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FISCAL POLICY AND FOOD INFLATION IN NIGERIA

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ABSTRACT

Food inflation has emerged as one of the most pressing macroeconomic challenges in Nigeria, undermining food security, eroding household welfare, and complicating the effectiveness of monetary policy. Despite the centrality of fiscal policy in shaping inflation dynamics, limited evidence exists on its specific transmission to food prices in Nigeria. This study addresses this gap by examining the impact of fiscal deficit, domestic debt, and external debt on food inflation using monthly data spanning 2000–2023. A vector autoregressive (VAR) framework is employed to capture the dynamics among the variables. The findings indicate that fiscal expansion through deficits and debt accumulation significantly worsens food inflation, with external debt exerting inflationary pressures via exchange rate depreciation, while domestic debt fuels monetary expansion that amplifies demand-pull inflation. Rising fiscal imbalances also interact with inflation expectations, heightening volatility in food prices. These results highlight the inflationary risks of unsustainable fiscal practices in a food-import-dependent economy. Policy implications underscore the importance of fiscal discipline, prudent debt management, and institutional reforms to mitigate inflationary spillovers.

Keywords: Food inflation, Domestic Debt, External debt, Fiscal deficits, Nigeria

1. Introduction

Food inflation holds particular importance in Nigeria's inflation dynamics, as food accounts for over 50% of household spending (Habib et al. 2025). This heavy weight in consumer budgets makes food prices a key determinant of welfare and poverty outcomes (Odion et al. 2025). Unlike other components of inflation, food prices are highly sensitive to agricultural production cycles, supply chain inefficiencies, inadequate storage facilities, and adverse weather conditions (Engelman et al. 2025). As a result, food inflation is often more volatile and destabilizing than headline or core inflation. The historical data underscores this volatility. According to NBS (2024), food inflation swung dramatically from -17.50% in January 2000 to 39.53% by

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

September 2001, an extraordinary reversal within twenty months. These sharp movements reflected weather-related agricultural shocks, structural bottlenecks, and broader macroeconomic pressures. The rate later fell to 0.11% by March 2003, only to surge again to 38.48% by August 2005 (NBS, 2024). Similar instability appeared in subsequent years, with food inflation even turning negative in 2007 before rebounding strongly in the following decade. Recent patterns confirm this volatility: food inflation rose from 22.94% in March 2021 to 40.8% in June 2024, moderating slightly to 39.5% in July 2024 (NBS, 2024). Such swings have profound implications for Nigerian households, especially the poor, for whom rising food costs directly erode food security, nutrition, and living standards.

The persistence of high food inflation highlights deep structural weaknesses in Nigeria's agricultural and economic systems. Weak transport networks, poor storage and processing infrastructure, climate vulnerabilities, and insecurity in farming areas all combine to sustain volatility (Dimnwobi et al. 2017; Nwokoye et al. 2019). However, inflationary pressures are not driven solely by agricultural factors. Macroeconomic management, particularly fiscal policy, has emerged as a decisive force in shaping inflation outcomes. Fiscal policy through debt accumulation, deficit financing, and expenditure management directly influences the balance between aggregate demand and supply (Okere et al. 2025a). On one hand, well-managed fiscal instruments can moderate inflationary pressures; prudent domestic debt reduces reliance on central bank financing, strategic external borrowing supports productive investment, and sustainable fiscal deficits stabilize demand without overheating the economy (Asandului et al., 2021; Sriyana, 2022). On the other hand, fiscal mismanagement amplifies inflation risks. Excessive borrowing crowds out private investment and raises production costs, while persistent deficits, especially when monetized, expand money supply and fuel price instability (Olaoye et al., 2024; Oyeleke, 2021; Okere et al. 2023a). For a consumption-driven economy such as Nigeria, the inflationary consequences of fiscal imbalances are especially acute in the food sector. Nigeria's fiscal trajectory reinforces these concerns. The fiscal deficit widened from ₦103.77 billion in 2000 to over ₦12.37 trillion in 2023 (CBN, 2023), reflecting structural weaknesses in public finance. Similarly, public debt has escalated since the post-2005 debt relief era, rising from $48.49 billion in 2012 to $114.35 billion by September 2023 (DMO, 2023). This sharp buildup in debt and deficits has intensified debates over the inflationary consequences of fiscal expansion, particularly with respect to food inflation.

This study makes three key contributions. First, while existing research has largely examined fiscal policy's impact on headline inflation or the CPI, this paper focuses specifically on food inflation - a component most relevant to welfare, poverty, and inequality in Nigeria. Second, unlike prior studies that often rely on a single fiscal policy variable, this study adopts a multidimensional approach by incorporating both fiscal deficits and public debt, thereby offering

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

a more comprehensive understanding of fiscal policy's inflationary impact. Third, the analysis draws on a dataset spanning pre, during and post-COVID-19 periods, enabling us to capture recent dynamics often omitted in earlier research.

