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Original Research Article

Fiscal Deficits and Private Savings in Nigeria

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Abstract

This study examined the effect of fiscal deficits on private savings in Nigeria from 1981 to 2023. The research used data on private sector savings deposit, fiscal deficit as a percentage of gross domestic product - GDP, broad money supply as a ratio of GDP in %, private sector credit as a ratio of GDP in % and exchange rate from the statistical reports of Nigeria's central bank. The main analytical technique applied was the Autoregressive Distributed Lag - ARDL Bounds testing method. The results revealed there is a long-term connection between the variables studied. The results also revealed that in the long run, fiscal deficit and private sector credit as a ratio of GDP in % have a positive though not significant relationship with private savings. At the same time, broad money supply as a ratio of GDP in % has a negative association with private savings. Meanwhile, exchange rate has a positive and significant relationship with private savings. In the short run, fiscal deficits, private sector credit as a ratio of GDP in %, broad money supply as a ratio of GDP in % and exchange rate have positive association with private savings. Interestingly, only broad money supply as a ratio of GDP in % is statistically significant. Based on these findings, the study submitted that sustained increases in private savings require policies that enhance household income, strengthen financial intermediation, ensure macroeconomic stability, and improve the productivity of government expenditures. Such measures are more likely to generate meaningful and lasting improvements in the nation's savings performance and economic development. Policymakers should encourage deposit money banks and other financial institutions to extend credit to sectors with high growth and employment potential, including agriculture, manufacturing, small and medium-scale enterprises (SMEs), and technology-based industries. Such measures would enhance productive capacity, increase income generation, and subsequently boost private savings. Policymakers should prioritize measures that enhance income levels, strengthen financial sector development, improve financial inclusion, and maintain macroeconomic stability. These policies are more likely to generate sustainable increases in private savings and support long-term economic growth and development in Nigeria.

Keywords: Private Savings, Fiscal Deficit, Financial Development, ARDL and Nigeria.

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I. INTRODUCTION

Government fiscal operations play a crucial role in shaping macroeconomic performance, especially in developing economies such as Nigeria. One of the central issues in fiscal policy debates is the relationship between government deficits and private savings. A government deficit occurs when government expenditure exceeds its revenue within a fiscal year, often financed through borrowing from domestic or external sources (Alesina & Perotti, 1997; Akidi, Momodu & Isoghom, 2025; George-Anokwuru, 2026). Persistent fiscal deficits have been a characteristic feature of the Nigerian economy, particularly since the oil price shocks and fiscal expansions of the 1980s. Private savings, on the other hand, represent the portion of disposable income that households and private firms set aside rather than spend on consumption. Private savings play a vital role in mobilizing resources for investment and economic growth, particularly in developing countries where capital accumulation is essential for development (Modigliani, 1986).

Furthermore, government deficits can influence private savings through several macroeconomic pathways. One major pathway is the income and consumption channel. When the government runs a deficit by increasing public expenditure without a corresponding increase in taxation, aggregate demand in the economy tends to rise. Increased government spending on infrastructure projects, salaries, and social programmes can raise household income and stimulate consumption. As consumption increases, households may allocate a larger share of their income to spending rather than saving, thereby reducing private savings. This mechanism aligns with the Keynesian view that expansionary fiscal policy can stimulate consumption

and reduce private savings in the short run (Blanchard, 2017).

In addition, when the government finances fiscal deficits through domestic borrowing, it increases the demand for loanable funds in the financial market. This increased demand can push interest rates upward, especially in economies with relatively shallow financial markets such as Nigeria. Higher interest rates may have two opposing effects on private savings. On one hand, higher returns on savings may encourage households to save more. On the other hand, higher interest rates may discourage private investment and reduce disposable income, thereby affecting savings decisions (Barro, 1990).

Moreover, when the government borrows heavily from domestic financial markets to finance deficits, it may absorb a significant portion of available credit. This reduces the funds available to private individuals and businesses, thereby limiting private investment opportunities. As investment opportunities decline, private savings may also decrease because individuals and firms may have fewer incentives to save for investment purposes (Alesina & Perotti, 1997). In Nigeria, where financial markets are still developing, government borrowing often competes directly with private sector borrowing, making the crowding-out effect more pronounced.

Government deficits can also influence private savings through the tax expectation pathway, which is closely related to the Ricardian Equivalence hypothesis. According to this theory, individuals anticipate that government borrowing today will eventually be repaid through higher taxes in the future. As a result, rational households may increase their savings in order to prepare for future tax obligations. If this behavior occurs, an increase in government deficits may lead to an increase in private savings rather than a decrease. However, the validity of this mechanism depends on the level of financial literacy, income stability, and long-term expectations among households (Barro, 1974).

In many developing countries, including Nigeria, government deficits are sometimes financed through monetary expansion or borrowing from the central bank. This may increase the money supply and lead to inflationary pressures. When individuals expect inflation to rise, they may reduce financial savings because the real value of money and financial assets declines. Instead, households may shift their wealth into real assets such as land, property, or commodities. This behavior reduces formal private savings in financial institutions (Fischer, Easterly & Sahay, 2001).

The income redistribution channel also plays a role in the relationship between fiscal deficits and private savings. Government spending financed by deficits may redistribute income across different sectors of the economy. For example, public sector wage increases, social welfare programmes, and infrastructure spending may increase income for certain groups while taxation or inflation reduces income for others. Since different income groups have different saving propensities, these redistributive effects can influence the overall level of private savings in the economy (Loayza, Schmidt-Hebbel & Servén, 2000).

In Nigeria, government deficits are also linked to private savings through the public debt channel. Persistent deficits lead to rising public debt, which may create uncertainty about the future stability of the economy. When households and businesses perceive rising debt levels as a risk to macroeconomic stability, they may adjust their financial behavior by increasing precautionary savings. Alternatively, if fiscal deficits weaken confidence in economic management, individuals may reduce formal savings and seek alternative means of holding wealth (International Monetary Fund, 2022).

The impact of fiscal deficits on private savings depends on the level of development of financial institutions and markets. In countries with well-developed financial systems, government borrowing may be absorbed more efficiently without significantly disrupting private sector access to credit. However, in Nigeria, where financial markets are relatively shallow and credit availability is limited, large fiscal deficits may exert stronger pressure on financial resources, thereby influencing private savings behavior (CBN, 2023).

In Nigeria, the issue of fiscal deficits has become increasingly significant due to rising public expenditures, declining oil revenues, and growing public debt. Over the years, the Nigerian government has consistently run fiscal deficits to finance infrastructure development, social programmes, and public sector wages. At the same time, Nigeria faces a relatively low domestic savings rate compared with other emerging economies. Low private savings can limit the availability of funds for investment and economic growth. While deficit spending may stimulate economic growth in the short run, its implications for private savings remain unclear. Since domestic savings are a major source of capital formation in developing economies, understanding the factors that influence private savings is crucial. If government deficits crowd out private savings, they may reduce funds available for investment and slow economic growth. However, if the Ricardian equivalence holds, deficits may not significantly affect national savings because private agents adjust their savings behavior accordingly.

Empirical evidence on the relationship between fiscal deficits and private savings remains mixed across countries. In Nigeria, many studies have focused on fiscal deficits and economic growth, inflation, or public debt, while relatively few studies have examined the

direct relationship between government deficits and private savings. Consequently, there remains uncertainty about whether government deficits in Nigeria crowd out private savings or encourage households to save more in anticipation of future taxation. This uncertainty creates a gap in policy understanding regarding the implications of deficit financing for domestic savings and investment.

