Growth
Vol. 9, No. 1, 20-30, 2022
ISSN(E) 2412-2068 / ISSN(P) 2518-0185
DOI: 10.20448/growth.v9i1.3931

Impact of Budget Deficit Financing on Money Supply in Nigeria

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Abstract

This study empirically investigated the impact of budget deficit financing on money supply in Nigeria. The study is modeled using a framework of Keynesian theory of budget deficit financing and Richadian Equivalent hypothesis. Due to the homogeneity of macroeconomic variables, it adopted a vector error correction mechanism (VECM) which shows the existence of long run relationship between money supply and indicators of financing budget deficit. The general findings revealed that external source of financing budget deficit; internal source of financing budget deficit as well as debt servicing has a significant effect on money supply for the period under review in the Nigerian context. Base on these findings, the study recommended that external and internal source of financing budget deficit should be encouraged for effective and increased economic stability in Nigeria and not for political reasons. It should be properly channeled to productive sector of the economy that enhances economic stability.

Keywords: Budgeting deficit financing, Money supply, Nigeria, Impact, Vector error correction mechanism, Debt servicing.
JEL Classiffication: H6; E51; E12; D53.

Citation | Francis Chukwudi Onyedibe; Maria Chinecherem Uzonwanne; Mbah Catherine Chidinma (2022). Impact of Budget Deficit Financing on Money Supply in Nigeria. Growth, 9(1): 20-30.
History:
Received: 2 March 2022
Revised: 18 April 2022
Accepted: 5 May 2022
Published: 23 May 2022

Funding: This study received no specific financial support.
Authors' Contributions: All authors contributed equally to the conception and design of the study.
Competing Interests: The authors declare that they have no conflict of interest.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained.
Ethical: This study followed all ethical practices during writing.

Contents

Contribution of this paper to the literature

To close this gap created by related works that used a proxy variable to measure budget deficit financing, such as fiscal balances and ratio of budget deficit to GDP, the current study used the various sources of financing deficit as explanatory variables to evaluate changes in money supply.

1. Introduction

When the government has a budget deficit, deficit financing is required. However, in order for the economy to grow as projected in a budget, the government must raise funds from other sources to cover revenue shortfalls caused by excessive spending. Deficit financing can be defined as the practice of raising government expenditures beyond revenue sources in order to stimulate a country's economy (Central Bank of Nigeria (CBN), 2019). This means that deficit financing can be described as money provided by a company or government to cover a revenue shortfall. In order to offer an economic boost, the government or a firm may engage in deficit financing (Onwe, 2014). When government expenditure tends to exceed public income, the government may resort to deficit financing to meet the deficit in the budget.

The idea of deficit financing is recognized by Keynes theory as compensating spending aimed to remedy the problem of unemployment and depression. For the goals of development, modern economists recommend deficit funding. According to Keynesian economists, a budget deficit is financed in order to boost economic activity and reduce unemployment in a country. A shift in the money supply on the other hand, has traditionally been thought to be the most important element in determining macroeconomic performance and business cycles. A higher money supply in particular, lowers interest rates, which leads to more investment in an economy and, as a result, stimulates expenditure.

To address the budget deficit, the government has taken a variety of steps. Printing new currency, local borrowing, and external borrowing can all be used to cover the budget deficit (Fischer & Easterly, 1990). Seigniorage for instance is the process used by the central bank of Nigeria to creat fresh currency notes to finance a deficit. It expands the money supply, causes inflation, and lowers interest rates. Domestic borrowing, such as the sale of Treasury bills, short-term federal bonds, and defense saving certificates is a second option for funding the budget deficit. Interest rates rise as a result of this sort of deficit financing, and private investment suffers as a result. Government borrowing from foreign resources can also be used to finance large deficits. Because local capital markets are too tiny and internal borrowing opportunities are equally limited in most developing nations, government borrowing from foreign resources to finance fiscal deficits is a common practice (Fischer & Easterly, 1990).

Foreign borrowing, domestic borrowing from the non-bank population and the banking system, and money printing are all options for funding a country's budget deficit. Unlike borrowing, money creation for deficit financing (monetary financing) expands the money supply proportionately and as the Quantity Theory of Money explains it promotes inflation in the long run. In countries that rely on monetary financing from the central bank rather than debt financing to fund their deficits, budget deficit financing is seen as a significant driver of inflation. If some of the extra money from the monetized budget deficits is utilized by the government to raise gross capital creation, the accompanying inflation will be brief and restrained due to output growth. Budget debt financing, on the other hand, can have a short-term inflationary impact on the economy if the government borrows money from the central bank to cover a budget shortfall but fails to repay the loan on time there by causing the money supply to increase unjustifiably.

Since the 1980s, the Nigerian economy has had a persistent fiscal (budget) deficit. This lack of fiscal discipline, which has resulted in ever-increasing budget deficits has been blamed for some of the country's macroeconomic difficulties, including high and growing inflation rates, high and rising unemployment, excessive debt and debt crises, poor investment performance, and so on (Onwloduokit, 1999). According to data from the Central Bank of Nigeria, overall surpluses of N1.0 billion and N32.0 billion were only achieved in the 1995 and 1996 fiscal years, respectively, from 1981 to 1996. From N103.8 billion in 2000 to N301.4 billion in 2002, the entire budget deficit grew. The overall deficit decreased over time, falling from N301.4 billion in 2002 to N47.4 billion in 2008. The overall deficit jumped from N800.0 billion in 2008 to N810.0 billion in 2009, and then to N1158.5 billion in 2011. In 2012, it decreased marginally to N975.7 billion before rising to N1153.5 billion in 2013. These increases have been steadily increasing from the third quarter of 2015, reaching N12118.85 billion in the third quarter of 2015 and N17360.01 billion in the fourth quarter of 2017. In the second quarter of 2018, it increased to N22379.67 (Central Bank of Nigeria (CBN), 2019).

Nigeria's total public debt was N32.915 trillion as of December 31, 2020. The debt stocks of the federal and state governments as well as the Federal Capital Territory are included in the figures. It will be recalled that following Nigeria's departure from recession in 2017, the government's actions to control the rate of growth in the public debt stock in order to maintain debt sustainability resulted in a decrease in new borrowing at the federal level. New borrowing to partially finance budget shortfalls has consistently decreased from N2.36 trillion in 2017 to N2.01 trillion in 2018, N1.61 trillion in 2019, and N1.59 trillion in the first Appropriation Act of 2020 (Debt Management Office (DMO), 2020). This trend was reversed in 2020 due to the economic and social impact of the COVID-19 Pandemic as New Borrowing in the revised 2020 Appropriation Act was N4.20 Trillion. Many countries including the advanced countries also increased their level of borrowing as a result of COVID-19 (Debt Management Office (DMO), 2020).

