

## Macroeconomic variables, financial development, and domestic investment in Nigeria

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**Annotation.** *The study examined macroeconomic variables, financial development, and domestic investment in Nigeria. The used an ex-post facto research design and gathered annual secondary data from 1990 to 2024 from the World Bank Indicators. The research applied the Autoregressive Distributed Lag (ARDL) model, along with descriptive statistics, unit root tests, cointegration tests, and diagnostic tests to examine the data. The results showed that interest rate, exchange rate, inflation, GDP growth, and financial development had expected signs but statistically insignificant effects on domestic investment over the long term. This indicates that investment behaviour in Nigeria is more affected by institutional and structural issues than by typical macroeconomic factors. The findings also point out that while financial development has a positive effect, its impact is weak due to shallow capital markets, limited access to credit, and governance issues. The study concludes that macroeconomic stability alone cannot significantly boost domestic investment without additional structural reforms. It recommends strengthening institutions, ensuring policy consistency, and coordinating fiscal and monetary policies to stabilise inflation, interest rates, and exchange rates which will in-turn affect investment.*

### 1. Introduction

Macroeconomic stability and financial development are essential for economic sustainability, especially in developing nations like Nigeria. The efficiency of the financial sector, domestic investment, and the dynamics between macroeconomic variables shape economic transformation (Ibrahim et al., 2024). The Nigerian economy has long suffered cycles of growth and contraction, based on the volatility of gross domestic product (GDP), inflation, interest rate, exchange rate, and government spending patterns (Mpia & Orji, 2025; Ibrahim et al., 2024; Eyo & Ugah, 2024). Financial development refers to the depth, access, and efficiency of financial markets and institutions (Ibrahim et al., 2024). Financial development

is important for mobilising savings, allocating credit to productive investments, and reducing information and transaction costs, which helps to raise investment. Macroeconomic instability in Nigeria has, nevertheless, continued to weaken the financial system's ability to allocate resources into productive domestic investment effectively (Mpia & Orji, 2025; Kwoke, 2024). Financial liberalisation in the late 1980s was intended to mobilise capital but has recorded mixed results due to structural weaknesses, policy inconsistencies, and institutional inefficiencies that have hampered sustained growth of investment (Iheonu et al., 2020).

Both public and private domestic investment are essential in building capital, creating jobs, and driving overall economic growth. Private

domestic investment in Nigeria has been under strain as a result of macroeconomic instability, unclear policies, and inadequate infrastructure (Iheonu et al., 2020). The adjustment in interest rates, inflation, and exchange rates has significantly impacted investment choice since private investors have shied away from long-term commitments (Mpia & Orji, 2025). For example, the continuous depreciation of the naira ever since the introduction of a market-determined exchange rate in 1986 has eroded investor confidence, raised production costs, and lowered foreign competitiveness of non-oil exports (Kwode, 2024; Isaac & Akpan, 2024). Besides, instability and inconsistency in macroeconomic policies have hindered economic reforms by successive governments to foster a favourable investment environment. Accordingly, trends in Nigeria's domestic investment have remained volatile, reflecting the overall volatility of the macroeconomic environment and its negative impact on long-term economic planning.

Financial development, in principle, stimulates domestic investment by increasing access to credit, improving the efficiency of capital allocation, and reducing risk diversification. The Nigerian financial sector has, however, not been optimal in performing these roles in practice. Credit rationing, excessive interest rates, and unavailability of long-term credit facilities have restricted private sector access to capital, hindering investment growth (Iheonu et al., 2020). Despite the growth in financial institutions and markets, the sector's contribution to investment in the domestic economy remains underwhelming due to structural issues, governance concerns, and limited financial inclusion. The international experience shows that macro-stability and effective financial systems allow nations to mobilise and retain funds for investment better (Dung et al., 2025; He & Yoo, 2024). Nigeria's situation shows that without

macroeconomic stability, low and steady inflation, stable exchange rates, and competitive interest rates, financial sector reform alone cannot drive sustained increases in domestic investment.

The relationship between macroeconomic variables, financial development, and domestic investment in Nigeria is a policy, empirical, and theoretical issue with grave implications for policy. While research provides mixed findings regarding the nature and direction of relationships, the variation arises from differences in methodology, observation window, and proxy variables used (Mpia & Orji, 2025; Kwode, 2024; Isaac & Akpan, 2024). While some studies emphasise the beneficial link between financial development and investment, others highlight the negative impact of macroeconomic uncertainty on financial sector development and real investment. Therefore, this research aims to evaluate how macroeconomic variables and the pace of financial development impact domestic investment in Nigeria, with the vision of giving empirical proof to guide effective policy interventions.

