



Determinants of Domestic Investment in Nigeria

Fr. Andrew Izuchukwu Nnoje, PhD

Department of Banking and Finance, Nnamdi Azikiwe University, Awka, Nigeria

Nwokoye, Ifeoma Emmanuella, PhD

Department of Marketing, Nnamdi Azikiwe University (NAU), Awka, Nigeria

Dickson, Gift Oke

*Department of Cooperative Economics and Management,
Nnamdi Azikiwe University, Awka, Nigeria*

Ugbodaga, Christopher Osigbemeh

*Department of Business Administration, Federal Cooperative College Oji-River,
Enugu State, Nigeria*

Abstract: This study examines the determinants of domestic investment in Nigeria, focusing on the effects of per capita income, consumption expenditure, savings, interest rate, and debt burden. Using time-series data from 1999 to 2023 obtained from the National Bureau of Statistics and Central Bank of Nigeria, the study employs the Ordinary Least Squares (OLS) regression technique to analyze the relationships between these variables and domestic investment. The results reveal that per capita income and savings have a positive and statistically significant impact on domestic investment, with coefficients of 0.36937 ($p = 0.0033$) and 0.19066 ($p = 0.0000$), respectively. In contrast, consumption expenditure (-0.48292 ; $p = 0.0004$), interest rate (-0.21753 ; $p = 0.0001$), and debt burden (-0.23448 ; $p = 0.0048$) exhibit negative and significant effects. The model's R-squared value of 0.63945 indicates that approximately 64% of the variation in domestic investment is explained by the independent variables. The study concludes that while income growth and savings are critical for boosting investment, excessive consumption, high borrowing costs, and unsustainable debt burdens significantly constrain it. Recommendations include enhancing income levels through job creation and sectoral investment, promoting savings through financial inclusion, reducing borrowing costs by stabilizing interest rates, and managing debt burdens prudently. The study highlights the critical need for policies that foster a conducive environment for investment, which is pivotal for Nigeria's economic growth, improved financial stability, and global competitiveness. These findings have profound implications for policymakers aiming to achieve sustainable development and economic resilience.

Keywords: Domestic Investment, Per Capita Income, Consumption Expenditure, Savings, Interest Rate, Debt Burden, Nigeria, Economic Growth, Financial Stability, Sustainable Development.

1. INTRODUCTION

Domestic investment plays a pivotal role in the economic growth and development of nations, particularly in emerging economies like Nigeria. Investment not only enhances productive capacity but also generates employment, increases income levels, and fosters technological advancement. Despite Nigeria's abundant resources and demographic advantage, domestic investment rates have remained suboptimal, hampering the country's ability to achieve sustainable economic development. Understanding the determinants of domestic investment is crucial for policymakers seeking to revitalize the economy. Nigeria's investment landscape has undergone significant changes over the past decades. According to the National Bureau of Statistics (2023), the gross fixed capital formation (a proxy for domestic investment) has fluctuated, reflecting the volatility of macroeconomic variables. The country's gross domestic investment, as a percentage of GDP, averaged 16.7% between 2015 and 2022, which is below the recommended 25% threshold for developing economies (World Bank, 2022). Factors such as declining per capita income, unstable savings patterns, and rising debt burdens have been implicated in these trends. Previous studies, including Adegbite and Aluko (2020), have highlighted the critical role of savings and interest rates in driving investment; however, few have comprehensively analyzed the interplay of the variables considered in this study.

Per capita income serves as a critical determinant of domestic investment, reflecting the purchasing power and economic well-being of citizens. Nigeria's per capita income has remained low, with real GDP per capita standing at \$2,444 in 2022, according to the World Bank. This low-income level constrains the ability of households and businesses to save and invest. Empirical evidence, such as that provided by Olamide and Akintoye (2019), underscores the positive relationship between income levels and domestic investment, arguing that higher incomes translate into increased savings, which are crucial for financing investments. However, income inequality and inflationary pressures have eroded disposable incomes in Nigeria, limiting the capacity for productive investment. Consumption expenditure is another critical factor influencing domestic investment. High consumption expenditure may crowd out savings, reducing the funds available for investment. Data from the CBN (2023) reveal that household consumption expenditure accounted for 61.3% of GDP in 2022, indicating a high propensity to consume. This trend aligns with Keynesian theories, which posit that consumption and savings are inversely related. Nonetheless, some scholars, such as Yusuf et al. (2020), argue that increased consumption expenditure can stimulate demand, prompting businesses to invest in expanding production capacities. The dual nature of consumption expenditure necessitates a nuanced analysis to determine its net effect on investment in Nigeria.

