Effect of Value Added Tax on Inflation in Nigeria

[1]Grace Hezekiah Isa &
[2]Richard Ngusha Kyarem

[1]*Department of Economics, Bingham University, Nasarawa State, Nigeria.*
[2]*Department of Economics, Federal University Dutsin-Ma, Katsina State, Nigeria*

A b s t r a c t

Value-Added Tax (VAT) has been recognized as a vital source of government revenue in the world over. It has been a concern for researchers and policy makers whether VAT is a trigger for the rising inflation rate in Nigeria. This paper thus examined the effect of the implementation of Local VAT (LVAT) on inflation rate in Nigeria, the effect of Foreign VAT (FVAT) on inflation rate in Nigeria and the effect of Import VAT (IVAT) on inflation rate in Nigeria from 2011 - 2024. Secondary data from the Federal Inland Revenue Service (FIRS), the National Bureau of Statistics (NBS) and the Central Bank of Nigeria (CBN) were used for the study. Data on LVAT, FVAT, IVAT and inflation rate were used for the study. Descriptive and Autoregressive Distributed Lag (ARDL) regression techniques were employed in analyzing the data. The ARDL being an inferential statistic was adopted because some the variables of the work were not stationary at level that is, 1(0). The findings show that, LVAT has a positive but insignificant effect on inflation rate in Nigeria, while FVAT and I VAT had a negative and insignificant effect on inflation rate in Nigeria. In addition, the Error Correction Term {ECT (-1)}, been correctly signed indicated that once there is disequilibrium in the system, it will take an average quarterly speed of 102.97% to restore the long-run relationship between inflation rate and VAT. The work therefore recommended among other, that the Nigerian government at all levels and policy makers should halt any plan of increasing the LVAT as it portends danger of worsening the already high inflation rate in Nigeria.

Corresponding Author:
Grace Hezekiah Isa

Background to the Study

Taxation has increasingly become a major tool for achieving the broad macroeconomic goals which include control of inflation. The immediate priority of many nations around the world is to strive for rapid overall development through fiscal consolidation and broadening the revenue base. Despite the fact that taxation is one of the most important revenue generating mechanisms in many economies, it usually triggers inflation with attendant adverse effects on economic performance hence it often features as a major monetary policy objective. Value Added Tax is a form of consumption tax that may or may not increase the prices of other commodities in many countries of the world (Tait, 1988).

Developing countries like Nigeria, have selectively adopted new tax systems to increase government revenue, influence purchasing power, improve the social conditions of the population and achieve rapid economic growth (lorun, 2012). Value Added Tax is an indirect tax introduced in Nigeria in 1993 as a replacement for the Sales Tax with the aim of broadening the tax base and generating additional revenue for the government. There are many factors and considerations that specifically justify replacing sales tax with VAT. The tax base of VAT is broader than that of sales tax, as it covers not only consumer goods, but other professional services. The tax is collected only by the Federal Inland Revenue Service (FIRS) at a rate of 5% which was increased to 7.5% on the 1st of February 2020 (Pw C, 2024).

The relationship between VAT and inflation has been a subject of interest and debate among economists and policy makers. On one hand, VAT can potentially contribute to inflationary pressures by increasing production costs and prices of goods and services. On the other hand, VAT can also have a dampening effect on inflation by enhancing tax compliance, reducing fiscal deficits, and promoting fiscal discipline. The main reasons for introducing VAT in Nigeria include: increasing public spending and increasing national income and reducing over reliance on crude oil imports and domestic challenges resulting uncertainty in international markets. The objective is to ensure that VAT is paid on those goods and revenue accrued therefrom channel to economic growth, but the process and the consequences have become debatable and hence an inquiry like this is justified.

The Nigerian government has continually increased VAT as an alternate source of revenue despite expressing concern to attain macroeconomic stability which includes price stability. There is that fear that Nigerians Will soon pay VAT on almost everything (Olaoye, 2014). The effect of all this is that it changes citizens' views of the system, making them questions the government's intentions. These problems can directly affect the standard of living of ordinary residents, such as excessive burden on end consumers via undesirables like rising fuel price and triggering spirals of inflation. This general perception has been a major cause of concern because the success of any public policy is judged by its impact on society (Clown, 2012).

