**

Table 3 presents the error correction regression results for the model. An error correction model estimates the speed of adjustment to equilibrium in a cointegrating relationship. Here, the Error Correction Term (ECT) derived from the equation is included among the regressors and denoted as CointEq (-1). The coefficient associated with these regressors is typically the speed of adjustment to long run equilibrium in every period. If the variables are indeed co-integrated, it is typically expected that this coefficient be negative and highly significant. The speed of adjustment for the error correction model in this study is negative at (-0.8032) and highly significant at 1 % with (0.0000) probability value. The speed of adjustment does conform to the a-priori expectation of the error correction term which is negative and statistically significant at 1% , confirming that a long-run (co-integrating) relationship exists between domestic investment and the set of explanatory variables. The size of this coefficient implies that adjustment to disequilibria towards long-run equilibrium via the correction term is relatively strong, as 80.32% percent of disequilibrium in a given year is corrected in the following year. This also means that it takes about a year to eliminate 80.32% of deviation between the actual and equilibrium domestic investment outcomes as determined by the fundamentals. It is also shown that Domestic Investment outcome is moderate to adjust back to equilibrium, implying policy effectiveness or flexibility. The value of the coefficient of determination ( $R^2$ ) of 0.8752 implies that about 87.52 per cent of the total variation in Domestic Investment is explained by changes in the exogenous variables while 12.46% is explained by the error term. The summary of the regression result in Table 3 is explained as follows;



Current year values of domestic savings were found to have significant positive relationship with domestic investment at 5% level of significance. This implies that, a 1% increase in domestic savings will lead to 11% increase in domestic investment in Nigeria. Therefore, the null hypothesis of no relationship is rejected. This result is also in line with the work of David, Sakanko and Obilikwu (2020). On the other hand, current year values of trade openness had significant negative effect on domestic investment in Nigeria at 1 per cent level of significance. The one-year lagged values of trade openness had significant positive effect on domestic investment. This implies that 1-unit increase in trade openness will lead to a 0.0035 decrease in domestic investment in the current year but lead to 0.0866 increase in the one lagged year.

Furthermore, the coefficient of Inflation was significant and negatively signed both in the current year and the one-year lag showing that the variable has an inverse relationship with domestic Investment. The variable is also statistically significant at 5% and 1% level of significance respectively. This implies that a 1unit increase in the value of inflation will lead to a 7% decrease in domestic investment in the current year but approximately 18% decrease in the lagged year. This result is according to literature confirming that when inflation is high, stock investments typically have a lower return. Inflation shocks many times reduce available funds for investment. (Nkwagu et al., 2021).

Government Capital Expenditure has a negative significant effect on domestic investment, implying that a unit increase in government expenditure will lead to a 22.13% reduction in domestic investment. This is as a result of government capital expenditure having a crowd out effect on domestic investment.

**Table 3: Error correction model (Short run)**  
**Dependent Variable: D(DINV)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOGDS)	0.1062**	0.0425	2.4967	0.0281
D(LOGDS(-1))	0.0866*	0.0404	2.1411	0.0535
D(TRDOP)	-0.0035***	0.0006	-5.7993	0.0001
D(TRDOP(-1))	0.0020***	0.0006	3.1708	0.0081
D(LOGINF)	-0.0686**	0.0262	-2.6220	0.0223
D(LOGINF(-1))	-0.1757***	0.0232	-7.572	0.0000
D(LOGGEX)	-0.0064	0.0320	-0.2003	0.8446
D(LOGGEX(-1))	-0.2213***	0.0392	-5.6509	0.0001
CointEq(-1)*	-0.8032***	0.1002	-8.0149	0.0000
R-squared	0.875203			
Adjusted R-squared	0.822657			

\*\*\*, \*\* and \* represent 1%, 5% and 10% levels of significance

Source: Author's Computation, 2023

#### **4.4 Long run results for determinants of domestic Investment in Nigeria.**

The result of the long run parameters is presented on Table 6 below. The table illustrates that trade openness has a significant negative relationship with domestic investment in Nigeria. Specifically, it means that a unit increase in trade openness will lead to a reduction in domestic investment in

Nigeria. Hence, the null hypothesis of no relationship is rejected. This result is also in line with the work of David, Obilikwu and Sakanko, (2020). None of the other variables had significant relationship with domestic investment in the long run.