Despite extensive research on fiscal policy in Nigeria, the specific relationship between government deficits and private savings has received relatively limited empirical attention. Therefore, this study examined the relationship between government deficits and private savings in Nigeria in order to provide evidence that can guide fiscal policy formulation and macroeconomic stability. The remaining sections of this paper were organized into a review of related literature, methodology, results and discussion, conclusion, as well as recommendations.

II. LITERATURE REVIEW

Conceptual Clarification

Government Deficits

Government deficit, commonly referred to as fiscal deficit occurs when the total expenditure of a government exceeds the total revenue it generates within a given fiscal period, usually a financial year. Government revenues typically include tax revenues, oil revenues, customs duties, and other non-tax income, while expenditures cover recurrent expenses such as salaries, administrative costs, and capital expenditures on infrastructure and development projects. When expenditure surpasses revenue, the resulting gap is referred to as a government deficit and is usually financed through borrowing from domestic or international sources or through the issuance of government securities (Alesina & Perotti, 1997; Akidi, Momodu & Isoghom, 2025; George-Anokwuru, 2026).

Government deficits are an important component of fiscal policy and are often used by governments to stimulate economic activity during periods of economic downturn. According to Keynesian economic theory, deficit spending can increase aggregate demand through government expenditure on goods, services, and infrastructure. This increased demand can lead to higher income, employment, and economic output, thereby helping to stabilize the economy during recessions or periods of slow growth (Blanchard, 2017). In this context, moderate fiscal deficits are often viewed as a tool for promoting economic growth and development.

Despite their potential benefits, persistent and excessive government deficits can create macroeconomic challenges. Continuous deficit financing may lead to a rapid accumulation of public debt, which can place a heavy burden on future generations through higher taxes or reduced government spending. Additionally, large deficits may increase interest rates if governments borrow heavily from domestic financial markets, thereby crowding out private sector investment. This situation occurs when government borrowing reduces the availability of funds for private businesses and households, ultimately slowing economic growth (Barro, 1990).

Government deficits can also influence inflation and exchange rate stability, particularly in developing economies. When deficits are financed through monetary expansion or central bank borrowing, the increase in money supply can generate inflationary pressures. Similarly, large fiscal deficits may weaken investor confidence and put pressure on the domestic currency. For this reason, many economists emphasize the importance of maintaining sustainable fiscal balances to ensure macroeconomic stability (Todaro & Smith, 2020).

In Nigeria, government deficits have become a recurring feature of fiscal operations over the past several decades. The country's fiscal position has been heavily influenced by fluctuations in global oil prices since oil revenues constitute a major portion of government income. When oil prices decline, government revenues fall significantly while expenditures remain high, resulting in fiscal deficits. As a result, the Nigerian government frequently resorts to domestic and external borrowing to finance budget shortfalls and maintain public spending (Central Bank of Nigeria, 2023).

Furthermore, structural challenges such as weak tax administration, limited diversification of revenue sources, and rising public expenditure have contributed to persistent fiscal deficits in Nigeria. Government expenses on infrastructure development, social welfare programmes, and public sector wages often exceeds revenue generation capacity. Consequently, fiscal deficits have become a major concern for policymakers due to their implications for public debt sustainability and macroeconomic stability (International Monetary Fund, 2022).

Understanding the concept and dynamics of government deficits is therefore essential in analyzing their potential impact on other macroeconomic variables, particularly private savings. Fiscal deficits may influence household and corporate saving behaviour through changes in income, taxation expectations, and interest rates. This makes the study of government deficits particularly relevant in examining the interaction between public sector fiscal activities and private sector financial decisions.

Private Savings

Private savings refer to the portion of disposable income that households and private sector entities set aside rather than spend on consumption. Disposable income represents income available to individuals after paying taxes, and savings occur when

individuals choose to postpone consumption for future use. Private savings therefore represent an important component of national savings and provide resources that can be used for investment, capital formation, and economic growth (Modigliani, 1986).

In macroeconomic analysis, private savings consist mainly of household savings and corporate savings. Household savings arise when individuals deposit funds in financial institutions, invest in financial assets, or hold money for future consumption. Corporate savings, on the other hand, refer to retained earnings by firms that are not distributed as dividends but reinvested in business operations. Together, these forms of savings contribute to the pool of financial resources available for investment within an economy (Loayza, Schmidt-Hebbel & Servén, 2000).

Private savings play a crucial role in economic development, particularly in developing countries where domestic capital formation is essential for sustaining economic growth. Higher levels of savings provide funds that can be channeled into productive investments such as infrastructure, industrial development, and technological advancement. Consequently, countries with higher savings rates often experience faster economic growth because they have more resources available to finance investment activities (Todaro & Smith, 2020).

Economic theory provides several explanations for saving behavior. One of the most important ideas is the life-cycle hypothesis, which advocated that people plan how much they spend and save throughout their lives to keep their lifestyle steady. The theory argued that when people are working and making more money, they usually save a lot. But when they retire and earn less, they start spending more than they save. This helps them keep their spending levels balanced during different parts of their lives (Modigliani & Brumberg, 1954).

Another important theory explaining saving behaviour is the permanent income hypothesis. This theory argued that people decide how much to spend and save based on what they expect their income to be over a long time, not just what they earn right now. As a result, temporary changes in income may not significantly affect savings behavior if individuals perceive them as short-term fluctuations (Friedman, 1957). These theories highlight the role of expectations, income stability, and economic conditions in shaping saving patterns. Private savings are also influenced by several macroeconomic factors, including interest rates, inflation, income levels, financial development, and government policies. For example, higher interest rates may encourage savings by increasing returns on financial assets, while high inflation may discourage savings because it reduces the purchasing power of money. Similarly, stable macroeconomic environments and well-developed financial institutions can encourage individuals to save by providing secure and profitable saving opportunities (Loayza *et al.,* 2000).

In Nigeria, private savings have historically remained relatively low compared with many emerging and developing economies. Several factors contribute to this situation, including low per capita income, high unemployment rates, limited financial inclusion, and macroeconomic instability. Many households prioritize immediate consumption due to income constraints, leaving little room for savings. In addition, weak financial infrastructure and limited access to banking services in rural areas have historically reduced opportunities for formal savings (Central Bank of Nigeria, 2023).

Furthermore, government fiscal policies, particularly persistent fiscal deficits, may influence private saving behaviour. When governments borrow heavily to finance deficits, it may affect interest rates, inflation expectations, and future tax policies, which in turn shape household and corporate saving decisions. Understanding the interaction between fiscal deficits and private savings is therefore critical for evaluating the effectiveness of fiscal policy and promoting sustainable economic growth in Nigeria.

Theoretical and Empirical Review

The Ricardian Equivalence Theory

The Ricardian equivalence theory was originally introduced by David Ricardo and later revived and formalized by Robert J. Barro in his influential work on government debt and fiscal policy. The theory explains that the way a government finances its expenditure either through taxation or borrowing does not significantly affect the overall level of consumption in the economy. According to Barro (1974), when a government runs a deficit by borrowing rather than raising taxes, rational households anticipate that the borrowed funds will eventually need to be repaid through higher future taxes. As a result, individuals increase their savings in the present period to prepare for these expected tax obligations. Therefore, deficit-financed government spending does not increase aggregate demand because private savings rise to offset the deficit (Barro, 1974).

