Sarcouncil Journal of Economics and Business Management

ISSN(Online): 2945-3593

Volume- 05| Issue- 03| 2026

Research Article **Received**: 25-01-2026 | **Accepted**: 20-02-2026 | **Published**: 03-03-2026

Fiscal Spending and Import Trade in Nigeria

***Tubotamuno Boma*[1] *and Iwundu Sunday Onyemaobi*[2]**

[1]*Department of Economics, University of Port Harcourt, Nigeria*
[2]*Institute of International Trade and Development University of Port Harcourt, Nigeria*

Abstract: This study empirically analysed the effect of fiscal spending on import trade in Nigeria from 1990 to 2024. The study specifically determined the effect of government infrastructural expenditure, government education expenditure, government health expenditure, government security expenditure and government debt servicing (proxies of fiscal spending) on total import value (proxy of import trade) in Nigeria. The annual time series data used for the study were extracted from Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics (NBS) report. The study adopted different econometric technique of Autoregressive Distributed Lag (ARDL) approach. The main findings of the study showed that, government infrastructural expenditure, government education expenditure and government health expenditure have positive and significant effects on total import value in Nigeria in both short run and long run, government security expenditure has a positive and non-significant effect on total import value in Nigeria in both short run and long run while government debt servicing has a negative and non-significant effect on total import value in Nigeria in both short run and long run. Based on the findings, the study concluded that, fiscal spending plays a dynamic role in driving and sustaining import trade in Nigeria. The study recommended that, government should prioritize domestic production of inputs and capital goods required in these sectors. This includes promoting local manufacturing of construction materials, medical equipment, educational supplies, security technologies, and ICT tools in order to reduce reliance on foreign imports.

Keywords: Education expenditure, Fiscal, Import, Security expenditure, Spending, Trade.

INTRODUCTION

Fiscal spending represents a central pillar of macroeconomic management, particularly in modern economies where the state plays an active role in stabilizing economic fluctuations, promoting social welfare, and fostering long-term development. Generally, fiscal spending includes expenditures on infrastructure, health, education, administration, defense, and social services. These expenditures are essential for providing public goods, correcting market failures, stimulating aggregate demand during economic downturns, and supporting structural transformation. In both advanced and developing economies, fiscal spending serves as a tool for influencing output, employment, income distribution, and investment patterns. As economies become more complex, the scale and composition of fiscal spending have expanded, reflecting growing governmental responsibilities in economic governance and social development (Lawal & Ogunro, 2020). The theoretical importance of fiscal spending is grounded in classical, Keynesian, and contemporary macroeconomic frameworks. Keynesian theory emphasizes government spending as a powerful instrument for boosting aggregate demand, increasing output, and reducing unemployment, especially during recessions. Public expenditure on capital projects, in particular, is theorized to generate multiplier effects that stimulate private investment and productivity. Neoclassical and endogenous growth models highlight the long-term impact of fiscal spending on human capital accumulation, technological progress, and economic efficiency. Meanwhile, theories of public finance underscore fiscal spending as a mechanism for redistributing resources and achieving allocative efficiency through the provision of public goods. These theoretical perspectives demonstrate that fiscal spending is not merely a budgeting activity but a strategic lever for shaping economic structure, influencing trade patterns, and achieving sustainable development (Ebipre & Eniekezimene, 2020). Fiscal spending plays a significant role in shaping a country's import trade, primarily through its influence on aggregate demand. When government expenditure increases, particularly on infrastructure, social services, and public administration, it raises national income and stimulates domestic consumption. In economies like Nigeria, where productive capacity is limited and many consumer and capital goods are imported, higher government spending often results in increased demand for foreign goods. This aligns with Keynesian theory, which posits that public expenditure boosts overall economic activity, thereby raising import demand when domestic supply is insufficient (Keynes, 1936; Adeleye *et al.*, 2020). Ndubueze *et al.* (2020) noted that government expenditure on

***Corresponding Author:** Tubotamuno Boma

DOI-https://doi.org/10.5281/zenodo.18853873

infrastructure also contributes to higher import levels by stimulating investments that rely heavily on imported machinery, equipment, and intermediate goods. For example, increased infrastructural spending such as road construction, power projects, and public buildings often requires foreign-sourced materials and technology, thus expanding import volumes. According to Adeniran, Yusuf, and Adeyemi (2014), infrastructure-led growth in developing economies is closely associated with rising importation of capital goods. This relationship is evident in many African countries, where industrial production depends substantially on imported inputs due to low local manufacturing capacity. Therefore, while infrastructure spending fosters long-term development, in the short run it tends to elevate import trade. In the education and health sectors, fiscal spending also indirectly increases imports through procurement of instructional materials, medical equipment, pharmaceuticals, and technology that are not produced domestically. Government education and health expenditures often require foreign goods to meet international standards in service delivery (Lawal & Ogunro, 2020). Ezeabasili *et al.* (2021) noted that increased public debt and the accompanying debt-servicing requirements affect import levels by altering exchange rate dynamics and foreign reserve availability. In summary, fiscal spending has a strong and multi-dimensional impact on import trade, promoting higher imports through increased demand, infrastructure investment needs, and sectoral procurement patterns, particularly in economies with weak domestic production structures (Babatunde & Adefeso, 2021).

Nigeria's fiscal landscape has been characterized by persistent increases in government spending over the past decades, driven by the need to address infrastructural deficits, provide social services, and stimulate economic growth. However, despite the expansion in fiscal spending, the country continues to grapple with a growing import bill and persistent trade deficits. This situation raises concerns about whether increased government expenditure is strengthening domestic productive capacity or inadvertently fueling import dependence. Nigeria's import demand continues to rise disproportionately relative to its domestic output, suggesting a structural imbalance that may be aggravated by fiscal policies. A major problem is that much of Nigeria's fiscal spending—especially capital expenditure on infrastructure—depends heavily on imported machinery, equipment, and technical inputs. Instead of stimulating local production, government expenditure often translates into higher demand for foreign goods due to limited local manufacturing capacity. Expansionary fiscal policy in Nigeria tends to increase aggregate demand for imported goods, thereby intensifying pressure on foreign reserves and widening trade deficits. This dependence not only undermines the potential benefits of fiscal spending but also makes the economy vulnerable to external shocks, particularly fluctuations in oil revenue and exchange rates. Furthermore, recurrent spending in critical sectors such as health, education, and security often results in increased importation of pharmaceuticals, instructional materials, vehicles, weapons, ICT devices, and other goods that are scarcely produced in Nigeria.

