FISCAL POLICY SHOCK, MACROECONOMIC CONDITIONS AND ECONOMIC ABSORPTION IN NIGERIA

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Abstract

This study investigated the dynamic effects of fiscal policy shocks and macroeconomic conditions on economic absorption in Nigeria. To assess how fiscal and macroeconomic disturbances influence the real and financial absorption capacity of the economy, proxied by capacity utilization (CU) and private sector savings (SAV), from 1989 to 2023. Employing an *ex post facto* research design, the study applied the Autoregressive Distributed Lag (ARDL) and Error Correction Model (ECM) framework to capture both short- and long-run interactions among fiscal financing (FF), fuel subsidy removal (FSR), inflation (INF), exchange rate (EXR), GDP growth (GDP), interest rate (IR), public debt (PD), and financial depth (FD). Unit root tests confirm a mixed order of integration, justifying the ARDL application. The empirical results indicate that while FF, FSR, INF, and EXR act as severe bottlenecks for CU, factors such as GDP, IR, and PD exert a positive impact. Conversely, SAV demonstrates a positive responsiveness to FF, FSR, INF, EXR, and GDP, but is adversely affected by IR and PD. Short-run dynamics indicate rapid adjustment toward equilibrium following shocks. The results highlight a structural asymmetry whereby fiscal and macroeconomic shocks stimulate financial absorption but suppress real-sector performance. Policy implications include reorienting fiscal financing toward productive investment, maintaining macroeconomic stability, strengthening financial intermediation, adopting gradual subsidy reforms, and ensuring prudent public debt management. These measures aim to harmonize real-sector growth with financial accumulation, promoting sustainable industrial and economic development.

Keywords: Fiscal Policy Shocks, Macroeconomic Conditions, Economic Absorption, Capacity Utilization, Savings.

JEL Classification: E21, E22, E32, E32, E62

1. INTRODUCTION

Fiscal policy has re-emerged as a central stabilization tool in both advanced and emerging economies, particularly amid recurrent macroeconomic shocks, structural vulnerabilities, and limited monetary policy space (Afonso & Sousa, 2009; Arestis, 2023). Evidence shows that fiscal policy shocks exert significant effects on output, consumption, investment, and macroeconomic resilience, though the magnitude and direction of these effects vary substantially across countries and depend on prevailing macroeconomic conditions (Akanbi, 2014; Akpan & Atan, 2015; Rahaman & Leon-Gonzalez, 2020; Magkonis *et al.,* 2026)). In open and developing economies, fiscal shocks also interact with inflation, exchange rates, and financial conditions, shaping how economies absorb disturbances over time (Turnovsky, 1996; Jolles *et al*., 2020).

Recent studies increasingly emphasize the concept of economic absorption, that is, the economy's capacity to internalize shocks through savings, investment, and productive utilization of resources, as a critical dimension of macroeconomic adjustment (Alcidi & Thirion, 2016; Dougherty & de Biase, 2021; Prabheesh *et al.*, 2026). While this literature is well developed for advanced economies, evidence for Sub-Saharan Africa remains limited, particularly regarding how fiscal shocks transmit through financial and real-sector channels simultaneously. Existing Nigerian studies largely focus on output growth, inflation, or inequality effects of fiscal policy shocks using VAR or SVAR frameworks (Akpan & Atan, 2015; Fatoba & Otonne, 2023), thereby overlooking absorption-related mechanisms such as savings behavior and capacity utilization.

Nigeria presents a compelling case for examining these dynamics due to its persistent fiscal deficits, rising public debt, exposure to commodity price volatility, exchange rate instability, and recent structural reforms, including fuel subsidy removal and exchange rate liberalization (Kure & Salisu, 2023). These features suggest that the effectiveness of fiscal policy in Nigeria depends not only on its size but also on prevailing macroeconomic conditions and the economy's ability to absorb shocks efficiently. Koukouritakis (2026) frames current account dynamics as being shaped by fiscal and output shocks, testing twin-divergence versus intertemporal adjustment mechanisms.

The problem, therefore, is that despite extensive evidence on the macroeconomic effects of fiscal policy shocks, little is known about how such shocks influence economic absorption in Nigeria under varying macroeconomic conditions. The absence of this evidence limits policy understanding of whether fiscal interventions enhance internal adjustment through savings and productive capacity or instead exacerbate financial and real-sector fragilities. Addressing this gap, this study examines the dynamic effects of fiscal policy shocks and macroeconomic conditions on economic absorption in Nigeria, thereby contributing to the broader fiscal policy and macroeconomic resilience literature in developing economies.

2. LITERATURE REVIEW

2.1. CONCEPTUAL REVIEW

Fiscal policy shocks refer to unexpected or exogenous changes in government fiscal actions, such as public expenditure, taxation, or deficit financing, which alter aggregate demand and macroeconomic trajectories beyond normal policy adjustments (Mendonça *et al*., 2008; Afonso & Sousa, 2009). These shocks transmit through multiple channels, including income, price, financial, and expectations channels, with effects shaped by economic structures and institutional settings (Akpan & Atan, 2015; Rahaman & Leon-Gonzalez, 2020). Fiscal performance is a function of external shocks (oil prices) and institutional quality, distinguishing short-run volatility from long-run sustainability (Yahaya & Bello, 2026). Monetary policy regimes are time-varying, contrasting pre-2010 accommodative responses with post-2010 inflation-stabilizing behavior under uncertainty (Magkonis *et al.,* 2026).

Macroeconomic conditions represent the environment within which fiscal shocks operate, typically captured by inflation, interest rates, exchange rates, output growth, and financial conditions. These conditions shape the magnitude, direction, and persistence of fiscal transmission, acting as moderating forces that determine whether fiscal policy stabilizes or destabilizes the economy (Turnovsky, 1996; Bhat & Kamaiah, 2021; Arestis, 2023; Kure & Salisu, 2023). Prabheesh et al. (2026) define global monetary spillovers through cross-border credit flows, disaggregating claims versus liabilities to capture asymmetric transmission via the exchange rate channel.

Economic absorption is conceptualized as the economy's capacity to internalize fiscal policy shocks by reallocating financial and real resources toward consumption, savings, and productive activity without generating persistent macroeconomic imbalances (Afonso & Sousa, 2009; Arestis, 2023). Operationally, absorption is examined along two dimensions, namely, financial absorption, proxied by private savings, and real-sector absorption, measured by capacity utilization (Akpan & Atan, 2015; Rahaman & Leon-Gonzalez, 2020; Bhat & Kamaiah, 2021; Dobrotă *et al*., 2021).