Value Added Tax is collected in Nigeria on locally produced and consumed goods (LVAT), on export goods (FVAT) and on goods imported into the country (import VAT). It is expected that VAT should have massively contributed to government revenue, significantly reduced public borrowing and produced colossal positive impacts on livelihood but ironically the country has been on foreign borrowing spree ever since its introduction. The living standards of the people has been dwindling ever since and Nigeria has become the world centre of poverty with over 50% of the people living in extreme poverty (RSIS International). This brings to question the possible cause of the fiasco and the necessity of investigating the impact of VAT on inflation seeing inflation relates directly to the prices of consumption and investment goods and services.

Objectives of the Study
The specific objectives are to:
1. Evaluate the effect of local VAT on inflation rate in Nigeria
2. Examine the effect of foreign VAT on inflation rate in Nigeria
3. Investigate the effect of import VAT on inflation rate in Nigeria

Literature Review
Concepts VAT and Inflation
The two prominent concepts that this work hangs upon are VAT and inflation. It is incontrovertible in economic history that these concepts unlike many others have universally accepted definitions and hence limited arguments as to what they mean or represent. VAT is tax variant on supply of goods and services which is levied at and deducted at each stage of the production and distribution chain. Each business along the production chain in an economy is required to pay this tax on the value of the produced goods/services (Caleb et al., 2018). Oyedokun (2020) asserts that VAT is a consumption tax levied on goods and services in contrast to sales tax. VAT is neutral with respect to the number of passages from the producer to the final consumer, whereas sales tax is levied on total value at each stage. ultimately, the final consumer bears the cost. In Nigeria, the definition of clarity of the concept of VAT is not debatable. VAT has been precisely 5% at any stage in the production or distribution chain until February 2025 when it was increased to 7,5%.

Bhattacharya (2014) describes inflation as a quantitative measure of the rate at which purchasing power for goods and services decreases over time. This means that, inflation erodes the purchasing power of consumers. Maina et al. (2014) added that inflation is a process by which money loses value manifesting quantitatively in rise in general prices of goods and services. Caballe et al. (2004) have a different opinion; that inflation is the daily increases in the prices of the goods and services. Obviously, the description of inflation in this case, focuses on galloping inflation.

Theoretical Framework
This paper is based on the New Keynesian school of economic thought particularly the New Keynesian inflationary theory. The New Keynesian Economics emphasizes that

public policies must be designed to impact both the macroeconomic and microeconomic scenario simultaneously. It must take cognizance of aggregate demand and microeconomic decisions of households and firms if it must effectively generate inclusive growth. The perspective of the school as relates to taxation focuses on three (3) key issues: fiscal policy interactions within an economic system, systemic price stickiness and aggregate demand variation. The school provides a central place to inflation and its impact in the economy both at the macroeconomic and the microeconomic levels. It places the current inflationary rate (IF_c) as a function of lagged inflation (IF_{c-1}), and output growth rate ($Y - Y_e$) (Investopedia, 2020)

$$IF_c = IF_{c-1} + \beta (Y - Y_e) \ldots\ldots\ldots\ldots\ldots.. (1)$$

Where Y = current output level and Y_e is the desired equilibrium output level.

Modifying the equation to capture our interested variables would then appear as;
$$IF_c = IF_{c-1} + \beta (VAT) + U_t \ldots\ldots..\ldots.. (2)$$

In the estimation model proper, VAT shall be represented in its various operational types. Amplifying these 3 cardinal viewpoints: firstly, fiscal policy interactions within an economic system in this research could imply that VAT policies must necessarily interact with other fiscal and monetary policies at both macroeconomic and microeconomic levels and hence impacts macro economically the aggregate demand and micro economically the households and firms' profits. Specifically, the fiscal policies of tax interact with government spending and subsequently impacts on inflation dynamism (Kehoe, 2020). In cases of poverty dominated nations like Nigeria, increased VAT results into direct reduction of disposable income and hence increased inability to secure basic needs. Until and unless this danger is carefully factored into policy formulation, the unfortunate consequence would be inevitable.

Secondly, the school's assertion of price stickiness is derived from the fact that price changes due to inflationary trend takes time as firms will not automatically vary the prices of goods and services following an instant uncertain price variation in the market (Corporate finance Institute, 2024). However, in import - dependent countries like Nigeria where prices of goods and commodities are determined externally and are heavily influenced by the volatile exchange rate, it's vital to note that the price system as advanced by the New Keynesian school becomes fallacious as price stickiness does not exist. Operating a tax regime in such a price system must note that price stickiness is not automatic and must rather be a target to attain such that tax implementation do not instigate a galloping inflation.

