

Money Supply and Private Sector Credit in Nigeria

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Article History	Abstract
Original Research Article	<i>This study examined the effect of money supply on private sector credit in Nigeria using time-series data obtained from the Central Bank of Nigeria covering the period from 1990 to 2024. Private sector credit served as the dependent variable, while narrow money supply (M1), broad money supply (M2), and broad money supply (M3) constituted the explanatory variables. To examine both the short- and long-run dynamics between money supply and private sector credit, the study employed unit root testing, cointegration analysis, the Granger causality test, descriptive statistics, correlation analysis, Dynamic Least Squares (DLS), and Fully Modified Least Squares (FMOLS). The DLS results indicated that money supply variables accounted for 55% and 51.9% of the variation in private sector credit. Specifically, M1 and M2 exerted negative effects on private sector credit, whereas M3 had a positive effect. The FMOLS estimates showed that 53.3% and 52.6% of the variation in private sector credit was associated with the money supply variables, with M1 and M3 exerting positive effects and M2 showing a negative effect. The study concluded that money supply plays an important role in determining private sector credit in Nigeria. Accordingly, it recommends that the Central Bank of Nigeria should sustain and strengthen policies aimed at expanding credit to the private sector. Monetary policy should also adopt a broader framework capable of influencing private sector credit and government expenditure as components of aggregate demand, while improving the effectiveness of monetary management through better organization of financial markets to strengthen the transmission effects of monetary policy variables, particularly broad money supply, on private sector credit.</i> Keywords: Money Supply, Private Sector Credit, Narrow Money Supply, Broad Money Supply, Broad Money Supply.
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Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited. Citation: Azoroh Bariledum Job PhD & Onuabi, Evans Jared. (2026). Money supply and private sector credit in Nigeria. UKR Journal of Economics, Business and Management, 2(9), 153-168.	

Introduction

Private sector credit consists of the funds advanced to private sector agents by depository corporations other than the central banks. Credit may take the form of loans, purchases of non-equity securities, and trade-related credit. It reflects changes in the aggregate value of credit newly made available to households and businesses and privately originated or negotiated investments involve relatively illiquid opportunities with varying risk–return characteristics that are not traded on public markets. The amount of bank lending to the private sector is also influenced by the prevailing phase of the economic cycle. During periods of economic expansion, banks are generally expected to maintain stronger credit positions and lending tend to weaken during downturns as financial institutions

become more cautious of the credit they extend to the real sector. In Nigeria, the expansion of bank credit to the private sector has been aided by the continued implementation of Central Bank of Nigeria (CBN) intervention programmes targeted at specific sectors through the banks' balance sheets alongside growth strategies adopted by the banks to deal with sector-wide pressures. Bank credit is a particularly important source of investment financing for private enterprises in emerging economies, including Nigeria (Chisom & Chikwendu, 2019), and the availability and accessibility of bank financing is a significant determinant of private-sector investment activity.

Evidence suggests considerable growth in credit to the private sector in Nigeria. Orjiude (2022) reported that loans provided by the Nigerian banking industry to the private sector increased by ₦5.1 trillion to represent 16.67% between January and December 2021. Credit supplied by the banking system consists of direct loans and overdrafts provided to private-sector participants through institutions such as deposit money banks, non-interest banks and merchant banks. Similarly, Adegbesan (2022) reported banking-sector credit to the private sector increased year-on-year by 33.7% to ₦35.3 trillion in November 2021. These developments indicate the expanding role of the banking sector in providing funds to private economic activities and their importance to businesses operating in the Nigerian economy.

Money supply is an important macroeconomic variable as the availability of liquidity influences the conduct and expansion of economic activities in both the public and private sectors (Hicham, 2020). Through access to available money and credit, private-sector agents can obtain finance for business activities at a cost represented by the prevailing interest rate. At a macroeconomic level, monetary policy is a major instrument through which the central banks seek to maintain economic stability and encourage sustainable economic growth. However, different schools of economic thought offer differing explanations of the relationship between money supply and economic performance. Monetarists generally contend that changes in money supply have a stronger influence on inflation than on real output or gross domestic product (GDP) (Seoela, 2020), and an unexpected expansion in the money stock may stimulate economic growth under certain conditions (Mahara, 2020). By contrast, Keynesian perspectives suggest that money supply has only a limited influence on economic growth (Gachugu & Luseno, 2023; Ogbanje & Ihemezie, 2021) and indicates the ongoing debate concerning the transmission and consequences of monetary expansion.

The relationship between money supply and economic activity has been subject to longstanding theoretical disagreement. While monetary neutrality is more plausible over extended economic periods, short-run conditions can lead to different outcomes. New Keynesian theory, for example, holds that changes in money supply may influence real variables such as GDP and employment in the short run due to price rigidity and imperfect information in the markets. A contraction in the availability of money may also result in broader price pressures and changes in money supply can influence inflation via demand-side mechanisms. The assumption of a simple linear relationship among economic variables may overlook the recurring and dynamic nature of monetary effects. Persistent increases in

the annual growth of money supply may lead to rising price levels and inflation, weakening the effects of monetary policy on economic growth. In Nigeria, inflationary pressures associated with the consequences of monetary expansion may contribute to the depreciation of the value of money. Given the close relationship between money and major macroeconomic aggregates, namely investment, expenditure, income, output, and employment, examining its influence on private-sector credit is important. With this background, the present study investigates the effect of money supply on credit to the private sector in Nigeria.

Literature Review

Conceptual Review

Money Supply

Monetary supply is the quantity of money in circulation in a given economy at a particular moment and functions as a highly liquid and spendable medium of exchange. It can be defined from a narrow and broad perspective depending on the degree of liquidity of the monetary aggregates. The former encompasses currency in circulation as well as demand deposits, whereas the latter adds other types of deposits to the definition [93]. In Nigeria, for example, narrow money is referred to as M1 and includes currency in circulation and demand deposits. In turn, the term broad money (M2) covers M1 in addition to the savings, time, and foreign-currency deposits. The definition of monetary aggregates as either narrow or broad depends largely on the level and extent of development of the financial system and infrastructure. Hence, the components of money in circulation may vary from one country to another depending on the definition and categories used by the country's monetary authorities.