These dimensions may diverge, as fiscal policy can simultaneously stimulate demand while constraining savings mobilization or productive efficiency, particularly in emerging economies (Fatoba & Otonne, 2023). Absorption is further moderated by inflation, exchange-rate stability, debt sustainability, and institutional credibility (Grosse-Steffen *et al*., 2021; Kure & Salisu, 2023; Alam, 2025), and shapes the distributional burden and speed of recovery from shocks (Alcidi & Thirion, 2016; Dougherty & de Biase, 2021; Hallegatte *et al*., 2022).

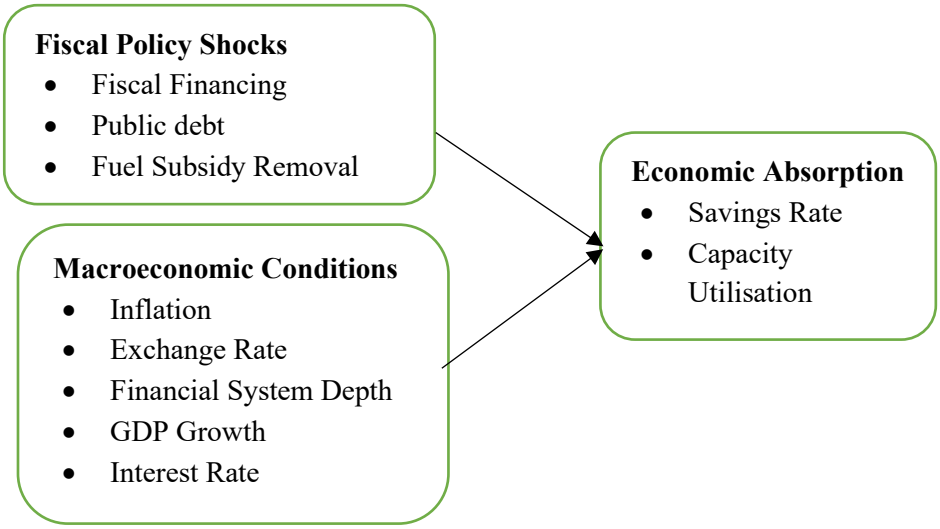

Figure 1: *Conceptual Framework; Author's Design (2026)*

2.2. THEORETICAL REVIEW

Building on the theoretical framework, fiscal policy shocks influence economic absorption through mechanisms explained by multiple strands of macroeconomic theory. Keynesian fiscal theory posits that discretionary changes in government spending and taxation exert demand-side effects on output, income, savings, and investment, especially in economies with underutilized productive capacity (Afonso & Sousa, 2009; Arestis, 2023). Takyi and Leon-Gonzalez (2020) apply monetary transmission theory within a New Keynesian Dynamic Stochastic General Equilibrium framework, demonstrating that financial exclusion weakens but does not abolish policy effectiveness. Fiscal expansions are therefore expected to increase aggregate demand and improve real-sector absorption, provided supply-side rigidities do not fully offset these impulses. Koukouritakis (2026) tests intertemporal adjustment mechanisms and twin-divergence hypotheses, finding that fiscal shocks can temporarily improve current accounts in Southeast Asia.

The fiscal transmission mechanism further refines this view, highlighting that fiscal shocks operate through output, prices, interest rates, exchange rates, and financial conditions, and that effects are neither automatic nor uniform (Akanbi, 2014; Akpan & Atan, 2015). Yahaya and Bello (2026) ground their analysis in resource dependence and fiscal sustainability theory, showing how oil price shocks transmit asymmetrically to fiscal outcomes in Nigeria. In structurally constrained economies like Nigeria, weak financial intermediation and rigidities magnify short-run effects but limit long-run absorption, implying that fiscal shocks may stimulate demand without guaranteeing sustained improvements in savings or capacity utilization.

The shock-absorption and macroeconomic resilience literature emphasizes an economy's ability to smooth and internalize shocks without persistent losses in

output or welfare (Alcidi & Thirion, 2016; Jolles *et al*., 2020). Absorptive capacity is shaped by institutional quality, fiscal space, and distributional mechanisms, with weak capacity shifting adjustment costs onto households and subnational entities (Dougherty & de Biase, 2021). Magkonis *et al.* (2026) contribute to time-varying monetary policy regimes, showing that China's evolving policy framework under uncertainty shifted toward inflation stabilization.

The Ricardian versus non-Ricardian fiscal behavior debate further informs expected absorption outcomes. While Ricardian equivalence predicts that debt-financed expansions raise private savings and limit real effects, empirical evidence from developing economies indicates non-Ricardian behavior, where liquidity constraints, inflation expectations, and shallow financial markets prevent full intertemporal smoothing (Bhat & Kamaiah, 2021; Fatoba & Otonne, 2023). This implies asymmetric and state-dependent absorption responses in Nigeria, where exchange rate volatility, inflationary pressures, and limited financial depth weaken Ricardian adjustments.

Finally, the open-economy macroeconomic framework highlights that fiscal shocks interact with capital flows, exchange rates, and trade competitiveness, influencing domestic absorption through imported inflation, balance-of-payments pressures, and financial conditions (Turnovsky, 1996; Wang & Kim, 2020). Prabheesh *et al.* (2026) draw on open-economy macroeconomics and the policy trilemma, illustrating how global monetary shocks spill over to small island economies via exchange rate and credit channels. Synthesizing these perspectives, the study conceptualizes fiscal shocks as exogenous disturbances whose effects on savings and capacity utilization are conditional on macroeconomic settings, with pronounced but uneven outcomes expected in Nigeria.

2.3. EMPIRICAL REVIEW

Empirical studies demonstrate that fiscal policy shocks exert heterogeneous macroeconomic effects, with outcomes shaped by economic structure, institutional quality, and transmission channels. In advanced economies, fiscal shocks primarily influence output, consumption, and investment via demand-side mechanisms, with effects differing by policy instrument (Afonso & Sousa, 2009). Prabheesh *et al*. (2026) show that U.S. monetary tightening reduces cross-border claims but increases liabilities in Fiji, transmitted through the exchange rate channel.

Emerging economies exhibit more volatile and less persistent fiscal responses. For instance, Akanbi (2014) shows that expansionary shocks in South Africa stimulate output in the short term but create inflationary pressures and crowding-out over time. Similar findings in Brazil and Bangladesh indicate asymmetric and time-varying fiscal effects (Mendonça *et al*., 2008; Rahaman & Leon-Gonzalez, 2020), illustrating how macroeconomic conditions critically shape transmission. Magkonis *et al.* (2026) document that China's monetary policy became more forward-looking and stable under rising global uncertainty, with weaker but more resilient responses in the 2010s. Koukouritakis (2026) reveals that fiscal

expansion may temporarily improve the current account in Southeast Asian economies, supporting "twin divergence" dynamics.