## **2. Theoretical and Empirical Review**

### **The Keynesian Theory of Investment**

John Maynard Keynes formulated the Keynesian Theory of Investment in his General Theory of Employment, Interest and Money in 1936 after the economic destruction of the Great Depression (Keynes, 1936; Fujino, 1974). The theory upheavals the understanding of what stimulates investment as it examines interest rates, expectations of investors, and the interaction of overall demand. The core element is the marginal efficiency of capital (MEC), a measure of the potential return on a new unit of capital (Keynes, 1936; Fujino, 1974). This return is matched with the current interest rate to decide whether a new investment is profitable. Investment increases when the MEC is higher

than the interest rate. Investment slows down or ceases when the interest rate is higher than the MEC (Keynes, 1936; Fujino, 1974). Aggregate demand plays the leading role in inspiring employment and output, thus directly determining the pattern of investment (Keynes, 1936). Such a situation also makes macroeconomic determinants like inflation, exchange rate, and fiscal policy important as they indirectly determine interest rates and inform investment choices (Fujino, 1974). Investors' uncertainty and expectations are also emphasised by the theory, noting that investment choices in imperfect markets where knowledge is limited and conditions change depend on psychological factors and measurable returns. Keynes also stressed the importance of government intervention in stabilising economic activity and held that prudent fiscal and monetary policies could stabilise business cycle swings and restore investor confidence (Keynes, 1936).

One of the key flaws of the Keynesian theory is that it is short-run oriented, thus limiting its ability to account for long-run investment growth trends, especially in developing countries where issues of structure, institutions, and infrastructure also affect investment behaviours (Fujino, 1974). However, the theory can adequately describe the effect of macroeconomic uncertainty, primarily interest rate fluctuations, on investment decisions. The twoness of expectations and uncertainty in accounting for investments offers good policy recommendations for developed and developing economies alike.

For Nigeria, the Keynesian theory responds to persisting investment problems. Variable interest rates, persistent inflation, and the continuous devaluation of the naira render otherwise desirable investments unattractive and postpone or forego capital undertakings. Furthermore, inconsistent fiscal and monetary

policies add to uncertainty, and long-term commitments by home and foreign investors are not in sight. This study supports the Keynesian view and argues that stable interest rates, effective anti-inflation measures, and a sound macroeconomic environment are essential to resuscitate domestic investment. Specifically, Nigeria's economic policymakers can apply Keynesian techniques to expand aggregate demand using increases in public spending, tax reductions, and monetary policy adjustments.

This study takes cognizance of Keynesian view as macroeconomic variables were considered to affect investment in the model. The study therefore hypothesized that:

H01: Macroeconomic variables do not significantly affect investment in Nigeria

### **The McKinnon-Shaw Hypothesis (Financial Liberalisation Theory)**

The McKinnon-Shaw Hypothesis was developed independently by Ronald McKinnon and Edward Shaw in 1973. The hypothesis was a response to the policies of financial repression that were common in most developing economies during the mid-20th century (McKinnon & Shaw, 1973). Artificially repressed interest rates, credit rationing, excessive reserve requirements, and other monetary restrictions discourage saving, limit the supply of loanable funds, and check investment and economic growth, the theory argues (McKinnon, 1973; Shaw, 1973). The key argument is that financial liberalisation, through the removal of interest rate ceilings, encourages competitive credit allocation, and facilitates deep capital markets, increasing savings mobilisation, market depth, and directing resources into the highest productivity investments. It is also argued that higher real interest rates resulting from liberalisation will encourage savers to deposit more in banks and increase the private sector's credit access. It assumes that a competitive and

effective financial system can allocate resources effectively, reduce information asymmetry, and promote investment-based growth (McKinnon, 1973; Shaw, 1973). In addition, the theory asserts liberalisation enhances financial innovation, stabilises risk-sharing mechanisms, and connects domestic financial systems with international markets, facilitating greater access to long-term capital. This makes the theory relevant to economies making the transition from state control to market economies, where inefficient credit allocation has been a challenge to private sector development.