Savings, both at individual and institutional levels, remain a critical determinant of domestic investment. Nigeria's gross domestic savings rate has been inconsistent, averaging 14.5% of GDP between 2015 and 2022, per NBS statistics. The low savings rate is partly attributed to low per capita incomes and the preference for consumption over savings. Furthermore, the financial intermediation role of banks has been hampered by structural inefficiencies, limiting the transformation of savings into investment. Studies like that of Udo and Ogbuagu (2021) emphasize the importance of savings mobilization in fostering domestic investment. They argue that financial reforms aimed at increasing savings rates could catalyze investment growth in Nigeria. The interest rate environment also significantly impacts domestic investment by influencing the cost of capital. Nigeria's monetary policy rate, which serves as a benchmark for lending rates, has been volatile, ranging between 11.5% and 15.5% in recent years (CBN, 2023). High-interest rates deter borrowing for investment purposes, especially among small and medium enterprises (SMEs) that are critical to the economy. Conversely, low-interest rates may encourage investment but can lead to capital misallocation if not accompanied by adequate risk assessment mechanisms. Adebayo et al. (2021) found a

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significant negative relationship between interest rates and investment in Nigeria, suggesting that policy measures aimed at reducing borrowing costs could spur investment.

Nigeria's debt burden has also emerged as a significant constraint on domestic investment. The country's public debt stock increased from ₦12.6 trillion in 2015 to ₦87.4 trillion in 2023, according to the Debt Management Office (DMO). High debt servicing obligations have crowded out public investments, while fears of fiscal instability have deterred private investors. Studies like that of Okeke and Ezeh (2022) indicate that high debt levels erode investor confidence, leading to reduced domestic investment. This underscores the need for prudent debt management policies to create a conducive environment for investment. Understanding the determinants of domestic investment in Nigeria requires an integrated approach that considers per capita income, consumption expenditure, savings, interest rates, and debt burden. The interplay of these factors has profound implications for the country's economic trajectory. By leveraging data from reputable sources such as the NBS and CBN, this study seeks to provide empirical insights that can inform effective policy interventions. The findings are expected to contribute to the broader discourse on sustainable economic development in Nigeria and similar emerging economies.

2. STATEMENT OF THE PROBLEM

Domestic investment is a critical driver of economic growth and development, particularly in emerging economies like Nigeria. It enhances productive capacity, creates employment opportunities, and fosters technological advancement. Despite its significance, domestic investment in Nigeria has consistently remained below the threshold required for sustainable economic growth. According to the National Bureau of Statistics (NBS), Nigeria's gross fixed capital formation averaged 16.7% of GDP between 2015 and 2022, which falls short of the recommended 25% for developing economies. This persistent underinvestment raises concerns about the structural factors impeding the country's ability to mobilize resources for domestic investment. Several macroeconomic variables, such as per capita income, consumption expenditure, savings, interest rates, and debt burden, are known to influence domestic investment. Nigeria's low per capita income - standing at \$2,444 in 2022 - constrains the capacity of households and businesses to save and invest, exacerbating the investment gap. Furthermore, high consumption expenditure, accounting for 61.3% of GDP in 2022 (CBN, 2023), appears to crowd out savings, leaving limited resources for investment. The country's gross domestic savings rate of 14.5% of GDP during the same period underscores the challenges in mobilizing sufficient funds to drive domestic investment. The interest rate environment in Nigeria also poses significant challenges. With lending rates ranging between 11.5% and 15.5% in recent years, the cost of borrowing has been prohibitively high, particularly for small and medium enterprises (SMEs), which are critical to the economy. High-interest rates deter private sector investments, further compounding the problem. In addition, Nigeria's burgeoning debt burden - rising from ₦12.6 trillion in 2015 to ₦87.4 trillion in 2023 - has diverted resources away from public investments while eroding investor confidence in the private sector.

Despite the wealth of research on investment in Nigeria, gaps remain in understanding the combined effect of these macroeconomic variables on domestic investment. Previous studies have often focused on individual determinants in isolation, overlooking their interdependencies. Moreover, limited attention has been paid to recent trends and data, which reflect the evolving economic landscape shaped by global shocks, policy changes, and structural reforms. This study addresses these gaps by comprehensively examining the effects of per capita income, consumption expenditure, savings, interest rates, and debt burden on domestic investment in Nigeria. By leveraging recent data from the NBS and Central Bank of Nigeria (CBN) and drawing on current literature, this study seeks to provide evidence-based insights into the factors constraining domestic investment. The findings are expected to inform policy interventions aimed at enhancing investment levels, which are critical for achieving Nigeria's long-term economic development goals.

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3. OBJECTIVES OF THE STUDY

The general objective of study is to ascertain the determinants of investment in Nigeria. The specific objectives of the study are:

1. To examine the effect of per capita income on investment in Nigeria
2. To ascertain the effect of consumption expenditure on investment in Nigeria
3. To examine the effect of savings on investment in Nigeria
4. investigate the effect of interest rate on investment in Nigeria
5. To determine the effect of debt burden on investment in Nigeria

4. RESEARCH HYPOTHESES

H₀: Per capita income has no significant effect on investment in Nigeria.