In 2016, debt service accounted for nearly a quarter of the country's budget (about 24%). The government has set aside N1.5 trillion for debt financing out of the N6.6 trillion planned for 2016. Out of the total amount allocated for 2017 (N7.3 trillion), N1.6 trillion was recommended for debt servicing. In 2018, the number increased to N2.2 trillion, or 24.17 percent, of the N9.1 trillion budgeted for debt servicing. In the same hand, government plans to spend 24% (N2.14 trillion) of the N8.9 trillion budget on debt payment in 2019. Meanwhile, the Nigerian government announced a N10.3 trillion spending plan for 2020. Nearly a quarter of that sum (N2.5 trillion) was set aside for debt repayment (Yusuf & Mohd, 2021).

For decades, competing viewpoints on the relationship between budget deficit finance and money supply have occupied center stage. The Neoclassicals and Keynesians championed the idea that budget deficits have a favorable impact on money supply. This viewpoint asserted that an expansionary fiscal strategy, whether through increased government spending or tax cuts, would worsen the budget deficit (Bovenberg, 1998; Dua, 1993). Money supply will be affected by the monetization of the budget deficit, and aggregate demand will be positively affected by the size of the multiplier. Besides, when government decides to finance its budget deficit through external borrowing, it was stipulated that government borrow externally and inject the money in an economy through establishment of capital projects will in turn raise finance in the long run to recoup the debt. This process will eventually affect money supply in an economy.

The Ricardian Hypothesis, on the other hand, claims that budget deficits have no effect on money supply in the short or long run. See, for example, (Barro, 1987; Cheug, 1998; Darrat, 1990). They assume that the government's spending level remains constant throughout time. As a result, if the government lowers taxes, the budget deficit will rise. However, because governments frequently equate their total expenditure in each period with their total income from all sources, this tax cut now indicates a future tax increase that is equal in value to the initial tax cut. Invariably, the value of taxes and other income at the present time is determined by current government expenditure. Thus, the current value of taxes and other revenues will not change as long as the current value of government expenditures remains unchanged (Barro, 1987).

The issuance of government bonds to fund government expenditures is viewed as an asset by bond holders, but it is also viewed as a liability because the government will have to raise taxes in the future to redeem the bonds (Barro, 1987). As a result, the equality of assets and liabilities implies that the society's net wealth remains unaltered. Since wealth does not change, consumption and aggregate demand are unaffected, implying that the money supply will remain constant. Therefore, this research work attempts to ascertain which of these theoretical paradigms hold for Nigerian economy as well as spotting out the relationship that exist between budget deficit financing and money supply considering the fact that the country has persistently ran a budget deficit over the years.

1.1. Statement of the Problem

Deficit financing is used by many developing countries to achieve certain macroeconomic goals. In traditional settings, deficit financing is viewed as a tactic used to deal with macroeconomic problems such as depression and poor output (Anyanwu, 1997). Budget deficit financing, on the other hand, looks to be a technique that tends to exacerbate inflationary pressures and drive out private sector investments, worsening unemployment difficulties (Anyanwu, 1997).

Despite the fact that actual receipts are frequently higher than anticipated forecasts, Nigeria has had massive budget deficits throughout the years (Anyanwu, 1997). Fiscal operations in Nigeria have been characterized by poor policy implementation, inconsistency of government macroeconomic policy, low development of private investments, drop in real sector growth, and public sector fiscal indiscipline, according to evidence from deficit financing.

As a result, Nigerian governments have implemented a number of national development plans and programs, including the Debt Management Strategy (DMS) and the Debt Management Office (DMO), which were established on October 4, 2000 to centrally coordinate the management of Nigeria's debt for all levels of government, with the goal of increasing productivity and diversifying the domestic economic base through budget deficit financing. The goal of the various developmental plans has been to achieve high levels of economic development, which would translate into an improvement in the population's living standards and as a result, a reduction in poverty through an increase in domestic output and job creation and thus the maintenance of a favorable balance of payments position, which has resulted in inefficiencies that have resulted in fundamental challenges.

Keynesian economics, on the other hand, believes there is a link between funding the budget deficit and economic performance. They claim, however, that funding a budget deficit has a positive impact on money supply in an economy; higher money supply stimulates domestic production, triggers aggregate demand, raises savings, promotes investment patterns at a lower interest rate, and stimulates expenditure. Businesses respond by expanding production and ordering more raw materials. Increased business activity increases the demand for labor, resulting in more job prospects (Peter, Olohungbebe, & Okoye, 2021). Increased unemployment is expected in the economy at this time, and the rate of interest rate sensitivity to investment is quite slow (Momodu & Monogbe, 2017). Given this theoretical backing and its relevance, one would wonder why empirical data and theoretical underpinning justify the fact that financing a budget deficit increases the stock of money in an economy and creates job opportunities, whereas the opposite is true in the Nigerian scenario.

Secondly, a great deal of empirical study has been done on the relationship between budget deficit financing and key macroeconomic indicators like growth, consumption, and interest rates. Empirical research on the consequences of financing a budget deficit on other variables such as the money supply, on the other hand, is few. The majority of studies on the subject used a single indicator as a proxy for budget deficit financing, such as fiscal balances and the ratio of budget deficit to GDP. Hence, our contention is that these variables do not accurately reflect the funding of budget deficits. To close this gap, the current study used the various sources of funding the total deficit as explanatory variables to evaluate the impact of budget deficit financing on chosen macroeconomic variables such as money supply. That is, the overall budget deficit financing was broken down into the numerous funding sources that were used. External sources of financing budget deficits and internal sources of financing budget deficits are examples of such indicators. The importance of this technique is that it revealed the various effects that various sources have on the money supply and the economy as a whole. It also serves as a reference for fiscal authorities, allowing them to choose the source with the least detrimental impact.

Another argument for this study is that the dynamic nature of the Nigerian economy's structure, as well as the introduction of new sets of empirical data (both brought about by time), may have rendered the findings of past studies obsolete. As a result, there is a need to approach the issue with new empirical evidence that reflects the country's current economic reality. Hence, the urgent need for this study.

2. Literature Review

2.1. Concept of Money supply

Money supply can alternatively be defined as the total of all members of a society's money stock. In Nigeria, this could be M1 or M2, in the United Kingdom (UK), M1, M2 and M3, or in the United States of America, M1, M2, M3 and M4 (USA).

The M1 is a specialized measure of money supply that focuses on the role of money as a medium of exchange and defines money as "currency in circulation outside banks plus demand deposits maintained in banks" = C+DD. M1 is defined by the Nigerian central bank as non-bank currencies plus positively held demand deposits. M2 refers to the money supply as a whole. Savings and time deposits are included = C + DD for M1 + SD+TD for M2. The justification for integrating commercial bank time and savings deposits is that they may be turned into cash quickly and utilized to conduct financial transactions. M+ is made up of M1 and M2 deposits as well as deposits held in other financial institutions such as finance houses, merchant banks, and other similar institutions (i.e. C+DD for M1 + SD+TD for M1 + D for M3). The reasons in favor of M3 are the same as those in favor of M2 (i.e. it can be converted into cash within a short notice). M4 is made up of M1, M2, and M3 plus investments in government securities such as treasury bills and certificates, call money, and so on. The arguments for including the government security is that they are easily cashable which makes them influence the spending habit of its holders in the same way a bank deposit does.