With regard to monetary management, it is believed that central banks are the primary actors involved in the regulation of the quantity of money in circulation. However, there are other monetary factors that play significant roles in the determination of the size of the money stock. These include the monetary base or high-powered money, credit creation, public portfolio behaviour, the response of central banks to economic factors, and foreign exchange transactions. In contrast to the classical and monetarist views on money, the Keynesian and post-Keynesian perspectives regard income, interest rates, and level of economic activity as key determinants of money supply. Handa (2009) further explains that regardless of the definition and measurement used, money supply is determined by a combination of the major monetary agents that play active roles in the economy. The three main participants include the public, commercial banks, and the central bank. The level of influence of these monetary actors and their degree of interaction in the determination

of the money stock depends on the situation in the economy.

Types of Money Supply

Through the monetary survey, Nigerian monetary authorities assess the money supply from either the liability side or the asset side of the monetary system's balance sheet. The monetary survey consolidates the assets and liabilities of the banking system, including the Central Bank of Nigeria (CBN), deposit money banks, investment banks, and other relevant financial institutions. Money supply is classified into two principal categories: narrow money (M1) and broad money (M2), with broad money expressed as $M2 = M1 + \text{Quasi-Money (QM)}$. Narrow money (M1), regarded as the most liquid component, consists of currency in circulation, including paper notes and coins, together with demand deposits. Both M1 and M2 can be obtained from the liability side of the monetary system's balance sheet. However, while M2 can be practically derived from the asset side, M1 cannot be obtained from the asset side with the same degree of ease and may involve some margin of error. Consequently, the liability side provides a more direct basis for deriving both narrow and broad money, whereas the asset side is primarily suitable for determining M2.

M1 and M2 can be written as follows:

$M1 = C + DD$ (derived from the liabilities column of the monetary system's Balance Sheet).

$M2 = C + DD + SD + TD + FCD$ (derived from the liabilities column of the monetary system's

Balance Sheet) or $M2 = C + DD + QM$

$M2 = NFA + NDA + OAN$ (derived from the Assets column of the monetary system's Balance Sheet)

Where

C = Currency Outside Bank

DD = Demand Deposit

SD = Savings Deposit

TD = Time Deposit

FCD = Foreign Currency Deposit

QM = Quasi money

$QM = SD + TD + FCD$

NFA = Net Foreign Assets

NDA = Net Domestic Assets

OAN = Other Assets Net

Net foreign assets of the Central Bank of Nigeria (CBN) and deposit money banks are the foreign exchange holdings

of the CBN and deposit money banks after the claims of foreign entities. By contrast, net domestic assets consist of two components: net domestic credit and other assets, net, of the banking system. The "other assets, net" component is a residual value that comes from the difference between miscellaneous assets and miscellaneous liabilities. Broad money supply (M2) emanates from the liabilities side of the monetary system. Currency outside the banking system plays an important component of the monetary process, and its share of broad money tends to be relatively high in developing economies. A high proportion of currency outside banks may indicate an underdeveloped financial and payment system and may be linked to low savings and investment, limited employment and output, and relatively high inflation. Demand deposits, meanwhile, provide an important foundation for the deposit money banks to make credit money through the banking system. The extent of this credit creation depends on the credit multiplier, which determines the amount of bank-created money that comes from available demand deposits.

Quasi-money, or near money, mainly consists of savings deposits, time deposits, and foreign-currency deposits and represents an important component of the overall money supply because of its link with investment activity. An increase in quasi-money is generally related to increased investment, increased GDP or income, and increased employment. In determining appropriate money supply policies, monetary authorities consider prevailing economic conditions and indicators, including public debt, inflation, the balance-of-payments position, output growth, the expansion of credit to the economy, and the level of foreign reserves. With regard to the appropriate monetary aggregate for policy formulation, [94] holds that broad money is best suited for economies experiencing inflationary pressures or cyclical disturbances characterized by widespread unemployment, reduced investment, declining gross national product, and weak savings.

Greenwood and Hanke (2022) depict M1 as a monetary aggregate comprising actual currency and coins, demand deposits, travelers' checks, and other checkable deposits. As the narrowest measure of money supply, M1 focuses on financial assets with the highest degree of liquidity and those that are readily accessible for transaction. Thus, it comprises mainly notes and coins in circulation and funds kept in highly accessible deposit accounts. Narrow money may therefore be thought of as the basic stock of currency and operative deposits that serve the medium-of-exchange function within an economy. Its designation as "narrow" comes from the limited range of financial assets included compared to other monetary aggregates, making it the form of money that is most readily available for everyday transactions and commercial activities.

Congdon (2021) defines broad money supply (M2) as the aggregate number of cash and short-term bank deposits of economic agents. It comprises a comprehensive measure of a country's money supply by incorporating those financial assets that households and businesses can use for payments or retain as short-term investments, including currency and funds kept in bank accounts. In addition to notes and coins, M2 also incorporates savings deposits and other relatively liquid deposits. Since some of these financial assets cannot be accessed as immediately as physical cash or instant-access deposits, they are commonly described as "near money." However, financial instruments such as shares and long-term securities are not included in broad money even though they are tradable because they are regarded as mainly investment assets rather than monetary assets.

Private Sector Credit

Credit to the private sector means funds advanced to private-sector entities by financial corporations in the form of loans, purchases of non-equity securities, trade credit, and other receivables, payable on demand or on specified terms. Financial corporations include monetary authorities, deposit money banks, and other financial corporations. Private-sector investment and entrepreneurship play a critical role in reducing poverty and promoting economic development. In addition to pro-poor government strategies, investment and entrepreneurship, particularly in competitive markets, could generate significant economic growth. Through enhanced productivity, job creation, and higher incomes, private-sector investment and entrepreneurship have the potential to accelerate economic development and poverty reduction, particularly if the public sector supports and complements private efforts, for example, by providing regulating and licensing frameworks, facilitating financing, and providing key services. Moreover, when expanded and appropriately harnessed, private-sector investment and entrepreneurship have the potential to improve health, education, and other social services, infrastructure, and basic amenities, contributing to enhanced well-being and productivity of poor populations and communities.

At the global level, capital constraints in developing countries are significant and could have negative implications for macroeconomic indicators and the ability of various financial corporations to undertake intermediary activities. Lack of access to capital for private-sector initiatives may negatively affect the overall level of investment, particularly in productive enterprises and economic activity that promotes sustainable development. It is through the expansion of such activities that enhanced private-sector investment and entrepreneurship would promote economic growth.