The central proposition of Ricardian Equivalence is that government borrowing simply postpones taxation rather than eliminating it. In this sense, individuals recognize the government's inter-temporal budget constraint and adjust their financial decisions accordingly. Instead of increasing consumption when government spending increases through borrowing, households increase their private savings to compensate for the expected future tax burden. This means that fiscal deficits do not have a significant impact on national savings, interest rates, or investment because private savings offset the decline in public savings (Barro, 1989).

The Ricardian equivalence theory relies on several vital assumptions. First, consumers are assumed to be rational and forward-looking, meaning they understand that government debt today implies higher taxes in the future. Second, the theory assumes the existence of perfect capital markets where individuals can borrow and lend freely without restrictions. Third, households are assumed to behave altruistically toward future generations, meaning they consider the welfare of their children and therefore save enough to cover the future tax liabilities associated with government debt. Under these conditions, deficit-financed government spending will not stimulate consumption because individuals will increase their savings to offset the future tax burden (Ricardo, 1820; Barro, 1974).

In terms of the connection between deficits incurred by government and private savings, the Ricardian equivalence theory predicts that an increase in government deficit will lead to an equivalent increase in private savings. When the government runs a deficit, public savings decline because government expenditure exceeds government revenue. However, households anticipate that the deficit will lead to higher taxes in the future and therefore increase their current savings. The increase in private savings offsets the decline in public savings, resulting in no significant change in national savings. Consequently, fiscal deficits do not crowd out private investment or significantly affect macroeconomic equilibrium (Barro, 1989).

Applying the Ricardian equivalence theory to Nigeria provides insight into the relationship between government deficits and private savings behavior in the country. Nigeria has experienced persistent fiscal deficits largely due to fluctuations in oil revenue, expansionary fiscal policies, and increasing government expenditures on infrastructure and social services. According to Ricardian Equivalence, Nigerian households should respond to government borrowing by increasing their private savings in anticipation of higher future taxes required to repay public debt (Iyoha & Oriakhi, 2002). In this case, government deficit financing would not significantly influence consumption because private sector behavior neutralizes the fiscal policy effect.

However, the applicability of Ricardian equivalence in Nigeria may be limited due to structural characteristics of the economy. Many households face liquidity constraints, low-income levels, and limited access to financial institutions, which restrict their ability to increase savings even when government deficits increase. Additionally, a large informal sector and low financial literacy may prevent individuals from fully anticipating future tax obligations associated with government borrowing. As a result, government deficits may still influence consumption, national savings, and economic activity in Nigeria, suggesting that the Ricardian Equivalence hypothesis may not fully hold in developing economies (Ogunmuyiwa, 2011).

Despite these limitations, the Ricardian equivalence theory remains an important framework for analyzing the relationship between government deficits and private savings. The theory provides a useful basis for examining whether fiscal deficits in Nigeria lead to increased private savings or whether they reduce national savings and crowd out private investment. Therefore, this theory serves as a foundation for understanding how fiscal policy may influence household saving behavior and macroeconomic stability in Nigeria.

Keynesian Theory of Fiscal Policy

The Keynesian theory of fiscal policy, created by John Maynard Keynes, gives a different way of understanding how government deficits relate to private savings. Keynes believed that the government should use fiscal policy to help keep the economy stable, especially when there isn't enough overall demand in the economy. According to Keynesian economics, government spending can stimulate output growth by boosting aggregate demand, employment, and national income (Keynes, 1936). In the Keynesian framework, government deficits arise when government expenditure exceeds government revenue. Unlike the Ricardian perspective, Keynesian theory views deficit spending as a useful tool for stimulating economic activity. When the government increases spending through deficit financing, it injects additional income into the economy. This increase in income encourages higher consumption and investment, thereby promoting economic growth (Blanchard & Johnson, 2013).

Keynesian theory also explains the connection between government deficits and private savings through the income effect. As government spending increases economic activity, household income rises. Since savings are a function of income, higher income levels typically lead to higher savings. Thus, government deficit spending may indirectly increase private savings through its positive effect on income and employment (Mankiw, 2019). In the Nigerian context, deficit financing has often been used to fund infrastructure development, social services, and economic stabilization policies. According to the Keynesian perspective, such fiscal deficits can stimulate economic activity by increasing employment and household income. As income increases, individuals may save a portion of their earnings, thereby increasing private savings in the economy (Iyoha & Oriakhi, 2002).

However, the effectiveness of deficit spending in Nigeria largely depends on the efficiency and productivity of government expenditure. If deficits are used to finance productive investments such as infrastructure, education, and healthcare, they can generate positive multiplier effects that stimulate economic growth and increase private savings. Conversely, if deficit spending is directed toward unproductive activities, it may lead to inflationary

pressures, rising interest rates, and reduced savings and investment (Ogunmuyiwa, 2011).

Relevance of the Theories to the Study

Both Ricardian equivalence and Keynesian theories provide important insights into the relationship between government deficits and private savings. While Ricardian Equivalence predicts that private savings will increase to offset government deficits, Keynesian theory suggests that deficits can stimulate economic activity and increase savings through higher income levels. These contrasting theoretical perspectives provide a useful framework for examining how fiscal deficits influence private saving behavior in Nigeria. Therefore, this study adopted these theories to analyze whether government deficits in Nigeria lead to an increase in private savings, as suggested by the Ricardian hypothesis, or whether they influence savings through income expansion as proposed by Keynesian economics.

Empirically,

a handful of scholars have adopted both the Ricardian equivalence and Keynesian theories to examine the connection between government deficit and private savings. For instance, Huntley (2014) looked at how long-term federal budget deficits affect national saving and private investment in the United States. The research explained how changes in private savings and the flow of foreign capital can reduce or balance some of the impact of budget deficits on saving and investment. The author used different estimates to show how uncertain the exact size of these effects might be. The study found that for every extra dollar the government spends beyond what it takes in, private investment could drop by as little as 15 cents or as much as 50 cents, with a middle estimate of about 33 cents less.

Furthermore, Kioko (2015) identified the extent to which local governments delivered public services and the effects of fiscal decay. The study found out that limitations on the taxing and expenditure powers since the late 1970s have hampered the ability of local governments in the management of fiscal resources. These constraints reduce the maneuverability of governments in the face of revenue and expenditure shocks and hence fiscal performance – a situation that is in contrast to the more free-wheeling fiscal policies advocated by Marire. Last, Macgee, Pugh, and See (2022) who discussed the influence of COVID-19 on the debts and savings of households, and the differences between the income levels. According to their research, they established that low-income households were at a higher risk of unemployment but transfers helped to reduce the effect on savings.

In addition, Kida (2020) looked at government savings, family spending, private savings, and population in Southeast Europe between 2004 and 2018.The study found that in the long run, government savings, total savings, and family spending are connected in a positive way, but population growth has a negative effect on family spending. However, in the short run, there was no clear connection between these factors. This suggests a different explanation compared to Marire's findings, where fiscal deficits might directly affect savings.

In South Africa, Marire (2023) used a Toda-Yamamoto vector autoregressive model to examine how fiscal deficits impact private savings from 1960 to 2021. The results showed that fiscal deficits increase savings and lower interest rates, which matches the idea that debt-funded deficits create financial assets, leading to higher savings and lower interest rates through the liquidity effect.