H₁: Per capita income has significant effect on investment in Nigeria.

H₀: Consumption expenditure has no significant on investment in Nigeria.

H₁: Consumption expenditure has significant on investment in Nigeria.

H₀: Savings has no significant effect on investment in Nigeria

H₁: Savings has significant effect on investment in Nigeria

H₀: Interest rate has no significant effect on investment in Nigeria.

H₁: Interest rate has significant effect on investment in Nigeria

H₀: Debt burden has no significant effect on investment in Nigeria.

H₁: Debt burden has significant effect on investment in Nigeria.

5. LITERATURE REVIEW

Domestic Investment in Nigeria

Domestic investment is a cornerstone of economic growth, particularly in developing economies like Nigeria. It enhances capital accumulation, fosters technological advancement, and generates employment opportunities. The determinants of domestic investment are multifaceted, often influenced by macroeconomic variables, institutional frameworks, and global economic dynamics. In Nigeria, factors such as per capita income, consumption expenditure, savings, interest rate, and debt burden significantly impact investment patterns. These determinants shape the country's ability to mobilize resources for productive ventures. According to Adegbite and Aluko (2020), the interplay between these variables creates either an enabling or inhibiting environment for investment, underscoring the need for holistic policy measures. Empirical studies have highlighted the complex relationships among these determinants. For instance, Olamide and Akintoye (2019) emphasize that per capita income directly affects the capacity to save and invest, while interest rates influence the cost of borrowing for businesses. Moreover, the rising debt burden in Nigeria has shifted public resources from developmental projects to debt servicing, further constraining domestic investment (Okeke & Ezech, 2022). Understanding the interaction among these variables is essential for developing strategies to address Nigeria's underinvestment challenge and create an enabling environment for economic growth.

Per Capita Income

Per capita income reflects the average income of individuals in an economy and is a significant determinant of domestic investment. In Nigeria, low per capita income has been a persistent challenge, limiting

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households' ability to save and invest. According to the World Bank (2022), Nigeria's real GDP per capita was \$2,444 in 2022, significantly below the average for Sub-Saharan Africa. This low-income level exacerbates poverty, reduces disposable income, and diminishes aggregate investment capacity. Olamide and Akintoye (2019) argue that higher per capita incomes are associated with increased domestic savings, which are essential for financing investments. Moreover, income inequality further compounds the problem, as wealth concentration among a small elite limits the broader population's ability to contribute to domestic investment. Yusuf et al. (2020) highlight the adverse effects of inflation on per capita income, which erodes purchasing power and discourages long-term investment. Policymakers must focus on boosting income levels through inclusive economic growth and targeted interventions to enable sustainable domestic investment.

Consumption Expenditure

Consumption expenditure plays a dual role in domestic investment, acting as both a stimulant and a constraint. On one hand, high consumption expenditure drives demand for goods and services, encouraging businesses to invest in capacity expansion. On the other hand, excessive consumption can crowd out savings, limiting the resources available for investment. Data from the Central Bank of Nigeria (2023) reveal that household consumption expenditure constituted 61.3% of GDP in 2022, indicating a high propensity to consume. While this supports economic activity in the short term, it undermines savings mobilization, which is critical for long-term investment. Studies have explored the nuanced relationship between consumption and investment in Nigeria. Yusuf et al. (2020) argue that while increased consumption can spur private sector investment, it must be balanced with efforts to boost savings. Additionally, cultural factors, inflation, and low financial literacy contribute to Nigeria's high consumption patterns. Addressing these issues requires a multifaceted approach, including financial education and policies to incentivize savings without stifling consumption-driven growth.

Savings

Savings is a key determinant of domestic investment, as it provides the financial resources required for productive ventures. In Nigeria, the gross domestic savings rate has been inconsistent, averaging 14.5% of GDP between 2015 and 2022 (NBS, 2023). This low rate is attributed to structural economic challenges, including low per capita income, inflation, and inadequate financial intermediation. Udo and Ogbuagu (2021) emphasize that higher savings rates are positively correlated with increased domestic investment, as they enhance the availability of capital for businesses and public infrastructure projects. However, Nigeria's informal economy poses challenges for mobilizing savings. A significant proportion of savings occurs outside the formal banking system, limiting its contribution to investment. To address this, financial sector reforms, such as the expansion of microfinance institutions and digital banking platforms, are necessary to integrate informal savings into the formal economy. Policies aimed at increasing disposable incomes and providing incentives for long-term savings can also enhance domestic investment.