Theoretical Framework

Classical Quantity Theory of Money

Fisher (1911) developed the equation of exchange. According to him, in partial equilibrium, the equation of exchange is stated as:

$$MS V=PT... \quad (2.1)$$

Where; MS is the money stock, V is the velocity of money and measures the rate at which a dollar circulates in the economy, P is the price level, and T is the level of transactions in an economy (Fisher, 1911)

Further, Fisher proposed that there is a fixed relationship between the number of transactions (T) taking place and output (Y), which makes it possible to replace T with Y as follows:

$$MS V=PY... \quad (2.2)$$

Equation (2) represents the Quantity Theory of Money, which, when money circulation velocity is constant in the short run, illustrates the quantity of money's proportionality to the nominative income. According to Fisher, increasing the money supply enlarges the cash balances and deposits in the hands of the public. Consequently, the public will spend the additional money balances, thus increasing the nominal gross domestic product by the increased amount of money, which shows how the change in money supply affects the economy. In turn, Mishkin (2007) notes that Fisher also realized the impact of the total expenditures' increase on the overall price level since one's expenditure is another's income, implying that the total transactions volume will rise, causing the aggregate price level to increase. In turn, the Quantity Theory of Money provides insight into how the money channel works in monetary policy. However, like classical economics, Quantity Theory of Money assumes that the economy operates at the level of full employment and that wages and prices are highly flexible to adjust to the increased money supply.

Classical Neutrality Theory of Money

The notion of the neutrality of money has usually been associated with the economist from the Austrian School of Economics, Friedrich Hayek (1931). He was the first to coin the term, meaning that the changes in the money supply have no effect on real economic output, which later on, was incorporated by the neoclassical and neo-Keynesian economists into general equilibrium theory, developing the concept in its current form. In its modern interpretation, the neutrality of money (or its absence) is used for economic changes that are not related to the short-run monetary effects, while the latter concept was perceived by Hayek himself as a long-run neutrality of money. In other words, if more money does not prompt the expansion

of an economy with increased production, the new money is non-neutral and causes inflationary pressures. The money neutrality applies to economies that are in equilibrium, with no significant monetary disequilibrium, while the reverse situation leads to non-neutrality. The early exchange theorists perceived it as a veil over the economic reality, helping to determine how much of a particular good or service was bought or sold at a given point. It could be assumed that during the early colonial period, the money did not play a significant role in economic growth since the coins were mostly foreign and only served exchange, administrative, and labor functions. Yet, later, the introduction of a wide range of banks throughout Africa and their ability to produce money in the form of bank-credit money has undermined the classical understanding of money neutrality. Additionally, with the current inflationary pressures on many economies caused by the imbalance between supply and demand, it has become even more difficult to observe the neutrality of money because changes in its supply and circulation could affect a wide range of factors in addition to prices.

Fisher's Transactions Equation

According to Inam (2014) several factors determine the general price level in an economy which include the volume of transactions, the stock of money and the velocity of circulation of money.

Fisher's equation of exchange in the transaction form is as follows:

$$PT = MV$$

$$P = MV/T$$

In Equation (2), P denotes the general price level, T represents the total volume of transactions, M refers to the stock of money, and V indicates the transaction velocity of money in circulation. Some economists employ Q instead of T , expressing the relationship as $MV = PQ$, where M represents the quantity of money, V measures the velocity of circulation, P denotes the general price level, and Q refers to the quantity of real goods and services sold, corresponding to real output or real GDP. Accordingly, the Quantity Theory of Money is founded on the relationship between the monetary stock M and the market value of the output financed by it, represented by PQ , with P indicating prices and Q representing real output. The equation of exchange therefore provides a framework for relating monetary conditions to the value and volume of economic transactions undertaken within an economy.

Fisher's equation of exchange provides a theoretical basis for understanding how variations in the money supply may influence the general price level and, consequently, inflation. It establishes a relationship between the quantity

of money circulating in an economy and the prices of goods and services. Fisher's explanation identifies two principal situations. First, when the volume of transactions T remains unchanged, an increase in MV results in a proportional rise in the general price level P , implying a corresponding decline in the value of money. Second, when MV is held constant, an increase in the quantity of goods available for transactions causes the general price level to decline proportionately, thereby increasing the purchasing value of money. The original Fisherian equation was subsequently adapted to focus on final output or national income rather than the total volume of transactions, with income velocity replacing transaction velocity. Income velocity refers to the average number of times a unit of money is used during a given period to facilitate payments for final goods and services, thereby linking monetary circulation more directly to national income.

Monetarist Theory

The Quantity Theory of Money is a key element of mainstream monetary theory, first developed during the 1950s. Conventional monetary economics broadly supports the core tenets of the quantity theory, especially its crucial assumption that money velocity is stable. Within this framework, e.g., changes in the money supply are then considered to be key drivers of nominal income (Friedman and Schwartz, 1965; Friedman, 1968). Although an increase of money in circulation can lead to a rise on output and lower unemployment in the short run as seen through observations from the perspective of monetarism, it is expected that throughout a longer time period, this increased money supply will lead to higher inflation via upward prices on general price level (Twinoburyo & Odhiambo 2018). In a similar vein, Mehrara and Musai (2012) note that monetarist typically attach heavy weight to money in determining both prices and real economic activity proposing a one-way causality from money supply to prices and output. In this context, inflation has long been in the monetarist tradition fundamentally seen as a monetary phenomenon. Mishkin (1995) provides a more extensive discussion of the channels through which monetary policy affects stock-market firms and explains that although monetarists such as Friedman (1961) and Keynesians generally agree on the impact of monetary policy on aggregate output through the asset-price channel, they differ in ways that are crucial to how we model this transmission process. A monetary contraction reduces wallet money for public monetarists, which limits spending decisions. Since the price of stocks gives information about the price of firms, lower spending on goods and services can then lead to fall in stock-market prices hurting market value of firms which in turn leads fell investment resulting lower national income.

Keynesian Theory

The Keynesian approach asks, in contrast to the monetarist position: How close is the correlation between quantity of money and production? According to Khabo (2005), a change in the money supply can indirectly affect output through the wealth that economic agents hold, as these financial amounts are used by them to acquire other financial assets such as bonds. This additional demand for bonds leads to lower market interest rates, which stimulate more investment spending and thereby increase national income. That mechanism is what is called the indirect transmission process. Thus, Keynes moved away from the classical position that monetary factors have little impact on economic growth and insisted that prices and wages tend to be much less flexible in the short run than the adjustment of the economy to monetary changes.