Momodu, Ewubare, Amadi and Okeme (2024) used a special model called the Autoregressive Distributed Lag model to look at how government deficits affect net national savings in Nigeria from 1981 to 2022.Their findings showed that in the short term, past policies that gave credit to agriculture had a big negative effect on savings. However, fiscal transfers had a small positive effect when considered one period later. The study also found that in the short run, there was a quick movement back towards the long-term balance. In the long run, agricultural credit programmes helped increase national savings, but spending on infrastructure had a small negative effect. Government borrowing and fiscal transfers didn't have a strong effect on savings in the long term. The research stressed the importance of supporting agricultural credit to boost savings, and it also pointed out the need for careful planning when it comes to infrastructure spending and government borrowing to keep the economy stable in the long run.

Similarly, Momodu, Akidi and Okeme (2025) looked at how government deficits affected private savings in Nigeria spanning 1981 to 2022 through the technique of Autoregressive Distributed Lag - ARDL. Their findings showed that in the short term, federal and state government deficits had a positive effect on private savings, but this effect was delayed. What this suggest is that the impact of these deficits wasn't immediate, but happened over time. This delay might be because of changes in the economy, like higher interest rates or more government spending, which could make people save more later. On the other hand, quasi-fiscal deficits, which are related to government-backed loans that don't get repaid, had a negative impact on private savings in the short term. This suggests that these kinds of deficits can create financial problems and reduce confidence in the private sector. In the long run, federal and state deficits were linked to lower private savings. This is probably because people worry about the government's ability to keep up with its debts, and because more government borrowing may take money away from private businesses. However, local government deficits were linked to higher private savings, likely because their impact is more limited to local areas. Surprisingly,

even though quasi-fiscal deficits hurt private savings in the short run, they were connected to more savings in the long term. This might be because over time, these deficits help stabilize the financial system and improve liquidity.

Research Gap

Although several studies have examined fiscal policy in Nigeria, most of them focus on the connection between fiscal deficits and economic growth, inflation, or public debt. Limited attention has been given to the direct relationship between government deficits and private savings in Nigeria. Furthermore, existing studies did not capture current realities regarding government deficits and private savings in Nigeria. Hence, they lost touch of current realities regarding government deficits and private savings in Nigeria. Therefore, this study filled this gap by empirically examining the connection between government deficits and private savings in Nigeria using updated data and appropriate econometric techniques.

III. MATERIALS AND METHODS

For this study, an ex-post facto research design was used and data were gathered from existing sources for the years 1981 to 2023. The data included yearly information on fiscal deficit as a percentage of gross domestic product (GDP), private sector savings deposit, broad money supply as a ratio of GDP in %, private sector credit as a ratio of GDP in % and exchange rate. All of these data were collected from the Statistical bulletin of Nigeria's apex bank.

Model Specification

The research model for this study is based on the clear version of the Keynesian theory, which made it clear that government deficit spending may indirectly increase private savings through its positive effect on income and employment. That is,

$$PS = f(FDT) \quad (1)$$

From equation one (1), PS is private savings and FDT is fiscal deficit.

However, based on the theoretical foundation, with a slight adjustment to equation (1) by including exchange rate and financial development (financial deepening) in the model because in many developing countries such as Nigeria, exchange rate depreciation (an increase in the exchange rate) tends to reduce domestic savings. When the domestic currency depreciates, the prices of imported goods and services will rise, leading to higher inflation and a reduction in the real purchasing power of households. As households spend a larger portion of their income on consumption, less income remains available for savings. At the same time, a well-developed financial system provides accessible and secure savings instruments, such as banks, mutual funds, pension schemes, and other financial products. Financial deepening encourages savings by making financial services more available and attractive. Consequently, the model for this study is presented thus:

$$PS = F(FDT, CPS/GDP, M3/GDP, EXR) \quad (2)$$

The linear form of equation (2) produced;

$$PS_t = \varphi_0 + \varphi_1 FDTt + \varphi_2 CPS/GDPt + \varphi_3 M3/GDPt + \varphi_4 EXRt + \varepsilon_t \quad (3)$$

The log form of equation (3) produced;

$$LnPS_t = \varphi_0 + \varphi_1 FDTt + \varphi_2 CPS/GDPt + \varphi_3 M3/GDPt + \varphi_4 LnEXRt + \varepsilon_t \quad (4)$$

Where; PS is private sector savings deposit, FDT is fiscal deficit as a percentage of gross domestic product (GDP), M_3/GDP is broad money supply as a ratio of GDP in %, CPS/GDP is private sector credit as a ratio of GDP in %, EXR is exchange rate, ε is error term which denotes other variables not included in the model, Ln is natural logarithm, t is the period of time and φo is the intercept. The parameter estimates are expected to behave in line with $\varphi_1, \varphi_2, \varphi_3 > 0$ *and* $\varphi_4 < 0$.

Techniques of Data Analysis

In this study, the Augmented Dickey-Fuller (ADF) unit root test, Johansen Co-integration test, and Error Correction Mechanism (ECM) were used as the main analytical tools. All the variables in the model were tested for stationarity using the ADF test. Typically, the ADF test involves estimating the following regression:

$$\Delta S_t = N_1 + N_2 t + \delta S_{t-1} + \Sigma \alpha_i \Delta S_{t-i} + \varepsilon_t \quad (5)$$

Where: S is a time series, t is a linear time trend, Δ is the first difference operator, ε is a pure white noise error term, N_1 is a constant, N_2 and δ are parameters and $\Delta S_{t-I} = (S_{t-1} - S_{t-2})$, $\Delta S_{t-2} = (S_{t-2} - S_{t-3})$, etc. The number of lagged difference terms is usually determined based on empirical judgment, with the goal of ensuring the error term in equation (4) is not correlated over time. In the ADF test, we check whether δ equals zero (Gujarati & Sangeetha, 2007).

The study used the Autoregressive Distributed Lag (ARDL) Bounds testing method for co-integration, developed by Pesaran and Shin (1999). Unlike other co-integration tests, the bounds test works whether the variables are I(0), I(1), or a mix of both. However, it is not suitable when there are I(2) series. Consequently, before using the Bounds Test, it was essential to test the integration level of all the variables using the ADF test. To determine if the variables in this study are co-integrated or have a long-run relationship, the Bounds F-statistic (bound test for co-integration) was calculated. The null hypothesis of no co-integration is rejected if the test statistic is greater than the upper critical value, while it is not rejected if the F-statistic is less than the lower critical value. If the result falls between the two, the co-integration test is inconclusive. The ARDL method was used to capture both the long-run and short-run dynamics