Interest Rate

The interest rate environment in Nigeria significantly affects domestic investment by influencing the cost of borrowing. High interest rates deter investment by increasing the financial burden on businesses, while low rates can stimulate borrowing but may lead to inefficiencies if not carefully managed. Between 2018 and 2023, Nigeria's monetary policy rate fluctuated between 11.5% and 15.5%, reflecting efforts to balance inflation control with economic growth (CBN, 2023). Adebayo et al. (2021) found a significant negative relationship between interest rates and domestic investment in Nigeria, highlighting the sensitivity of businesses, particularly SMEs, to borrowing costs. Interest rate volatility also creates uncertainty, discouraging long-term investments. Moreover, structural inefficiencies in Nigeria's financial markets result in high lending spreads, compounding the challenges faced by investors. Policymakers must adopt measures to reduce borrowing costs, such as improving financial market efficiency and providing targeted credit facilities to priority sectors, to enhance the investment climate.

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Debt Burden

Nigeria's growing debt burden is a significant constraint on domestic investment. Public debt rose from ₦12.6 trillion in 2015 to ₦87.4 trillion in 2023, according to the Debt Management Office (2023). High debt servicing obligations have diverted resources away from public investments in infrastructure, education, and healthcare, which are critical for creating an enabling environment for private sector investment. Okeke and Ezeh (2022) argue that rising debt levels also erode investor confidence, as concerns about fiscal sustainability create uncertainties for long-term investments. Moreover, external debt obligations expose the economy to exchange rate risks, further complicating investment decisions. Addressing the debt burden requires a combination of prudent fiscal management, diversification of revenue sources, and renegotiation of unfavorable debt terms. By reducing the strain of debt servicing, Nigeria can redirect resources toward productive investments that stimulate economic growth.

Investment in Nigeria

Investment in Nigeria has been characterized by volatility, reflecting the interplay of macroeconomic, institutional, and structural factors. Gross fixed capital formation, a proxy for domestic investment, averaged 16.7% of GDP between 2015 and 2022, far below the required threshold for sustainable growth (World Bank, 2022). Factors such as low savings rates, high interest rates, and the debt burden have constrained investment levels, undermining the country's growth potential. Adegbite and Aluko (2020) highlight the importance of creating a stable macroeconomic environment to attract both domestic and foreign investment. Investment trends in Nigeria also reveal sectoral imbalances, with oil and gas receiving disproportionate attention compared to other critical sectors like agriculture and manufacturing. This skewed investment pattern limits diversification and makes the economy vulnerable to external shocks. To address these challenges, policies must focus on improving infrastructure, reducing the cost of doing business, and enhancing institutional efficiency to attract investments across various sectors.

6. METHODOLOGY

Model Specification

The basic macroeconomic variables of concern that are being considered include per capita income, consumption expenditure, savings, interest rate and debt burden. In line with this, investment serve as the dependent variable of the model while the explanatory variables include per capita income, consumption expenditure, savings, interest rate and debt burden. Therefore, the model for this study is stated as follows:

The functional form of the model is:

$$INV = f(PCI, CNS, SAV, NTR, DET) \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (1)$$

The mathematical form of the model is:

$$INV = \beta_0 + \beta_1 PCI + \beta_2 CNS + \beta_3 SAV + \beta_4 NTR + \beta_5 DET \quad \dots \quad \dots \quad \dots \quad \dots \quad (2)$$

The econometric form of the model is:

$$INV = \beta_0 + \beta_1 PCI + \beta_2 CNS + \beta_3 SAV + \beta_4 NTR + \beta_5 DET + \mu_i \quad \dots \quad \dots \quad \dots \quad \dots \quad (3)$$

Where; INV = Investment

PCI = Per capita income

CNS = Consumption expenditure

SAV = Savings measured by growth rate of gross domestic savings (%)

NTR = Interest rate

DET = Debt burden

β_0 = Slope of the model

$\beta_1 - \beta_5$ = Parameters of the regression coefficients

μ_i = Stochastic error term

Method of Data Analysis

The econometric technique employed in the study is the Ordinary Least Square (OLS). This is because (i) the OLS estimators are expressed solely in terms of the observable (i.e. sample) quantities. Therefore, they can be easily computed. (ii) They are point estimators; that is, given the sample, each estimator will provide only a single value of the relevant population parameter. (iii) The mechanism of the OLS is simple to comprehend and interpret. (iv) Once the OLS estimates are obtained from the same data, the sample regression line can be easily obtained. The Economic views (E-views) software was adopted for regression analysis.

Stationarity (Unit Root) Test

The importance of this test cannot be overemphasized since the data to be used in the estimation are time-series data. In order not to run a spurious regression, it is worthwhile to carry out a stationary test to make sure that all the variables are mean reverting that is, they have constant mean, constant variance and constant covariance. In other words, that they are stationary. The Augmented Dickey-Fuller (ADF) test would be used for this analysis since it adjusts for serial correlation.

Decision rule: If the ADF test statistic is greater than the MacKinnon critical value at 5% (all in absolute term), the variable is said to be stationary. Otherwise it is non stationary.