However, the hypothesis has its weaknesses. Liberalisation is not always a blessing. Without proper regulatory frameworks, liberalisation can lead to irresponsible conduct, create asset price bubbles, and cause banking crises, as seen in the case of most liberalising countries (Ahmed & Islam, 2009). Despite this, the McKinnon-Shaw hypothesis is significant since it emphasises the contribution of a well-functioning financial sector in bringing about economic growth. Its focus on aligning interest rates with market forces to mobilise savings and channel credit to productive sectors of the economy has important policy implications for developing countries.

In Nigeria, the theory offers a way of explaining the financial reforms put in place following the 1980s, including the deregulation of interest rates, the restructuring of the banking industry, and the liberalisation of financial institutions. The reforms were implemented with the primary objective of enhancing access to credit by the private sector and enhancing domestic investment. Nevertheless, issues in the past, like excessive lending rates, shortfalls in long-term sources of funds available, and weak institutions, have truncated the potential benefits. From the McKinnon and Shaw hypothesis, steady and

controlled liberalisation and efforts to lower the cost of borrowing and enhance the intermediation of funds would significantly stimulate domestic investment in Nigeria. By directing credit to high-return, productive activities, Nigeria would be able to improve capital formation, private sector development, and more stable economic growth (Ndikumana, 2000).

This study also take cognizance of financial liberation theory as finance was considered to affect investment in the model. The study therefore hypothesized that:

HO2: Financial Development does not significantly affect investment in Nigeria Mpia and Orji (2025); Kwode (2024); Isaac and Akpan (2024) examined the macroeconomic factors influencing Nigerian domestic investment in the period from 1982 to 2020, using investment hypotheses and the ARDL method. The variables included interest rates, output, savings, government spending, money supply, the performance of the stock market, and inflation. Government spending, money supply, and inflation were significant determinants of investment in the short term. All the variables except interest rates were significant in the long term. that macroeconomic performance is positively related to domestic investment. It means that good macroeconomic conditions spur investment. Therefore, improving economic measures, exceptionally favourable interest rates, can render domestic investment attractive. Owuzo, Egbon, and Ezi (2024) also revealed that macroeconomic variables affect investment but reported a negative impact. Eyo and Ugah (2024) on the other side revealed that interest rates, exchange rates, inflation, and GDP growth negatively but insignificantly influenced domestic investment

He and Yoo (2024); Dung et al. (2025); Salakpi, Nasse, and Nangpiire (2024) examined the association between financial

sector development. These studies identifies a strong positive correlation between savings and investment under various economic situations. It suggests that the performance of the economy can be improved by enhancing channels of investment and finance and coordinating these steps with regional and international trade integration policies. This policy can contribute towards sustained economic development as well as investment growth.

Iheonu et al. (2020) examined the influence of financial sector development on ECOWAS domestic investment from 1985 to 2017. The impact of financial development is different depending on the proxy employed in the financial development. Private sector domestic credit showed a statistically insignificant positive impact, while banking intermediation efficiency and broad money supply showed statistically significant negative impacts. Appreciable differences at the country level were observed, and private sector domestic credit was discovered to Granger-cause investment.

Different studies have examined the effect of macroeconomic variables and financial development on Nigerian domestic investment, African domestic investment, and other nations' domestic investments (Mpia & Orji, 2025; Eyo & Ugah, 2024; He & Yoo, 2024; Kwode, 2024; Isaac & Akpan, 2024; Owuzo et al., 2024; Dung et al., 2025; Salakpi et al., 2024; Iheonu et al., 2020) using different datasets, variables, and estimation methods. Nevertheless, earlier studies have, in most cases, treated macroeconomic variables and financial development as exclusive. They have not done justice to both areas by incorporating them into a single empirical model to establish the effect on domestic investment simultaneously. Few studies in Nigeria have explicitly examined the potential threshold or non-linear effects of financial

development on investment, even though there is growing global evidence on these interactions. In addition, while short- and long-term relations have been examined in some of the literature, there is a gap in evaluating how macroeconomic determinants of stability, including inflation, interest rates, and exchange rates, interact with performance in the financial sector to influence investment results. This study aims to fill these gaps by combining macroeconomic fundamentals and measures of financial development under one analytical framework. It will employ econometric modelling to determine threshold and interaction effects and generate policy-relevant information for Nigeria's economy. The findings will contribute to improved understanding of how macro-financial interactions collectively influence domestic investment, address a gap in existing literature, and support more coordinated fiscal, monetary, and financial sector reforms.