**Table 4: Long run model**  
**Dependent Variable: D(DINV)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGDS	-0.023875	0.066008	-0.361704	0.7239
INT	0.012408	0.008757	1.416901	0.1819
LOGCPS	0.219652	0.185816	1.182096	0.2601
TRDOP	-0.006933***	0.002071	-3.347426	0.0058
LOGINF	0.036682	0.070974	0.516839	0.6147
LOGGEX	0.124224	0.089285	1.391313	0.1894
C	12.67395	0.747569	16.95355	0.0000

\*\*\*, \*\* and \* represent 1%, 5% and 10% levels of significance

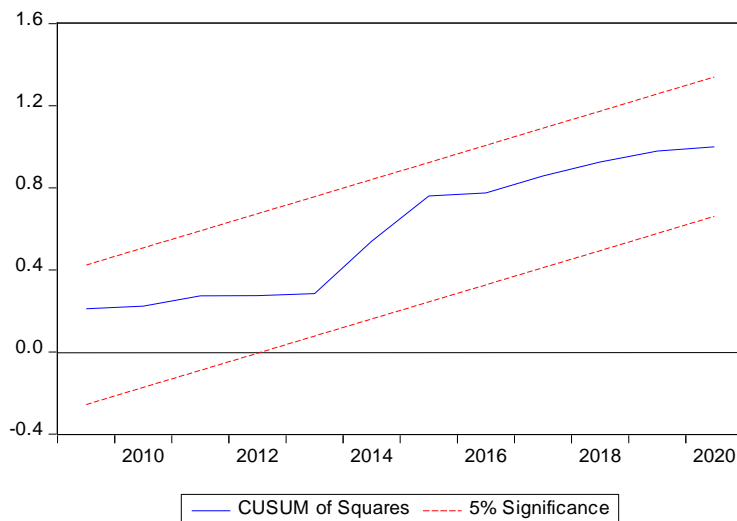
Source: Author’s Computation, 2023

**4.5 Post Estimation Test (Stability Tests)**

This section helps to validate the Error Correction Model results in order to ascertain the usefulness of the estimated model for policymaking. As far as the diagnostic checks are concerned, the model is a good fit and it passes all the diagnostic tests. The R square value is 87.52% showing that almost 88 percent variations in the dependent variables are represented by the model and the rest by the error term. The CUSUMSQ (cumulative sum of recursive residuals of square) is used for testing the stability of the parameters. Figure 1 is the graphical plot of the CUSUM of square points. The CUSUM of squares plot lies within the critical lines. This suggest that the estimated model is relatively stable and that valid conclusions can be drawn from its estimated coefficients.

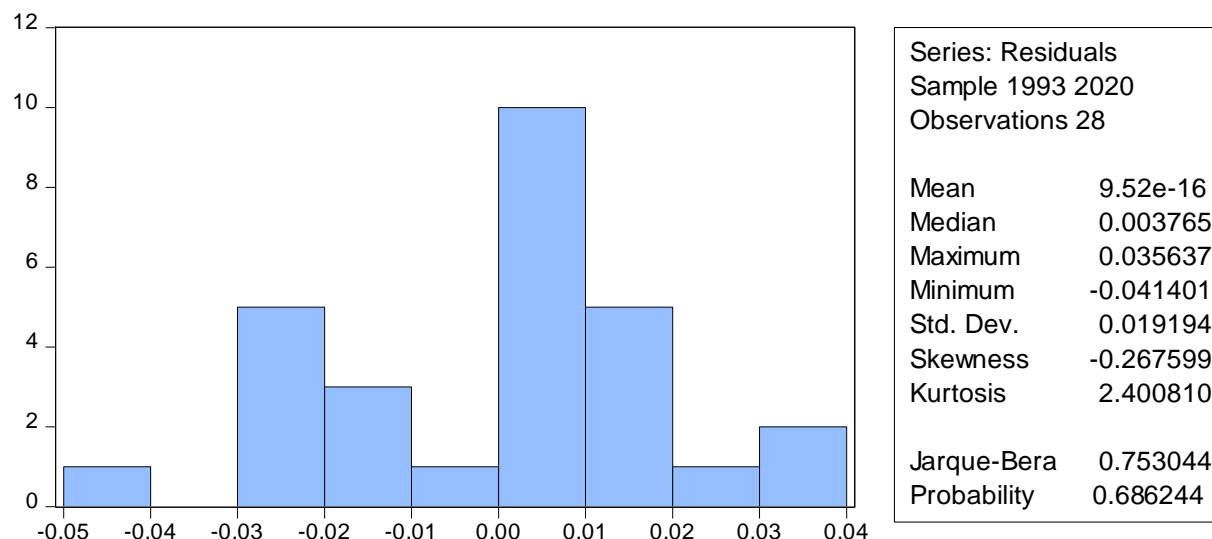
These tests are suggested by Pesaran & Shin (1999) for measuring the parameter stability.