Nigeria-specific evidence reinforces these contextual effects. Akpan and Atan (2015) show that fiscal shocks impact output, inflation, and exchange rates, yet structural rigidities limit long-run growth benefits. Fatoba and Otonne (2023) highlight distributional effects but do not examine financial or real-sector channels. Recent work emphasizes resilience and shock-absorption mechanisms: economies with strong fiscal buffers and flexible frameworks absorb shocks more efficiently (Alcidi & Thirion, 2016; Jolles *et al*., 2020), while weak institutional capacity redistributes shock burdens (Dougherty & de Biase, 2021). Yahaya and Bello (2026) find that positive oil price shocks improve Nigeria's fiscal balance in the long run but generate short-run volatility, while negative shocks destabilize fiscal outcomes.

Macroeconomic conditions further shape absorption, that is, heightened uncertainty dampens fiscal effectiveness (Alam, 2025), structural characteristics determine crowding-in or crowding-out of private activity (Bhat & Kamaiah, 2021), and in Nigeria, fiscal shocks interact strongly with monetary policy, liquidity, and interest rates, influencing savings and productive activity (Kure & Salisu, 2023).

3. METHODOLOGY

This study adopts an ex post facto research design, appropriate for analyzing macroeconomic relationships where variables are not subject to experimental manipulation. The focus is on examining the dynamic effects of fiscal policy shocks and macroeconomic conditions on economic absorption in Nigeria, using annual time-series data. The study utilizes annual data spanning 1989 to 2023, sourced exclusively from the Central Bank of Nigeria (CBN) Statistical Bulletin, ensuring consistency, reliability, and policy relevance. The period captures major fiscal regimes, oil price cycles, exchange rate reforms, and the recent fuel subsidy removal episode, making it suitable for dynamic macroeconomic analysis.

Economic absorption is proxied by two complementary indicators reflecting financial and real-sector absorption through Savings (SAV), that is, private sector savings mobilized through commercial banks, capturing financial absorption. And capacity utilization (CU), that is, manufacturing capacity utilization rate, capturing real-sector absorption.

The study employs the Autoregressive Distributed Lag (ARDL) approach developed by Pesaran, Shin, and Smith, which is particularly suitable for small samples and allows variables to be integrated of order zero I(0) or one I(1), but not I(2). The ARDL framework enables the estimation of both short-run dynamics and long-run relationships within a unified model, making it well-suited for Nigeria's evolving macroeconomic structure.

3.1. MODEL SPECIFICATION

To capture the multidimensional nature of economic absorption, two ARDL models are specified in functional forms as

Model 1: $SAVG_t = f(FPS_t, MC_t)$ (1)

Model 2: $CU_t = f(FPS_t, MC_t)$ (2)

Where FPSdenotes fiscal policy shocks, MC represents macroeconomic conditions.

However, the model specifications are given as:

3.1.1. MODEL 1: SAVINGS-BASED ECONOMIC ABSORPTION

$$SAV_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 IR_{t-i} + \sum_{i=0}^{q_1} \alpha_2 FF_{t-i} + \sum_{i=0}^{q_2} \alpha_3 FSR_{t-i} + \sum_{i=0}^{q_3} \alpha_4 INF_{t-i} + \sum_{i=0}^{q_4} \alpha_5 EXR_{t-i} + \sum_{i=0}^{q_5} \alpha_6 GDP_{t-i} + \sum_{i=0}^{q_6} \alpha_7 FD_{t-i} + \sum_{i=0}^{q_7} \alpha_8 PD_{t-i} + \varepsilon_t \quad (3)$$

3.1.2. MODEL 2: CAPACITY UTILIZATION-BASED ECONOMIC ABSORPTION

$$CU_t = \beta_0 + \sum_{i=1}^{p} \beta_1 IR_{t-i} + \sum_{i=0}^{q_1} \beta_2 FF_{t-i} + \sum_{i=0}^{q_2} \beta_3 FSR_{t-i} + \sum_{i=0}^{q_3} \beta_4 INF_{t-i} + \sum_{i=0}^{q_4} \beta_5 EXR_{t-i} + \sum_{i=0}^{q_5} \beta_6 GDP_{t-i} + \sum_{i=0}^{q_6} \beta_7 FD_{t-i} + \sum_{i=0}^{q_7} \beta_8 PD_{t-i} + \mu_t \quad (4)$$

Where: Fiscal Financing (FF) is Federal government expenditure less retained revenue, divided by nominal GDP. Fuel Subsidy Removal (FSR) is the change in the price of fuel. Inflation (INF) is the consumer price inflation rate. Exchange Rate (EXR) is the nominal naira to US dollar exchange rate. Gross Domestic Product (GDP) is the real GDP growth rate. Public Debt (PD) is the total public debt as a ratio of GDP. Financial Depth (FD) is the index of broad money (M2) plus credit to the private sector, divided by GDP.

3.1.3. LONG-RUN AND SHORT-RUN DYNAMICS

Following estimation, the existence of a long-run relationship among variables is tested using the ARDL bounds testing approach to cointegration. Where cointegration is established, the short-run dynamics are derived through an Error Correction Model (ECM):

$$\Delta Y_t = \gamma_0 + \sum \gamma_i \Delta X_{t-i} + \lambda ECM_{t-1} + u_t \quad (5)$$

where ECM_{t-1}represents the speed of adjustment to long-run equilibrium, and λ is expected to be negative and statistically significant. Post estimation diagnostics include tests for serial correlation, heteroskedasticity, normality, and model stability tests, ensuring robustness and reliability of results.

4. RESULTS AND DISCUSSION

4.1.1. DESCRIPTIVE STATISTICS AND DISTRIBUTIONAL PROPERTIES

Table 1 reports the descriptive statistics of the macroeconomic and fiscal variables. Capacity utilization has a mean of 0.476, with moderate dispersion, reflecting relatively stable productive activity over the sample period. Savings

exhibits greater variability, consistent with its sensitivity to income shocks and macroeconomic uncertainty.

Several variables, particularly fuel subsidy removal, exchange rate, inflation, and public debt growth, display pronounced positive skewness and excess kurtosis, indicating the presence of extreme observations and fat tails. These distributional characteristics are typical of macroeconomic series in emerging economies subject to policy shocks and external volatility.