The New Keynesian's assertion that changes in tax rate and tax variants impacts on aggregate demand which in turn influences the existing inflationary rate is relevant. In fact, the tax multiplier is normally stronger in a country with high poverty rate. In a country grappling with a persistent double-digit inflation like Nigeria, this postulation is very relevant for tax policy formulation, implantation and impact evaluation.

Empirical Literature

There are many studies on the relationship and impact of tax on inflation in Nigeria. The outcomes of such studies fall into two distinct groups; of those that have found positive relationship and those that have discovered negative relationship between the variables. A positive impact of tax on inflation is possible if the government can effectively manage the formulation and implementation of the tax and the utilization of the tax proceed to impact aggregate demand. If this is achieved, the aggregate demand can aid stabilization of the general price system and mitigate inflationary pressures. The researchers that have identifies a positive relationship between tax and inflation in Nigeria are many such as Adegbite (2019); Obaretin and Akbor (2022).

Other researchers such as Adegbite (2019); Anichebe (2015); Afolatan et al. (2021) using different techniques arrived at the conclusion that taxation of different natures (whether income tax or consumption tax like (VAT) has negative relationship with inflation in Nigeria. They all identify the existence of a short run disequilibrium in the relationship and identify the corrective capacity of the *invisible hand* in correcting the disequilibrium via the Error Correction Model (ECM) in the long run. The speed of adjustments is variously identified but generally they are all above 50%. These studies seem to ignore the role of the government in policy formulation particularly in the area of correcting the disequilibrium in the short run and look forward more to mythological, non-existing and fallacious role of the *invisible hand.* In reality, accumulated short runs sum up to the long run. This makes nonsense of the ECM tool and the fallacious expectation which if not taken seriously would make the long run expectations fallacious.

On a slightly varied level, Matthew et al. (2021) assessed the effect of an increase in VAT rate on inflation rate in Nigeria as well as the relationship between VAT and Nigeria's total debt outstanding. Emmanuel and Gbalam (2018) interest were mainly on the link between VAT and price stability. Koyck findings showed that, increase in VAT rate does not guarantee more revenue or a significant reduction in government borrowing in Nigeria. Afolabi and Bankola (2022) found that, there exist a positive long run interconnection between VAT and economic growth in Nigeria. These outcomes relating to VAT and important macroeconomic variables depict the centrality of either inflation or tax (VAT) on economic growth and development of Nigeria.

Methodology
Research Design and Data

The ex-post facto research design was employed in this work because the phenomenon to be investigated has already occurred and has been documented. An attempt to examine a cause - effect relationship between independent variable VAT which has already occurred and the dependent variable Inflation rate (INF) is the focus. This research used secondary data - INF sourced from CBN Statistical Bulletin (2022) and the NBS report (2023). Data on VAT was sourced from FIRS's Tax Statistics/Report (2023). The data obtained were on variables such as LVAT, FVAT and IVAT. All data were obtained in quarterly time series structures from 201I QI to 2024 Q1, giving a total of 53 data points.

Method of Data Analysis

Descriptive statistical tools of minimum and maximum values, and standard deviation were employed to show the behavior of the data. Unit root test was conducted to know the time series properties of the data in order to avoid spurious result and also identify the appropriate estimation technique to use. The study eventually employed the ARDL technique because some variables were not stationary at levels 1(0) when stationary test was conducted using Augmented Dickey Fuller (ADF) test see Appendix. Furthermore, post estimation tests of Breusch - Pagan-Godfrey Heteroscedasticity and Multicollinearity were carried out to validate the results.

Model Specification

The model is made of a dependent variable - INF and three variants of VAT as dependent variables i.e. LVAT, FVAT and IVAT. The functional form of the model is:

$$INF f (LWT, FVAT, IVAT) \dots\dots\dots\dots\dots (1)$$

The econometrics form of the model is stated as;

$$INFt = \beta_0 + \beta_1 LVAT_t + \beta_2 FVAT_t + \beta_3 IVAT_t + U_t \quad\text{------------------} (2)$$

Where β_0 = constant/intercept of the regression line, β_1, β_2 and β_3 = Parameter estimates or slope of the variables and U_t = Error term.