In addition, government expenditure in social sectors significantly correlates with increased foreign procurement, indicating a structural weakness in local industries that prevents fiscal spending from generating backward linkages in the domestic economy. This trend implies that even well-intentioned public spending may unintentionally exacerbate import dependence rather than encourage domestic value addition. Drawing from the identified problem, this study empirically examined the effect of fiscal spending on import trade in Nigeria. Other specific objectives of the study include to: determine the effects of government infrastructural expenditure, government education expenditure, government health expenditure, government security expenditure and government debt servicing on total import value in Nigeria.

LITERATURE REVIEW

Theoretical Framework

Many theories that provide theoretical explanation to fiscal spending – import trade nexus exist. For the purpose of this study, Keynesian Theory of Fiscal Policy, Multiplier-Accelerator Theory as well as theory of Absolute Advantage were adopted and reviewed as follows:

Keynesian Theory of Fiscal Policy

This theory was propounded by John Maynard Keynes in 1936, through his seminal work *"The General Theory of Employment, Interest and Money,"* emphasizes the crucial role of government spending and taxation in stabilizing economic fluctuations and achieving full employment (Keynes, 1936). Keynes developed his theory during the Great Depression, a period

Publisher: SARC Publisher

when classical economic assumptions of self-adjusting markets failed to restore stability and employment. According to Keynes (1936), aggregate demand which comprises consumption, investment, government expenditure, and net exports is the main driver of output and employment in an economy. When aggregate demand is insufficient, it leads to underemployment and idle resources. Keynes argued that in such situations, the government must intervene through fiscal policy, that is, adjusting its levels of spending and taxation to influence overall economic activity. He proposed that during periods of economic recession, expansionary fiscal policy (increasing public expenditure or reducing taxes) should be implemented to stimulate aggregate demand. Higher government spending injects additional income into the economy, which multiplies through consumption and investment, thereby increasing output and reducing unemployment. Conversely, during inflationary periods, contractionary fiscal policy (reducing public spending or increasing taxes) should be used to dampen excess demand and stabilize prices. Keynes also highlighted the concept of the multiplier effect, where an initial increase in government expenditure leads to a more than proportionate increase in national income. This occurs because the recipients of government spending spend a portion of their additional income, further increasing aggregate demand and production. In the context of an open economy like Nigeria, the Keynesian perspective suggests that fiscal expansion may lead to an increase in import demand if domestic production cannot meet the rising consumption and investment needs. This implies that the effectiveness of fiscal policy partly depends on the structure and capacity of the domestic economy to supply goods and services (Stiglitz, 2010)

Overall, the Keynesian Theory underscores that government intervention is essential for macroeconomic stability and growth, particularly in addressing unemployment, stimulating production, and correcting cyclical fluctuations that market forces alone cannot resolve (Dada & Adewale, 2013). Keynesian Theory of Fiscal Policy remains highly relevant to understanding the relationship between fiscal spending and import trade in Nigeria. The theory provides a framework for explaining how changes in government spending influence aggregate demand, which in turn affects import behavior. In Nigeria's case, fiscal expansion tends to raise aggregate demand, but because the domestic economy lacks sufficient productive capacity, much of this additional demand is met through imports. Consequently, periods of high fiscal spending are often associated with increased import bills and trade deficits. The Keynesian model also offers insights for policymakers by highlighting the importance of channeling fiscal spending toward sectors that enhance domestic production and reduce import dependence. When government expenditure is directed toward infrastructure, agriculture, and manufacturing, it can strengthen local industries, improve supply capacity, and minimize import leakages.

Multiplier-Accelerator Theory

The Multiplier-Accelerator theory combines Keynesian insights with accelerator theory to explain how changes in government expenditure can amplify the impact on employment and economic activity. According to the multiplier-accelerator model, increases in government spending lead to higher aggregate demand, which stimulates investment and production, leading to further increases in income and employment. The multiplier effect refers to the initial increase in spending by the government, which generates additional rounds of spending as income earned by households and businesses leads to higher consumption and investment. The accelerator effect, on the other hand, suggests that changes in aggregate demand lead to changes in investment spending by firms, amplifying the initial impact of government expenditure on employment. The combined effect of the multiplier and accelerator can result in larger-than-expected changes in income and employment in response to changes in government spending. This is because increases in government expenditure not only directly create employment through public sector projects but also stimulate private sector investment and consumption, leading to further job creation. Empirical studies have provided evidence of the multiplier-accelerator effect in action. For example, research by Blanchard and Perotti (2002) found that increases in government spending have a positive impact on GDP and employment, with multiplier effects varying depending on the economic context and fiscal policy measures.

Empirical Literature

Saleh *et al.* (2024) empirically analyses the impact of government capital expenditure on the balance of payments, covering the period 1990–2022. The study made use of ex-post facto research and time

Publisher: SARC Publisher

series data. The autoregressive distributed lag (ARDL) and error correction model (ECM) methods were used. The result of the study showed that in the short run, government administration capital expenditure in Nigeria (GACE) and government transfer capital expenditure in Nigeria. (GTCE) are positively insignificant on Balance of Payment in Nigeria (BOPN), while government economic services capital Expenditure in Nigeria (GECE) and government social and community services capital expenditure in Nigeria (GSCE) have a negative and insignificant impact on balance of payment in Nigeria (BOPN).

Etsemitan and Obriki (2023) evaluated the relationship between fiscal policy and economic growth in Nigeria using time series data spanning from 1981 to 2021. Data were sourced on these variables from the Central Bank of Nigeria Statistical Bulletin, 2021. The statistical tools employed include descriptive statistics, Augmented Dickey Fuller unit root test, Johansen Cointegration test and Error Correction Model (ECM). The result indicates that non-oil revenue, capital expenditure and recurrent expenditure had significant positive relationship with economic growth. Oil revenue was found to have insignificant positive relationship with economic growth in Nigeria.