Another contribution by Keynes was the idea of a liquidity trap, which is when interest rates are nearing zero percent and traditional monetary policy doesn't work anymore in stimulating activity. At the Keynesian view, the influence of monetary policy operates mainly via the interest-rate transmission channel which affects not only investment decisions but also household expenditure on housing and durable goods (Mishkin 1995). Mishkin (1995) also makes a further distinction between the Keynesian and monetarist interpretations of the asset-price. Keynesians accept that contractionary monetary policy can change bond prices because it affects interest rates; but changes in bond and stock prices can then affect the market value of firms, thus producing a multiplier effect on investment spending and hence national output. This, in turn, results with the different impact of monetary conditions on asset prices and investment behavior along with aggregate expenditures when we will outline expansionary monetary policy that follows from the Keynesian framework.

Keynesian money supply transmission mechanism can be stated as

$$M_s \uparrow \rightarrow R \downarrow \rightarrow I \uparrow \rightarrow AD \uparrow \rightarrow Y \uparrow \rightarrow P \uparrow \dots \quad (2.4)$$

Where

M_s = Money supply

R = Rate of interest

I = Investment

AD = Aggregate demand,

Y = National Income,

P = Price level.

Keynes argued that full-employment equilibrium could be restored through a decline in the real wage resulting from an increase in the price level rather than through a reduction

in the nominal money wage. From this perspective, the interest rate is not determined solely by the existing levels of saving and investment; instead, equilibrium between saving and investment can be re-established when excess savings are channelled into investment. Although Keynes recognized the fundamental role of the interest rate in determining investment, he maintained that investment decisions are also influenced by several other measurable and non-measurable factors. In particular, he introduced the concept of the marginal efficiency of capital (e) as an additional determinant of investment and argued that a rational entrepreneur should compare this expected return with the prevailing rate of return (r) when making investment decisions.

In broader terms, Keynesian economics shifted the central orientation of economic analysis from microeconomic issues toward macroeconomic concerns, from long-run adjustment toward short-run conditions, and from an emphasis on aggregate supply (AS) toward aggregate demand (AD). The significance of this framework lies in its proposition that economic stability is associated with an equilibrium between aggregate supply and aggregate demand, expressed as $AS = AD$. This equilibrium condition is also reflected in Fisher's Equation of Exchange, represented by $MV = PT$. Within the Keynesian framework, money demand is explained through three principal motives: transactions, precautionary, and speculative motives. The disaggregation of bank deposits can therefore be interpreted in relation to these distinct motives for holding money.

Other monetarist economists, particularly Milton Friedman (1952), identified three principal effects through which an expansion in the money stock can influence economic activity: the liquidity effect, the income effect, and the price-expectations or anticipation effect. According to this perspective, an increase in the money supply initially produces an immediate liquidity effect by lowering the interest rate, corresponding in part to the Keynesian liquidity-preference mechanism. The resulting improvement in liquidity encourages economic agents to increase their market demand for goods and services, thereby stimulating economic activity and expanding aggregate income. This subsequent increase in economic activity represents the income effect through which monetary expansion can influence the broader economy.

Traditional Approach

Under this framework, money supply is understood as the set of financial assets that function as a generally accepted medium of exchange, comprising currency held by the public together with demand deposits maintained in commercial banks. Thus, the money stock of an economy consists primarily of those monetary instruments that can

be readily used to facilitate transactions and settle payments. This measure is commonly referred to as narrow money, or M1, because it includes only the most liquid components of the money supply. It can therefore be expressed mathematically as $M1 = C + DD$, where C denotes currency held outside the banking system and DD represents demand deposits in commercial banks.

The Chicago School

Chicago economists, under the leadership of Professor Milton Friedman, adopted a broader conceptualization of money and represented it as M2, defining money partly in terms of its function as a temporary store of value. Their argument is based on the observation that income receipts and expenditure flows within an economy do not always occur at the same time, creating a need for individuals and firms to retain money temporarily as a source of general purchasing power. Consequently, money performs not only the conventional role of facilitating exchange but also serves as a temporary repository of purchasing capacity. On this basis, the monetary stock should extend beyond the narrowly defined M1 to incorporate other highly liquid or near-money assets. Accordingly, M2 can be expressed as $M2 = M1 + \text{Savings Deposits} + \text{Time Deposits}$.

Gurley and Shaw Approach

John G. Gurley and Edward S. Shaw broadened the concept of money and money supply by treating currency (C) and demand deposits (DD) as claims against financial intermediaries, including the central bank and commercial banks. They argued that the financial system contains a relatively broad range of assets that can serve as close substitutes for money. These additional liquid assets were incorporated into the broader monetary aggregate M3. Under their approach, money supply comprises M2 together with deposits held in other non-bank financial institutions, including savings banks, building societies, loan associations, and similar institutions. The resulting formulation is expressed as $M3 = C + DD + SD + TD + \text{DNBFI}$ (Keith Band and Peter Howells, 2003).

Quantity Theory of Credit

Werner developed the Quantity Theory of Credit through his work on a quantity theory of disaggregated credit and international capital flows, placing particular emphasis on distinguishing between transactions involving money used for GDP-related activities and those associated with non-GDP transactions. From this perspective, money should not be defined exclusively in terms of bank deposits or aggregate private-sector savings. Werner further challenged the conventional characterization of banks as simple financial intermediaries that merely transfer existing funds from savers to borrowers. Instead, banks are viewed as institutions capable of generating new money through

the lending process, thereby making credit creation an important component of monetary dynamics.

Credit Channel Theory

Bernanke and Gertler developed the Credit Channel Theory, emphasizing that the effects of monetary policy on economic activity can be strengthened through endogenous movements in the external finance premium. The external finance premium refers to the difference between the cost incurred when borrowers obtain funds from external sources and the cost associated with financing through internally generated resources. According to this framework, imperfections in credit markets are reflected in the magnitude of the external finance premium. Consequently, a change in monetary policy that causes open-market interest rates to rise or fall tends to produce a corresponding movement in the external financing premium, thereby amplifying the overall effect of monetary policy on borrowing conditions and economic activity.

Bank Lending Credit Channel Theory

The bank lending channel posits that changes in monetary policy would influence the availability of intermediated credit, particularly credit provided by commercial banks. The bank lending channel is, essentially, the balance sheet channel, but extended to the activities of lending institutions.