Results, Interpretation and Discussion of Findings
Descriptive Statistics Result

Table 1: Descriptive Statistics

	INF	LVAT	FVAT	IVAT
Mean	185.6845	5.098954	4.136229	4.192076
Median	14.91000	4.850701	4.074822	3.970481
Maximum	9021.000	6.497046	6.077023	5.805165
Minimum	8.700000	4.524611	3.235930	3.570377
Std. Dev.	1236.975	0.545981	0.727023	0.545926
Skewness	7.072215	1.207502	0.643349	1.040473
Kurtosis	51.01727	3.212368	2.482061	3.232176
Jarque-Bera	5533.472	12.97915	4.248508	9.681871
Probability	0.000000	0.001519	0.119522	0.007900
Sum	9841.280	270.2446	219.2201	222.1800
Sum Sq. Dev.	79565538	15.50097	27.48522	15.49782
Observations	53	53	53	53

Source: Authors Computation using E-views 12

The descriptive statistics in table 1 shows that INF 2011Q1 – 2024Q1 had maximum and minimum values of 9021 and 8.7% respectively INF averaged 185.68% during the period with a standard deviation of 1236.9%, which implies that the data deviated from both sides of the mean by 1051.29%. This implies inflate rate in Nigeria was widely dispersed during the period under study, thus, a significant fluctuation in inflation rate which can be attributed to poor management of macroeconomic variables in Nigeria, particularly from the 2023Q2 – 2024Q1. The shape of the distribution, measured by the skewness, revealed a coefficient of 7.072215 which implies a positive skewed distribution and deviates from normal distribution. With a Kurtosis of 51.01727, it implies that inflation is leptokurtic which means that, the distribution is peaked relative to the normal distribution. The descriptive normality results equally reveal that the Gausian distribution assumption of the normal data on inflation did not follow the normal curve since the null hypothesis of normally distributed data cannot be accepted given the Jarque-Bera probability value of 0.00000, which is less than 0.05.

Local VAT during the period had minimum and maximum values of 4.524611 and 6.497046 respectively. The average value of LVAT was 5.098954 and a standard deviation of 0.545981 implying that deviation from both sides of the mean by 4.55. This suggests that the data for LVAT was widely dispersed from the mean during the sample period as the standard deviation was found to be lower than the mean value. The co-efficient of skewness of 1.207502 suggests that the data is positively skewed and does not comply with the symmetrical distribution assumption. The kurtosis value of 3.212368 which is greater than three implied that LVAT is leptokurtic, thus the distribution is peaked relative to the normal distribution. The Jarque-Bera P-value of 0.001519 (which is less than 0.05) means that, LVAT is not normally distributed at the 5% level of significance.

Foreign VAT had minimum and maximum values of 3.235930 and 6.077023 respectively, while the mean value and standard deviation are 4.136229 and 0.727023 respectively. This shows that FVAT is fairly dispersed from the mean with magnitude of 3.41. Foreign VAT was also found to be positively skewed with 0.643349 and non-symmetrical. With a kurtosis value of 2.482061, it implies that FVAT is platykurtic, which is flat relative to the normal distribution. The Jarque-Bera P-value of 0.119522 suggests that, FVAT is normally distributed at the 5% (0.05) level of significance.

Finally, IVAT had minimum and maximum values of 3.570377 and 5.805165 respectively. The average value of IVAT during the period was 4.192076 with a standard deviation of 0.545926 implies that, the data deviated from the mean value by 3.64615. This suggests that IVAT in Nigeria was widely dispersed during the period under study as the standard deviation was found to be less than the mean value. The skewness co-efficient value of 1.040473 suggests that IVAT is positively skewed and does not comply with the symmetrical distribution assumption. The kurtosis value being 3.232176 indicated that, IVAT is leptokurtic, which is peaked relative to the normal distribution. The Jarque-Bera P-value of 0.007900 suggests that, IVAT is not normally distributed.

Diagnostic Test Result

White's Heteroscedasticity Test

The primary reason for conduction heteroscedasticity test is to detect violation of the Ordinary Least Square (OLS) constant variance assumption, with the hypothesis:

Ho (Null Hypothesis): There is homoscedasticity

H_1(Alternative Hypothesis): There is heteroscedasticity

This work used the White's Heteroscedasticity test (Breusch-Pagan-Godfrey) to verify whether the constant variance assumption is violated in the models.

Table 2: Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.117602	Prob. F(4,47)	0.9756
Obs*R-squared	0.515295	Prob. Chi-Square(4)	0.9720
Scaled explained SS	10.11214	Prob. Chi-Square(4)	0.0386

Source: Authors Computation using E-views 12

Reference to table 2, the Prob. value of the White's F-statistic being 0.9756, which is greater than 0.05% level of significance, implies that there is no heteroscedasticity. Thus, Ho is accepted.