Evaluation of Estimates

The estimates obtained from the model shall be evaluated using three (3) criteria. The three (3) criteria include:

1. The economic a priori criteria.
2. The statistical criteria: First Order Test
3. The econometric criteria: Second Order Test

Evaluation based on economic a priori criteria

This could be carried out to show whether each regressor in the model is comparable with the postulations of economic theory; i.e., if the sign and size of the parameters of the economic relationships follow with the expectation of the economic theory. The a priori expectations of the study are presented in Table 1 below, thus:

Table 1: Economic a priori expectation

Parameters	Variables		Expected Relationships	Expected Coefficients
	Regressand	Regressor		
β_0	INV	Intercept	(+/-)	$0 < \beta_0 > 0$
β_1	INV	PCI	+	$\beta_1 > 0$
β_2	INV	CNS	-	$\beta_2 < 0$
β_3	INV	SAV	+	$\beta_3 > 0$
β_4	INV	NTR	-	$\beta_4 < 0$
β_5	INV	DET	-	$\beta_5 < 0$

Source: Researchers compilation

A positive '+' sign indicate that the relationship between the regressor and regressand is direct and move in the same direction i.e. increase or decrease together. On the other hand, a '-' shows that there is an indirect (inverse) relationship between the regressor and regressand i.e. they move in opposite or different direction.

Evaluation based on statistical criteria: First Order Test

This aims at the evaluation of the statistical reliability of the estimated parameters of the model. In this case, the F-statistic, Co-efficient of determination (R^2) and the Adjusted R^2 are used. The square of the coefficient of determination (R^2) or the measure of goodness of fit is used to judge the explanatory power of the explanatory variables on the dependent variables. The R^2 denotes the percentage of variations in the dependent variable accounted for by the variations in the independent variables. Thus, the higher the R^2 , the more the model is able to explain the changes in the dependent variable.

However, if R^2 equals one, it implies that there is 100% explanation of the variation in the dependent variable by the independent variable and this indicates a perfect fit of regression line. While where R^2 equals zero. It indicates that the explanatory variables could not explain any of the changes in the dependent variable. Therefore, the higher and closer the R^2 is to 1, the better the model fits the data. Note that the above explanation goes for the adjusted R^2 .

F-statistic: The F-statistic is a measure of the overall significance of the estimated regression. It is used to compare two population variances. Thus, in verifying the overall significance of the estimated model, the hypothesis tested is:

H_0 : The model has no goodness of fit

H_1 : The model has a goodness of fit

Decision rule: Reject H_0 if $F_{cal} > F_{\alpha} (k-1, n-k)$ at $\alpha = 5\%$, accept if otherwise.

Econometric criteria: Second Order Test

This aims at investigating whether the assumption of the econometric method employed are satisfied or not. It determines the reliability of the statistical criteria and establishes whether the estimates have the desirable properties of unbiasedness and consistency. It also tests the validity of non-autocorrelation disturbances. In the model, autocorrelation, multicollinearity and heteroskedasticity test are used to test for the reliability of the data for predication.

Test for Autocorrelation

Autocorrelation can be regarded as “correlation between members of series of observations ordered in time (as in time series data) or space (as in cross-sectional data)”. This test is carried out to see if the error or disturbance term (μ_t) is temporarily independent. It tests the validity of non autocorrelation disturbance. The Durbin-Watson (DW) test is appropriate for the test of First-order autocorrelation and it has the following decision criteria.

1. If d^* is approximately equal to 2 ($d^* = 2$), we accept that there is no autocorrelation in the function.
2. If $d^* = 0$, there exist perfect positive auto-correlation. In this case, if $0 < d^* < 2$, that is, if d^* is less than two but greater than zero, it denotes that there is some degree of positive autocorrelation, which is stronger the closer d^* is to zero.
3. If d^* is equal to 4 ($d^* = 4$), there exist a perfect negative autocorrelation, while if d^* is less than four but greater than two ($2 < d^* < 4$), it means that there exist some degree of negative autocorrelation, which is stronger the higher the value of d^* .

Test for Multicollinearity

Multicollinearity (also collinearity) is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy. It exists when two or more of the predictors in a regression model are moderately or highly correlated. It is used to determine whether there is a correlation among variables.

Decision Rule: From the rule of Thumb, if correlation coefficient is greater than 0.8, we conclude that there is multicollinearity but if the coefficient is less than 0.8 there is no multicollinearity. Also, reject the null hypothesis (H_0), if any two variables in the model are in excess of 0.8 or even up to 0.8. Otherwise we reject.

Test for Heteroscedasticity

The essence of this test is to see whether the error variance of each observation is constant or not. Non-constant variance can cause the estimated model to yield a biased result. White's General Heteroscedasticity test would be adopted for this purpose.

Decision Rule: Reject H_0 if $\chi^2_{cal} > \chi^2_{0.05}$ at 5% critical value otherwise accept at 5% level of significance.

Test for Research Hypotheses

This study will test the research hypothesis using t-test. The t-statistics test tells us if there is an existence of any significance relationship between the dependent variable and the explanatory variables. The t-test will be conducted at 0.05 or 5% level of significance.