Table 1: *Descriptive Analysis*

	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
CU	0.4760	0.0983	0.2935	0.5960	-0.6255	1.8541
SAV	0.2617	0.1743	-0.0223	0.6513	0.5168	2.6265
FF	0.0254	0.0204	-0.0078	0.0857	0.7636	3.5340
FSR	22.2029	94.6016	-49.0000	543.5000	5.1331	28.8050
INF	0.1792	0.1878	-0.2037	0.8831	1.9602	8.0469
EXR	0.2369	0.5972	-0.0577	3.2353	4.0971	20.2964
GDPG	0.0425	0.0395	-0.0204	0.1533	0.5323	3.4310
IR	0.1379	0.0373	0.0613	0.2600	0.7689	5.0480
PDEBTG	0.2311	0.3862	-0.4777	1.8246	2.4140	11.0305
FD	0.1508	0.0583	0.0715	0.2483	0.1150	1.2892

Author's Compilation (2026)

4.1.2. TEST OF NORMALITY

Table 2 reports the results of the Shapiro-Wilk test for normality on the main fiscal and macroeconomic variables used in the study. The Shapiro-Wilk test examines whether each variable follows a normal distribution, where the null hypothesis assumes normality. Based on the results, SAVG ($W = 0.9509$, $p = 0.1307$), Fiscal Financing ($W = 0.9551$, $p = 0.1746$), Gross Domestic Product ($W = 0.9669$, $p = 0.3813$), and Interest Rate (IR; $W = 0.9408$, $p = 0.0652$) did not reject the null hypothesis at the 5 per cent significance level, indicating approximate normality. In contrast, Fuel Subsidy Removal ($W = 0.3558$; $p < 0.001$), Inflation ($W = 0.7238$; $p < 0.001$), Exchange Rate ($W = 0.4461$; $p < 0.001$), Capital Utilization ($W = 0.8600$; $p = 0.0005$), Public Debt ($W = 0.6889$; $p < 0.001$), and Financial Depth ($W = 0.8447$; $p = 0.0002$) significantly deviate from normality.

These findings imply that macroeconomic indicators such as GDP growth and fiscal financing exhibit normal distributions; variables reflecting price shocks (FSR, INF), currency fluctuations (EXR), public debt, capital utilization, and financial sector depth are non-normally distributed.

Table 2: *Normality Test Using Shapiro-Wilk*

Variable	Obs	W	V	z	Prob > z
SAVG	34	0.9509	1.7140	1.1230	0.1307
FF	34	0.9551	1.5670	0.9360	0.1746
FSR	34	0.3358	23.1930	6.5510	0.0000
INF	34	0.7238	9.6450	4.7230	0.0000

EXR	34	0.4461	19.3420	6.1730	0.0000
GDP	34	0.9669	1.1560	0.3020	0.3813
CU	34	0.8600	4.8870	3.3060	0.0005
IR	34	0.9408	2.0670	1.5130	0.0652
PD	34	0.6889	10.8620	4.9700	0.0000
FD	34	0.8447	5.4230	3.5230	0.0002

Author's Compilation (2026)

4.1.3. CORRELATION ANALYSIS

The pairwise correlation matrix (Table 3) reveals economically intuitive relationships. Capacity utilization is negatively correlated with fiscal financing (FF = –0.21). This suggests that larger fiscal deficits are associated with lower utilization of industrial capacity. The association between CU and fuel subsidy removal is weakly positive (FSR = 0.07), indicating a limited contemporaneous link. Inflation shows a moderately strong negative correlation with CU (INF = –0.46), implying that rising price levels significantly undermine productive capacity. Exchange rate is also negatively associated with CU (EXR = –0.29), reflecting the adverse effects of currency weakness on an import-dependent industrial sector. In contrast, real GDP growth exhibits a positive correlation with CU (GDP = 0.41), confirming that economic expansion supports higher capacity utilization. Public debt is negatively correlated with CU (PD = –0.17), suggesting mild debt-related constraints on production. Financial depth shows a strong positive correlation with CU (FD = 0.65), highlighting the importance of financial intermediation in supporting real-sector activity.

Savings displays a different correlation structure. Fiscal financing is positively correlated with savings (FF = 0.16), indicating that higher government spending or deficits are associated with increased savings. Fuel subsidy removal has a moderate positive association with savings (FSR = 0.31), suggesting that rising fuel prices encourage saving behavior. Inflation shows a near-zero correlation with savings (INF = 0.01), implying no meaningful linear relationship at the descriptive level. Exchange rate depreciation is positively correlated with savings (EXR = 0.18), reflecting uncertainty-induced or valuation-related saving responses. Real GDP growth has a weak positive correlation with savings (GDP = 0.05), suggesting limited direct translation of growth into higher savings. Public debt is positively associated with savings (PD = 0.17), possibly reflecting precautionary responses to rising debt burdens. Finally, financial depth is negatively correlated with savings (FD = –0.18), indicating that improved access to liquidity and credit may reduce the need for precautionary saving.

Table 3. *Correlation Analysis*

	CU	**SAV**	**FF**	**FSR**	**INF**	**EXR**	**GDP**	**IR**	**PD**	**FD**
CU	1.00	-0.13	-0.21	0.07	-0.46	-0.29	0.41	-0.37	-0.17	0.65
SAV	-0.13	1.00	0.16	0.31	0.01	0.18	0.05	0.23	0.17	-0.18
FF	-0.21	0.16	1.00	0.24	0.13	0.42	-0.38	0.64	0.50	0.10
FSR	0.07	0.31	0.24	1.00	0.06	0.06	-0.08	0.22	0.44	0.32

INF	-0.46	0.01	0.13	0.06	1.00	-0.17	-0.46	0.25	-0.01	-0.22
EXR	-0.29	0.18	0.42	0.06	-0.17	1.00	-0.08	0.37	0.81	-0.18
GDP	0.41	0.05	-0.38	-0.08	-0.46	-0.08	1.00	-0.16	-0.17	-0.14
IR	-0.37	0.23	0.64	0.22	0.25	0.37	-0.16	1.00	0.30	-0.34
PD	-0.17	0.17	0.50	0.44	-0.01	0.81	-0.17	0.30	1.00	0.15
FD	0.65	-0.18	0.10	0.32	-0.22	-0.18	-0.14	-0.34	0.15	1.00

Author's Compilation (2026)

4.1.4. MULTICOLLINEARITY DIAGNOSTICS

The variance inflation factor (VIF) results, as shown in Table 4, indicate that multicollinearity is not a serious concern in either capacity utilization or savings models. For both dependent variables, the mean VIF is 2.93, which is well below the conventional threshold of 10 and within the range considered acceptable for reliable coefficient estimation.