Nnamdi (2023) established the relationship between government expenditure and employment generation of Nigeria, motivated this study. The Error Correction econometric model (ECM), the Johansen cointegration and the Granger causality tests were the central analytical tools used in the study. In the short-run, a positive relationship was observed. The short-run coefficient of economic services and unemployment was observed to be negative and the direction of causality was from government expenditure on economic services. Expenditure on social community service observed negative and statistically and observed a weak causal influence on unemployment.

Omojimite (2022) examined the pattern of government expenditures and its effect on the unemployment problem in Nigeria. Data on government capital expenditure were examined which revealed a bias in favour of the provision of social infrastructure to the relative neglect of 'directly productive' investment. The study concluded that government priority in allocating resources should be reversed by allocating more to direct productive investments.

Obiakor *et al.* (2021) estimated the short-run and long-run effect of terms of trade, trade openness and government spending in Nigeria from 1981 to 2019. Data for this study was sourced from the World Bank's World Development Indicators (WDI), Central Bank of Nigeria's (CBN) Statistical Bulletin, and FRED Economic Data. Using the ARDL estimation method, the study found that terms of trade do not significantly determine government spending in both the short-run and long run. The short-run effect of trade openness on government was not significant, but its long-run effect was negative and statistically significant, confirming the efficiency hypothesis in the relationship between trade openness and government spending.

Ugochukwu and Oruta (2021) examined the effect of various components of government expenditures on economic growth in Nigeria for periods between 1981 and 2020. The study adopted the Error Correction model and Granger Causality Test. The short-run model revealed that the components of government expenditures like recurrent expenditures on agriculture, health and education have an insignificant negative impact on economic growth. Recurrent expenditure on debt servicing and road and construction indicated a positive and negligible impact on economic growth. Concerning capital expenditures, government capital expenditures on social services were shown to have a negative and significant impact on economic growth.

Nwamuo (2020) investigated the impact of fiscal policy on the economic growth in Nigeria using time series data from 1981 to 2018. Augmented Dickey-Fuller test technique, Johanssen co-integration test and vector error correction was employed in analyzing the data. The vector error correction estimate of short run relationship showed that domestic debt, external debt and non-oil revenue have a positive and significant impact on economic growth while recurrent expenditure and capital expenditure have a negative and significant impact on economic growth. The vector error correction estimate of long run relationship revealed that domestic debt and external debt have a negative and insignificant impact on recurrent expenditure has a negative and significant impact on economic growth.

Ndubueze *et al.* (2020) examined the effect of government social expenditure on unemployment in Nigeria from 1981 to 2016. The study made use of secondary data and employed Ordinary Least

Publisher: SARC Publisher

Square (OLS) regression method. The results revealed that government recurrent expenditure does not have statistically significant impact on unemployment in Nigeria, whereas capital expenditure does. Also, the overall statistic showed that recurrent and capital expenditure on health and education has significant impact on unemployment in Nigeria.

Ogar *et al.* (2019) examined the effect of fiscal policy on macroeconomic policy dynamics in Nigeria. The data for the study were sourced from the CBN statistical bulletin for the period 1980 to 2016. The exploratory design was combined with the ex-post facto research design; the data collection method was desk survey. The study used the Vector Error Correction Mechanism (VECM) for data analysis. Findings from the analyses showed that there is no long run and short run causality running from fiscal policy instruments such as government revenue, government expenditure and debt to interest rate in Nigeria. The study also showed that there is no long run and short run causality running from fiscal policy instruments such as government revenue, government expenditure and debt to GDP in Nigeria.

Ebi and Ibe (2019) empirically examined the causal relationship between government expenditure and unemployment from 1981 to 2017. Data used was secondary and obtained from Central Bank of Nigeria (CBN) Statistical Bulletin of various years and other reports. Unit root test indicates the variables were integrated in order (I). Cointegration test results indicate a long-run equilibrium relationship between unemployment rate (UEMR), recurrent expenditure (REXR) and capital expenditure (CEXR). There is negative and significant relationship between unemployment rate (UEMR) and recurrent expenditure (REXR). The negative relationship agrees with a priori expectations. On the other hand, relationship between unemployment rate (UNER) and capital expenditure (CEXR) is positive and significant. However, the positive relationship is contrary to our a priori expectation. This means that a change in government expenditure will impact unemployment rate. Increased government capital expenditure results in increased unemployment rate instead of a decrease. There is no causal relationship amongst all the variables of interest.

Olukayode and Olorunfemi (2018) investigated the impact of fiscal policy instruments on employment generation in Nigeria within the periods of 1980-2015. The study used the Augmented Dickey Fuller test to estimate the stationarity level, Engel Granger cointegration test for long-run relationship and ordinary least square for long-run estimates. The findings showed that government spending and manufacturing output had negative impact on unemployment rate in Nigeria.

Onodugo *et al.* (2017) empirically determined the impact of public sector expenditures (CEXP and REXP) together with private sector investment (PINV) on unemployment (UNEMP) in Nigeria. The study made use of a regression model with annual data from 1980 to 2013. The R-squared (0.84) showed that greater proportion of the total variations in UNEMP was brought about by variations in the regressors. The study recommended that the proportion of capital expenditure in Nigerian budget profile should be systematically increased while the recurrent expenditure should be reduced.

Ozoh, *et al* (2016) ascertained the influence of fiscal policy on unemployment and inflation reduction in Nigeria. Data were sourced from Central Bank of Nigeria Statistical Bulletin (2014); World Development Indicator (2013); IMF World Economic Outlook (2013) amongst others. The study employed Autoregressive Distributed Lag (ARDL) bounds testing which is based on the estimation of an Unrestricted Error Correction Model. The findings revealed the following among others: federal government capital expenditure (a tool of fiscal policy) in the first and second year does not reduce unemployment rate but it does significantly in the third year. Petroleum profit tax and company income tax do not significantly reduce inflation but only custom and excise duty did. The joint effect of all the tax variables was significant in inflation control.