Despite the fact that money is classified as M1, M2, M3, and M4 above, they are not all recognized in Nigeria, since the CBN only recognizes M1 and M2 as the total money supply. This is due to the fact that the country's financial markets are still in their infancy. The base money, often known as M0, is another sort of money. It includes all currencies in circulation as well as all bank reserves, including the central banks. It is high-powered money that is utilized to make other kinds of money.

2.2. Concept of Budget Deficit Financing

The problem of budget deficit financing has gotten a lot of attention from academics because anytime a government has a budget deficit, the first thing that comes to mind for financial professionals is how to finance the deficit so that the negative consequences on the economy are minimized.

When government spending exceeds government revenue, the government may use budget deficit financing to close the gap in the budget. The idea of deficit financing is recognized by Keynes theory as compensating spending aimed to remedy the problem of unemployment and depression. Budget deficit financing is recommended by modern economists for development goals.

Nwaotka (2004) describes budget deficit financing as a planned excess expenditure over revenue, controlled by government policy, or the creation of a fund to finance budget deficits by borrowing, whether from internal or external sources, that must be repaid with interest within a set time period. In finance, a budget deficit is defined as government spending that exceeds income and is covered by borrowing. According to Keynesian economists, a country's deficit is financed in order to boost economic activity and eliminate unemployment. Budget deficit financing, according to Stiglitz (2005) is a circumstance in which the federal government's excess fund of outlays above receipts for a certain time is financed by public borrowing.

Deficit financing can alternatively be defined as the sale of debt securities to cover expenses that exceed income. This type of funding is also known as a nonbanking public source of capital. Budget deficit financing is commonly used in government finance because income, which is represented by tax receipts and fees, is sometimes insufficient to cover expenses. Budget deficit financing, like monetizing the debt, raises interest rates since government debt instruments compete with private securities for limited capital (Smriti, 2010).

Governments all around the world are constantly looking for new methods to fund their fiscal deficits. The following are the two most important sources:

- Borrowings: The fiscal deficit can be covered by borrowings from both internal and external sources (public, commercial banks, etc).
- Seigniorage: This refers to the central banks issuing of fresh money. To cover the budget deficit, the government may borrow from the Central Bank of Nigeria (CBN) using its securities as collateral. The Central Bank of Nigeria (CBN) releases fresh money to finance the country's budget shortfall. This entails funding a budget deficit. Borrowings are a preferable source of funds since they do not raise the money supply, which is the primary cause of inflation. The usage of seigniorage, on the other hand, may lead to inflationary trends in the economy due to increased money supply.

In the above explanation of budget deficit financing, this study adopts the viewpoint of Nwaotka (2004) who defined budget deficit financing as a planned excess expenditure over income and a dedicated government policy of creating funds to finance her deficit by borrowing, whether from internal or external sources to foster her economy by stabilizing her macroeconomic variables, which must be repaid with interest within a specific time period.

2.3. Basic Theories

2.3.1. Keynesian Theory of Financing Budget Deficit

Keynesian Economic Theory was developed by British Economist (Keynes, 1936). This theory was built on the following assumptions for its reliability and fundamental stability of this work.

According to Keynesian theory, government spending can boost economic growth by raising government consumption through increased employment, profitability, and investment. For the theory, the government can reverse economic downturns by borrowing money from the private sector and then spending it back into the private sector. Again, they believe that active government intervention in the market place through deficit financing is the only way to ensure growth and stability by assuring efficiency in resource allocation, market regulation, economic stabilization, and social dispute resolution. In the near run, total expenditure in the economy has a considerable influence on economic growth through economic stability. Thus, it holds that the economy is fundamentally unstable and that achieving economic stability requires active government intervention through expenditure.

Keynesian philosophy uses government spending to stimulate the economy, eliminate unemployment, and make households feel wealthy (Usher, 1998). Okpanachi and Abimiku (2007) on the other hand, believe that a budget deficit increases economic activity in the short run by making consumers feel wealthier, hence increasing overall private and public consumption expenditure. This suggests that Keynesian theory drives the money supply to rise, causing investment to rise as well and private sector decisions can sometimes result in inefficient macroeconomic outcomes, necessitating active policy responses from the public sector, particularly monetary and fiscal policy actions by the Central Bank of Nigeria and the federal Ministry of Finance to stabilize output across the economy.

2.3.2. Ricardian Equivalence Hypothesis (REH)

The Ricardian Equivalence Hypothesis is the second, but more contentious school of thought on budget deficit finance (REH). In 1820, David Ricardo proposed this hypothesis which was later expanded upon by Harvard professor (Barro, 1974). Ricardian equivalence is also known as the Barro-Ricardo equivalence statement because Ricardian economists contend that the preceding seemingly reasonable assumption is erroneous. Although a debt-financed tax cut would enhancie current disposable income, it would also mean that the government would have to raise taxes at some point in the future to pay off the debt and interest. As a result, the tax decrease would only provide consumers with a temporary boost in income that would be reclaimed later. If consumers understand this, then they would know that their permanent or lifetime resources had not changed.

As a result, the decrease in tax would not have any impact on consumer spending and households would save all of their new disposable income to cover future tax liabilities. There would be no influence on national saving since there would be no effect on consumption. Financing the budget deficit would not have the impact that Keynesian economists predicted if national saving remained unchanged. Money supply, output, employment, foreign debt, and interest rates, in particular, would be unaffected in the short and long run. The tax cut would have little impact on the economy. Many scholars have used the Ricardian equivalence hypothesis to suggest that tax cuts which tend to diminish both public revenues and savings are the primary source of funding for budget deficits.

While these tax cuts reduce public savings and raise the budget deficit, they also increase private savings by the same amount. Changes in the composition of public funding such as debt versus taxes, according to proponents of this viewpoint have no influence on real interest rates, aggregate demand or private expenditure. According to the Ricardian Equivalence Hypothesis, a deficit-financed tax cut will reduce public savings while increasing private savings. As a result, the decrease in public savings is fully offset by an increase in private savings, and national income remains unchanged. The main premise is that government debt is similar to future taxes, and future taxes are comparable to current taxes if consumers are sufficiently forward-thinking. Hence, financing the government by debt is equivalent to financing it by taxes. Let us assume that government purchases remain constant and that the government decides a cut in taxes.