Multicollinearity Test Result

Multicollinearity exists when the independent variables are correlated with one another. The effect of multicollinearity is that the estimated regression coefficients of the independent variables that are correlated tend to have large sampling errors, and hence, undermine the reliability and stability of the estimated coefficients. Multicollinearity is detected using the Variance Inflation Factor (VIF) given by the formular:

$VIF_k = 1/1-R_k^2$

Where:

R_k^2 = the squared multiple correlation for predicting the kth predictor from all other predictors.

Under the ARDL/Bounds test approach, the decision rule is that, if the value of the uncentered VIF is greater than the centred VIF, it indicates that there is no multicollinearity among the independent variables.

Table 3: Multicollinearity Test

Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
INF(-1)	0.021265	1.032291	1.008818
LVAT	12.29027	22.42304	7.568841
FVAT	38.71206	15.74119	7.133534
IVAT	137.6793	40.85858	13.96423
C	107018.2	3.319106	NA

Source: Authors Computation using E-views 12

Table 3 shows the values of the uncentered VIF which are greater than the centered VIF across all the variables. This implies that, there are no multicollinear variables in the model, hence absence of multicollinearity among the independent variables.

Model Estimation and Interpretations of Model
Table 4: ARDL Error Correction Regression Results

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CointEq(-1)*	-1.029699	0.139980	-7.356031	0.0000
R-squared	0.514800	Mean dependent var		0.375962
Adjusted R-squared	0.514800	S.D. dependent var		1784.527
S.E. of regression	1243.036	Akaike info criterion		17.10754
Sum squared resid	78802053	Schwarz criterion		17.14507
Log likelihood	-443.7962	Hannan-Quinn criter.		17.12193
Durbin-Watson stat	2.003965			

Source: Authors Computation using E-views 12

From table 4, the lagged coefficient of the Error Correction Term {ECT(-1)}, is correctly signed (negative) and statistically significant at 5% level of significance (as shown by -1.029699 and a probability value of 0.0000. It implies that once there is disequilibrium in the system, it will take an average (quarterly) speed of 102.97% to restore the long-run relationship between inflation rate and VAT. In other words, deviation from short run to long run equilibrium will be adjusted by approximately 102.97% within the next quarter to ensure full convergence to equilibrium level. Specifically, it means the system overcorrects slightly beyond equilibrium. Thus, any shock to the system is quickly

nullified, which indicates that inflation rate in Nigeria adjust quickly to changes in VAT rate. The policy implication of this is that the Nigerian economy is highly responsive and slightly overactive to deviations from equilibrium.

The co-efficient of determination (R-square), which measures the goodness of fit, indicates that the model is relatively fit for prediction. The R-square shows that 51.48% of changes in inflation rate were collectively due to LVAT, FVAT and IVAT, while 48.52% of the unaccounted variations were captured by the error term. Durbin Watson statistic shows that, there is no evidence of autocorrelation, as indicated by the DW statistic of 2.00.

Table 5: The ARDL Long-Run Results

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	295.0712	327.1363	0.901982	0.3717
INF(-1)*	-1.029699	0.145824	-7.061226	0.0000
LVAT**	0.424373	3.505749	0.121051	0.9042
FVAT**	-2.013953	6.221901	-0.323688	0.7476
IVAT**	-0.172436	11.73368	-0.014696	0.9883

  * P-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LVAT	0.412133	3.404699	0.121048	0.9042
FVAT	-1.955865	6.036628	-0.324000	0.7474
IVAT	-0.167462	11.39532	-0.014696	0.9883
C	286.5606	314.8560	0.910132	0.3674

EC = INF - (0.4121*LVAT -1.9559*FVAT -0.1675*IVAT + 286.5606)

Source: Authors Computation using E-views 12

The results in table 5 indicates that LVAT has a positive and insignificant effect on inflation rate. This implies that a 1% increase in VAT leads to approximately 0.41% increase in inflation rate in the long run. It indicates that LVAT has a positive but an insignificant effect on inflation rate in the long run. The estimated coefficient of FVAT being -1.955865 shows that a negative effect of FVAT on inflation rate. Thus, a percentage increase in FVAT results in approximately 1.96% decreases in inflation rate in the long run, holding other factors constant. The -0.167462 estimated coefficient of IVAT indicates a negative effect of IVAT on inflation rate. The result implies that a percentage increase in IVAT reduces inflation rate by approximately 0.17%, holding another factors constant.