Abubakar (2016) investigated the effect of fiscal policy shocks on output and unemployment in Nigeria under the Keynesian framework by employing the Structural Vector Autoregression (SVAR) methodology to analyse annual series on the relevant variables for the period 1981-2015. Augmented Dickey Fuller (ADF) test for unit root result shows all variables to be integrated of order one and Johansen Cointegration test confirms the presence of long run association among the variables. Findings of the SVAR model shows shock in public expenditure as having a positive long- lasting effect on output. Revenue shock was found to exert a positive effect (lower than that of public expenditure shock) on output.

Publisher: SARC Publisher

Egbulonu and Amadi (2016) examined the relationship between fiscal policy and unemployment rate in Nigeria for the period 1970 to 2013. Data for the study were sourced from the National Bureau of Statistics (NBS) and the Central Bank of Nigeria (CBN) Statistical Bulletin. The data were also subjected to co-integration test in order to know whether using the variables together in the model would produce reliable results. The study found a negative relationship between fiscal policy government debt stock) and unemployment rate in Nigeria while government tax revenue exhibited a positive relationship with unemployment rate. This means that increase in tax rate reduces employment in Nigeria.

METHODOLOGY

This study employed annual time series data. The data covered the periods of thirty-five (35) years, spanning from 1990 through 2024. The relevant annual time series data for this study were sourced from Central Bank of Nigeria (CBN) statistical bulletin and National Bureau of Statistics (NBS) report. These sources of data were considered reliable and dependable.

Model Specification

The theoretical framework of this study was anchored on Keynesian Theory of Fiscal Policy because of its relevance to this study. The theory provides a framework for explaining how changes in government spending influence aggregate demand, which in turn affects import behaviour. Empirically, the model employed for this study is a multiple regression model. This model was built on the model of Saleh *et al*. (2024) with slight modifications. However, the modified model is specified as follows:

Functional Model

To show the functional relationship, the modified model can be written as;

TIV = *f*(GIE, GEE, GHE, GSE, GDS) (1)

Mathematical Model

To show the linear mathematical relationship, the model can be written as;

$$TIV = \beta_0 + \beta_1 GIE + \beta_2 GEE + \beta_3 GHE + \beta_4 GSE + \beta_5 GDS \quad (2)$$

Including the stochastic or error term ($\mathbb{Q}_t$) in our econometric model, our model will become;

Econometric Model

$$TIV = \beta_0 + \beta_1 GIE + \beta_2 GEE + \beta_3 GHE + \beta_4 GSE + \beta_5 GDS + \mathbb{Q}_t \quad (3)$$

Log Linear Model

$$LOG(TIV) = \beta_0 + \beta_1 LOG(GIE) + \beta_2 LOG(GEE) + \beta_3 LOG(GHE) + \beta_4 LOG(GSE) + \beta_5 LOG(GDS) + \mathbb{Q}_t \quad (4)$$

A Priori Expectation: $\beta_1 > 0; \beta_2 > 0; \beta_3 > 0; \beta_4 > 0; \beta_5 < 0$

Where: TIV = Total import value, GIE = Government infrastructural expenditure, GEE = Government education expenditure, GHE = Government health expenditure, GSE = Government security expenditure, GDS = Government debt servicing, β_0 = Regression intercept, β_1- β_5 = Coefficients or parameters attached to the independent variables in TIV model, $\mathbb{Q}_t$ = Stochastic or error term

Data Analysis Techniques

The data analysis for this study started with descriptive statistics for each variable included in the models. The descriptive statistics provided information on the average observation for each series and the median over the range of the investigation, measure of dispersion (maximum and minimum values and standard deviation) and information on the nature of skewness and kurtosis of both the conditioned variable and the predictor variables. Thereafter, the study proceeded to conducting pre-estimation tests as stated earlier, so as to ensure that the estimated model is not spurious in nature and if a co-integrating regression can be estimated. Based on the unit root test outcome, autoregressive distributed lag (ARDL) technique was adopted since the variables have mixture of I(0) and I(1) series.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

The section presents the result of the descriptive statistical analysis as follows:

Table 1: Descriptive Statistics

	TIV	GIE	GEE	GHE	GSE	GDS
Mean	8441.824	69.78743	237.9326	145.1214	253.3769	2357.869
Median	3911.950	20.06000	137.1200	81.91000	181.2900	285.1000
Maximum	44782.39	234.0100	801.4200	495.1100	864.3800	17864.10
Minimum	45.72000	0.410000	0.290000	0.150000	1.740000	1.000000
Std. Dev.	10546.78	76.97198	250.0026	159.3310	273.3047	4260.568

Publisher: SARC Publisher

Skewness	1.734136	0.791304	0.875152	0.890556	0.938443	2.293984
Kurtosis	5.752497	2.252168	2.481221	2.446572	2.613980	7.617474
Jarque-Bera	28.59084	4.468184	4.860181	5.073014	5.354575	61.79033
Probability	0.000001	0.107089	0.088029	0.079142	0.068749	0.000000
Sum	295463.9	2442.560	8327.640	5079.250	8868.190	82525.40
Sum Sq. Dev.	3.78E+09	201439.3	2125044.	863136.4	2539645.	6.17E+08
Observations	**35**	**35**	**35**	**35**	**35**	**35**