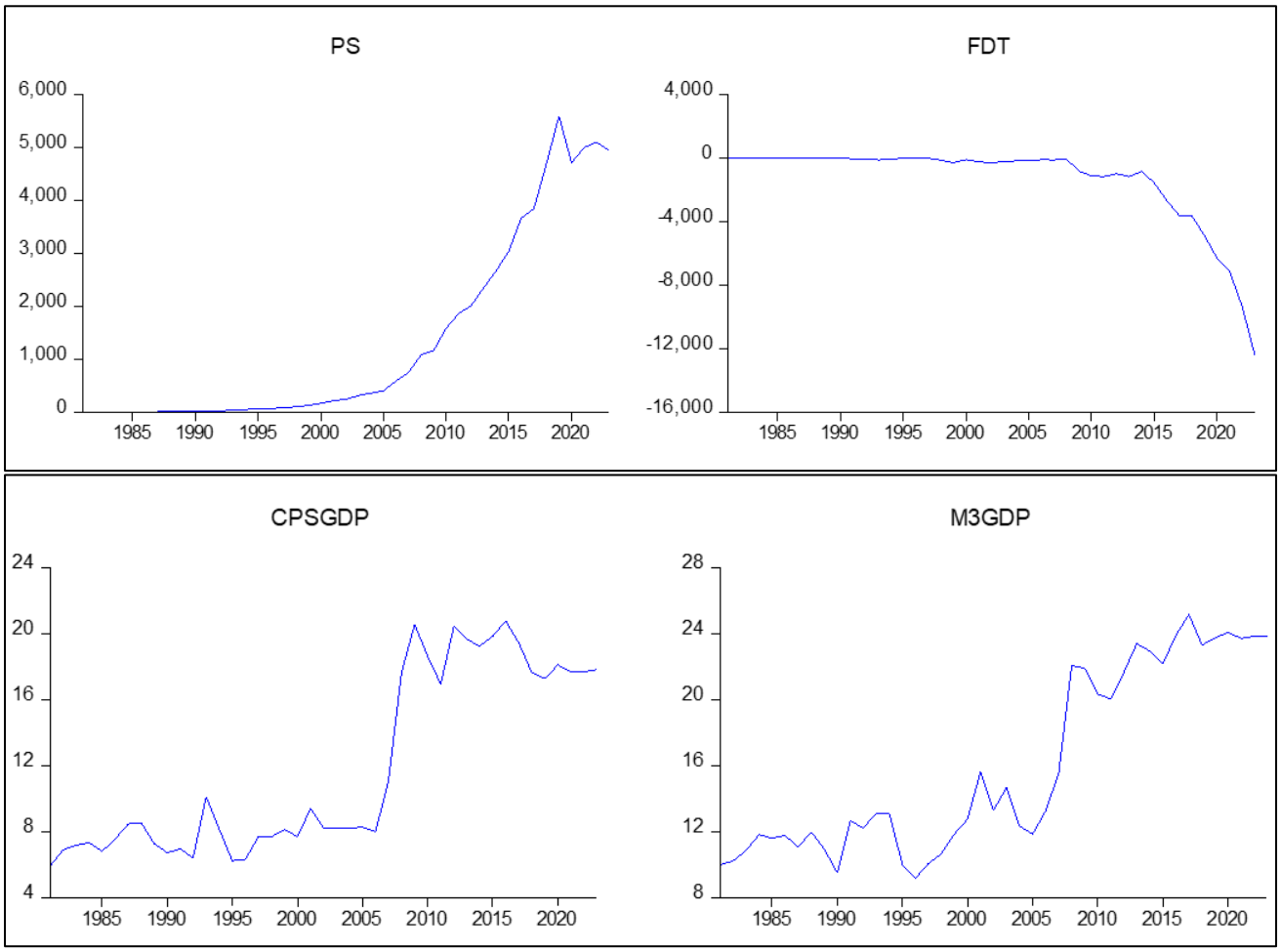
among the variables. The ARDL model is written as follows:

$$\Delta PS_{t,j} = d_0 + d_1 PS_{t-1,j} + d_2 FDT_{t-1,j} + d_3 CPS/GDP_{t-1,j} + d_4 M3/GDP_{t-1,j} + d_5 EXR_{t-1,j} + \sum_{i=1}^{n1} e_{1i,j}\Delta PS_{t-1,j} + \sum_{i=0}^{n2} e_{2i,j}\Delta FDT_{t-1,j} + \sum_{i=0}^{n3} e_{3i,j}\Delta CPS/GDP_{t-1,j} + \sum_{i=0}^{n4} e_{4i,j}\Delta M3/GDP_{t-1,j} + \sum_{i=0}^{n5} e_{5i,j}\Delta EXR_{t-1,j} + \lambda ECMt - 1 + \mu_t \quad ---- (6)$$

Where Δ is the difference operator, n is the best lag length, e_1, e_2, e_3, e_4, e_5 show how the model behaves in the short run and d_1, d_2, d_3, d_4, d_5 show how much the variables change in the long run and μ_t is the error term. ECM_{t-1} is the error correction term. The error coefficients (λ_1) show how fast the model corrects any imbalance from the previous period to get back to the long run balance. The coefficient of ECM is expected to be negative and significant. A negative and significant ECM coefficient means that any short-term changes between the dependent and explanatory variables will eventually return to the long-term relationship.

IV. RESULTS AND DISCUSION

Appraising the trends of private sector savings deposit (PS), fiscal deficit as a percentage of gross domestic product (GDP) (FDT), broad money supply as a ratio of GDP in % (M3/GDP), private sector credit as a ratio of GDP in % (CPS/GDP), exchange rate (EXR), in Nigeria from 1981 to 2023



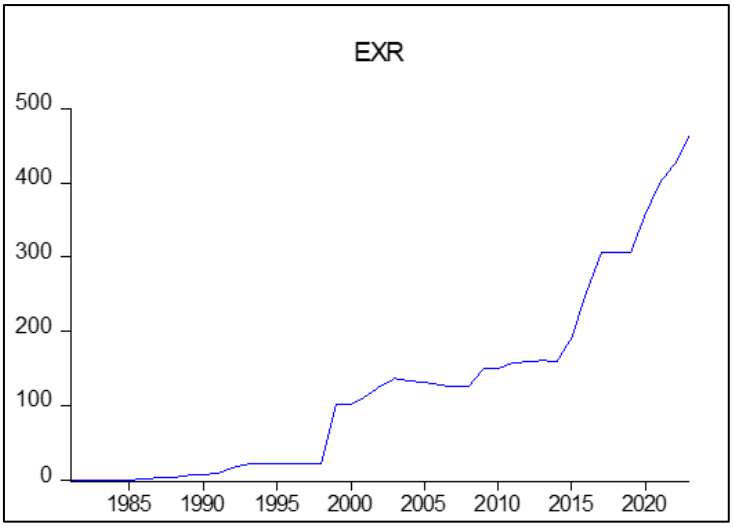


Figure 1: The trends of private sector savings deposit, fiscal deficit as a percentage of gross domestic product (GDP), broad money supply as a ratio of GDP in %, private sector credit as a ratio of GDP in %, exchange rate, in Nigeria from 1981 to 2023
Source: Author (2026).

Private Sector Savings Deposits (PS)

The graph of Private Sector Savings Deposits (PS) shows a persistent upward trend throughout the period. Between 1981 and the late 1990s, savings deposits remained relatively low and increased only marginally. From the early 2000s onward, the series began to rise steadily, reflecting improvements in banking penetration, financial sector reforms, and increased public confidence in the banking system. The most remarkable growth occurred between 2010 and 2020, when deposits expanded sharply, reaching their highest level. Although there was a slight decline after 2020, the overall trend remained strongly positive. The continuous increase in private sector savings deposits suggests a gradual deepening of Nigeria's financial system. Higher savings mobilization increases the pool of loanable funds available for investment, economic growth, and financial intermediation. However, the decline observed after 2020 may indicate economic uncertainties, inflationary pressures, or reduced real household incomes affecting saving behaviour.

Fiscal Deficit as a Percentage of GDP (FDT)

The graph of Fiscal Deficit as a Percentage of GDP (FDT) remains relatively stable and close to zero during the 1980s, 1990s, and early 2000s. However, from around 2010 onwards, the fiscal deficit became increasingly negative, indicating rising government borrowing relative to GDP. The deterioration accelerated after 2015 and became particularly severe between 2020 and 2023, when the deficit reached its lowest level. The growing fiscal deficit reflects increasing government expenditure exceeding revenue, largely due to declining oil revenues, rising debt servicing obligations, infrastructure spending, and economic shocks. The sharp deterioration after 2020 coincides with the COVID-19 pandemic and subsequent economic recovery measures, which significantly increased public spending while reducing revenue generation.