Empirical Review

Nyeche et al. (2025) established the effect of the money supply on price stability in Nigeria in 1990-2023 by analyzing time-series data (Central Bank of Nigeria Statistical Bulletin, 2023). The dependent variable was price stability, while narrow money (M1), broad money (M2), and broad money (M3) and quasi-money were independent variables. The researchers utilized the Autoregressive Distributed Lag (ARDL) technique, revealing that quasi-money and price stability tended to change in the same direction. Given the other variables held constant, the 1% change in the money supply (M3) at the current period and M3(-2) at the lagged period resulted in CPI increasing by 0.05% and decreasing by 0.15%, respectively, thereby indicating price stability. By analogy, a 1% decrease in M1 at the current period and its lagged level led to a 0.1% drop in CPI. The authors found that changes in disaggregated money supply explained 50.2% of CPI's variance. Since money supply significantly influenced price stability, the researchers suggested further financial-market reforms to minimize the informal financial sector's impact.

Amadi et al. (2025) explored the effect of monetary policy on Nigeria's economic growth in 1982-2022. The researchers retrieved time-series data from the World

Development Indicators and the Central Bank of Nigeria Statistical Bulletin, focusing on interest rate, exchange rate, money supply, and cash reserve ratio's effect on gross domestic product (GDP). The study applied the Autoregressive Distributed Lag technique, which revealed that money supply significantly and positively influenced GDP, whereas the cash reserve ratio, exchange rate, and interest rate negatively contributed to economic growth, meaning that increases in these rates decreased GDP. The authors recommended that the Central Bank of Nigeria should pursue a more expansionary monetary policy by possibly increasing open market operations (OMO), decreasing the monetary policy rate, and lowering banks' cash reserve ratio.

Gachugu and Luseno (2023) identified the relationship between financial deepening and economic development in Kenya by assessing money supply as a substitute for financial deepening and GDP as a proxy for economic growth. The study was based on the financial intermediation theory and added several arguments related to the financial deepening concept. The researchers applied the historical research design and analyzed the data in bivariate Autoregressive (bVAR) model alongside descriptive and inferential statistics. The results revealed that 1 unit increase in money supply as a ratio to GDP led to a 0.3215-unit decrease in GDP growth in the long run. According to the authors, the money supply's adverse impact on GDP indicated that haphazard or aggressive money-supply increase would trigger unfavorable economic growth. Thus, Kenya needed to apply tighter monetary policy, including lower open market operations (OMO), such as issuing fewer infrastructure bonds.

Ida and Komang (2022) reassessed the relationship between inflation and three key economic variables in Zambia – money supply, exchange rate, and fuel prices – by analyzing secondary time-series data of 2012–2021. The software used for analysis included SPSS Version 22.0, multiple linear regression, the coefficient of determination (R^2), partial hypothesis testing (t-test), and simultaneous hypothesis testing (F-test). The study found that money supply, exchange rate, and gasoline prices positively influenced the rate of inflation. Therefore, the authors suggested that the government should endeavor to raise the money supply to get the economy to the targeted level.

Anachedo et al. (2022) investigated the relationships between monetary policy variables, inflation and nominal gross domestic product in Nigeria by employing time series data during the period 1990–2021. In the framework of the study, narrow money supply, broad money supply, exchange rate, interest rate and monetary policy rate were considered as monetary policy variables with the Central Bank of Nigeria Statistical Bulletin taken as a source of

data. Johansen Cointegration test and Vector Error Correction Mechanism were applied for analysis. The study revealed that inflation had a small positive impact on economic growth in Nigeria, suggesting that the increase in the inflation rate contributed to higher economic growth rate in Nigeria. By contrast, interest rates were unveiled to have a significant negative impact on economic growth in the long run. High borrowing costs discourage investment through credit and, accordingly, have a contractionary effect on the national economy. The study advised monetary authorities to adopt expansionary monetary policies to ensure money supply for productive transactions and investment that could lead to sustainable long-time economic growth.

Razia and Omarya (2022) explored the impact of the money supply on the per capita economic development in Palestine. The cointegration approach, Error Correction Model and Autoregressive Distributed Lag model were utilized to examine the effect of money supply on the gross domestic product (GDP) per capita. The money supply (M2), gross domestic product (GDP) per capita, gross fixed capital formation (GFCF) and inflation rate (INF) were taken as the four key macroeconomic variables. The results of the investigation revealed that money supply, aggregate capital formation and inflation rate positively influenced economic growth in the short run. However, according to the study, none of the variables revealed significant effect on economic growth in the long run, which implies that the short-time contribution of money supply, aggregate capital formation and inflation rate to economic growth was not identified.

Onipede et al. (2021) analyzed the dynamics of the impact of money supply on economic growth within the framework of the Autoregressive Distributed Lag technique. The study used the Purchasing Manager Index as an indicator of economic growth and investigated the short-time and long-time relationships between broad money supply (M3), consumer price index, oil prices, external reserves and economic growth during the period January 2010 – December 2018. The results of the analysis revealed that the long-run relationship between economic growth and money supply was statistically significant and consistent with theory. In particular, the estimate of the error-correction coefficient of -0.38072 was found to be statistically significant and negative and, accordingly, revealed a potential for cointegration. The result suggested that 38% of deviations from the long-run relationship between economic growth and the investigated variables were corrected every month. The study recommends the Central Bank of Nigeria to pursue stable and appropriate monetary aggregates growth in line with requirements of

economic expansion and implement the Government's Economic Recovery and Growth Plan (ERGP).

Ogbanje and Ihemezie (2021) explored the effects of the money supply and exchange rate on agricultural GDP in Nigeria. The study used the secondary data, which was collected from the Central Bank of Nigeria and covered the period 1981–2018. The descriptive statistics, Augmented Dickey-Fuller test, Johansen Cointegration test and Vector Autoregression were utilized for analysis. The results of the research revealed that there was a great fluctuation in the case of the broad money supply while, at the same time, all the variables were stationary at first difference. Johansen Cointegration test failed to reveal long-run relationship, whereas Agricultural GDP VAR model came out with $R^2=0.9978$ with statistically significant Chi-Square. The estimates and probabilities of money supply and exchange rate were found to be 0.3389 and 0.2502 with z-statistics of 3.92 and 5.44, respectively. Accordingly, the study suggested that the increase in overall expenditure would contribute to higher agricultural GDP and revealed that appropriate exchange rate policies should be used to raise agricultural production with due consideration of potential inflationary consequences.

Mahara (2021) investigated the relationship among broad money supply, inflation, capital expenditure and economic development in Nepal using the annual time-series data of 1976-2019. The study employed the Autoregressive Distributed Lag (ARDL) bounds-testing approach to cointegration. The variables included real GDP growth, broad money supply and inflation. The data were extracted from the Current Macroeconomic and Financial Situation-2019/20. The results established a long-run positive nexus between broad money supply, capital expenditure and economic growth. The study however, was conducted within the confines of the Nepalese economy and therefore, is beyond the scope of this research. It therefore, becomes imperative to explore the impact of the broad money supply, on economic growth of Sub-Saharan African Economies.