Source: *Authors' Computation (2026).*

The results of the descriptive statistics as presented in Table 4.1 showed that total import value (TIV) recorded an average value of 8441.824 with a maximum of 44782.39 and minimum of 45.72 during the period 1990 - 2024. The total import value (TIV) has a Jarque-Bera value of 28.59 with a probability value of 0.000001 which shows that it is not normally distributed. In addition, the results of the descriptive statistics showed that government infrastructural expenditure (GIE) stood at 69.787 on an average with minimum rate of 0.41 and maximum of 234.01. The government infrastructural expenditure (GIE) has a Jarque-Bera value of 4.468 with a probability value of 0.107 which shows that it is normally distributed. Also, government education expenditure (GEE) recorded an average value of 237.93 with a minimum of 0.29 and a maximum of 250.0026. The government education expenditure (GEE) has a Jarque-Bera value of 4.86 with a probability value of 0.088 which shows that it is normally distributed. During the period under review, government health expenditure (GHE) on an average stood at 145.121 with a minimum value of 0.15 and a maximum of 495.11. The government health expenditure (GHE) has a Jarque-Bera value of 5.073 with a probability value of 0.0791 which shows that it is normally distributed. Furthermore, government security expenditure (GSE) during the period under review averaged 253.376 with a minimum of 1.74, a maximum of 864.38. The government security expenditure (GSE) has a Jarque-Bera value of 5.35 with a probability value of 0.069 which shows that it is normally distributed. Lastly, government debt servicing (GDS) during the period under review averaged 2357.869 with a minimum of 1.0 and a maximum of 17864.1. The government debt servicing (GDS) has a Jarque-Bera value of 61.79 with a probability value of 0.00 which shows that it is not normally distributed.

Trend Analysis

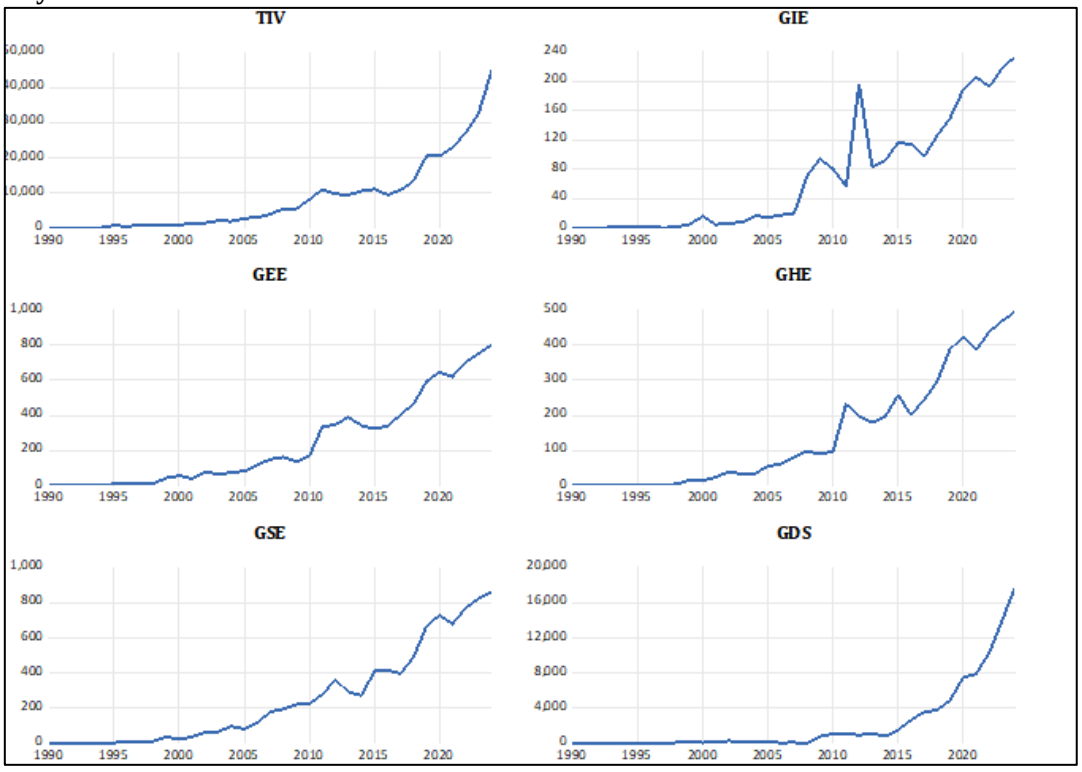

Figure 1: Line Graph Showing the Trends in Research Variables from 1990 to 2024.

Publisher: SARC Publisher

Figure1 shows the trend in total import value (TIV) during the research period. The graphs collectively show a consistent upward trend across all variables—total import value (TIV), government infrastructural expenditure (GIE), government education expenditure (GEE), government health expenditure (GHE), government security expenditure (GSE), and government debt servicing (GDS) from 1990 to 2024, reflecting Nigeria's growing fiscal commitments and economic expansion. Total import value (TIV) displays the sharpest rise, especially after 2015, suggesting increasing dependence on imported goods. All forms of government expenditure rise steadily over time, though with occasional fluctuations: government infrastructural expenditure (GIE) shows a major spike around 2011 before stabilizing and rising again, while government health expenditure (GHE) and government security expenditure (GSE) reveal periodic surges corresponding to health and security pressures in the country. Government education expenditure (GEE) demonstrates a relatively smoother but steady upward trajectory, indicating gradual increases in education funding. Government debt servicing (GDS)shows the most dramatic late-period growth, especially from 2015 onward, highlighting the sharp increase in Nigeria's debt servicing burden as public debt levels expanded. Overall, the graphs illustrate a pattern of escalating public spending and import demand, with rising debt servicing obligations becoming one of the most significant fiscal pressures toward the end of the period.

Unit Root Test

A unit root test is a statistical procedure used to determine whether a time series variable is non-stationary, meaning its statistical properties (mean, variance, and covariance) change over time. One of the most common tests is Augmented Dickey-Fuller (ADF) test. This test is therefore carried out in this study to examine the presence of a unit root. The results are summarized in the table below:

Table 2: Augmented Dickey-Fuller (ADF) Test Results

Variables	**ADF**	**Mackinnon Critical Value @ 5%**	**P-value (Prob.*)**	**Decision**	**Order of Integration**
ADF At Levels					
LOG(TIV)	-2.212324	-2.951125	0.2058	Non-stationary	
LOG(GIE)	-1.584072	-2.960411	0.4785	Non-stationary	
LOG(GEE)	-6.251170	-2.957110	0.0000	Stationary	
LOG(GHE)	-4.817449	-2.976263	0.0006	Stationary	
LOG(GSE)	-3.901096	-2.957110	0.0054	Stationary	
LOG(GDS)	-1.511802	-2.951125	0.5157	Non-stationary	
ADF At First Difference					
LOG(TIV)	-7.910211	-2.954021	0.0000	Stationary	I(1)
LOG(GIE)	-3.938730	-2.963972	0.0052	Stationary	I(1)
LOG(GEE)	-	-	-	-	I(0)
LOG(GHE)	-	-	-	-	I(0)
LOG(GSE)	-	-	-	-	I(0)
LOG(GDS)	-9.298268	--2.954021	0.0000	Stationary	I(1)