2.3.3. Classical Theory of Money

Despite the fact that the hypothesis was first proposed in 1586, it was Irving Fisher who popularized it in 1911. Later, a group of Cambridge economists proposed an alternative strategy. The fundamental conclusion of these two theories, however, is that the same price level varies directly and proportionally with the money supply. For the classical theory of money, continuous price inflation is caused by an increase in the quantity of money in circulation. This theory is sometimes referred to as the "quantity theory of money" because of the velocity of money circulation which is constant, and the money supply which determines the total money value of transactions in the economy at any given time (Jhingan, 2005). Money, according to them is a curtain that serves as a neutral intermediary in the economy. The classical theory of money like Say's Law of markets assumes that money has no utility other than the usefulness of the commodities and services it is used to acquire and hence, it is not always wanted (Obafemi & Ifere, 2015). This school of thought has it that people only want money because it serves as a medium of exchange. If the money supply changes without the aggregate output changing the prices of goods and services will rise proportionately and real wages, employment, and output will not be affected.

Changes in the money supply will only have an impact on the overall price level and the money wage if the money supply increases. It will effectively increase the total money supply and with velocity constant without having corresponding increase in goods and services, people will want to spend the extra money on the same quantity of goods and services available because they are not expected to hoard money. Prices of goods and services will rise as a result and the increase in the general price level will bring additional aggregate money expenditure to the same level as the entire effective increase in money supply. Fisher's equation of exchange is used to explain the classical money theory which posits that a change in the money supply will lead to a direct and proportionate change in inflation.

$$PT = MV \tag{1}$$

Equation 1 shows the velocity of money in circulation which is denoted by the letter V. P stands for the price of products and services, M represent money while T stands for the transaction (output). According to this theorist, increase in the supply of money leads to a fall in the value of money, implying that money expansion leads to inflation.

2.4. Review of Empirical Literature

A number of empirical studies have been done on impact of budget deficit financing on macroeconomic variables such as interest rate, inflation rate and money supply in which some of them are reviewed in this work.

In Congo and Belgium, Koyame-Marsh (2017) looked at the relationship between budget deficit financing, money supply, and inflation using annual data for the Democratic Republic of Congo (Congo) from 1966 to 1995 and Belgium from 1970 to 1997. The study experimentally examines the long-run link between inflation, budget deficit finance, and money supply. The impact of budget deficits, finance, and money supply on inflation in the two countries is examined using an error-correction model framework. Both countries' error-corrected estimates of

money and budget deficit financing are not statistically significant, implying that neither Congo nor Belgium's budget deficit financing is inflationary. However, because the calculated coefficient of the error correction term in the instance of Belgium is statistically significant, the study concluded that both budget deficits and money supply Granger produce inflation in the long run in Belgium. In order to successfully lower inflation and reach the targeted inflation rates, the report advises that fiscal and monetary policies be unified and structural reforms be hastened. Their work, on the other hand, uses the budget deficit as a single variable in determining its effectiveness in the money supply, whereas the current study focuses on financing the budget deficit in the money supply, using external debt financing and local debt financing as indicators of budget deficit financing.

Okoro (2013) investigated Nigeria's budget deficit financing and trade balance. In order to analyze the data, the researchers used Granger-Causality and Vector Auto-Regression (VAR) approaches. The result of the analysis shows that there is a positive association between deficit financing and trade balance in the short run (surplus). While the long-term result suggests that increasing budget deficit financing reduces Nigeria's trade deficit. Hence, the study suggests that proper deficit financing management be implemented in order to achieve the above results. The study claims that deficit financing is a useful tool for the government to improve trade in the short term and that in the long run, deficit financing could be used to reduce Nigeria's trade deficit. In their study, Budget deficit financing was used as a single variable to capture its effect on trade surpluses in Nigeria while this present research work disembodied budget deficit financing to different indicators in other to capture the full effects of financing budget deficit on money supply in Nigeria economy.

Using a co-integrated VAR analytic approach, Negash (2016) explored the equilibrium link between government budget deficit financing, money supply, and inflation in Ethiopia. The study sought to provide empirical evidence for a long-term causal link between budget deficit financing, broad money supply, and inflation. The study used annual time series data from 1975 to 2012 with the use of a co-integrated VAR or vector error correction (VEC) model method. Using the Granger causality test, the researchers looked into the direction of causality. The system's parameters were determined using the Johansen estimation method. In both the short and long run, the results reveal a positive causal link between money supply and inflation. It also demonstrates that funding budget deficits has a long-term impact on both money supply and inflation. However, the model employed the ratio of budget deficit to GDP as a proxy for budget deficit financing, whereas the latter utilizes domestic and external sources of borrowing as indicators of budget deficit financing.

Umeora and Ikeora (2016) study the effects of government budget deficit financing on Nigeria's money supply. The analysis uses secondary data from the CBN Statistical Bulletin for the years 1970 to 2014. Error Correction Model (ECM) and Pairwise Granger Causality are used for the analysis. The regression results reveal that government fiscal deficits have a considerable and negative impact on money supply while inflation has little impact on money supply or fiscal deficits. Hence, they recommend that governments should run fiscal deficits in order to keep the money supply and inflation under control. This present study employs indicators of financing budget deficits such as domestic and external sources of finance to reflect the influence of budget deficit financing on money supply in the Nigerian economy, whereas the former uses government fiscal deficit as a proxy for financing budget deficit.

In Nigeria, Nwaeke and Korgbeelo (2016) looked at the relationship between deficit financing and macroeconomic indicators such economic growth (as measured by real GDP), inflation rate (INFR), and unemployment rate (UNPR). In their research, they used the ordinary least squares (OLS) approach of multiple regression analysis. Their findings suggest that deficits financed by foreign loans have a negligible negative impact on economic growth in Nigeria, whereas deficits financed through local sources (e.g. DBS and NBP) encourage growth. Furthermore, deficit financing has no substantial impact on inflation, and domestic sources of financing deficits in Nigeria exacerbate unemployment. Therefore, the study suggested among other things that Nigeria diversify and widen its revenue source in order to lessen the country's vulnerability to negative oil revenue shocks and avoid deficit budgeting. Their research, on the other hand is focused on determining the influence of deficit financing on macroeconomic variables including inflation, unemployment, and growth. However, because money supply has a positive association with budget deficits, the current study focuses on money supply as a dependent variable for deficit financing indicators.

From 1970 to 2013, Eze and Ogiji (2016) explore the impact of deficit financing on economic stability in Nigeria. Regression analysis was used in this investigation. External Source of Deficit Financing (EXF), Non-banking Public Source of Deficit Financing (NBPF), and Exchange Rate have significant and positive implications on the Economic Stability proxy for Gross Domestic Product (GDP), whereas Ways and Means Source of Deficit Financing (WM), Banking System Source of Deficit Financing (BSF), and Interest Rate (INTR) have negative implications on economic stability in Nigeria, according to the study. The implication is that government deficit financing via External Sources of Deficit Financing (EXF) and Non-banking Public Sources of Deficit Financing (NBPF) will maintain economic stability, whereas government deficit financing via Banking System Sources of Deficit Financing (BSF) and Ways and Means Sources of Deficit Financing (WM) will reduce economic growth causing economic instability. The study finally recommends that Nigerian deficit finance should be targeted on the productive areas of the economy. This is because deficit financing has only resulted in economic instability, showing that Nigeria's economic stability will require good policies. The purpose of this study is to determine the impact of funding the budget deficit on the stability of the Nigerian economy, using GDP as the explanatory variable, whereas the current study focuses on the money supply.