At the individual variable level, fiscal financing (FF) and interest rate (IR) record low VIF values of 1.70, while fuel subsidy removal (FSR) and inflation (INF) exhibit modest VIFs of 2.21 and 2.08, respectively, suggesting minimal collinearity. Exchange rate (EXR) and public debt (PD) display relatively higher VIF values of 6.18 and 6.93, indicating moderate correlation with other regressors; however, these values remain below critical levels and do not threaten model stability. Gross domestic product (GDP) and financial depth (FD) show the lowest VIFs of 1.38 and 1.29, respectively, confirming their weak linear dependence on other explanatory variables.

Table 4: *Variance Inflation Factor*

Dependent	**Capacity Utilization**		**Savings**	
Variable	**VIF**	**1/VIF**	**VIF**	**1/VIF**
FF	1.7	0.5892	1.7	0.5892
FSR	2.21	0.4517	2.21	0.4517
INF	2.08	0.4797	2.08	0.4797
EXR	6.18	0.1617	6.18	0.1617
GDP	1.38	0.7266	1.38	0.7266
IR	1.7	0.5882	1.7	0.5882
PD	6.93	0.1442	6.93	0.1442
FD	1.29	0.7781	1.29	0.7781
Mean VIF	**2.93**		**2.93**	

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4.1.5. UNIT ROOT TESTS MODEL SELECTION

Augmented Dickey-Fuller tests (Table 5) indicate a mixed order of integration among the variables. The unit root test results reveal a mixed order of integration among the variables, justifying the use of the ARDL framework. Stationarity is assessed at conventional significance levels using probability values under specifications with a constant and, where appropriate, a constant plus trend.

Savings (SAV) is stationary at a level, with a probability value of 0.0083, which is significant at the 1 per cent level, indicating integration of order zero, I(0). Fiscal financing (FF) is non-stationary at the level (p = 0.0985) but becomes stationary after first difference with a probability value of 0.000, significant at the 1 per cent level, implying I(1). Similarly, fuel subsidy removal (FSR) is non-stationary at the level (p = 0.3389) but stationary at first difference with p = 0.000, also indicating I(1).

Inflation (INF) is stationary at a level, with a probability value of 0.0302, significant at the 5 per cent level, and is therefore I(0). The exchange rate (EXR) is strongly stationary at the level, with a probability value of 0.0000, significant at the 1 per cent level, confirming I(0). Gross domestic product growth (GDP) is likewise stationary at level (p = 0.0036, significant at 1 per cent), indicating I(0). Interest rate (IR) is also stationary at a level, with a probability value of 0.0274, significant at the 5 per cent level, and is therefore I(0).

Financial depth (FD) is non-stationary at the level (p = 0.8593) but becomes stationary at first difference with a probability value of 0.0003, significant at the 1 per cent level, implying I(1). Capacity utilization (CU) is also non-stationary at level (p = 0.664) and attains stationarity after first differencing with p = 0.0002, significant at the 1 per cent level, indicating I(1).

Table 5: *Dickey-Fuller Unit Root Tests*

Variable	**Level**			**First Difference**			**Order of Integration**
	Prob.	Constant	Constant + Trend	Prob.	Constant	Constant + Trend	
SAV	0.0083	-3.486	-3.487	—	—	—	I(0)
FF	0.0985	-2.574	-2.451	0.000	-6.215	—	I(1)
FSR	0.3389	-1.886	-2.321	0.000	-5.554	—	I(1)
INF	0.0302	-3.053	-3.579	—	—	—	I(0)
EXR	0.0000	-6.047	-6.046	—	—	—	I(0)
GDP	0.0036	-3.739	-3.65	—	—	—	I(0)
IR	0.0274	-3.088	-2.943	—	—	—	I(0)
FD	0.8593	-0.65	-2.349	0.0003	-4.378	—	I(1)
CU	0.664	-1.222	-1.425	0.0002	-4.476	—	I(1)

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4.2. REGRESSION RESULTS

4.2.1. ARDL BOUNDS TEST FOR COINTEGRATION

The ARDL bounds test in Table 6 confirms a long-run relationship in both models, with F-statistics of 10.348 (capacity utilization) and 6.015 (savings), exceeding the 1% upper critical bound. The error-correction terms are negative and highly significant (–1.496 for CU; –1.347 for SAV; p < 0.01), indicating rapid convergence to long-run equilibrium. In the long run, fiscal financing and fuel

subsidy removal reduce capacity utilization, reflecting crowding-out effects and rising production costs, while exchange rate depreciation and inflation further weaken industrial performance. Conversely, GDP growth, interest rate, and public debt positively influence capacity utilization, suggesting demand-driven and debt-financed support to productive activity.

For savings, fiscal financing, fuel subsidy removal, inflation, exchange rate depreciation, and GDP growth exert positive long-run effects, consistent with income and precautionary saving behavior. However, interest rate and public debt reduce savings, indicating debt overhang and borrowing-cost effects. Financial depth is insignificant in both models, highlighting weak financial–real sector transmission.

Table 6: *ARDL Bounds Test for Cointegration*

Dependent Variable	F-Stat.	10% I(0)	10% I(1)	5% I(0)	5% I(1)	2.5% I(0)	2.5% I(1)	1% I(0)	1% I(1)	Decision
Capacity Utilization	10.34	1.95	3.06	2.2	3.39	2.48	3.7	2.79	4.1	Co-integration
Savings	6.015	1.95	3.06	2.2	3.39	2.48	3.7	2.79	4.1	Co-integration

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4.2.2. INFORMATION CRITERIA FOR ARDL MODEL SELECTION

Table 7 reports the information criteria used to evaluate the adequacy of the ARDL models for capacity utilization and savings. In both models, the log-likelihood of the fitted model is substantially higher than that of the null model, indicating improved explanatory power. The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are both negative and relatively low for each specification (AIC: –134.423 for capacity utilization; –47.275 for savings), suggesting good model fit after penalizing for model complexity. The slightly lower AIC and BIC values for the capacity utilization model indicate a comparatively stronger fit than the savings model. Overall, the information criteria confirm that the selected ARDL specifications are empirically appropriate and parsimonious for the sample period.