Source: *Authors' Computation (2026).*

From Table 2 above, the Mackinnon critical value for rejection of unit root hypotheses indicates that government education expenditure (GEE), government health expenditure (GHE) and government security expenditure (GSE) are stationary at levels and as such integrated of order zero, I(0). Furthermore, total import value (TIV), government infrastructural expenditure (GIE), and government debt servicing (GDS) are stationary after first differencing and as such, they are integrated of order one, I(1). Given that variables are integrated at Order 1(0) and Order 1(1), the Autoregressive Distributed Lag (ARDL) estimation technique becomes the most appropriate method.

Bounds Cointegration Test

The result of ARDL bounds cointegration test carried out in this study is presented in Table 4.4:

Publisher: SARC Publisher

Table 3: ARDL Bound Cointegration Test Result

Test Statistic	Value	K
F-statistic	7.772125	5
Significance	Lower Bound [I(0)]	Upper Bound [I(1)]
10%	2.08	3
5%	2.39	3.38
2.5%	2.7	3.73
1%	3.06	4.15

Source: *Authors' Computation (2026).*

The ARDL bound cointegration test result as presented in Table 3 shows that the value of F-statistics which is 7.772125 is greater than the upper bound critical value and the lower bound critical value both at 5%, indicating that there is cointegration among the variables in the model, that is, there is a cointegration among total import value (TIV), government infrastructural expenditure (GIE), government education expenditure (GEE), government health expenditure (GHE), government security expenditure (GSE) and government debt servicing (GDS). This means that government infrastructural expenditure (GIE), government education expenditure (GEE), government health expenditure (GHE), government security expenditure (GSE) and government debt servicing (GDS) are good determinants of total import value (TIV) in the long run.

Short Run Autoregressive Distributed Lag (ARDL) Model Estimation

The results of the short run ARDL total import value (TIV) model estimation are hereby presented in Table 4.4 below:

Table 4: Results of Short Run ARDL Estimation of Total import value (TIV) Model Estimation

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
Dependent Variable = LOG(TIV)				
DLOG(TIV(-1))	0.231755	0.013713	16.90056	0.0376
DLOG(GIE)	0.708180	0.043983	16.10131	0.0395
DLOG(GIE(-1))	-0.147162	0.015489	-9.500969	0.0668
DLOG(GIE(-2))	0.908197	0.102370	8.871693	0.0715
DLOG(GEE)	4.327052	0.257339	16.81459	0.0378
DLOG(GEE(-1))	0.280762	0.065143	4.309904	0.1451
DLOG(GHE)	3.150089	0.191347	16.46274	0.0386
DLOG(GSE)	0.128251	0.086291	1.486258	0.3770
DLOG(GDS)	-0.229110	0.055525	-4.126218	0.1514
CointEq(-1)*	-0.462302	0.082968	-5.572055	0.0002
R^2 = 0.797945 Adjusted R^2 = 0.761195 Durbin-Watson stat = 2.568876				

Source: *Authors' Computation (2026).*

Interpretation of the Parameters/Coefficients

The coefficient of government infrastructural expenditure (0.708180) indicates that there is a positive relationship between government infrastructural expenditure and total import value. This means that total import value will increase by 0.708180 given a unit increase in government infrastructural expenditure. Also, the coefficient of government education expenditure (4.327052) indicates that there is a positive relationship between government education expenditure and total import value in the short run. This means that total import value will increase by 4.327052 given a unit increase in government education expenditure. Moreover, the coefficient of government health expenditure (3.150089) indicates that there is a positive relationship between government health expenditure and total import value. This means that total import value will increase by 3.150089 given a unit increase in government health expenditure. Additionally, the coefficient of government security expenditure (0.128251) indicates that there is a positive relationship between government security expenditure and total import value. This means that total import value will increase by 0.128251

Publisher: SARC Publisher

given a unit increase in government security expenditure. Lastly, the coefficient of government debt servicing (-0.229110) indicates that there is a negative relationship between government debt servicing and total import value. This means that total import value will decrease by 0.229110 given a unit increase in government debt servicing.

Significance of Individual Parameters [T-statistics (Prob. values)]

This tests statistical significance of the individual parameter in the model at 5% level of significance. From the ARDL result, since the p-value for government infrastructural expenditure of 0.0395 is less than the alpha value of 0.05, we therefore conclude that government infrastructural expenditure is statistically significant in the short run. Also, since the p-value for government education expenditure of 0.0378 is less than the alpha value of 0.05, we therefore conclude that government education expenditure is statistically significant in the short run. Moreover, since the p-value for government health expenditure of 0.0386 is less than the alpha value of 0.05, we therefore conclude that government health expenditure is statistically significant in the short run. Additionally, since the p-value for government security expenditure of 0.3770 is greater than the alpha value of 0.05, we therefore conclude that government security expenditure is not statistically significant in the short run. Lastly from the ARDL result, since the p-value for government debt servicing of 0.1514 is greater than the alpha value of 0.05, we therefore conclude that government debt servicing is not statistically significant in the short run.

Interpretation of Adjusted R-Squared

From the estimated ARDL short-run results, the adjusted R-squared value is 0.761195. This shows that if the coefficient of determination is adjusted, approximately seventy-four percent (76%) of the changes in total import value are attributable to changes government infrastructural expenditure, government education expenditure, government health expenditure, government security expenditure and government debt servicing while the remaining twenty-six percent (24%) of the variation in the model is equally captured by the error term (unknown factors outside the model).