Nwanna and Umeh (2019) investigated the financing of deficits and economic growth. The analysis relied on secondary data from the CBN statistical bulletin on a variety of topics that were relevant during the time period under consideration (1981-2016). The analysis used the Augmented Dickey Fuller (ADF) unit root test, Johanson Co-integration test, and normality test. The outcomes of the study demonstrated that funding deficits with external debt has a considerable detrimental impact on Nigeria's economic growth. In addition, domestic debt has a positive substantial effect on Nigeria's economic growth, whereas debt service has no significant effect. As a result, the study recommends that the government establish monitoring teams to ensure that the budget is properly implemented, as well as any loans taken out, in order to reduce corruption, linkages, and wastages. The monitoring teams will accomplish this by holding everyone accountable for every kobo of government funds spent. However,

the former attempted to prove that deficit financing had a major impact on growth, whilst the latter focused on determining the impact of deficit financing on money supply in the Nigerian economy.

2.5. Justification of the Study

Given the empirical literature reviewed, which focuses on the impact of budget deficit financing on macroeconomic variables such as interest rate, GDP, unemployment, and inflation, this study focuses primarily on financing the Nigerian economy's budget deficit and money supply, with strong indicators of budget deficit financing such as external and internal sources of debt financing. Internal debt financing includes deficits financed by the Central Bank of Nigeria and deposit money banks, as well as deficits financed by non-bank public sources such as insurance companies, pension and provident funds, savings and loans associations, leasing companies, unit trusts, development finance institutions, discount houses, individual private investors, and money and capital markets. Second, this research aims to determine whether financing the budget deficit through external debt financing and domestic debt financing has had a significant impact on the money supply, as Keynes theory recognizes the idea of financing the budget deficit as compensatory spending intended to alleviate unemployment and depression.

However, most of the studies conducted on the topic made use of single variable such as fiscal balances and ratio of budget deficit to GDP as proxy for budget deficit financing. Specifically, the work of Negash (2016)who worked on the analysis of equilibrium relationship among government budget deficit financing, money supply and inflation in Ethiopia uses ratio of budget deficit to GDP as proxy for financing budget deficit. In a similar manner, Koyame-Marsh (2017) who worked on the relationship between budget deficit financing, money supply and inflation in Congo and Belgium uses fiscal balances as proxy for budget deficit financing. These variables we argue may not be a good indicator of budget deficit financing. To close this gap, the current study used diverse sources of budget deficit financing as explanatory variables to evaluate the impacts of budget deficit financing on chosen macroeconomic variables such as money supply. That is, the budget deficit financing was disaggregated into multiple sources of funding such as internal and foreign sources. The importance of this technique is that it helped to reveal the various effects that various sources have on the money supply and the economy as a whole.

Another argument for this study is that the dynamic nature of the Nigerian economy's structure as well as the introduction of new sets of empirical data (both brought about by time) may have rendered the findings of past studies obsolete. As a result, there is a need to approach the issue with new empirical evidence that reflects the country's current economic reality.

3. Theoretical Framework and Model Specification

Understanding the method by which budget deficit financing affects important macroeconomic variables is the first step toward quantifying the influence of budget deficit financing on the money supply. Fiscal policy is used by governments to influence the amount of aggregate demand in the economy in order to achieve economic goals such as price stability, full employment, and economic growth. According to Keynesian economic theory, the greatest method to stimulate aggregate demand is to increase government spending and lower tax rates. Keynesians claim that this strategy can be utilized to construct the framework for robust economic development and striving towards full employment in times of recession or low economic activity. The ensuing deficits would theoretically be paid for by a growing economy during the subsequent boom.

Within the context of Keynesian models, the link between money supply and budget deficit finance has been examined using the IS-LM framework. According to the Keynesian model, financing a budget deficit will increase aggregate expenditure by expanding money supply. Budget deficits financed through the issuing of bonds on the other hand raise bondholder wealth which stimulates consumption. The multiplier impact of increased consumption, results in increased national income. As a result, if the budget deficit is financed by issuing government bonds, the resulting expansionary fiscal policy will cause the IS curve to move to the right according to the Keynesian premise and if the rise in budget deficit financing has a positive impact on money supply, the LM curve will shift to the left. This policy combination results in a new equilibrium point for the IS and LM schedules with greater production and interest rates. Hence, the money market shows that real money supply and demand are equal at equilibrium with this equation:

$$M^s = M^d \text{ or } Ms/p = Md/p \quad (2)$$

Equation 2 present a clear justification that money held for individual purposes equals the stock of money in an economy. However, according to the Fisherian method, the circulation of money stock is related to the amount of money spent in the economy over a specific period of time in the classical theory of money. Monetarists think that inflation happens when the pace of expansion of the money supply exceeds the rate of growth of the economy as explained by the quantity theory of money. This monetarist link between the generation of base money and inflation demonstrates that when central banks issue money at a pace higher than the demand for cash balances at the current price level, the resulting excess demand in the goods and services market pushes up the price level in the economy. Thus, in order for budget deficit financing to be inflationary, the money supply must expand above what is required for the economy to function properly.

For this reason, if the average price of an item is **1p** and the quantity sold is **1q**, the total expenditure on that commodity is **p1q1** with the hope that the economy has **k** commodities.

$$\Sigma pq = p1q1 + p2q2 + \ldots + pkqk \quad (3)$$

$$\Sigma p1q1 = PQ \quad (4)$$

Where **p** is index of price of goods sold, **q** is index of quantity of goods sold and **PQ** is the total monetary expenditure on goods. The average turnover of money or the velocity of money in the process of exchange of these goods will be equal to;

$$V = PQ/M \quad (5)$$

Where the velocity of circulation, **M** is total money stock.

Equation three was later transformed to;

$$MV = PQ \quad (6)$$

Equation 6 argues that at full employment, an increase in the money supply (M) is believed to have no effect on the velocity of circulation (V) or the volume of transactions (Q). As a result, the price level (p) will vary directly with the amount of money (M) and vice versa.

$$P = f(M) \quad (7)$$

Equation 7 is augmented to accommodate disembodied budget deficit financing to various indicators such as total external source of debt financing and internal source of debt financing. External source of debt financing which is the amount of budget deficits financed from foreign loans and internal source of debt financing (i.e budget deficits financed from the domestic banking system which comprises of the Central Bank of Nigeria and the deposit money banks and deficit financed from the non bank public sources which include insurance companies, pension and provident funds, savings and loans associations, leasing companies, unit trust, development finance institutions, discount houses, individual private investors, money and capital markets, etc) so as to capture its effect on money supply.