Private Sector Credit as a Ratio of GDP (CPS/GDP)

The CPS/GDP graph shows moderate fluctuations between 1981 and 2008, remaining generally below 10 percent of GDP. A significant structural increase occurred around 2009–2010 when credit to the private sector expanded sharply, rising above 15 percent of GDP and reaching approximately 20 percent in subsequent years. Although some fluctuations are evident after 2012, the ratio remained considerably higher than its pre-2009 levels. This trend suggests substantial financial sector expansion and increased access to credit for businesses and households following banking sector reforms. Increased credit availability is expected to stimulate investment, production, and employment generation. Nevertheless, the post-2015 fluctuations may indicate challenges such as rising non-performing loans, tighter monetary policies, or economic recessions affecting lending activities.

Broad Money Supply as a Ratio of GDP (M3/GDP)

The M3/GDP graph reveals an overall upward trend despite considerable fluctuations. During the 1980s and early 1990s, broad money supply remained relatively low, averaging around 10–12 percent of GDP. The ratio experienced periodic increases and declines throughout the 1990s and early 2000s. A notable expansion occurred after 2008, with M3/GDP rising sharply above 20 percent and remaining relatively high thereafter. The upward movement reflects increased financial deepening, monetary expansion, and growth in banking activities. The higher money supply indicates greater liquidity within the economy and increased capacity of financial institutions to support economic activities. However, excessive monetary growth without

corresponding increases in output may contribute to inflationary pressures.

Exchange Rate (EXR)

The Exchange Rate (EXR) graph exhibits a dramatic and continuous upward trend throughout the study period. During the 1980s, the exchange rate remained very low, reflecting a relatively stronger naira. However, substantial depreciation began after the Structural Adjustment Programme (SAP) in 1986 and accelerated in the late 1990s and early 2000s. The exchange rate continued to rise significantly after 2015 and exceeded ₦400 per US dollar by 2023. The persistent increase indicates a continuous depreciation of the Nigerian naira against major foreign currencies. This depreciation can be attributed to foreign exchange shortages, declining oil export earnings, inflation differentials, capital outflows, and structural weaknesses in the economy. While a weaker currency may improve export competitiveness, it also raises the cost of imports, fuels inflation, and increases production costs.

Inclusive Interpretation

Collectively, the graphs indicate that Nigeria experienced increasing financial deepening, evidenced by rising private savings deposits (PS), private sector credit (CPS/GDP), and broad money supply (M3/GDP). At the same time, the economy witnessed worsening fiscal deficits (FDT) and substantial exchange rate depreciation (EXR). While financial sector development has the potential to support economic growth and human development, persistent fiscal imbalances and exchange rate instability may undermine these gains by creating inflationary pressures, increasing debt burdens, and reducing economic efficiency. Therefore, policies aimed at strengthening financial intermediation must be complemented by sound fiscal management and exchange rate stability.

Table 1: Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	Level form		First difference		Order of integration
	ADF Statistics	5% Critical Value	ADF Statistics	5% Critical Value	
PS	-5.877775	-2.954021	-	-	I(0)
FDT	11.33772	-2.933158	-7.277358	-2.936942	1(1)
CPS/GDP	-0.980213	-2.933158	-5.334850	-2.935001	1(1)
M3/GDP	-0.739509	-2.933158	-6.204884	-2.935001	1(1)
EXR	3.071535	-2.933158	-4.408356	-2.935001	1(1)

Note: PS, FDT, CPS/GDP, M3/GDP and EXR as earlier defined

Source: *Author 2026.*

The outcomes of the ADF test in Table 1 reveal that at the five percent significance level, PS is stationary at 1(0). However, FDT, CPS/GDP, M3/GDP, and EXR become stationary after one difference. That is, 1(1). Since the variables are unified of order 1(0) and 1(1), it meets the requirement to use an ARDL model to investigate the long-run relationships.

Table 2: ARDL Bounds Test for Co-integration

Model		F-Statistic = 30.92801
PS= F(FDT, CPS/GDP, M3/GDP, EXR)		K = 4
Critical Values	Lower Bound	Upper Bound
5%	2.56	3.49

Note: PS, FDT, CPS/GDP, M3/GDP and EXR as earlier defined

Source: *Author 2026.*

The result in Table 2 confirmed that PS, FDT, CPS/GDP, M3/GDP, and EXR have a long run connection because at the 5% significance level, the upper critical value is lower than the F-statistic of 30.9. Consequently, both the long and short terms' effects of the variables were determined.

Table 3: Estimated ARDL Long Run Coefficients. Dependent Variable: PS ARDL (1, 0, 3, 1, 1)

Regressors	Coefficient	t-Statistic	P-Value
FDT	0.000111	1.456821	0.1559
CPS/GDP	0.124356	1.242983	0.2238
M3/GDP	-0.032855	-0.285298	0.7774
LOG(EXR)	1.011452	10.74039	0.0000

Note: PS, FDT, CPS/GDP, M3/GDP and EXR as earlier defined

Source: *Author 2026.*

The assessed ARDL long term coefficients in Table 3 show that in the elongated period, fiscal deficits, private sector credit as a ratio of GDP in % and exchange rate have positive association with private savings.

However, broad money supply as a ratio of GDP in % has a negative association with private savings. In all, only exchange rate has a significant relationship with private savings.

Table 4: Error Correction Representation for the Selected ARDL Model ARDL (1, 0, 3, 1, 1)

Regressors	Coefficients	t-Statistic	P-Value
FDT	1.33E-05	1.738564	0.0927
CPS/GDP	0.012727	1.775989	0.0862
M3/GDP	0.031401	3.410478	0.0019
LOG(EXR)	0.018252	0.481953	0.6335
ECM (-1)	-0.120374	-14.75000	0.0000
R^2 = 0.682566; **D-W stat. =** 2.130459; Akaike info criterion = -2.293616; Schwarz criterion = -2.040284			

Source: *Author 2026.*

A careful observation of Table 4 reveals that the Error Correction Term is negative and significant as expected. The value of Durbin Watson statistic is 2.130459 confirming that the model is free from the problem of autocorrelation. At the same time, R-squared is 0.68. This suggests that 68% changes in the private savings can be elucidated by the variables involved in the model, meanwhile 32 percent is elucidated by the error term.

Furthermore, the coefficient of fiscal deficit revealed a positive and insignificant connection with private savings in Nigeria. This means that if there is an increase in fiscal deficit, it will lead to an increase in private savings. This finding is consistent with the finding of Marire (2023) who employed Toda-Yamamoto vector autoregressive modeling framework to study how fiscal deficits influence private savings from 1960 to 2021 in South Africa. The researcher discovered a positive association between fiscal deficits and savings. However, fiscal deficit is not statically significant. The ARDL result revealing a positive but statistically insignificant relationship between fiscal deficit and private savings in Nigeria suggests that increases in fiscal deficits tend to be associated with increases in private savings; however, the magnitude of this effect is too weak to exert a meaningful influence on savings behaviour. From a policy perspective, this finding implies that fiscal deficits are not a significant driver of private savings mobilization in Nigeria. Consequently, policymakers cannot rely on expansionary fiscal policies or deficit financing as an effective mechanism for stimulating private savings within the economy.