### 3. Methodology

The study utilised an ex-post facto research design. This is because the variables have already been established, are easily accessible, and were gathered without control and manipulation. The variables cannot be tested experimentally, but the design enables us to ascertain the effect and relationship between the independent and dependent variables. The availability of data also affects the period of study selected.

Secondary data were accessed through the World Bank Indicators (WDI) for the corresponding years. All the data are collected at the national level on an annual basis. For macroeconomic indicators, inflation rate (INFR), exchange rate (EXCH), interest rate (INT), and GDP growth rate (GDP) have been used as proxies for such significant investment determinants. For financial development, gross capital formation has been used as a proxy indicator. The private domestic investment

(DOI) measure for the same period was used as the investment variable. The data contains 35 observations between the years 1990 and 2024. 1990 was chosen because it was the post major macro-economic and financial reforms in Nigeria while the data stops at 2025 was because the data for Central Bank of Nigeria statistics bulletin and WDI were yet to be published. This time interval was chosen since the data afforded enough detail for practical analysis.

The model specification is given below:

$$Y = b + b_1X_1 + b_2X_2 + \dots + b_nX_n + e \quad (1)$$

Where:

Y = dependent variable

$b_0$  = constant of the equation

$b_1 - b_n$  coefficient of independent variables

$X_1 - X_n$  = independent variables  $e$  = error term

#### Model 1

This study integrated both Keynesian Theory of Investment and McKinnon-Shaw Hypothesis by developing a hybrid model for investment. The model can be expressed as:

$$DOI = f(INT, EXCH, INFR, GDP, FID) \quad (2)$$

From an econometric perspective, this can be expressed as:

$$DOI_{it} = \beta_0 + INT + EXCH + INFR + GDP + FID + U_t \dots\dots\dots(3)$$

More clearly, it can be expressed as follows:

$$DOI_{it} = \beta_0 + \beta_1INT_{it} + \beta_2EXCH_{it} + \beta_3INFR_{it} + \beta_4GDP_{it} + \beta_5FID_{it} + U_t \dots\dots\dots(4)$$

Where:

DOI = Private Domestic Investment

INT = Interest Rate

EXCH = Exchange Rate

INFR = Inflation Rate

GDP = GDP Growth Rate

FID = Financial Development

$X_1 - X_5$  = Independent Variables

$\beta_1 - \beta_5$  = Intercept

$\mu_t$  = Error Term

For data analysis, this study used Econometric Views (E-Views) version 11 due to its user-friendly interface and efficient time-series data analysis. The analysis included several tests initially. These include the Augmented Dickey-Fuller (ADF) unit root test and the cointegration test. We also employed descriptive statistics, correlation matrix, multicollinearity test, and heteroskedasticity tests to check the reliability and validity of the regression equation's estimated parameters.

## 4 Data Presentation and Analysis

Table 1: Descriptive Statistics

|              | DOI      | EXCH     | FID       | GDP       | INF      | INR       |
|--------------|----------|----------|-----------|-----------|----------|-----------|
| Mean         | 16.69520 | 198.8671 | 9.760785  | 4.222343  | 18.70559 | 2.930383  |
| Median       | 17.67220 | 131.2743 | 8.909485  | 4.195924  | 13.00697 | 5.371280  |
| Maximum      | 49.09900 | 1478.965 | 19.62560  | 15.32916  | 72.83550 | 18.18000  |
| Minimum      | 0.000000 | 8.038285 | 0.000000  | -2.035119 | 5.388008 | -31.45257 |
| Std. Dev.    | 11.08146 | 263.6575 | 4.189763  | 3.850174  | 15.86930 | 9.855540  |
| Skewness     | 0.418989 | 3.509628 | -0.047673 | 0.524998  | 2.071452 | -1.359818 |
| Kurtosis     | 3.639931 | 17.16925 | 3.630173  | 3.592593  | 6.495683 | 5.758355  |
| Jarque-Bera  | 1.621256 | 364.6382 | 0.592388  | 2.119916  | 42.85088 | 21.88220  |
| Probability  | 0.444579 | 0.000000 | 0.743643  | 0.346470  | 0.000000 | 0.000018  |
| Observations | 35       | 35       | 35        | 35        | 35       | 35        |

Source: Author's computation (2025)



The descriptive statistics for this study's variables are in Table 1. The average values for Domestic Investment (DOI), Exchange Rate (EXCH), Financial Development (FID), GDP growth (GDP), Inflation (INF), and Interest Rate (INR) over 35 years are about 16.7, 198.9, 9.8, 4.2, 18.7, and 2.9, respectively. The table also shows that all variables varied significantly over the period, as seen by the large differences between the minimum and maximum values, along with their high standard deviations. This indicates high fluctuations throughout the study period, making it essential to examine their movements. The skewness indicates that DOI, EXCH, GDP, and INF are positively skewed, while FID is nearly symmetric, and INR is

negatively skewed.