Interpretation of CointEq(-1) Values

Lastly, the result of the CointEq(-1) in Table 4 above, shows that the coefficient of the error correction term is significant and negative. In other words, the negative sign justifies its significance. This implies that the CointEq(-1)* will be effective to correct any deviations from the long-run equilibrium. The coefficient of the CointEq(-1)* at -0.462302 also indicates that the speed of adjustment to long run equilibrium is 46% when any past deviation will be corrected in the present period. This means that the present value of total import value adjusts rather slowly to changes in government infrastructural expenditure, government education expenditure, government health expenditure, government security expenditure and government debt servicing.

Long Run Autoregressive Distributed Lag (ARDL) Model Estimation

The long run ARDL total import value (TIV) model which was specified in chapter three is estimated in this section using Econometric Views (E-Views) 12 statistical software. The results obtained are hereby presented in Table 4.5 below:

Table 5: Results of Long Run ARDL Estimation of Total Import Value (TIV) Model Estimation

Dependent Variable: LOG(TIV)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
LOG(GIE)	0.188312	0.062802	2.998524	0.0134
LOG(GEE)	0.938594	0.189791	4.945413	0.0006
LOG(GHE)	0.842006	0.195725	4.301973	0.0016
LOG(GSE)	0.023433	0.194947	0.120204	0.9067
LOG(GDS)	-0.117613	0.202674	-0.580310	0.5745
C	-1.080674	0.108251	-9.982997	0.0636

Source: *Authors' Computation (2026).*

Interpretation of the Parameters

The coefficient of government infrastructural expenditure (0.188312) indicates that there is a positive relationship between government infrastructural expenditure and total import value. This means that total import value will increase by 0.188312 given a unit increase in government infrastructural expenditure. Also, the coefficient of government education expenditure (0.938594) indicates that there is a positive relationship between government education expenditure and total import value in the long run. This means that

Publisher: SARC Publisher

total import value will increase by 0.938594 given a unit increase in government education expenditure. Moreover, the coefficient of government health expenditure (0.842006) indicates that there is a positive relationship between government health expenditure and total import value. This means that total import value will increase by 0.842006 given a unit increase in government health expenditure. Additionally, the coefficient of government security expenditure (0.023433) indicates that there is a positive relationship between government security expenditure and total import value. This means that total import value will increase by 0.023433 given a unit increase in government security expenditure. Lastly, the coefficient of government debt servicing (-0.117613) indicates that there is a negative relationship between government debt servicing and total import value. This means that total import value will decrease by 0.117613 given a unit increase in government debt servicing in the long run.

Significance of Individual Parameters [T-statistics (Prob. values)]

This tests statistical significance of the individual parameter in the model at 5% level of significance. From the ARDL result, since the p-value for government infrastructural expenditure of 0.0134 is less than the alpha value of 0.05, we therefore conclude that government infrastructural expenditure is statistically significant in the long run. Also, since the p-value for government education expenditure of 0.0006 is less than the alpha value of 0.05, we therefore conclude that government education expenditure is statistically significant in the long run. Moreover, since the p-value for government health expenditure of 0.0016 is less than the alpha value of 0.05, we therefore conclude that government health expenditure is statistically significant in the long run. Additionally, since the p-value for government security expenditure of 0.9067 is greater than the alpha value of 0.05, we therefore conclude that government security expenditure is not statistically significant in the long run. Lastly from the ARDL result, since the p-value for government debt servicing of 0.5745 is greater than the alpha value of 0.05, we therefore conclude that government debt servicing is not statistically significant in the long run.

Post-Estimation Tests

The results of post estimation tests are presented below:

Table 6: Post-Estimation Tests Results TIV Model

Test	F-Statistic	Probability	Null Hypothesis	Decision
Normality Test	0.907161	0.6156	**H_0:** Normally distributed	Retain H_0
Serial Correlation LM Test	0.079331	0.8904	**H_0:** No serial correlation	Retain H_0
Heteroskedasticity Test	0.601087	0.8436	**H_0:** Homoscedasticity	Retain H_0
Ramsey RESET test	0.041362	0.8434	**H_0:** Correctly specified	Retain H_0

Source: *Authors' Computation (2026).*

The Jarque Bera (Normality) test result in Table 6 shows that the model is normally distributed. The Breusch-Godfrey Serial Correlation LM test result shows that the model has no serial correlation problem. Also, the Breusch-Pagan-Godfrey heteroskedasticity test result shows that the model has homoscedasticity. Lastly, the Ramsey RESET test result shows that the model is correctly specified. This Implies that the functional form of the model is correct.

Discussion of Findings

The study determined the effect of fiscal spending on import trade in Nigeria. The findings of the study showed that government infrastructural expenditure has a positive and significant effect on total import value in Nigeria in both short run and long run. This result is also in agreement with the finding of Ebipre and Eniekezimene (2020) which stated that government infrastructural expenditure is one of the major indicators of fiscal spending that significantly contributes to economic growth in Nigeria. Also, findings from this study showed that government education expenditure has a positive and significant effect on total import value in Nigeria in both short run and long run. This result is also related to the finding of Saleh, Aigbedion and Aiyedogbon (2024) which stated that government education expenditure as an indicator of fiscal sending was significantly related to economic growth, implying that government education expenditure was a major determinant of economic growth in Nigeria. In addition, the findings from this study showed that government health expenditure has a positive and significant effect on total import value in Nigeria in both short run and long run. The finding is also related to the

Publisher: SARC Publisher

finding of Obiakor, Okwu and Akpa (2021) who found that government health expenditure is significantly related to trade openness in Nigeria in the long run. Furthermore, findings from this study showed that government security expenditure has a positive and non-significant effect on total import value in Nigeria in both short run and long run. This result is also supported by the result of Olamileke and Olufemi. (2020) who found that government security expenditure is relevantly important tool of fiscal spending that positively impacts economic growth in Nigeria. Lastly, findings from this study showed that government debt servicing has a negative and non-significant effect on total import value in Nigeria in both short run and long run. This result is also supported by the result of Omojimite (2022) who established that government debt servicing has insignificant negative impacts on unemployment problem in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Drawing from the foregoing, this study empirically determined the effect of fiscal spending on import trade in Nigeria. The study found that government infrastructural expenditure, total internet penetration, government health expenditure and government security expenditure are important fiscal spending economy indicators that positively drive import trade in Nigeria. Based on the findings, the study therefore concluded that fiscal spending plays a vital role in driving, enhancing and sustaining import trade in Nigeria.