Table 7: *Information Criteria for ARDL Models*

Statistic	Capacity Utilization	Savings
Observations	31	31
Log-likelihood (Null)	56.3291	9.8462
Log-likelihood (Model)	79.2113	41.6377
Degrees of Freedom	12	18
Akaike Information Criterion (AIC)	**–134.423**	**–47.275**
Bayesian Information Criterion (BIC)	**–117.215**	**–21.464**

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4.2.3. ARDL-ECM ESTIMATION RESULTS

The ARDL–ECM results in Table 8 reveal the short- and long-run adjustment dynamics of capacity utilization (CU) and savings (SAVG) in response to macroeconomic and fiscal variables. The lagged dependent variable for CU, Dependent (-1), is negatively significant at the 1 per cent level (coefficient = -1.496; probability = 0.000), indicating that deviations from long-run equilibrium are rapidly corrected, with past CU substantially reducing current capacity utilization. Similarly, for SAV, the lagged dependent variable is negatively significant at the 1 per cent level (coefficient = -1.347; probability = 0.000), confirming that saving behavior adjusts strongly toward equilibrium aftershocks.

Fiscal Financing (FF) negatively affects CU in the current period (coefficient = -0.698; probability = 0.095), implying that short-term fiscal expansions slightly reduce capacity utilization. Conversely, FF positively impacts savings (SAV) at 1 per cent significance (coefficient = 12.034; probability = 0.001), suggesting that increased government spending stimulates saving. The lagged FF shows a positive effect on CU (coefficient = 0.747; probability = 0.037) and a negative effect on SAV (coefficient = -5.458; probability = 0.014), reflecting the delayed redistribution of fiscal effects across production and saving. Fuel Subsidy Removal (FSR) negatively affects CU (coefficient = 0.0002; probability = 0.023) in the short run, indicating that rising fuel costs constrain industrial activity. For SAV, FSR is positively significant in the current period (coefficient = 0.003; probability = 0.027) but negatively significant at one-period lag (coefficient = -0.003; probability = 0.036) and two-period lag (coefficient = -0.002; probability = 0.012), suggesting that fuel price adjustments initially encourage saving but reduce it over subsequent periods.

Inflation (INF) negatively affects CU at a 10 per cent level (coefficient = -0.055; probability = 0.074), while positively influencing SAV at a 1 per cent level (coefficient = 1.016; probability = 0.000), indicating that rising prices suppress production but induce precautionary saving. Exchange Rate (EXR) negatively affects CU (coefficient = -0.024; probability = 0.075) but positively influences SAV in the current period (coefficient = 0.419; probability = 0.000) and negatively at lag one (coefficient = -0.308; probability = 0.009), reflecting that currency depreciation reduces production capacity but alters saving behavior across periods. Gross Domestic Product (GDP) growth rate positively and significantly drives both CU (coefficient = 0.523; probability = 0.000) and SAV (coefficient = 3.017; probability = 0.001), indicating that economic expansion enhances production and saving.

Interest Rate (IR) positively affects CU (coefficient = 0.440; probability = 0.001), suggesting that higher borrowing costs may encourage efficient production. IR negatively influences SAV (coefficient = -1.756; probability = 0.031), with lagged IR also negative (coefficient = -2.362; probability = 0.031), implying that higher interest rates reduce saving in both the current and previous periods. Population Density (PD) positively impacts CU (coefficient = 0.055; probability = 0.020) but negatively affects SAVG (coefficient = -0.464; probability = 0.007), suggesting that densely populated areas support industrial activity but reduce

household or corporate saving. Lagged PD shows a modest positive effect on SAVG (coefficient = 0.275; probability = 0.102).

Financial Depth (FD), defined as broad money plus credit to the private sector divided by GDP, is not significant for CU (coefficient = -0.063; probability = 0.695) and marginally significant for SAVG in the current (coefficient = 1.727; probability = 0.790) and lagged periods (FD(-1), coefficient = 5.139; probability = 0.072; FD(-2), coefficient = 2.068; probability = 0.197), suggesting limited short-term influence of financial depth on production and saving. The constant term is negatively significant for CU (coefficient = -0.108; probability = 0.000) and marginally positive for SAV (coefficient = 0.235; probability = 0.056), capturing baseline effects. Overall, the ECM results confirm a rapid adjustment toward long-run equilibrium, with CU primarily influenced by GDP, IR, FF, FSR, and PD, while SAV responds strongly to FF, GDP, FSR, EXR, INF, IR, and PD, highlighting the dynamic interplay between fiscal policy, fuel prices, macroeconomic conditions, and financial depth in shaping production and saving patterns in Nigeria.

Table 8: *ARDL–ECM Results for Capacity Utilization and Savings*

Variable	CU Co-efficient	Std. Error	t-Statistic	P>t	SAVG Co-efficient	Std. Error	t-Statistic	P>t
Dependent (-1)	-1.496	0.175	-8.530	0.000	-1.347	0.246	-5.470	0.000
FF	-0.698	0.397	-1.760	0.095	12.034	2.874	4.190	0.001
FF(-1)	0.747	0.334	2.240	0.037	-5.458	1.914	-2.850	0.014
FSR	0.0002	0.000	-2.470	0.023	0.003	0.001	2.490	0.027
FSR(-1)	–	–	–	–	-0.003	0.001	-2.330	0.036
FSR(-2)	–	–	–	–	-0.002	0.001	-2.920	0.012
INF	-0.055	0.029	-1.890	0.074	1.016	0.201	5.070	0.000
EXR	-0.024	0.013	-1.880	0.075	0.419	0.082	5.130	0.000
EXR(-1)	–	–	–	–	-0.308	0.100	-3.080	0.009
GDP	0.523	0.099	5.290	0.000	3.017	0.728	4.150	0.001
IR	0.440	0.106	4.140	0.001	-1.756	0.727	-2.410	0.031
IR(-1)	–	–	–	–	-2.362	0.979	-2.410	0.031
PD	0.055	0.022	2.530	0.020	-0.464	0.144	-3.230	0.007
PD(-1)	–	–	–	–	0.275	0.156	1.760	0.102
FD	-0.063	0.158	-0.400	0.695	1.727	2.195	0.790	0.445
FD(-1)	–	–	–	–	5.139	2.619	1.960	0.072
FD(-2)	–	–	–	–	2.068	1.521	1.360	0.197
Constant	-0.108	0.022	-5.030	0.000	0.235	0.112	2.100	0.056

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4.2.4. ROBUSTNESS CHECK USING NEWEY–WEST

To assess robustness, Table 9 reports Newey-West regression results. The direction and significance of key variables, particularly the negative effect of inflation on capacity utilization and the positive influence of financial depth on savings, remain broadly consistent with the ARDL findings.