The remainder of the paper proceeds as follows: Section 2 reviews the relevant literature, Section 3 outlines the methodology, Section 4 presents the results, and Section 5 concludes with policy recommendations.

2. Literature Review

The role of fiscal policy in shaping food inflation dynamics can be explained using different theoretical aproaches. From a Keynesian standpoint, expansionary fiscal policy via increased government expenditure or tax reductions stimulates aggregate demand (Ezenekwe et al. 2023; Dimnwobi et al. 2025). In settings where food supply is relatively inelastic, this heightened demand pressure translates into higher food prices. The Monetarist school complements this by stressing that persistent fiscal deficit, particularly when monetized, expand the money supply and fuel broad-based inflation, with food prices among the most affected. The Fiscal Theory of the Price Level (FTPL) adds a forward-looking dimension, positing that inflation expectations are driven by fiscal sustainability (Zeb et al., 2024). If agents anticipate deficits will be financed through money creation or distortionary taxes, food prices adjust upward. On the supply side, fiscal measures such as subsidies, tax incentives, and agricultural infrastructure investments can mitigate food inflation by lowering costs and easing bottlenecks (Nwokoye et al., 2022). Yet, when poorly designed, these interventions may entrench inefficiencies and amplify price volatility.

Empirical studies have examined the fiscal policy–inflation nexus across diverse contexts. Kandil and Morsy (2011) found that government spending alleviated inflationary pressures in Gulf economies, while in Nigeria, Dikeogu (2018) and Oyerinde (2019) reported that recurrent and capital spending exert mixed but largely inflationary effects. Sriyana (2022) confirmed similar patterns in Indonesia, with fiscal and monetary policies jointly fueling inflation. Debt dynamics have also attracted attention. Zeb et al. (2024) showed that external debt asymmetrically affects inflation in Pakistan, while Lebbe and Aslam (2016) established a positive deficit-inflation link in Sri Lanka. In West Africa, Aimola and Odhiambo (2021a, 2021b) reported divergent findings: public debt significantly fueled inflation in Ghana but had no measurable impact in Nigeria. Evidence from Egypt (Helmy, 2021), Zimbabwe (Saungweme & Odhiambo, 2021), Paraguay (Urquhart, 2021), and Cameroon (Enongene & Etape, 2023; Ewane & Mejame, 2023) consistently pointed to debt-driven inflationary pressures

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

More recent studies expand the regional and methodological scope. Olaoye et al. (2022, 2024) showed that external debt exacerbates inflation in Sub-Saharan Africa (SSA), while domestic borrowing provides some stabilization. Duodu et al. (2022) and Ngala (2024) highlighted fiscal deficits as significant drivers of inflation in Ghana and Kenya, respectively. At the global level, Cevik and Miryugin (2024) confirmed that expansionary fiscal shocks exert strong inflationary effects across 140 countries. Emerging approaches, such as nonlinear autoregressive distributed lag (NARDL) models, reveal asymmetric inflationary responses to debt changes (Saungweme et al., 2023; Abdukadir & Abdulle, 2024). Moreover, interactive analyses, such as Nguyen (2022), show that governance quality shapes the debt–inflation relationship, sometimes in counterintuitive ways.

Despite these contributions, important gaps remain. First, most studies assess fiscal policy through a single proxy typically public debt or government expenditure in isolation without jointly incorporating domestic debt, external debt, and fiscal deficits within an integrated framework, thereby providing only a partial account of fiscal dynamics. Second, empirical attention has largely centered on general inflation measures (e.g., CPI), overlooking food inflation, which is more volatile and socially consequential in developing economies like Nigeria. Addressing these gaps requires a comprehensive framework that incorporates multiple fiscal indicators while explicitly focusing on food inflation, thereby yielding insights that are both analytically richer and policy relevant.

3. Methodology

3.1. Model Specification

Guided by the insights from past studies (Iddrisu & Alagidede, 2020; Kuma & Gata, 2023), the empirical model for this study is specified as follows:

$$FINF_t = \Gamma_0 + \Gamma_1 EXD_t + \Gamma_2 DOD_t + \Gamma_3 FID_t \qquad 1$$

Where FINF denotes food inflation, EXD represents external debt, DOD captures domestic debt, and FID refers to the fiscal deficit

Bairagi et al. (2022) and Dimnwobi et al (2022a) argue that agricultural productivity growth can significantly impact food inflation. Higher productivity leads to increased food supply, which can help stabilize or reduce food prices (Aladejare & Dimnwobi, 2025a). Conversely, low productivity can constrain supply, driving prices up. Thus, modifying Equation 1 yields:

$$FINF_t = \Gamma_0 + \Gamma_1 EXD_t + \Gamma_2 DOD_t + \Gamma_3 FID_t + \Gamma_4 AGRIP_t \qquad 2$$