In addition, the positive coefficient lends partial support to the Ricardian Equivalence Hypothesis, which posits that rational economic agents increase their savings in anticipation of future taxation arising from government borrowing. However, the insignificance of the coefficient suggests that Nigerian households do not systematically adjust their savings decisions in response to changes in government fiscal balances. This may be attributable to low-income levels, widespread poverty, imperfect capital markets, and limited financial literacy, which constrain the ability of households to save irrespective of government fiscal actions. Therefore, fiscal authorities should exercise caution in assuming that increased deficits will automatically induce higher private savings to offset government dissaving.

The insignificant effect indicates that other macroeconomic variables such as disposable income, inflation, interest rates, financial inclusion, exchange rate and employment conditions may exert a stronger influence on private savings than fiscal deficits. As a result, policies aimed at enhancing private savings should prioritize income growth, macroeconomic stability, and financial sector development rather than focusing solely on fiscal expansion. Measures such as promoting financial inclusion, increasing access to banking services, strengthening deposit mobilization mechanisms, and maintaining positive real interest rates are likely to yield more substantial improvements in private savings behaviour. The finding also suggests that fiscal deficits in Nigeria may not have generated sufficient confidence effects or productive spillovers capable of significantly influencing household saving decisions. This could reflect concerns regarding the efficiency of public expenditure and the productive utilization of borrowed funds.

Moreover, the ARDL estimation reveals a positive relationship between broad money supply as a ratio of GDP (M3/GDP), private sector credit as a ratio of GDP (CPS/GDP), and private savings in Nigeria. Meanwhile, broad money supply as a ratio of GDP (M3/GDP) is statistically significant. This finding suggests that financial deepening, reflected through increased monetary expansion and greater credit allocation to the private sector, contributes positively to savings mobilization within the economy. The result underscores the critical role of the financial sector in facilitating resource mobilization and enhancing domestic savings, which are essential for sustainable economic growth and development. The positive relationship between M3/GDP and private savings implies that an expansion in the level of financial assets and liquidity relative to economic output enhances the capacity of the financial system to mobilize savings. As the money supply expands, financial institutions are able to offer a wider range of financial products and services,

thereby increasing public participation in formal financial markets. This finding suggests that policies aimed at deepening financial intermediation and broadening access to banking services can strengthen savings mobilization. Consequently, monetary authorities should continue to promote financial inclusion, expand digital financial services, and improve access to formal financial institutions, particularly in rural and underserved communities.

Also, the positive association between broad money supply and private savings indicates that a well-developed financial system encourages households and firms to hold financial assets rather than idle cash balances. Increased liquidity within the banking system can enhance confidence in financial institutions and improve the attractiveness of savings instruments. Therefore, maintaining a stable monetary environment that supports financial sector growth without generating excessive inflation is essential for sustaining the positive contribution of money supply expansion to private savings. Similarly, the positive relationship between private sector credit (CPS/GDP) and private savings suggests that increased credit availability promotes savings accumulation within the economy. Greater access to credit enhances productive investment opportunities, stimulates business expansion, and increases household and corporate incomes. As incomes rise, the capacity to save also improves, thereby strengthening domestic savings mobilisation. This finding highlights the importance of an efficient credit allocation mechanism in fostering both investment and savings growth.

The ARDL estimation indicating a positive but statistically insignificant relationship between exchange rate and private savings in Nigeria suggests that exchange rate depreciation tends to be associated with an increase in private savings; however, the effect is not sufficiently strong to exert a significant influence on savings behaviour. This finding implies that fluctuations in the exchange rate are not a major determinant of private savings in Nigeria, and changes in the value of the naira do not substantially alter households' and firms' saving decisions. The positive coefficient may reflect a precautionary saving response by economic agents during periods of exchange rate depreciation. As the naira weakens against foreign currencies, households and firms may anticipate higher future prices of imported goods and increased economic uncertainty, thereby encouraging them to save more as a buffer against potential adverse economic conditions. However, the statistical insignificance of the relationship suggests that such precautionary behaviour is neither widespread nor sufficiently strong to generate a systematic impact on aggregate private savings. This outcome may be attributed to the relatively low-income levels of many households, which limit their capacity to increase savings regardless of exchange rate movements.

From a policy perspective, the finding implies that exchange rate management alone is unlikely to serve as an effective instrument for mobilizing private savings. While exchange rate stability remains important for overall macroeconomic performance, policymakers should recognize that private savings are more strongly influenced by factors such as income growth, financial sector development, real interest rates, employment opportunities, and inflation expectations. Consequently, strategies aimed at increasing private savings should focus on improving economic welfare, expanding financial inclusion, and strengthening the institutional framework of the financial sector rather than relying on exchange rate adjustments.

The insignificant relationship may also indicate the limited transmission of exchange rate movements to household saving behaviour due to structural characteristics of the Nigerian economy. A substantial proportion of the population operates within the informal sector and may have limited exposure to foreign exchange markets. As a result, exchange rate fluctuations may affect consumption and production costs without necessarily translating into significant changes in saving decisions. This finding underscores the need for policies that deepen financial intermediation and integrate a larger proportion of the population into the formal financial system, thereby enhancing the responsiveness of savings behaviour to macroeconomic policy signals.

Although exchange rate depreciation may encourage savings through precautionary motives, persistent currency instability can undermine the real value of financial assets through imported inflation. Rising prices resulting from exchange rate pass-through effects may reduce disposable income and erode households' capacity to save. Therefore, maintaining exchange rate stability remains essential not because it directly stimulates private savings, but because it contributes to a stable macroeconomic environment that supports income growth, financial planning, and confidence in the banking system. The positive but insignificant coefficient also suggests that exchange rate policies should be complemented by broader structural reforms aimed at enhancing domestic production and export competitiveness. Reducing dependence on imports, diversifying export earnings, and strengthening foreign exchange reserves can mitigate excessive exchange rate volatility and improve macroeconomic stability. Such measures are likely to create favourable conditions for investment, employment generation, and income growth, which ultimately exert a stronger influence on private savings than exchange rate movements alone.

Post Estimation Diagnostic Tests Results

Table 5: Breusch-Godfrey Test for Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.096726	Prob. F(2,27)	0.9081
Obs*R-squared	0.284556	Prob. Chi-Square(2)	0.8674

Source: *Author (2026).*

Table 5 reveals none existence of a serial autocorrelation problem. The reason for this is simple, the chi-square value, as well as the connected probability of the chi-square statistic are more than 0.05.

Table 6: Autoregressive Conditional Heteroskedaticity Test Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.526545	Prob. F(10,29)	0.1802
Obs*R-squared	13.79446	Prob. Chi-Square(10)	0.1826
Scaled explained SS	5.620983	Prob. Chi-Square(10)	0.8460

Source: Author (2026).

Table 6 approves that the model is free from heteroskedasticity, this suggests that the variance of the residual in the model (i.e., private savings model) is homoscedastic during the period investigated in this study.