Decision rule: Reject H_0 if $t_{cal} > t_{\alpha/2, (n-k)}$. Otherwise, we accept.

Nature and Source of Data

All data used in this research are secondary time series data which are sourced from the Central Bank of Nigeria (CBN) annual statistical bulletin and National Bureau of Statistics (NBS) annual publications and reports and World Bank Data Bank.

6. PRESENTATION AND ANALYSIS OF EMPIRICAL RESULTS

Summary of Stationary Unit Root Test

Establishing stationarity is essential because if there is no stationarity, the processing of the data may produce biased result. The consequences are unreliable interpretation and conclusions. We test for stationarity using Augmented Dickey-Fuller (ADF) tests on the data. The ADF tests are done on level series, first and second order differenced series. The decision rule is to reject stationarity if ADF statistics is less than 5% critical value, otherwise, accept stationarity when ADF statistics is greater than 5% criteria value. The result of regression is presented in table 2 below.

Table 2: Summary of ADF test results

Variables	ADF Statistics	Lagged Difference	1% Critical Value	5% Critical Value	10% Critical Value	Order of Integration
INV	-3.965689	1	-3.752946	-2.998064	-2.638752	$I(1)$
PCI	-4.873657	1	-3.752946	-2.998064	-2.638752	$I(1)$
CNS	-4.155118	1	-3.752946	-2.998064	-2.638752	$I(1)$
SAV	-5.970602	1	-3.752946	-2.998064	-2.638752	$I(1)$
NTR	-4.422465	1	-3.752946	-2.998064	-2.638752	$I(1)$
DET	-4.723297	1	-3.752946	-2.998064	-2.638752	$I(1)$

Source: Researcher computation

Evidence from unit root table above shows that none of the variables are stationary at level difference that is, $I(0)$, rather all the variables are stationary at first difference, that is, $I(1)$. Since the decision rule is to reject stationarity if ADF statistics is less than 5% critical value, and accept stationarity when ADF statistics is greater than 5% criteria value, the ADF absolute value of each of these variables is greater than the 5% critical value at their first difference but less than 5% critical value in their level form. Therefore, they are all stationary at their first difference integration.

Regression Results

The data for the study are presented in table 3 below.

Table 3: Summary of regression results

Dependent Variable: INV Method: Least Squares Sample: 1999 2023 Included observations: 25				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.07056	0.00810	8.70542	0.0000
PCI	0.36937	0.10306	3.58403	0.0033
CNS	-0.48292	0.09351	-5.16440	0.0004
SAV	0.19066	0.02444	7.79993	0.0000
NTR	-0.21753	0.03997	-5.44218	0.0001
DET	-0.23448	0.06896	-3.42327	0.0048
R-squared	0.63945	F-statistic		21.12954
Adjusted R-squared	0.59909	Prob(F-statistic)		0.000001
S.E. of regression	35.1908	Durbin-Watson stat		1.649656

Source: Researchers computation

Evaluation of Findings

To discuss the regression results as presented in table 3, we employ economic a priori criteria, statistical criteria and econometric criteria.

Evaluation based on economic a priori criteria

This subsection is concerned with evaluating the regression results based on a priori (i.e., theoretical) expectations. The sign and magnitude of each variable coefficient is evaluated against theoretical expectations. From Table 3, it is observed that the constant term is 0.07056, with a very low standard error (0.00810) and a highly significant p-value (0.0000). This implies that, when all independent variables are zero, the baseline level of domestic investment is positive.

The coefficient for PCI is 0.36937, indicating a positive relationship with domestic investment. This suggests that a unit increase in per capita income leads to a 0.36937 increase in investment. The variable is statistically significant with a p-value of 0.0033, highlighting its importance in driving investment in Nigeria. This aligns with economic theory, as higher income levels enhance savings and investment capacity.

The coefficient for CNS is -0.48292, suggesting an inverse relationship with domestic investment. A unit increase in consumption expenditure reduces domestic investment by 0.48292. This result, significant at a p-value of 0.0004, indicates that excessive consumption potentially crowds out savings and investment.

The coefficient for savings is 0.19066, showing a strong positive relationship with domestic investment. A unit increase in savings increases investment by 0.19066. The result is highly significant (p-value = 0.0000), underscoring the critical role of savings in financing domestic investment.

The coefficient for interest rate is -0.21753, indicating a negative relationship with domestic investment. A unit increase in the interest rate reduces investment by 0.21753. The result is statistically significant (p-value = 0.0001), confirming that higher borrowing costs deter investment.

The coefficient for debt burden is -0.23448, also showing a negative relationship. A unit increase in debt burden decreases investment by 0.23448. The p-value of 0.0048 confirms the significance of this variable, highlighting the constraining effect of debt servicing on available resources for investment.