However, because the homogeneity of macroeconomic variables cannot be overlooked, the empirical method that will be used to investigate the impact of budget deficit financing on money supply will be a system equation model. In this paper, we utilize Vector Error Correction Model to evaluate short-run dynamics and long-run linkages among budget deficit financing, and money supply and its affiliates (inflation). The conventional VECM is written compactly as;

$$\Delta MS = C_1 + \sum_{i=1}^{k-1} \beta_i \Delta MS_{t-i} + \sum_{j=1}^{k-1} \alpha_i \Delta EXTDSF_{t-j} + \sum_{k=1}^{k-1} \lambda_k \Delta INTDSF_{t-k} + \sum_{r=1}^{k-1} \pi_r \Delta DS_{t-r} + \sum_{n=1}^{k-1} \pounds_n \Delta CPI_{t-n} + \sum_{v=1}^{k-1} \text{¥}_v \Delta RGDP_{t-v} + \sum_{m=1}^{k-1} \delta_m \Delta INTR_{t-m} + \lambda_1 ECT_{t-1} + U_1 t \quad (8)$$

Equation 8 implies that all the variables of the model are assumed to be endogenous. This is because the effect of money supply on inflation is almost always inseparable (Umeora and Ikeora 2016), that means that the effect on inflation has also been brought in. Therefore, consumer price index, interest rate and real GDP were added in the model to serve as a control variables to financing deficit indicators.

Where;

M^S = Money Supply, EXTDSF = External Source of Budget Deficit Financing, INTDSF = Internal Source of Budget Deficit Financing, CPI = Consumer Price Index (Proxy for Inflation Rate), RGDPGR = Real Gross Domestic Product Growth Rate, INTR = Interest Rate , K-1 = the lag length is reduced by 1, λ = Sped of adjustment parameter with a negative sign, ECT_{t-1} = the error correction term, μ = Disturbance term/error term, β_0 = Constant term, β, α, λ_k, π, δ, $\pounds$, ¥ short run dynamics coefficients of the model's adjustment long run equilibrium.

3.1. Apriori Expectation

Based on the theories and empirical studies, we expect the predictor variables such as external source of financing budget deficit, internal source of financing budget deficit, debt servicing, consumer price index (Proxy for inflation) as well as real GDP to have positive and direct relationship with the dependent variable (Money supply) while interest rate is expected to have a negative relationship with money supply because increase in money lowers interest rate. Therefore, money supply is inversely related to the interest rate. For this reason, it is mathematically states as follow:

$$EXTDSF/M^S > 0,\ INTDSF/M^S > 0,\ DS/MS > 0,\ RGDP/M^S > 0,\ M^S/CPI > 0\ INTR/M^S < 0.$$

The above signifies a positive and negative relationship and movement of exogenous variables on money supply.

4. Empirical Results and Discussion of Findings

4.1. Unit Root Test

The unit root test is a test for variable stationarity that uses the augmented Deckey Fuller (ADF) test the null hypothesis (H_0) and the alternative hypothesis (H_1) to know whether the variables have or do not unit root. Since Ordinary Least Square (OLS) generates misleading regression when it is non statitionary, the unit root test is estimated. In other words, when the unit root is present, the variables are non-stationary, and when the unit root is absent, the variables are stationary. When the variables are stationary, OLS will be BLUE. The ADF results, which include t- statistics and a 5% critical value, are provided in the Table 1.

Table 1. Unit root (ADF test).

Variables	ADF Test	5% critical value	Order of integration	Remarks
MS	-4.18	-3.53	1 (1)	Stationary
EXTDSF	-5.20	-3.53	1 (1)	Stationary
INTDSF	-4.77	-3.53	1 (1)	Stationary
RGDP	-8.44	-3.53	1 (1)	Stationary
CPI	-3.88	-3.54	1 (1)	Stationary
DS	-7.87	-3.53	1 (1)	Stationary
INTR	-8.51	-3.53	1 (1)	Stationary

Decision Rule: Reject H_0 if ADF test value is greater than 5% critical value, otherwise accept. From the above result, At first difference, the ADF test value of money supply MS is (-4.182067), external source of financing budget deficit EXDSF is (-5.205541), internal source of financing budget deficit INTDSF is (-4.778740), debt servicing DS is (-7.879150), consumer price index (Proxy for inflation rate) CPI is (-3.88016), real gross domestic product RGDP is (-8.444470) and interest rate INTR (-8.515384) are greater than their critical values of (-3.536601), (-3.536601), (-3.536601), (-3.536601), (-3.544284), (-3.536601) and (-3.536601) at 5% respectively. Therefore, we reject H_0 of MS, EXDSF, INTDSF, DS, CPI, RGDP and INTR and then conclude that they are stationary at first difference.

4.2. Test for Co-Integration

Given that the series are integrated in the same order, that is, order one (1), the Johansen cointegration test technique is proven to be useful in determining if the variables of the model have a long-run relationship. The multivariate approach proposed by Johansen (1988) and Johansen and Juselius (1990) is used to test for the long-run link between the variables under consideration. In non-stationary time series, the Johansen approach discovers a number of cointegrating vectors. It provides for hypothesis testing of cointegrating vectors and loading matrix elements. The following is the outcome of the cointegration test:

Null hypothesis (H_0): there is no cointegration among the variables.

Alternative hypothesis (H_1): there is cointegration among the variables.

Table 2. Johansen cointegration test result.

Series: LNMS LNEXTD LNINTD LNDS LNCPI LNRGDP INTR				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		**Trace**	**0.05**	
No. of CE(s)	**Eigenvalue**	**Statistic**	**Critical Value**	**Prob.****
None *	0.77	149	126	0.00
At most 1	0.63	94.4	95.8	0.06
At most 2	0.46	57.8	69.8	0.30
At most 3	0.31	34.8	47.8	0.46
At most 4	0.23	20.9	29.8	0.36
At most 5	0.21	11.1	15.5	0.20
At most 6	0.05	1.98	3.84	0.15

Note: Trace test indicates 1 cointegrating eqn(s) at the 0.05 level.
* denotes rejection of the hypothesis at the 0.05 level.
**MacKinnon, Haug, and Michelis (1999) p-values.

From the Table 2, the trace likelihood ratio results point out that the null hypothesis of no cointegration among the variables is rejected in favour of the alternative hypothesis up one cointegrating equation at 5% significant level because their values exceed the critical values. Specifically, from the result above, the evidence that residuals are stationary since the trace statistics (149.2644) is greater than the critical value at 5% (125.6154) or probability values less than 0.05; thus, our variables are co-integrated indicating a possible long run relationship.