Recommendations

The following recommendations are proffered based on the findings of this study:

i. Government should prioritize domestic production of inputs and capital goods required in these sectors. This should include promoting local manufacturing of construction materials, medical equipment, educational supplies, security technologies, and ICT tools. Incentives such as tax holidays, credit guarantees, and import-substitution programmes can reduce reliance on foreign imports.

ii. To minimize import-driven fiscal shocks, the government should encourage public-private partners arrangements that leverage private sector expertise and resources. Public-private partners can facilitate technology transfer and local capacity building, reducing the need for imported machinery, materials, and services in the long term while still enabling efficient expansion of infrastructure, education, health, and security projects.

iii. Government should invest in skills development, R&D, and innovation hubs that allow Nigerian industries to produce high-quality substitutes for imported educational technology, pharmaceuticals, medical devices, and laboratory equipment. This will gradually shift demand away from foreign goods and promote self-sufficiency.

iv. Government should adopt better debt management strategies, including renegotiation of loan terms, prioritization of concessional borrowing, and strict evaluation of loan-funded projects.

REFERENCES

1. Abubakar, A. B. "Dynamic effects of fiscal policy on output and unemployment in Nigeria: An econometric investigation." *CBN Journal of Applied Statistics* 7.2 (2016): 101-122.
2. Adeleye, N., Osabuohien, E., & Bowale, E. “Public sector expenditure and trade openness in sub-Saharan Africa: A panel data analysis.” *Journal of Economic Policy Reform*, 23.4 (2020): 426–441.
3. Babatunde, M. A., & Adefeso, H. A. “Government expenditure and trade balance nexus: Evidence from Nigeria.” *African Journal of Economic Policy*, 28.1 (2021); 33–52.
4. Blanchard, O., & Perotti, L. “International trade.” *Pearson Education*. (2002).
5. Olabisi, A. S., & Oloni, E. F. "Composition of public expenditure and economic growth in Nigeria." *Journal of Emerging Trends in Economics and Management Sciences* 3.4 (2012): 403-407.
6. Ebi, R. O. & Ibe, R. C. "Government expenditure and unemployment: examination of the Nigerian evidence." (2019).
7. Ebipre, P., & Eniekezimene, F. "Government expenditure and economic growth in Nigeria." *International Journal of Business & Law Research* 8.3 (2020): 63-71.
8. Egbulonu, K. G., & Amadi, K. W. "Effect of fiscal policy on unemployment in the Nigerian economy." *International journal of innovative finance and economics research* 4.3 (2016): 1-7.

Publisher: SARC Publisher

9. Sokunbi, A. R., Olayinka, I. R., Aworinde, B. T., Taiwo, A., & Musa, C. O. "Fiscal policy and economic growth in Nigeria." *Journal of Economics and Allied Research* 9.3 (2024): 1-13.
10. Ezeabasili, V.N., Isu, H. O. & Mojekwu, J. N. "Public debt and economic growth in Nigeria: An error correction Approach." Asia Journal of Economics, 12.9 (2021): 201- 213.
11. Schumpeter, J. A. "The general theory of employment, interest and money." (1936): 791-795.
12. Ugochukwu, S. D., & Oruta, L. I. "Government expenditure and economic growth in Nigeria: A disaggregated analysis." *Traektoria Nauki= Path of Science* 7.11 (2021): 4022-4035.
13. Obisike, N. E., Okoli, U. V., Onwuka, I. N., & Mba, S. E. "Impact of government expenditure on unemployment in Nigeria: Evidence from social expenditure." *International Journal of Social Sciences and Management Research* 6.1 (2020): 65-76.
14. Nnamdi, H. "The relationship between government expenditure and employment generation of Nigeria." *Public Policy and Administration Research*, 6.7 (2023): 95-106.
15. Nwamuo, C. "Impact of fiscal policy on the economic growth in Nigeria: An empirical analysis." *European Journal of Business and Management* 12.12 (2020): 37-50.
16. Obiakor, R., Okwu, A., & Akpa, E. "Terms of trade, trade openness and government spending in Nigeria." (2021): 55-62.
17. Ogar, A., Arikpo, O. F., & Suleiman, L. G. "Fiscal and macroeconomic policies dynamics in Nigeria." *Global Journal of Social Sciences* 18 (2019): 33-51.
18. Maku, E. O., & Alimi, O. Y. "Fiscal policy tools, employment generation and sustainable development in Nigeria." *Acta Universitatis Danubius. Œconomica* 14.3 (2018).
19. Omojimite, O. "The pattern of government expenditures and its effect on the unemployment problem in Nigeria." *International Journal of Business and Finance Management Research*, 2.1 (2022): 42-48.
20. Onodugo, V. A., Obi, K. O., Anowor, O. F., Nwonye, N. G., & Ofoegbu, G. N. "Does public spending affect unemployment in an emerging market?." (2017).
21. Ozoh, F. O., Uma, K. E., & Odionye, J. C. "The assessment of the effects of fiscal policy on unemployment and inflation reduction: The case of Nigeria." *International Journal of Research in Management, Economics and Commerce* 6.9 (2016): 1-10.
22. Aiyedogbon, O. J. "Government Capital Expenditures and Balance of Payment in Nigeria: 1990-2022." *International Journal* 14.2 (2024).
23. Stiglitz, J. "Economics of the public sector (3rd ed.)." *New York: W. W. Norton*. (2010).
24. Ugochukwu, S. D., & Oruta, L. I. "Government expenditure and economic growth in Nigeria: A disaggregated analysis." *Traektoria Nauki= Path of Science* 7.11 (2021): 4022-4035.

Source of support: Nil; **Conflict of interest:** Nil.

Cite this article as:
Boma, T. & Onyemaobi, I. S. "Fiscal Spending and Import Trade in Nigeria". *Sarcouncil Journal of Economics and Business Management* 5.3 (2026): pp 1-13.

Publisher: SARC Publisher