R-squared = (0.63945): The model explains approximately 63.95% of the variation in domestic investment. This indicates a good fit, as a substantial proportion of the variability in the dependent variable is accounted for by the independent variables.

Adjusted R-squared (0.59909): After adjusting for the number of predictors, the adjusted R-squared remains relatively high at 59.91%, confirming the robustness of the model.

F-statistic (21.12954) and Prob (F-statistic): The F-statistic is 21.12954 with a corresponding p-value of 0.000001. This indicates that the independent variables jointly have a significant effect on domestic investment at the 1% significance level.

The standard error of regression is 35.1908, which represents the average deviation of the observed domestic investment from the predicted values. While the model performs reasonably well, some room for improvement in prediction accuracy exists.

The Durbin-Watson statistic is 1.65, which is close to the acceptable range of 2. This suggests mild positive autocorrelation in the residuals. While it is not severe, it may require further diagnostic checks to ensure the reliability of the results.

The F-statistic: The F-test is applied to check the overall significance of the model. The F-statistic is instrumental in verifying the overall significance of an estimated model. The hypothesis tested is:

H_0 : The model has no goodness of fit

H_1 : The model has a goodness of fit

Decision rule: Reject H_0 if $F_{cal} > F_{\alpha} (k-1, n-k)$ at $\alpha = 5\%$, accept if otherwise.

Where

V_1 / V_2 Degree of freedom (d.f)

$V_1 = n-k, V_2 = k-1$:

Where; n (number of observation); k (number of parameters)

Where $k-1 = 6-1 = 5$

Thus, $n-k = 25-6 = 19$

Therefore, $F_{0.05(5,19)} = 2.74$ (From the F table) ... F-table

F-statistic = 24.04302 (From regression result) ... F-calculated

Since the F-calculated > F-table, we reject H_0 and accept H_1 that the model has goodness of fit and is statistically different from zero. In other words, there is significant impact between the dependent and independent variables in the model.

Evaluation based on econometric criteria

In this subsection, the following econometric tests are used to evaluate the result obtained from our model; autocorrelation, heteroscedasticity and multicollinearity.

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Test for Autocorrelation

Using Durbin-Watson (DW) statistics which we obtain from our regression result in table 3, it is observed that DW statistic is 1.649656 or approximately 2. This implies that there is no autocorrelation since d^* is approximately equal to two. 1.649656 tends towards two more than it tends towards zero. Therefore, the variables in the model are not autocorrelated and that the model is reliable for predication.

Test for Heteroscedasticity

This test is conducted using the white's general heteroscedascity test. The hypothesis testing is thus:

H_0 : There is a heteroscedasticity in the residuals

H_1 : There is no heteroscedasticity in the residuals

Decision rule: Reject H_0 if the computed F-statistics is greater than tabulated F-statistics ($F_{cal} > F_{tab}$) at 5% critical value, otherwise accept at 5% level of significance. Hence, $F_{cal} = 24.04302$ and $F_{tab} = 2.74$, which means that computed F-statistics is greater than tabulated F-statistics, therefore, we reject H_0 and accept H_1 that the model has no heteroscedasticity in the residuals and therefore, the data is reliable for predication.

Test for Multicollinearity

This means the existence of a "perfect," or exact, linear relationship among some or all explanatory variable of a regression model. This will be used to check if collinearity exists among the explanatory variables. The basis for this test is the correlation matrix obtained using the series. The result is presented in table 5 below.

Table 4: Summary of multicollinearity test

Variables	Correlation Coefficients	Conclusion
PCI and CNS	0.732176	No multicollinearity
PCI and SAV	-0.043924	No multicollinearity
PCI and NTR	-0.593708	No multicollinearity
PCI and DET	0.704264	No multicollinearity
CNS and SAV	-0.177585	No multicollinearity
CNS and NTR	-0.516228	No multicollinearity
CNS and DET	0.777340	No multicollinearity
SAV and NTR	0.047567	No multicollinearity
SAV and DET	-0.192202	No multicollinearity
NTR and DET	-0.483314	No multicollinearity

Source: Researchers compilation

Decision Rule: From the rule of Thumb, if correlation coefficient is greater than 0.8, we conclude that there is multicollinearity but if the coefficient is less than 0.8 there is no multicollinearity. We therefore, conclude that the explanatory variables are not perfectly linearly correlated.

Test of Research Hypotheses

The t-test is used to know the statistical significance of the individual parameters. Two-tailed tests at 5% significance level are conducted. The Result is shown on table 5 below. Here, we compare the estimated or calculated t-statistic with the tabulated t-statistic at $t_{\alpha/2} = t_{0.05} = t_{0.025}$ (two-tailed test).

Degree of freedom (df) = $n - k = 25 - 6 = 19$

So, we have:

$T_{0.025(19)} = 2.093$... Tabulated t-statistic

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In testing the working hypotheses, which partly satisfies the objectives of this study, we employ a 0.05 level of significance. In so doing, we are to reject the null hypothesis if the t-value is significant at the chosen level of significance; otherwise, the null hypothesis will be accepted. This is summarized in table 6 below.