Matres and Le (2021) probed into the influence of the broad money supply on the rate of economic growth. The study used a mix of data from 217 countries over the 1960-2020 period to arrive at its conclusions. The World Development Indicators database was used as the source of data. Four alternative models were estimated using the GDP growth, broad money supply, inflation, unemployment, real interest rate, foreign direct investment, government expenditure, gross fixed capital formation, real exchange rate and corruption as variables. The study established an inverse relationship between the real interest rate and inflation as well as that of the broad money supply and economic growth. Although the sample size used in the study was a

strength, the study's limitation is its applicability to all the sample countries considered, varying as they may be in financial development, institutions and economic fundamentals. This presents the need to consider a relatively narrow set of countries as opposed to a heterogeneous set as considered in this study.

Yakubu and Abdallah (2021) evaluated the impact of banks' financial intermediation on economic growth in 11 Sub-Saharan African countries over the 1970-2016 period. Broad money supply, bank lending to the private sector and bank deposits were used as the financial intermediation proxies. The study used the Breusch-Pagan test to justify the random-effects estimation approach. The results revealed that the broad money supply and bank credit to the private sector had significant effects on economic development as opposed to the deposits that do not have any significant effect. The study's focus on Sub-Saharan Africa is a strength which complements this study's scope. The study however, used a static estimation technique as opposed to a dynamic approach which the current study is based on. The dynamic nature of the economic time series variables makes it important that the current study uses a different technique. This is because previous observations have an effect on future observations for such variables.

Aigheyisi and Edore (2019) assessed the asymmetric effects of the broad money supply on economic growth in Nigeria to reveal the short and long-run causality using the Shin, Greenwood-Yin Nonlinear Autoregressive Distributed Lag (NARDL) approach to cointegration and error-correction analysis. The study used annual time-series observations of the 1981-2016 period. Asymmetry evidence in the relationship between the broad money supply and economic growth was established in the study. Specifically, an increase in the broad money supply had a positive and statistically significant effect on economic growth in the short- and long-run. Based on the study's results, the authors recommended the need for the appropriate control of the broad money supply and inflation rate to achieve economic activity. The study however, is void of an economic theory which is a limitation that the current study is free of as it is based on a theoretical framework.

Imoagwu and Ezeanyej (2019) looked at the relationship between financial development and economic growth in Nigeria with a focus on financial deepening, measured as the ratio of broad money supply to GDP, interest rates and credit to the private sector. The study's objective was achieved using a Vector Autoregressive econometric approach. The results revealed a positive relationship between financial development and economic growth in Nigeria. Credit to the private sector as a ratio to GDP in particular, had a positive and statistically significant effect

on economic growth in the long-run but not in the short-run. The focus on one country, Nigeria, although a limitation for the study is an advantage to the current study as Nigeria falls within the geographical scope of this study.

Bashir and Sam-Siso (2020) evaluated the relationship between monetary policy and macroeconomic performance in Nigeria over the 1981-2018 period. The stochastic properties of the time-series variables under consideration were established using conventional unit-root tests as well as those of unit-root tests coupled with structural breaks and shift dummies. The results revealed that the mixture of I(0) and I(1) processes in the same specification require the use of the Autoregressive Distributed Lag (ARDL) approach. According to the short-run results, the lagged inflation rate, exchange-rate appreciation and unexpected appreciation (captured by the shift dummy) will reduce inflation rate but a lower Monetary Policy Rate (MPR) and a higher volume of money in circulation will increase inflation. In addition, the lagged unemployment, a higher MPR and exchange-rate depreciation significantly increased unemployment but the unexpected appreciation reduced unemployment.

Onwuteaka, Okoye, and Molokwu (2019) analyzed the impact of monetary policy on economic growth in Nigeria using the secondary data sourced from the Central Bank of Nigeria Statistical Bulletin in the period from 1980 to 2017. To examine the influence of money supply, credit availability, interest rate on credit, infrastructure, inflation rate, external debt, and price index on the country's economic development, the authors applied the Ordinary Least Squares (OLS) multiple econometric approach. The study revealed that money supply, interest rate on credit, infrastructure, and external debt were factors with statistically significant impacts; meanwhile, the other variables were found to be insignificantly related to economic development.

Yien et al. (2017) explored the relationship between monetary policy and economic growth in Malaysia in the period from 1980 to 2015 by employing the Vector Autoregression (VAR) and Granger causality approach. The results demonstrated that the interest rate Granger-caused the per capita economic growth, money supply, inflation, unemployment, and foreign direct investment. The study also concluded that Malaysia's transition from monetary targeting to interest-rate targeting was an appropriate choice. Additionally, a bidirectional causality between unemployment and per capita economic growth was detected. Despite the fact that most of the articles analyzed the relationship between money supply and economic growth, the current study focuses on the particular aspect of money supply's impact on the private-sector credit in Nigeria.

Methodology

The study will adopt the ex-post facto research design which will involve the use of a theoretical consideration combined with an empirical observation to generate maximum amount of information from the data. The study will use secondary data sourced from the Central Bank of Nigeria Statistical Bulletin. The study will use annual time series data from 1990 to 2024 for the purpose of the study. The set of data used will consist of the variables specified in the study model. The theoretical framework will explain how money supply could potentially affect private-sector credit. With this information, the study will treat private-sector credit as the dependent variable while the various components of money supply (M1, M2, M3) will become the independent variables. In accordance with the research by Marshal (2016), the study will specify private-sector credit as a function of these variables as specified below;

$$PSC = (M1, M2, M3) \quad (1)$$

The model can thus be presented as follows.

$$PSC_t = \beta_0 + \beta_1 M1_t + \beta_2 M2_t + \beta_3 M3_t + \epsilon \quad (2)$$

Where:

PSC_t - Private sector credit

M1_t- Narrow money supply

M2_t - Broad money supply

M3_t- Broad money supply

β_0 - is a constant

β_1 - β_3 - Coefficients of the explanatory variables

A Priori Expectation

This is used to examine the economic usefulness of the equation with regard to meeting the a priori expected sign of the parameters. Generally, money supply is expected to contribute positively to private sector credit. Specifically, the expected nature of relationship includes:

- i. $\beta_1 > 0$: This means that narrow money supply (M1) is expected to contribute positively to private sector credit.
- ii. $\beta_2 > 0$: This means that broad money supply (M2) is expected to contribute positively to private sector credit.
- iii. $\beta_3 > 0$: This means that broad money supply (M3) is expected to contribute positively to private sector credit.