Normality Test Result

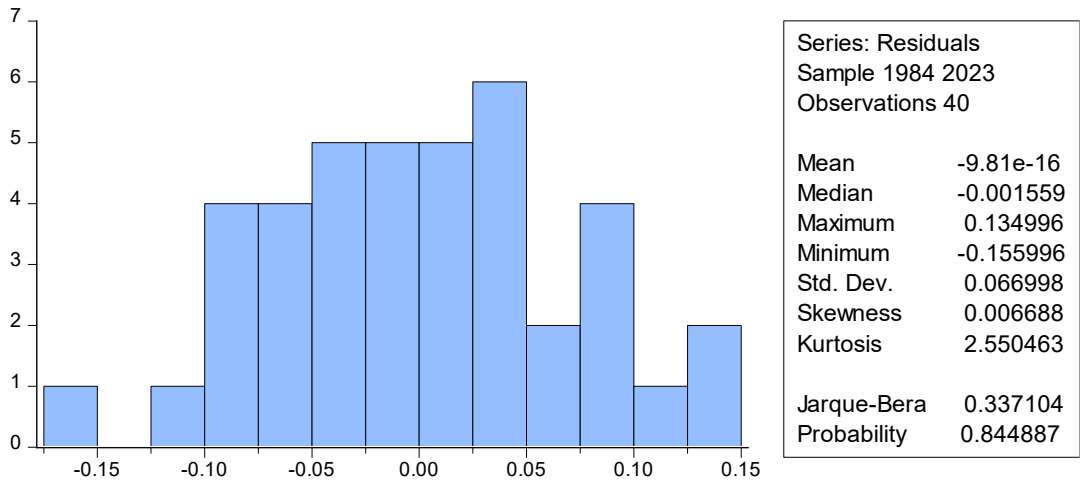


Figure 2: Normality Test Result

Source: *Author (2026).*

Figure 2 reveals the normal distribution of the error term at 5%, considering the probability value of the Jarque-Bera statistic of 0.845, which is more than 0.05 level.

V. CONCLUSION AND RECOMMENDATIONS

This study investigated how fiscal deficits relate to private savings in Nigeria spanning 1981-2023. The study used information on private sector savings deposit, fiscal deficit as a percentage of gross domestic product (GDP), broad money supply as a ratio of GDP in %, private sector credit as a ratio of GDP in % and exchange rate from the statistical reports of Nigeria's apex bank. The technique of Autoregressive Distributed Lag (ARDL) was applied. The outcomes revealed that the variables have a long run association. The outcomes also revealed that in the long run, fiscal deficit and private sector credit as a ratio of GDP in % have a positive though not significant connection with private savings. At the same time, broad money supply as a ratio of GDP in % has a negative association with private savings. Meanwhile, exchange rate has a positive and significant relationship with private savings. In the short run, fiscal deficits, private sector credit as a ratio of GDP in %, broad money supply as a ratio of GDP in % and exchange rate have positive association with private savings. Interestingly, only broad money supply as a ratio of GDP in % is statistically significant. Based on these findings, the study suggested that policymakers should ensure that deficit-financed expenditures are directed toward growth-enhancing sectors such as infrastructure, education, healthcare, and technological development. Productive public investment can raise income levels and create conditions that encourage greater private savings over the long run. The policy implication is that deficit financing alone cannot be relied upon as a tool for

promoting private savings. Rather, sustained increases in private savings require policies that enhance household income, strengthen financial intermediation, ensure macroeconomic stability, and improve the productivity of government expenditures. Such measures are more likely to generate meaningful and lasting improvements in the nation's savings performance and economic development. Policymakers should encourage deposit money banks and other financial institutions to extend credit to sectors with high growth and employment potential, including agriculture, manufacturing, small and medium-scale enterprises (SMEs), and technology-based industries. Such measures would enhance productive capacity, increase income generation, and subsequently boost private savings. Policymakers should prioritize measures that enhance income levels, strengthen financial sector development, improve financial inclusion, and maintain macroeconomic stability. These policies are more likely to generate sustainable increases in private savings and support long-term economic growth and development in Nigeria.

REFERENCES

- Akidi, V., Momodu, A. A., & Isoghom, W. K. (2025). Fiscal Deficit Financing and Unemployment Rate in Nigeria: An Empirical Investigation. *International Journal of Economics and Business Management*, 11(4), 238-258.
- Alesina, A., & Perotti, R. (1997). Fiscal adjustments in OECD countries: Composition and macroeconomic effects. *Economic Policy*, 12(21), 207–248.
- Barro, R. J. (1974). Are government bonds net wealth? *Journal of Political Economy*, 82(6), 1095–1117.
- Barro, R. J. (1989). The Ricardian approach to budget deficits. *Journal of Economic Perspectives*, 3(2), 37–54.
- Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal of Political Economy*, 98(5), S103–S125.
- Blanchard, O. (2017). *Macroeconomics* (7th ed.). Pearson Education.
- Blanchard, O., & Johnson, D. (2013). *Macroeconomics* (6th ed.). Pearson Education.
- Central Bank of Nigeria (CBN). (2023). *Central Bank of Nigeria Statistical Bulletin*. Abuja: CBN.
- Fischer, S., Easterly, W., & Sahay, R. (2001). The economics of the government budget constraint. *World Bank Research Observer*.
- Friedman, M. (1957). *A Theory of the Consumption Function*. Princeton University Press.
- George-Anokwuru, C. C. (2026). Fiscal deficit financing and unemployment in Nigeria. *International Journal of Economics, Commerce and Management United Kingdom,* 14(1), 172-200.
- Huntley, J. (2014). The Long-Run Effects of Federal Budget Deficits on National Saving and Private Domestic Investment. *Working Paper Series Congressional Budget Office Washington, DC.* 2014-02.
- International Monetary Fund (IMF). (2022). *Nigeria: Article IV Consultation Report*. Washington, D.C.
- Iyoha, M. A., & Oriakhi, D. E. (2002). *Explaining African economic growth performance: The case of Nigeria*. African Economic Research Consortium.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money*. Macmillan.
- Kida, N. (2020). Dynamic relationship between government spending, final consumption and savings: Evidence from Southeast Europe. *International Journal of Economics and Business Administration*, 8(2), 521-539.
- Kioko, S.N. (2015). Impact of tax and expenditure limitations on local government savings. In: Hou, Y. (eds) Local Government Budget Stabilization. *Studies in Public Budgeting, vol 2. Springer, Cham.*
- Loayza, N., Schmidt-Hebbel, K., & Servén, L. (2000). What drives private saving across the world? *Review of Economics and Statistics*, 82(2), 165–181.
- Mankiw, N. G. (2019). *Macroeconomics* (10th ed.). Worth Publishers.
- Marire, J. (2023). Do fiscal deficits influence private savings in South Africa? An empirical note. *Journal of Economic and Financial Sciences,* 16(1), a809.
- Modigliani, F. (1986). Life cycle, individual thrift, and the wealth of nations. *American Economic Review*, 76(3), 297–313.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. Kurihara (Ed.), *Post-Keynesian Economics*. Rutgers University Press.
- Momodu, A. A., Akidi, V., & Okeme, E. (2025). Governments' Deficits and Private Savings in Nigeria: An Empirical Analysis. *International Journal of Advanced Multidisciplinary Research and Studies,* 5(1), 356-365.
- Momodu, A. A., Ewubare, D. B., Amadi, C. R., & Okeme, D. E. (2024). Effect of Government Deficits on Net National Savings in Nigeria. *International Journal of Economic Research and Development Studies (JERDS),* 1(1), 29-40.
- Ogunmuyiwa, M. S. (2011). Does fiscal deficit stimulate economic growth in Nigeria? *Journal of Research in National Development*, 9(1), 1–8.
- Ricardo, D. (1820). *Essay on the funding system*. London: John Murray.
- Todaro, M. P., & Smith, S. C. (2020). *Economic Development* (13th ed.). Pearson.