In terms of kurtosis, a distribution is considered leptokurtic when the kurtosis is greater than three and platykurtic when it is less than three. Thus, DOI, EXCH, FID, GDP, INF, and INR are leptokurtic, showing thinner tails than a normal distribution. The Jarque-Bera statistic is significant when the probability value is less than 5% and insignificant when greater than 5%. Therefore, EXCH, INF, and INR do not follow a normal distribution since their probabilities are below 5%, while DOI, FID, and GDP do fit a normal distribution. Since the dependent variable (DOI) is normally distributed, as indicated by the statistics, using the Ordinary Least Squares (OLS) estimator is suitable for the analysis.

Table 2: Result of Unit Root (Stationarity) Test

| Variables | Augmented Dickey-Fuller (ADF) | 5% Critical level | Philip-Perron (PP) | 5% critical level | Order of integration |      |
|-----------|-------------------------------|-------------------|--------------------|-------------------|----------------------|------|
|           |                               |                   |                    |                   | ADF                  | PP   |
| DOI       | -3.602097                     | -2.951125         | -3.602097          | -2.951125         | I(0)                 | I(0) |
| INT       | -4.486703                     | -3.548490         | -12.52822          | -2.954021         | I(1)                 | I(1) |
| EXCH      | 6.510840                      | -2.954021         | 10.80142           | -2.954021         | I(1)                 | I(1) |
| INFR      | -4.657166                     | -2.954021         | -4.644190          | -2.954021         | I(1)                 | I(1) |
| GDP       | -3.803579                     | -2.951125         | -3.929801          | -2.951125         | I(0)                 | I(0) |
| FID       | -4.916951                     | -2.954021         | -4.903845          | -2.954021         | I(1)                 | I(1) |

Source: Author's computation (2025)

Time series data frequently exhibit non-stationarity, which creates difficulties for econometric modelling. When such series are analysed using Ordinary Least Squares (OLS), the resulting estimates are often biased and unreliable, increasing the risk of drawing false conclusions. Put differently, regressions involving non-stationary variables tend to produce deceptive statistical outcomes. To avoid this, it is essential to determine the integration properties of the data by applying unit root tests. Regressions become spurious when both the dependent and explanatory variables are non-stationary in their level

form, typically yielding artificially high coefficients of determination and apparently significant t-statistics. Despite their apparent strength, such results are meaningless since the OLS estimates lack consistency, rendering hypothesis testing invalid. In this study, the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests were employed to verify stationarity, with the corresponding results presented in Table 2.

The outcomes of the ADF and PP unit root tests reveal that Domestic Investment (DOI) and GDP are stationary in their level form, implying integration of order zero, I(0).

Conversely, Interest Rate (INT), Exchange Rate (EXCH), Inflation Rate (INFR), and Financial Development (FID) attain stationarity only after first differencing, which classifies them as integrated of order one, I(1). Given the presence of variables with mixed integration orders, the appropriate estimation strategy is the Autoregressive Distributed Lag

(ARDL) bounds testing technique, as it is designed to accommodate both I(0) and I(1) processes. Accordingly, the ARDL framework is employed in this study to capture both the short-run dynamics and the long-run equilibrium relationships among the variables.