Table 3 Present the Result of Vector error correction model.

Dependent Variable: MS							
Vector Error Correction Estimates							
Standard errors in ( ) & t-statistics in [ ].							
Error Correction:	**D(LNMS)**	**D(LNEXTD)**	**D(LNINTD)**	**D(LNDS)**	**D(LNCPI)**	**D(LNRGDP)**	**D(INTR)**
	-0.07	-2.22	0.02	0.14	-0.28	0.37	-13.6
	(0.02)	(0.77)	(0.29)	(0.69)	(0.13)	(0.14)	(5.11)
CointEq1	[-3.82]	[-2.87]	[0.06]	[0.19]	[-2.02]	[2.52]	[-2.65]
	0.22	1.54	0.12	0.40	0.45	0.02	9.05
	(0.31)	(1.06)	(0.40)	(0.95)	(0.19)	(0.20)	(7.04)
D(LNMS(-1))	[0.71]	[1.44]	[0.31]	[0.42]	[2.37]	[0.12]	[1.28]
	0.05	0.20	0.01	0.70	0.03	0.02	0.97
	(0.00)	(0.20)	(0.07)	(0.18)	(0.04)	(0.04)	(1.39)
D(LNEXTD(-1))	[8.33]	[0.96]	[0.17]	[3.71]	[0.88]	[0.70]	[0.69]
	0.09	-0.73	0.13	0.24	0.13	-0.07	-6.29
	(0.02)	(0.73)	(0.27)	(0.66)	(0.13)	(0.14)	(4.85)
D(LNINTD(-1))	[4.51]	[-1.00]	[0.48]	[0.35]	[1.03]	[-0.54]	[-1.29]
	0.04	-0.18	-0.06	-0.56	0.09	1.69	-0.85
	(0.00)	(0.27)	(0.10)	(0.24)	(0.04)	(0.05)	(1.82)
D(LNDS(-1))	[5.48]	[-0.67]	[-0.53]	[-2.26]	[1.96]	[0.00]	[-0.46]
	0.07	0.74	0.25	0.03	-0.00	-0.37	4.59
	(0.03)	(1.24)	(0.46)	(1.11)	(0.22)	(0.23)	(8.21)
D(LNRGDP(-2))	[2.18]	[0.59]	[0.53]	[0.03]	[-0.00]	[-1.56]	[0.55]
	-0.01	0.15	0.01	0.01	0.00	-0.01	0.24
	(0.01)	(0.05)	(0.01)	(0.04)	(0.00)	(0.00)	(0.33)
D(INTR(-1))	[-0.75]	[3.05]	[0.77]	[0.25]	[0.19]	[-1.68]	[0.71]
	0.12	-0.17	0.03	0.08	-0.05	0.09	0.34
	(0.08)	(0.27)	(0.10)	(0.24)	(0.04)	(0.05)	(1.80)
C	[1.52]	[-0.63]	[0.27]	[0.32]	[-1.03]	[1.74]	[0.19]
R-squared	0.63	0.52	0.24	0.59	0.80	0.55	0.63
Adj. R-squared	0.57	0.17	-0.32	0.28	0.65	0.22	0.36
F-statistic	90.7	21.5	20.4	19.9	5.40	1.68	2.31

4.3. Evaluation of Estimates

The result in table 3 shows that the sign of the coefficient of INTDSF is positive and is 0.090, which implies that with the influence of all other variables held constant, an increase in the internal source of financing deficit by one percent on the average, will lead to an increase in Money supply by about 9.3 Percent. The sign of the coefficient conforms to economic a priori expectation. More so, the sign of the coefficient of EXTDSF is positive at 0.0517, this suggest that all things being equal, as EXTDSF increases by one percent on the average, Money supply will increase by about 5.17 percent. Also, the sign of the coefficient of DS is positive at 0.040, this suggest

that all things being equal, as DS increases by one percent on the average, Money supply will increase by about 4.0 percent.

The following result above shows that the government will increase money supply in the Nigerian economy by financing its budget deficit through internal and external sources of budget deficit financing as well as servicing the debt. This claim was founded on the fact that financing a budget deficit increases money supply which stimulates domestic output, raises savings, and encourages investment trends at any given interest rate. As a result, Keynesian perspectives on the money supply and budget deficit finance are valid for the Nigerian economy.

Furthermore, the real GDP change coefficient has the correct signs and is statistically significant. This means that, in the long run, changes in real GDP have a significant impact on money supply, resulting in a positive or negative shift. INTR has a negative correlation of -0.0115, implying that when INTR rises by 1% on average, Money supply falls by around 11.5 percent, all other parameters remaining constant over the study period. This outcome was consistent with the Nigerian economy's theoretical interest rate to money supply postulation.

From the regression table, it can be observed that multiple coefficient of determination (R^2) is given as 0.633 or 63.3%. This means that about 63.3% of the variation in Money supply is explained by EXTDSF, INTDSF, DS, CPI, RGDP and INTR. The remaining 36.7% is explained by other variables not included in the model. The adjusted R^2 is reported as the multiple coefficient of determination adjusted to take into account the degrees of freedom associated with the sum of squares. The Adjusted R^2 is given as 0.566 or 56.6%. This implies that about 56.6% of the fluctuations in the dependent variable Money supply are jointly explained by the fluctuations in the explanatory variables.

The coefficient of ECT (-0.08528) which measures the speed of adjustment towards long-run equilibrium carries the expected negative sign and significant at 5 percent level. The coefficient of the ECT indicates a feedback of 8.5% of the previous year's disequilibrium. This also implies the speed with which MS adjust from short-run disequilibrium to change in EXTDSF, INTDSF, DS, CPI, RGDP and INTR in order to attain long-run equilibrium of 8.5% within one year.

5. Conclusion and Recommendations

The researcher concludes that there is a positive relationship between indicators of budget deficit financing and money supply and its affiliates (inflation) in Nigeria after examining the impact of budget deficit financing on money supply in Nigeria using the VECM technique to test some explanatory variables. Furthermore, while conforming to apriori predictions, the researcher concludes that there is no meaningful link between interest rate and money supply looking at the result.

Sequel to the findings of the study, the study recommends the following:

1. External debt financing (EXTD) and debt servicing have a positive impact on money supply. This implies that EXTDSF and DS are one of the factors affecting money supply in Nigeria. Because rising EXTD and debt servicing are important sources of budget deficit financing in Nigeria, external sources of financing deficits should be encouraged for effective and increased economic stability reasons and they should be properly channeled to the productive sector of the economy to enhance economic stability. More importantly, efficient and effective debt servicing should be encouraged in order to reduce debt burden at the right moment.

2. Given the beneficial and large impact of funding the budget deficit through internal borrowings, the government should enhance measures that equalize the level of funding the budget deficit locally in order to ensure economic stability.