Table 9: *Newey–West Regression Results of Capacity Utilization and Savings*

	Capacity Utilization				Savings			
Variable	**Coef.**	**Std. Err**	**t**	**P>t**	**Coef.**	**Std. Err**	**t**	**P>t**
FF	-1.08	0.54	-1.99	0.07	4.05	3.61	1.12	0.28
L1.FF	-0.55	0.32	-1.72	0.11	3.87	1.78	2.17	0.05

FSR	0.00	0.00	-1.14	0.27	0.00	0.00	1.26	0.23
L1.FSR	0.00	0.00	-1.43	0.17	0.00	0.00	-0.14	0.89
INF	-0.17	0.06	-2.79	0.01	0.70	0.39	1.81	0.09
L1.INF	0.03	0.03	0.76	0.46	0.04	0.21	0.18	0.86
EXR	-0.03	0.02	-1.47	0.16	0.21	0.17	1.29	0.22
L1.EXR	-0.02	0.03	-0.91	0.38	0.21	0.10	2.07	0.06
GDP	-0.01	0.28	-0.02	0.99	2.42	1.63	1.49	0.16
L1.GDP	0.57	0.19	3.04	0.01	-0.12	1.13	-0.10	0.92
IR	0.35	0.29	1.23	0.24	-1.19	1.66	-0.72	0.48
L1.IR	0.41	0.24	1.72	0.11	0.61	1.49	0.41	0.69
PD	0.09	0.04	2.07	0.06	-0.29	0.31	-0.94	0.36
L1.PD	0.02	0.04	0.56	0.58	-0.25	0.19	-1.35	0.20
FD	-0.13	0.19	-0.67	0.51	5.99	1.03	5.81	0.00
L1.FD	0.21	0.33	0.65	0.52	-1.77	2.22	-0.80	0.44
cons	-0.11	0.02	-5.56	0.00	0.11	0.14	0.76	0.46

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4.2.5. EQUATION DIAGNOSTICS AND GOODNESS-OF-FIT STATISTICS FOR SHORT-RUN ARDL MODELS

Table 10 presents the diagnostic and goodness-of-fit statistics for the short-run ARDL models of capacity utilization and savings. The reported statistics include the root mean square error (RMSE), coefficient of determination (R^2), chi-square (χ^2) statistic, and associated p-values for each explanatory variable.

For capacity utilization, the model explains a modest proportion of variation, with R^2 values ranging from 0.01 to 0.46 across the explanatory variables. Fiscal financing (ΔFF) exhibits the strongest explanatory power ($R^2 = 0.46$, $\chi^2 = 25.93$, $p < 0.01$), indicating its dominant role in driving short-run changes in productive capacity. Other variables, including inflation, exchange rate, GDP, interest rate, public debt, and financial depth, show relatively low R^2 values and largely insignificant χ^2 statistics, suggesting limited short-run predictive strength.

Similarly, for savings, fiscal financing remains the primary significant determinant ($R^2 = 0.32$, $\chi^2 = 14.14$, $p < 0.01$), while the remaining variables contribute minimally to short-run variation. Inflation exhibits marginal significance ($p = 0.05$), implying a weak but positive short-run association with savings accumulation.

Table 10: *Equation Diagnostics and Goodness-of-Fit Statistics*

CAPACITY UTILISATION						SAVINGS					
Equation	**Parm**	**RMSE**	**R^2**	**χ^2**	**P> Chi²**	**Equation**	**Parm**	**RMSE**	**R^2**	**χ^2**	**P > χ^2**
ΔCU	2	0.05	0.15	5.14	0.08	**ΔSAV**	2	0.20	0.05	1.65	0.44
ΔFF	2	0.02	0.46	25.93	0.00	**ΔFF**	2	0.02	0.32	14.14	0.00
ΔFSR	2	125.37	0.03	1.07	0.59	**ΔFSR**	2	126.18	0.02	0.68	0.71
ΔINF	2	0.14	0.09	3.13	0.21	**ΔINF**	2	0.13	0.17	5.98	0.05
ΔEXR	2	0.84	0.01	0.23	0.89	**ΔEXR**	2	0.84	0.00	0.08	0.96
ΔGDP	2	0.04	0.02	0.61	0.74	**ΔGDP**	2	0.04	0.02	0.75	0.69
ΔIR	2	0.04	0.07	2.13	0.34	**ΔIR**	2	0.04	0.06	1.79	0.41
ΔPD	2	0.51	0.05	1.43	0.49	**ΔPD**	2	0.51	0.03	1.04	0.59
ΔFD	2	0.03	0.05	1.59	0.45	**ΔFD**	2	0.03	0.11	3.63	0.16

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4.2.6. DIAGNOSTIC TESTS AND MODEL ADEQUACY

Post-estimation diagnostics (Table 11) indicate no evidence of heteroskedasticity in either model. The capacity utilization equation exhibits no serial correlation, and residuals follow a white-noise process. The savings equation, however, displays mild serial correlation and borderline residual dependence, suggesting caution in interpreting its short-run coefficients.

Table 11: *Post-Estimation Diagnostic Tests for Capacity Utilization and Savings Models*

Diagnostic Test	**Capacity Utilization**	**Savings**	**Diagnostic Test**	**Capacity Utilization**	**Savings**
Heteroskedasticity Test	**Breusch–Pagan / Cook–Weisberg**	**Breusch–Pagan / Cook–Weisberg**	**Autocorrelation Test**	**Breusch–Godfrey LM**	**Breusch–Godfrey LM**
Chi-square (χ^2)	0.02	0.21	Lag (p)	1.000	1.000
Prob > χ^2	0.8976	0.6429	Chi-square (χ^2)	0.386	4.405
Decision (5%)	No heteroskedasticity	No heteroskedasticity	Prob > χ^2	0.5344	0.0358
White Noise Test	**Portmanteau (Q)**	**Portmanteau (Q)**	Decision (5%)	No serial correlation	Serial correlation present
Lags	10	10			
Q-statistic	5.7055	17.7634			
Prob > χ^2	0.8394	0.0591			
Decision (5%)	White noise	Marginal (borderline)			

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4.2.7. JOINT SIGNIFICANCE TESTS

Wald test results (Table 12) show that fiscal and macroeconomic variables are jointly significant for savings at conventional significance levels, underscoring their collective influence on financial accumulation. For capacity utilization, joint significance is weaker and only marginal at the 10 per cent level, suggesting that production responds more selectively to specific macroeconomic channels rather than to the full set of fiscal variables simultaneously.