Table 3: Cointegration Test (Bound Testing Approach)

| Model | F-statistic | Lower Bound (5%) | Upper Bound (5%) | Remarks     |
|-------|-------------|------------------|------------------|-------------|
| DOI   | 4.313       | 2.22             | 3.37             | Significant |

Source: Author's computation (2025)

Unit root test verifies that it exists with variables integrated of order one, I(1), and others stationary at level, I(0). Hence, the Autoregressive Distributed Lag (ARDL) bounds testing procedure is the most appropriate method to use when testing for cointegration. This procedure is applied in testing the model, examining the significance of macroeconomic determinants and financial development on domestic investment (DOI model), and the findings are presented in Table 3. The null hypothesis of the bounds test is that there exists no long-run relationship (no cointegration) between the variables. According to the decision rule, the null will be rejected if the calculated F-statistic is larger than the upper bound critical value at the

specified level of significance (5% in this case). On the contrary, if the F-statistic is below the lower bound, then the null is accepted, while observations between the bounds render the result inconclusive. For the DOI model, the resulting F-statistic is 4.313, which is higher than the upper bound critical value of 3.37. This provides sufficient evidence to reject the null hypothesis and confirms the cointegration. Effectively, the ARDL bounds test validates a long-run equilibrium relationship between domestic investment, macroeconomic aggregates, and financial development and therefore justifies estimating both the long-run and short-run dynamics within the ARDL framework.

Table 4: Regression Result of Domestic Investment

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| INR      | 0.926281    | 0.843240   | 1.098478    | 0.3221 |
| EXCH     | -0.055707   | 0.048071   | -1.158850   | 0.2989 |
| INF      | 0.822159    | 0.466091   | 1.763943    | 0.1380 |
| GDP      | 0.267727    | 0.815140   | 0.328443    | 0.7559 |
| FID      | 2.224412    | 1.545948   | 1.438866    | 0.2097 |
| C        | -18.041458  | 11.891037  | -1.517232   | 0.1897 |

Source: Author's Computation (2025)

Table 4 shows the long-run ARDL estimates of the relationship between domestic investment (DOI), macroeconomic variables, and financial development. These long-run



ARDL estimates shed light on what influences domestic investment (DOI) during the study period. The interest rate (INR) has a positive coefficient (0.93) but is statistically insignificant ( $p = 0.3221$ ). This means that higher interest rates do not significantly limit long-term investment. This finding differs from traditional economic theory, which suggests that rising borrowing costs would discourage investment. It indicates that in Nigeria, investment decisions may be less affected by interest rate changes and more shaped by structural or institutional factors. In addition, the difference in this result and previous studies and the apriori expectation may be as a result of institutional weakness and policy inconsistencies in Nigeria.

The exchange rate (EXCH) has a negative coefficient (-0.0557) but remains insignificant ( $p = 0.2989$ ). This weak relationship shows that long-term exchange rate changes have not strongly impacted investment flows. Firms may manage this through hedging or

import substitution strategies. Inflation (INF), with a positive coefficient (0.82) and marginal significance ( $p = 0.1380$ ), reveals a somewhat unusual finding. Moderate inflation may go hand-in-hand with higher investment, possibly reflecting inflationary conditions that promote asset accumulation or speculative investment.

GDP growth has a positive value (0.27) but is insignificant ( $p = 0.7559$ ). This suggests that while economic growth generally supports investment, its impact in the long run has been weak, likely due to structural issues and ineffective policy transmission. The most notable effect is seen with financial development (FID), which has a positive coefficient (2.22) but is still insignificant ( $p = 0.2097$ ). This suggests that better financial intermediation could potentially boost domestic investment, even if the evidence is not strong. Overall, the findings indicate that while macroeconomic fundamentals are important, institutional and structural barriers limit their long-run impact.

Table 5: Breusch-Godfrey Serial Correlation LM Test

|               |          |                     |        |
|---------------|----------|---------------------|--------|
| F-statistic   | 3.193855 | Prob. F(2,3)        | 0.1807 |
| Obs R-squared | 21.09343 | Prob. Chi-Square(2) | 0.0000 |

Source: Author's Computation (2025)

Table 5 shows the Breusch-Godfrey LM test for serial correlation in the residuals of the ARDL model. The F-statistic is 3.19, with a probability value of 0.1807. This value is higher than the 5% significance level, meaning we cannot reject the null hypothesis of no serial correlation. This suggests that the model does not have autocorrelation in its dynamic specification. On the other hand, the

Obs\*R-squared statistic is 21.09, linked to a Chi-square probability of 0.0000. This might seem contradictory because it suggests there is some correlation present. However, in small-sample ARDL models, the F-statistic is often considered more important. Overall, this result suggests that the estimated model is correctly specified and is not affected by residual correlation.