3. Because the effect of financing the budget deficit is consistent with its theoretical postulations of money supply, it follows that if interest rates rises, bond prices will rise as well, making bonds more appealing to hold than money. On this basis, the government should pursue a lower interest rate policy through its monetary policy. As a result of the greater aggregate demand, there will be a higher volume of transactions. For policymakers, this means that lowering domestic interest rates will induce Nigerians to want more money for transactional purposes rather than opting for a bond. This will enhance money supply, promoting economic activity and providing jobs for Nigeria's growing labor population. This will aid in the provision of job for the citizens of Nigeria.

4. The findings indicate that the Keynesian and Neoclassical theories apply to Nigeria. As a result, the study recommends that greater focus be placed on the productivity and effectiveness of government spending, as this has a beneficial influence on aggregate money supply via a rise in aggregate demand.

References

Anyanwu, J. C. (1997). *Nigerian public finance.* Onitsha: Joanne Educational Publishers Ltd.

Barro, R. J. (1987). Government spending, interest rates, prices, and budget deficits in the United Kingdom, 1701-1918. *Journal of Monetary Economics, 20*(2), 221- 247.Available at: https://doi.org/10.1016/0304-3932(87)90015-8.

Barro, R. J. (1974). Are government bonds net wealth? *Journal of Political Economy, 82*(6), 1095-1117.Available at: https://doi.org/10.1086/260266.

Bovenberg, L. A. (1998). Long–term interest rates in the United States: An empirical analysis. *IMF Staff Papers, 35*(2), 382-390.Available at: https://doi.org/10.2307/3867086.

Central Bank of Nigeria (CBN). (2019). *Annual report and statement of accounts.* Abuja: Central Bank of Nigeria, 2019.

Cheug, B. (1998). The causality between budget deficits and interests rates in Japan: An application of time services analysis. *Applied Economic Letters, 5*(7), 419-432.Available at: https://doi.org/10.1080/135048598354546.

Darrat, A. F. (1990). Structural federal deficits and interest rates: Some causality and co-integration tests. *Southern Economic Journal, 56*(3), 752-759.Available at: https://doi.org/10.2307/1059375.

Debt Management Office (DMO). (2020). DMO news. Retrieved from https://www.dmo.gov.ng.

Dua, P. (1993). Interest rates, government purchases, and budget deficits: A forward-looking model. *Public Finance Quarterly, 21*(4), 470-478.Available at: https://doi.org/10.1177/109114219302100407.

Eze, O. R., & Ogiji, F. O. (2016). Impact of deficit financing on economic stability in Nigeria: Analysis of economic growth. *Journal of Applied Finance and Banking, 6*(1), 111-125.

Fischer, S., & Easterly, W. (1990). The economics of the government budget constraint. *The World Bank Research Observer, 5*(2), 127-142.

Jhingan, M. L. (2005). *The economics of development and planning* (38th ed.). Delhi: Vrinda Publications (P) Ltd.

Johansen, S. (1988). Statistical analysis of cointegration vectors. *Journal of Economic Dynamics and Control, 12*(2-3), 231-254.Available at: https://doi.org/10.1016/0165-1889(88)90041-3.

Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with appucations to the demand for money. *Oxford Bulletin of Economics and Statistics*, *52*(2), 169-210.Available at: https://doi.org/10.1111/j.1468-0084.1990.mp52002003.x.

Keynes, J. M. (1936). *The general theory of employment, interest, and money*. London and New York: Macmillan.

Koyame-Marsh, R. O. (2017). The dichotomy between the Saudi women's education and economic participation. *The Journal of Developing Areas*, *51*(1), 431-441.Available at: https://doi.org/10.1353/jda.2017.0026.

MacKinnon, J. G., Haug, A. A., & Michelis, L. (1999). Numerical distribution functions of likelihood ratio tests for cointegration. *Journal of Applied Econometrics*, *14*(5), 563-577.Available at: https://doi.org/10.1002/(sici)1099-1255(199909/10)14:5%3C563::aid-jae530%3E3.0.co;2-r.

Momodu, A., & Monogbe, T. (2017). Budget deficit and economic performance in Nigeria. *Journal of Business and Management Studies*, *10*, 21276.

Negash, H. D. (2016). Analysis of equilibrium relationship among government budget deficit financing, money supply and inflation in Ethiopia: Co-integrated VAR analysis approach. *African Journal of Business Management*, *7*(35), 3423-3434. 3421.

Nwaeke, G. C., & Korgbeelo, C. (2016). Budget deficit financing and the Nigerian economy. *European Journal of Business and Management*, *8*(22), 206-214.

Nwanna, I. O., & Umeh, G. (2019). Deficit financing and economic growth: The Nigerian experience. *International Journal of Economics and Financial Management*, *4*(1), 28-49.

Nwaotka, E. (2004). Sustainability of fiscal deficits, monetary policy and inflation stabilization: The case of Turkey. *Journal of Policy Modeling*, *10*(4), 661-681.

Obafemi, F. N., & Ifere, E. O. (2015). Monetary policy transmission mechanism in Nigeria: A FAVAR approach. *International Journal of Economics and Finance*, *7*(8), 93-103.Available at: https://doi.org/10.5539/ijef.v7n8p229.

Okoro, S. A. (2013). Deficit financing and trade balance in Nigeria. *International Journal of Accounting Research*, *42*(827), 1-6.

Okpanachi, U., & Abimiku, C. (2007). Fiscal deficit and macroeconomic performance: A survey of theory and empirical evidence. *The Nigerian Economy: Challenges and Directions for Growth in the Next*, *25*, 3-34.

Onwe, B. U. (2014). Implication of deficit financing on economic growth in Nigeria. *European Centre of Research Training and Development UK*, *2*(10), 122-135.

Onwloduokit, E. A. (1999). Fiscal deficit and inflation dynamics in Nigeria: An empirical investigation of causal relationship. *CBN Economic and Financial Review*, *37*(2), 1-6.

Peter, D., Olohungbebe, S., & Okoye, C. (2021). The effect of debt burden on economic development in Nigeria. *American Journal of Humanities and Social Sciences Research*, *5*(5), 232-241.

Smriti, J. E. (2010). *Economic of the public sector* (3rd ed. Vol. 790). New York and London: W.W Norton and Company.

Stiglitz, J. E. (2005). Fair trade for all: How can it promote development. *International Journal of Business*, *23*, 54.

Umeora, C., & Ikeora, E. (2016). Effects of government fiscal deficits on money supply in Nigeria, 1970–2014. *International Journal for Research in Business, Management and Accounting*, *2*(6), 57-67.

Usher, A. (1998). Public expenditure and economic growth in Nigeria. *Department of Economics, University of Ilorin, Uorin, Nigeria*.

Yusuf, A., & Mohd, S. (2021). The impact of government debt on economic growth in Nigeria. *Cogent Economics & Finance*, *9*(1), 1946249.Available at: https://doi.org/10.1080/23322039.2021.1946249.