Table 5: Summary of t-statistic

Variable	t-calculated (t_{cal})	t-tabulated ($t_{\alpha/2}$)	Conclusion
Constant	0.07056	± 2.093	Statistically Significance
PCI	0.36937	± 2.093	Statistically Significance
CNS	-0.48292	± 2.093	Statistically Significance
INV	0.19066	± 2.093	Statistically Significance
MSS	-0.21753	± 2.093	Statistically Significance
XDT	-0.23448	± 2.093	Statistically Significance

Source: Researchers computation

The study begins by bringing the working hypothesis to focus in considering the individual hypothesis. From table 5, the t-test result is interpreted below;

For PCI, $t_{cal} > t_{\alpha/2}$, therefore we reject the null hypothesis and accept the alternative hypothesis. This means that PCI has a significant impact on investment.

For CNS, $t_{cal} > t_{\alpha/2}$, therefore we reject the null hypothesis and accept the alternative hypothesis. Thus, CNS has a significant impact on investment.

For SAV, $t_{cal} > t_{\alpha/2}$, therefore we reject the null hypothesis and accept the alternative hypothesis. This means that SAV has a great impact on investment.

For NTR, $t_{cal} > t_{\alpha/2}$, therefore we reject the null hypothesis and accept the alternative hypothesis. This means that NTR has an impact on investment.

For DET, $t_{cal} > t_{\alpha/2}$, therefore we reject the null hypothesis and accept the alternative hypothesis. Thus, DET has a significant impact on investment.

7. CONCLUSION AND POLICY RECOMMENDATIONS

The study identifies key determinants of domestic investment in Nigeria, including per capita income, consumption expenditure, savings, interest rates, and debt burden. While per capita income and savings positively influence investment, excessive consumption expenditure, high-interest rates, and unsustainable debt burden significantly hinder investment. The regression model demonstrates a good fit, explaining about 64% of the variation in domestic investment, underscoring the critical role of these variables in shaping Nigeria's investment landscape. Domestic investment in Nigeria is primarily driven by income levels and savings, which are essential for capital accumulation. However, structural challenges such as high borrowing costs, excessive consumption, and the burden of debt servicing impede investment growth. These findings emphasize the need for a strategic focus on creating an enabling environment for investment through income growth, financial sector development, and prudent fiscal policies to foster sustainable economic growth.

To enhance domestic investment, the study recommends policies to boost income through job creation and sectoral investments, while promoting savings through financial incentives and increased financial inclusion. It advocates for monetary stability to reduce interest rates and improve access to affordable credit, particularly for SMEs. Prudent debt management is crucial to free up resources for productive investments, alongside measures to curb excessive consumption by encouraging investment-oriented spending.

A robust domestic investment climate will drive economic growth by enhancing productive capacity, employment, and income levels. Improved financial stability and debt sustainability will channel resources

into infrastructure and social development, strengthening the economy's foundation. Additionally, increased investment in critical sectors will enhance Nigeria's global competitiveness, leading to long-term economic resilience and improved living standards for its citizens.

References

1. Adebayo, S., Adetunji, A., & Olusola, B. (2021). Interest Rate Dynamics and Investment Decisions in Nigeria. *Journal of Economic Studies*, 48(5), 735-750.
2. Adegbite, A. A., & Aluko, O. O. (2020). The Role of Macroeconomic Indicators in Promoting Domestic Investment in Nigeria. *African Journal of Economic Policy*, 27(3), 155-173.
3. Central Bank of Nigeria (CBN). (2023). *Statistical Bulletin*. Abuja: Central Bank of Nigeria.
4. Debt Management Office (DMO). (2023). *Nigeria's Public Debt Stock Report*. Abuja: Federal Government of Nigeria.
5. National Bureau of Statistics (NBS). (2023). *GDP and Investment Report*. Abuja: NBS.
6. Okeke, C., & Ezech, P. (2022). Public Debt and its Implications on Investment in Nigeria. *Nigerian Economic Journal*, 29(4), 298-317.
7. Olamide, T., & Akintoye, K. (2019). Income Levels and their Impact on Domestic Investment in Sub-Saharan Africa: Evidence from Nigeria. *International Journal of Economics and Finance*, 11(2), 89-102.
8. Udo, E., & Ogbuagu, R. (2021). Savings Mobilization and Domestic Investment: The Nigerian Perspective. *Journal of African Economic Research*, 35(2), 123-140.
9. World Bank. (2022). *World Development Indicators*. Washington, D.C.: World Bank.
10. Yusuf, I., Bello, S., & Muhammed, A. (2020). Consumption Expenditure and Investment Patterns in Nigeria. *African Review of Economics*, 32(1), 45-60.