Data Analysis Technique

Unit Root Tests

Several econometric techniques are available for determining whether a time-series variable contains a

unit root. Estimating regression models with non-stationary variables may produce spurious results, whereby the estimated model indicates statistically significant relationships among variables even though the observed association merely reflects contemporaneous movements rather than a genuine economic relationship. Such results can lead to unreliable or inconsistent inferences. It is therefore essential to establish the stationarity properties of the variables before undertaking further econometric analysis. To address this issue, the study will employ the Augmented Dickey-Fuller (ADF) test and the Phillips-Perron (PP) test to examine the presence of unit roots. For greater robustness, both tests will be estimated under their three standard specifications.

The Augmented Dickey-Fuller test is selected because it accommodates additional lagged values of the dependent variable, thereby helping to control for autocorrelation in the error term. The procedure provides a systematic means of determining whether the variables are stationary or contain unit roots. Accordingly, the ADF test will be implemented using its three conventional forms, following the standard procedure for unit-root testing, as presented in the equations below.

$$\Delta Y_t = Y_{t-1} + \sum \beta_t \Delta m_{t-1} Y_{t-1} + \mu_t \text{ (none)} \dots\dots\dots 3.15$$

$$\Delta Y_t = \beta_1 + \beta_2 Y_{t-1} + \sum \beta_t \Delta m_{t-1} Y_{t-1} + \mu_t \text{ (intercept)} \dots\dots\dots 3.16$$

$$\Delta Y_t = \beta_1 + \sum T + \beta_2 Y_{t-1} + \sum \beta_t \Delta m_{t-1} Y_{t-1} + \mu_t \text{ (intercept and trend)} \dots\dots\dots 3.17$$

Where:

ΔY_t - is the variable of interest.

Y_{t-1} - is its one-period lag.

β_1 - is a constant and T is the time trend.

We test the null hypothesis of nonstationarity of the variable against the alternative hypothesis of stationarity. If the t statistics is more negative than the calculated t statistics at 5%, the null hypothesis is rejected (Gujarati et al., 2012). The null hypothesis is rejected, which means the variable is stationary.

Cointegration Analysis

Regressing one non-stationary time-series variable on another variable may produce a spurious regression producing apparently significant results that do not reflect a genuine long-run relationship. The concepts of unit roots and cointegration are therefore crucial to establish if the residuals obtained from the regression are stationary, and whether a long-run or equilibrium relationship exists between the variables. A cointegration test is, therefore, a tool to detect such a long-run relationship hence preventing the problem of spurious regression. The study will therefore conduct a cointegration test whose type will be determined by the results of the unit-root tests. The study will also perform the following diagnostic and evaluation tests on the estimated model:

The R-squared: The coefficient of multiple determinations (R-squared) will be used to determine how well the sample regression line fits the data. It will also be used to determine the variation in the dependent variable that is attributable to the independent variables.

The t-test: This tests the statistical significance of individual estimated parameter. To achieve this, 5% level of significance with (n-k) degrees of freedom will be used. Where n is the number of observation and k is the number of parameters.

Decision Rule:

If t-calculated value > t-tabulated value $\Rightarrow$ reject the H0 at 5% level of significance.

If t-calculated value < t-tabulated value $\Rightarrow$ retain the H0 at 5% level of significance.

The F-test: The F-test will be used to test the overall significance of the model. To achieve this, 5% level of significance with (n-k) and (k-1) degrees of freedom will be used. Where n is the number of observation and k is the number of parameters

Decision Rule:

If F-calculated value > F-tabulated value $\Rightarrow$ reject the H0 at 5% level of significance.

If F-calculated value < F-tabulated value $\Rightarrow$ retain the H0 at 5% level of significance.

Empirical Results

Table 1: Unit Root Test

Variable	ADF	MacKinnon @ 1%	MacKinnon @ 5%	MacKinnon @ 10%	Order of integration
PSC	-6.317605	-3.639407	-2.951125	-2.614300	1(1)
M1	-4.242848	-2.636901	-1.951332	2.614300	1(1)
M2	-5.875548	-3.646342	-2.954021	-2.615817	1(1)
M3	-5.409656	-3.639407	-2.951125	-2.614300	1(1)

Source: Extract from E-view 12.0

The unit root test results presented in Table 1 indicate that the null hypothesis of a unit root cannot be rejected for most of the variables in their level form, as the reported p-values of the ADF statistics are not statistically significant at any of the three conventional significance levels. However, after first differencing, the variables become stationary, as the null hypothesis of non-stationarity is rejected at the 1% significance level for all the estimated variables. The results

therefore establish that the variables are integrated either at level, $I(0)$, or at first difference, $I(1)$. Given the integration properties identified from the unit root analysis and the absence of variables integrated beyond the first order, the Error Correction Model (ECM) methodology is considered appropriate for estimating the model and examining the relationship among the variables.

Table 2: Descriptive Statistic

	PSC	M1	M2	M3
Mean	13.23114	7.516286	8.191143	17.20057
Median	10.58000	8.070000	8.680000	15.41000
Maximum	22.75000	10.31000	11.28000	27.09000
Minimum	5.810000	3.660000	4.220000	8.460000
Std. Dev.	5.935207	1.898022	2.053162	5.768619
Skewness	0.123808	-0.490535	-0.386877	0.017390
Kurtosis	1.276163	2.006387	1.868939	1.419005
Jarque-Bera	4.423019	2.843408	2.738739	3.646934
Probability	0.109535	0.241302	0.254267	0.161465
Sum	463.0900	263.0700	286.6900	602.0200
Sum Sq. Dev.	1197.707	122.4846	143.3262	1131.417
Observations	35	35	35	35

Source: Extract from E-view 12.0

Table 2 reports the descriptive statistics of the dependent and explanatory variables. Credit to the private sector ranges from a minimum of 5.810000 to a maximum of 22.75000, with a mean of 13.23114 and a standard deviation of 5.935207, indicating that the observations deviate from the mean by approximately 5.9 units in either direction and are not widely dispersed, given that the standard deviation is below the mean. M1 records minimum and maximum values of 3.660000 and 10.31000, respectively, with a mean of 7.516286 and a standard deviation of 1.898022; this relatively lower standard deviation implies an approximate deviation of 1.8 units around the mean and indicates limited variability in the

observations. For M2, the minimum and maximum values are 4.220000 and 11.28000, respectively, while the mean is 8.191143 and the standard deviation is 2.053162. Thus, the observations deviate from the mean by approximately 2.0 units, suggesting that the series does not exhibit wide dispersion because its standard deviation is lower than the mean. Finally, M3 has a minimum value of 8.460000 and a maximum value of 27.09000, with a mean of 17.20057 and a standard deviation of 5.768619. The reported standard deviation indicates that M3 observations vary by approximately 5.7 units around the mean, while its value below the mean similarly suggests that the data are not widely dispersed.