**Figure 1: CUSUM of SQUARE**



The normality test result on figure 2 also revealed that the sample variance is normally distributed since Jaque-Bera probability is not significant at 5%. The sample variance of the estimate for the variables are normally distributed when the probability value of Jaque-Bera is not significant.

**Figure 2 Normality test**



The Breusch-Godfrey serial autocorrelation and heteroskedasticity test shown on Table 5 shows that there is no serial autocorrelation in the error term and also no heteroskedasticity among the variables specified in the model. The result of these diagnostic tests further help to confirm the validity of the results for policy inferences.

**Table 5: Other Results of Residual Diagnostic Tests**

Test	$X^2$ Value	Probability Value
Breusch-Godfrey Serial Correlation test	3.8378	0.0580
Heteroskedasticity test	0.7305	0.7208
*Jarque-Bera test	0.7530	0.6862

*Source: Author's Computations, 2023*

## **5.0 Summary, Conclusion and Recommendations**

### **5.1 Summary**

This study presents an empirical analysis of the Determinants of Domestic Investment in Nigeria for the period between 1981 and 2021 employing various techniques of econometric analysis.

The objectives of this study are to see how domestic savings, inflation, credit to the private sector government expenditure, interest rate, and trade openness influence domestic investment in Nigeria.

In order to achieve the set objectives, Econometric techniques such as unit root test through the use of Augmented Dickey Fuller test was carried out. This was done to avoid the problem of spurious results that arise due to non-stationary data and the use of a co-integration model to estimate a long-run static relationship of the model was carried out. The Augmented Dickey Fuller unit root stationarity test results reveals that the variables were stationary at levels, I (0) and first difference, I (1). The ARDL model was then employed to determine if there was a long run relationship among the variables.

The Auto-Regressive Distributive Lag Model (ARDL model) and Error Correction Model (ECM) were also employed to determine the impact of the independent variables on the dependent variable. The ARDL result shows that a long run relationship did exist among the variables which support the view that the variables, both dependent and independent variables establish a long run relationship. This is because the F-statistics of the ARDL model exceeds the upper bound results at 1%, 2.5%, 5% and 10 % levels of significance and this shows that there is a long run relationship between domestic investment and the specified explanatory variables.

The short run model results (ECM) show that domestic savings significantly increases domestic investment. On the other hand, trade openness, inflation and government expenditure significantly reduce domestic investment in Nigeria over the period of study. The speed of adjustment does conform to the a-priori expectation of the error correction term which is negative and statistically significant at 1%. The coefficient of the lagged error term or equilibrium error correction model or CointEq (-0.8032), is negative and significant, confirming that a long-run (co-integrating) relationship exists between domestic investment and the set of explanatory variables. The long run model results revealed that only trade openness had significant negative relationship with domestic investment. All the other variables were found to be non-significant.

## **5.2 Conclusion**

Based on the above findings, there exists co-integrating relationship among the value of Domestic Investment and the independent variables in the model. The speed of adjustment does conform to the a-priori expectation of the error correction term which is supposed to be negative and statistically significant at 1%. The short run dimension of the result reveals that key variables that significantly determines domestic investment in Nigeria are domestic savings, inflation, trade openness and government expenditure. Domestic savings significantly increases domestic investment attesting to the existence of crowd in effect, while trade openness, inflation and government expenditure significantly reduce domestic investment attesting to the existence of crowd out effect. Furthermore, long run results revealed that the Nigerian domestic investment dynamics only responds significantly to trade openness which was found to significantly reduce domestic investment in the long run.

## **5.3 Recommendations**

Based on the findings above, the study recommends that the Nigerian government should work hand in hand with stakeholders in the process of formulating, evaluating and implementing new trade and monetary policies that will have a positive impact on the Nigerian economy. This will in turn have a positive impact on the Nigerian investment.

Nigerians should diversify the economy in terms of export commodity so that her level of trade will not be bias towards import. Government should increase on capital expenditure that will create enabling environment for Nigerian domestic investors.

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