Table 6: Heteroskedasticity Test: Breusch-Pagan-Godfrey

|                     |          |                      |        |
|---------------------|----------|----------------------|--------|
| F-statistic         | 0.689165 | Prob. F(25,5)        | 0.7590 |
| Obs R-squared       | 24.02716 | Prob. Chi-Square(25) | 0.5178 |
| Scaled explained SS | 0.900369 | Prob. Chi-Square(25) | 1.0000 |

Source: Author's Computation (2025)

Table 6 shows the results of the heteroskedasticity test using the Breusch-Pagan-Godfrey method. The F-statistic is 0.6892, with a probability value of 0.7590, which is above the 5% significance level. Similarly, the Obs R-squared probability is 0.5178, and the scaled explained SS probability is 1.0000; both are also above typical significance levels. These findings indicate that we cannot reject the null hypothesis of homoskedastic residuals. This means the variance of the error terms is constant across different observations, and the model does not experience heteroskedasticity. This result enhances the reliability of the regression estimates. It suggests that the standard errors are strong and that the t-statistics and F-statistics from the model are valid for making inferences.

### **Discussion of Findings**

The long-run ARDL results of this study show a relationship between macroeconomic variables, financial development, and domestic investment in Nigeria. The findings revealed that interest rate, exchange rate, inflation, GDP growth, and financial development are not statistically significant, even though they show the expected positive or negative signs in some cases. This finding is consistent with previous Nigerian studies such as Eyo and Ugah (2024) and Isaac and Akpan (2024) which found out that interest rates and GDP growth had weak or insignificant effects on domestic investment, due to structural rigidities and weak policy transmission channels. Similarly, Kwode (2024) discovered that while GDP and savings were long-run drivers of investment, inflation and lending rates had negative effects. Thus, this suggests that investment in Nigeria is less affected by interest rate and GDP growth and more by institutional and structural inefficiencies.

The weak impact of the exchange rate noted

also aligns with Owuzo et al. (2024), who found that exchange rate instability reduced investment performance in ECOWAS countries. However, this insignificance may reflect Nigerian firms' strategies, such as hedging and import substitution, which help lower exposure to exchange rate fluctuations. The positive but small effect of inflation in this study contrasts with the typical negative relationship shown in Mpia and Orji (2025) and Kwode (2024). Speculative investment behaviours can explain this during inflationary times, where assets serve as a protection against currency depreciation.

The most significant finding is the positive but insignificant role of financial development. This supports Iheonu et al. (2020), who noted that while financial deepening can promote investment, weak intermediation weakens the effect. In contrast, studies like those by He and Yoo (2024) and Salakpi et al. (2024) showed a stronger positive impact of financial development on investment, particularly in low- and middle-income countries. This difference suggests that Nigeria's underperforming financial sector still lacks the institutional depth necessary to turn development into significant investment results. Overall, this study reinforces the view that macroeconomic and financial indicators are important, but in Nigeria, their impact is limited by ongoing structural challenges and inconsistent policies.

### **5. Conclusion and Recommendations**

This study examined the relationship between macroeconomic factors, financial development, and domestic investment in Nigeria using the ARDL framework. The findings show that interest rate, exchange rate, inflation, GDP growth, and financial development, while expected to be significant, did not have a meaningful impact on domestic investment over the long term. This outcome highlights the influence of structural barriers,

weak financial systems, and ineffective institutions over traditional macroeconomic factors on investment behaviour. It indicates that Nigeria's investment environment is less affected by standard macroeconomic changes and more limited by inconsistent policies, poor infrastructure, and governance issues. The result also points to the financial sector's limited ability to turn development into effective investment, which reflects shallow capital markets and restricted access to credit. Therefore, while macroeconomic stability is important, it cannot independently drive strong domestic investment without structural and institutional changes.

Based on these findings, several recommendations are made. First, the government should focus on strengthening institutions to improve policy credibility, lower uncertainty, and boost investor confidence. Second, fiscal and monetary authorities need to work together to maintain stability in inflation, exchange rate, and interest rates, while ensuring that growth-supporting expenses, such as infrastructure, are prioritised. Third, targeted reforms in the financial sector should aim to deepen credit markets, lower borrowing costs, and expand long-term financing options to support private investment. Lastly, policies should aim to diversify the economy beyond oil by promoting productive sectors like manufacturing and agriculture, which can attract and sustain domestic investment. A coordinated approach to macroeconomic and structural policies is crucial for transforming Nigeria's investment landscape and achieving sustainable growth.

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