Table 12: *Wald Test*

Item	**Capacity Utilization**	**Savings**
Restricted Variables	FF, FSR, INF, EXR, GDPG, IR, PD, FD	FF, FSR, INF, EXR, GDPG, IR, PD, FD
Number of Restrictions	8	8
F-statistic	2.52	11.91
Degrees of Freedom	F(8, 14)	F(8, 14)
Prob > F	0.0624	0.0000

Decision (5% level)	Not significant	Significant
Decision (10% level)	Significant	Significant

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4.2.8. DISCUSSION OF FINDINGS

The analysis of Nigeria's capacity utilization and savings using the ARDL-ECM framework reveals nuanced insights into the effects of fiscal policy, macroeconomic shocks, and financial variables on real and financial sector activity. The ARDL bounds test confirms a long-run equilibrium relationship for both CU and SAV, with F-statistics (10.348 for CU and 6.015 for SAV) exceeding the 1% critical value, while the negative and significant error-correction terms (–1.496 for CU; –1.347 for SAV) indicate rapid convergence to equilibrium following shocks. These results validate the presence of stable long-term interactions between fiscal and macroeconomic variables and sectoral outcomes in Nigeria.

The selection of ARDL models is supported by information criteria. The log-likelihoods of the models substantially exceed those of null models, while both Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are negative and low (AIC: –134.423 for CU; –47.275 for SAV), indicating good explanatory power and parsimonious model specifications. Notably, the CU model demonstrates a comparatively better fit than the savings model, suggesting a stronger alignment of fiscal and macroeconomic variables with industrial performance relative to financial absorption.

In the long run, fiscal financing and fuel subsidy removal negatively affect capacity utilization, reflecting crowding-out effects and higher production costs, consistent with theoretical expectations that expansive fiscal interventions can displace private sector activity. Exchange rate depreciation and inflation similarly constrain industrial output, highlighting vulnerabilities in the real sector to macroeconomic shocks. Conversely, GDP growth, interest rates, and public debt positively influence CU, suggesting that demand-driven expansion and debt-financed support can stimulate productive activity.

For savings, fiscal financing, fuel subsidy removal, inflation, exchange rate depreciation, and GDP growth exhibit positive long-run effects, indicating that households and firms engage in precautionary or income-driven saving in response to fiscal and macroeconomic pressures. However, interest rates and public debt reduce saving, demonstrating the negative implications of higher borrowing costs and debt overhang on financial accumulation. Financial depth appears largely insignificant, implying weak short-term transmission from financial sector development to both production and saving behavior.

The ARDL-ECM results highlight rapid adjustment dynamics for both capacity utilization and saving. The significant negative coefficients on lagged dependent variables (CU: –1.496; SAV: –1.347) indicate that deviations from long-run equilibrium are quickly corrected, with past outcomes substantially influencing current sectoral performance.

Short-term effects reveal that fiscal financing slightly reduces capacity utilization but strongly increases savings in the current period, reflecting an immediate boost to household and corporate saving alongside modest pressure on production. Lagged fiscal financing has the opposite effect, supporting capacity utilization while dampening savings, which underscores the delayed redistribution of fiscal impacts across sectors.

Fuel subsidy removal constrains capacity utilization in the short run while temporarily encouraging saving, although this effect diminishes over subsequent periods. Similarly, inflation and exchange rate depreciation negatively affect capacity utilization but encourage saving behavior, highlighting precautionary responses to rising costs and currency volatility. GDP growth consistently enhances both capacity utilization and productivity, reinforcing the positive role of economic expansion.

Interest rates positively influence capacity utilization, potentially reflecting greater efficiency or selective investment under higher borrowing costs, but reduce savings both contemporaneously and with a lag, consistent with debt-service constraints. Public debt supports capacity utilization but reduces savings, suggesting that fiscal borrowing favors industrial activity while limiting household or corporate capacity to save. Financial depth remains largely insignificant for capacity utilization but positively affects savings at certain lags, pointing to delayed financial sector effects on saving behavior.

Newey–West estimates largely confirm the ARDL results, with the key signs and directions of coefficients maintained. For instance, inflation continues to negatively affect capacity utilization, and financial depth positively impacts savings. Some coefficients experience slight attenuation in significance, reflecting the conservative adjustment for heteroskedasticity and autocorrelation. This robustness check reinforces confidence in the validity of the ARDL-ECM results, supporting their reliability for policy interpretation.

5. CONCLUSION

This study examined the dynamic effects of fiscal policy and macroeconomic variables on capacity utilization and savings in Nigeria using the ARDL–ECM framework. The empirical evidence confirms the existence of stable long-run relationships between fiscal financing, macroeconomic shocks, and sectoral outcomes. Both models exhibit strong explanatory power and rapid adjustment to equilibrium following shocks, underscoring the sensitivity of Nigeria's real and financial sectors to fiscal and macroeconomic conditions.

The findings reveal a structural asymmetry in policy transmission as fiscal expansion and macroeconomic disturbances tend to stimulate financial absorption through increased savings while simultaneously constraining real-sector absorption via reduced capacity utilization. This divergence suggests that Nigeria's fiscal–macroeconomic environment encourages precautionary and income-driven saving

but undermines industrial productivity through higher costs, exchange rate pressures, and inflation.

The results carry important implications for fiscal and macroeconomic management in Nigeria. First, the negative impact of fiscal financing and subsidy removal on capacity utilization indicates that expansionary fiscal actions, when not productivity-enhancing, can crowd out private sector activity and raise production costs. Second, the consistent sensitivity of capacity utilization to inflation and exchange rate depreciation underscores the vulnerability of industrial output to macroeconomic instability. Third, the divergent responses of savings and capacity utilization suggest that fiscal shocks reallocate resources toward financial buffers rather than productive investment, weakening the growth-inducing role of savings.

Moreover, the insignificance of financial depth for capacity utilization implies a weak linkage between financial sector development and real-sector performance, pointing to structural inefficiencies in financial intermediation. The positive effect of public debt on CU, alongside its negative effect on savings, suggests that debt-financed expenditure may support industrial activity in the short to medium term but at the cost of eroding private financial accumulation.

The study recommends that fiscal financing in Nigeria be reoriented toward productive investments in infrastructure, energy, and industry to enhance capacity utilization and reduce crowding-out effects. Monetary and exchange rate policies should priorities price and currency stability to minimize production uncertainty and input-cost volatility. Strengthening the real financial sector linkage is essential, with credit allocation encouraged toward productive activities to channel savings into investment. Subsidy reforms should be gradual and complemented by targeted support for energy-intensive industries to avoid sharp declines in industrial output. Public debt management must be prudent, ensuring that borrowing stimulates production without undermining private savings or financial stability. Collectively, these measures aim to synchronize fiscal, monetary, and structural policies to promote sustainable industrial growth and efficient financial accumulation.

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