Major Findings and Discussions

There are three major findings from the ARDL regression results in table 4. Firstly, the p-value of LVAT which is 0.9042 is greater than 0.05 level of significance. This implies that LVAT has a positive but insignificant effect on inflation rate in Nigeria. This is consistent with the findings of Akhor and Osasu (2022) and that of Matthew et al. (2021). Although, the LVAT has an insignificant effect on inflation rate, the positive nature of the insignificance effect should be taken seriously. This is because the Nigerian economy has an endemic inflationary already and any small stimulation of the inflation may exhibit a high inflationary multiplier effect which could trigger hyperinflation. Also, when businesses and consumers anticipate a VAT increase, no matter how insignificant, they easily adjust their behaviour. Businesses might preemptively raise prices in anticipation of higher costs, and consumers might increase their demand before the tax hike. Both of these can drive inflation to higher levels. In addition, sectors of the Nigerian economy with lower price elasticity of demand are more inclined and likely to pass on the full VAT increase to consumers, hence, amplifying the inflationary effect.

Secondly, the p-value of FVAT from the table 5 is 0.7474 is greater than the 0.05 level of significance in the long run. This implies that FVAT has no significant effect on inflation rate in Nigeria. Foreign VAT was discovered to have a negative effect on inflation rate in Nigeria, therefore agrees with the work of Milenkovic et al. (2020) that was conducted in selected Balkan countries. Thus, imposition of VAT on foreign goods is not among the real triggers of inflation in Nigeria. One plausible reason for this is that higher foreign VAT can lead to a substitution effect where Nigerian consumers replace more imported goods with the relatively cheaper local alternatives, thus, reducing pressure on domestic inflation. It will lead to shifting of demand from the once treasured *foreign rice* to its local counterpart as a result of the increase cost of foreign rice in Nigeria. Also, another reason for this negative effect of foreign VAT and inflation rate could be the reduced competitiveness of foreign goods due to higher VAT rates abroad which has incentivized local production, hence boosted supply and lowered domestic prices.

Finally, the ARDL estimated result in table 5 indicates that, the p value of import VAT is 0.9883 which also is greater than the 0.05 level of significance. The implication is that, import VAT has no significant effect on inflation rate in Nigeria in the long run. Import VAT from the regression result has a negative effect on inflation rate in Nigeria which means that, import VAT is not a trigger of inflation rate. This is due to the fact that, increased import VAT can dampen the demand for imported goods. When the demand for imports declines, the overall demand pressure on the economy might reduce, leading to lower inflation. On the other hand, higher import VAT can lead to a reduction in overall consumer spending, as consumers face higher prices for imported goods. This reduction in demand will invariably contribute to lower inflation. Another reason can be a situation where the higher import VAT affects non-essential goods, in which case the overall impact on inflation might be minimal as consumers cut back on non-essential import.

Conclusion and Recommendations

The study discovered a long run insignificant effect of all components of VAT (local, foreign and import) on inflation rate in Nigeria. It was also discovered that, inflation rate in Nigeria adjust quickly to changes in VAT rate in the period under review (201I QI — 2024 Q1). Therefore, this study established that VAT in its various dimensions (local, foreign or import) has not contributed significantly to rising inflation in Nigeria.

In line with the findings, the following recommendations were proffered:

1. The government at all levels (Federal, State and Local) can gradually or totally remove VAT on locally produced foodstuff. This is because the effect of all forms of VAT on inflation is insignificant.
2. Government at the national level can raise more revenue from foreign VAT as it portends no danger for inflation. This will go a long way in addressing the low Tax - GDP ratio that has characterized the Nigeria economy over the years.
3. The rate of import VAT should also be increased by the Federal Government of Nigeria, since doing that will not lead to any rise in inflation rate in the nation. In addition, there will be more revenue, and domestic production will as well be stimulated.

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APPENDIX
ADF Unit Root Test Results

Variables	At Levels	5% Critical Value	At 1st Difference	5% Critical Value	Order of Integration	Remarks
INF	-7.2212	-2.9187	-8.3964	-2.9211	I(0)	Stationary
*In*LVAT	4.5068	-3.5043	-8.6474	-3.5004	I(1)	Stationary
*In*FVAT	2.3829	-2.9187	-4.8778	-2.9199	I(1)	Stationary
*In*IVAT	1.8584	-3.4986	-5.7234	-3.5004	I(1)	Stationary