Table 3: Covariance Analysis: Ordinary

	PSC	M1	M2	M3
Probability				
PSC	1.000000			
M1	0.265689	1.000000		
	0.0000	-----		
M2	0.279909	0.498626	1.000000	
	0.0000	0.0000	-----	
M3	0.266357	0.386053	0.402142	1.000000
	0.0000	0.0000	0.0000	-----

Source: Extract from E-view 12.0

From the correlation coefficient, the study found positive and significant correlation between the dependent and the independent variables within the time periods of the study.

Table 4: Co-integration Test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.534484	57.62030	47.85613	0.0047
At most 1 *	0.340914	32.38822	29.79707	0.0246
At most 2 *	0.276637	18.63049	15.49471	0.0163
At most 3 *	0.213935	7.943613	3.841466	0.0048
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.534484	25.23208	27.58434	0.0971
At most 1	0.340914	13.75774	21.13162	0.3853
At most 2	0.276637	10.68687	14.26460	0.1706
At most 3 *	0.213935	7.943613	3.841466	0.0048

Source: Extract from E-view 12.0

The results of the Johansen co-integration test are reported in Table 4, and we reject the null hypotheses of no co-integrating equation at 5% level of significance. This means that there is a linear combination of the variables that are stationary in the long run and also affirms the presence of a long run link between money supply and loan to private sector in Nigeria.

Table 5: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
M1 does not Granger Cause PSC	33	3.63358	0.0395
PSC does not Granger Cause M1		0.75630	0.4788
M2 does not Granger Cause PSC	33	4.14478	0.0265
PSC does not Granger Cause M2		1.02872	0.3706
M3 does not Granger Cause PSC	33	1.02176	0.3730
PSC does not Granger Cause M3		0.14171	0.8685

Source: Extract from E-view 12.0

Table 5 summaries the Pairwise granger causality tests, the results found that there is unidirectional causality from narrow money supply to private sector credit and a unidirectional causality from broad money supply to private sector credit.

Table 5: Results of Dynamic Least Squares

Dependent Variable: PSC
Method: Dynamic Least Squares (DOLS)
Date: 08/02/26 Time: 16:06
Sample (adjusted): 1992 2023
Included observations: 32 after adjustments
Cointegrating equation deterministics: C
Fixed leads and lags specification (lead=1, lag=1)
Long-run variance estimate (Bartlett kernel, Newey-West fixed bandwidth =4.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
M1	1.514605	8.139797	0.186074	0.8544
M2	-1.706586	8.224504	-0.207500	0.8378
M3	1.038633	0.328026	3.166314	0.0051
C	-1.801559	3.786804	-0.475747	0.6397
R-squared	0.550612	Mean dependent var		13.46844
Adjusted R-squared	0.519420	S.D. dependent var		5.929126
S.E. of regression	1.683083	Sum squared resid		53.82261
Long-run variance	3.192465			

Source: Extract from E-view 12.0

The result of the Dynamic Least Squares on the link between money supply and private sector credit in Nigeria is presented in Table 5. The R-square and adjusted R-square showed that 55% and 51.9% variation in private sector credit was explained by money supply factors in the model while the remaining 45 and 48.1 was explained by other variables not included in the model. Results show that narrow money supply (M1) and broad money supply (M2) have negative effect on private sector credit. While broad money supplies (M3) have positive influence on private sector credit within the time periods of the study.

Table 6: Results of Fully Modified Least Squares

Dependent Variable: PSC				
Method: Fully Modified Least Squares (FMOLS)				
Date: 08/02/26 Time: 16:05				
Sample (adjusted): 1991 2024				
Included observations: 34 after adjustments				
Cointegrating equation deterministics: C				
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
M1	3.992336	4.481285	0.890891	0.3801
M2	-3.847459	4.412633	-0.871919	0.3902
M3	1.052443	0.170398	6.176382	0.0000
C	-3.310984	1.572082	-2.106114	0.0437
R-squared	0.533127	Mean dependent var		13.42088
Adjusted R-squared	0.526440	S.D. dependent var		5.915736
S.E. of regression	1.604461	Sum squared resid		77.22881
Long-run variance	3.460000			

Source: Extract from E-view 12.0

Table 6 reports the Fully Modified Least Squares (FMOLS) estimates of the relationship between money supply and private sector credit in Nigeria. The results indicate that the R-squared and adjusted R-squared values are 53.3% and 52.6%, respectively, implying that the money supply variables included in the model account for 53.3% of the variation in private sector credit, while the remaining 46.7% is attributable to other factors not incorporated into

the model. The findings further show that narrow money supply (M1) and broad money supply (M3) exert positive effects on private sector credit, whereas broad money supply (M2) has a negative effect on private sector credit over the study period.

Conclusion

This study investigated the relationship between money supply and private sector credit in Nigeria using time-series

data obtained from the Central Bank of Nigeria Statistical Bulletin covering 1990–2024. The Dynamic Least Squares (DLS) results showed that money supply variables accounted for 55.0% and 51.9% of the variation in private sector credit, with narrow money supply (M1) and broad money supply (M2) exerting negative effects, while broad money supply (M3) had a positive effect. The Fully Modified Least Squares (FMOLS) estimates indicated that 53.3% and 52.6% of the variation in private sector credit was associated with the money supply variables; in this case, M1 and M3 demonstrated positive effects, whereas M2 exhibited a negative effect on private sector credit. Based on these findings, the study concludes that money supply plays an important role in determining private sector credit in Nigeria.

Recommendations

1. Central Bank of Nigeria should maintain and enhance the policies on credit to private sector. This will promote and further develop the financial sector especially in the lending rate to investors so as to encourage investors to borrow more for investment purposes in Nigeria.
2. The monetary policy should be broader in definition to influence the effect of credit to private sector and government expenditure in the components of aggregate demand. Hence, it will help to address the nexus between money supply and private sector credit in Nigeria.
3. The Central Bank of Nigeria should be made more effective in its monetary management by making all financial markets organized so as to accentuate the effects of monetary policy variables like Broad money supply to private sector credit.

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