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

Where AGRIP refers to agricultural productivity

Another important determinant of food inflation identified by Olufemi-Phillips et al. (2024) and Kuma and Gata (2023) is climate change. Extreme weather events, such as droughts, floods, and heatwaves, disrupt agricultural productivity, leading to reduced crop yields and livestock losses (Okafor et al. 2022; Okere et al. 2023b). These disruptions decrease food supply, driving up prices (Dimnwobi et al. 2021; Samour et al. 2024). Additionally, changing climate patterns affect growing seasons and geographical suitability for crops, further impacting food production (Hammami et al. 2025; Nwani et al., 2025). The increased cost of inputs like water and energy due to climate stress also raises food prices. Adjusting Equation 2, we have:

$$FINF_t = \Gamma_0 + \Gamma_1 EXD_t + \Gamma_2 DOD_t + \Gamma_3 FID_t + \Gamma_4 AGRIP_t + \Gamma_5 CLIM_t \quad 3$$

Green et al. (2013) and Obiora et al. (2023) identify exchange rates, wage rate, money supply, and logistics as important drivers of food inflation. A depreciating exchange rate increases the cost of imported food, raising prices. Excessive money supply can lead to higher demand, pushing up food prices. Poor logistics, including transportation inefficiencies and supply chain disruptions, further exacerbate costs by limiting food availability and increasing distribution expenses. Capturing the above in the VAR framework yields:

$$FINF_t = \Gamma_0 + \Gamma_1 \sum_{p=1}^{P} FINF_{t-p} + \Gamma_2 \sum_{p=1}^{P} EXD_{t-p} + \Gamma_3 \sum_{p=1}^{P} DOD_{t-p} + \Gamma_4 \sum_{p=1}^{P} FID_{t-p} + \Gamma_5 \sum_{p=1}^{P} AGRIP_{t-p}$$

$$+ \Gamma_6 \sum_{p=1}^{P} CLIM_{t-p} + \Gamma_7 \sum_{p=1}^{P} EXR_{t-p} + \Gamma_8 \sum_{p=1}^{P} WGR_{t-p} + \Gamma_9 \sum_{p=1}^{P} LOG_{t-p} + \Gamma_{10} \sum_{p=1}^{P} QOM_{t-p} + \mu_{t3} \quad 3.23$$

Where

Γ_0 = *intercept term*

Γ_i = i^{th} *slope parameters*

$\mu_{t,3}$ = *idiosyncratic error term assumed to be normally distributed with zero mean, constant variance and no autocorrelation*

Where CLIM denotes climate change, EXR is exchange rate, WGR represents wage rate, LOG refers to logistic costs, and QOM is the quantity of money.

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

3.2. Estimation techniques

This study employs a reduced-form Vector Autoregression (VAR) as the primary estimation framework. VAR models are particularly well suited for multivariate macroeconomic analysis, as they capture the evolving interdependencies among endogenous variables without imposing restrictive theoretical assumptions (Ekesiobi et al. 2025). In a VAR of order *p*, each variable is specified as a linear function of its own lags and those of other variables in the system, allowing the data to reveal dynamic linkages within a mutually dependent structure. The reduced-form VAR is preferred to structural VAR (SVAR) or other identification-heavy techniques for two main reasons. First, SVAR models require strong, and often arbitrary, identifying restrictions, which are difficult to justify in the context of fiscal–inflation dynamics where theoretical ordering of shocks remains contested. Second, the objective of this study is not to recover deep structural parameters but to trace the dynamic responses of food inflation to fiscal policy shocks. In this regard, the reduced-form VAR provides a flexible, empirically tractable, and theoretically defensible tool.

Prior to estimating the VAR, standard pre-estimation diagnostics were conducted. Descriptive statistics were first employed to summarize the central tendency, dispersion, and distributional properties of the variables. This step provides initial insights into the behavior of the data, highlights potential outliers, and guides the choice of appropriate transformations or modeling strategies. Stationarity was then assessed using the Augmented Dickey–Fuller (ADF) and Phillips–Perron (PP) tests, while the Johansen cointegration test was employed to examine the existence of long-run equilibrium relationships among the variables. These procedures ensure the robustness of the VAR specification by accounting for unit roots and potential cointegrating vectors. Unit root testing is crucial because the presence of non-stationary variables can lead to spurious regressions, yielding misleading inferences (Dimnwobi et al. 2023a; Dimnwobi et al. 2023b; Nwokoye et al. 2024). When variables exhibit unit roots, they do not revert to a long-run mean and often display time-dependent variance, making traditional regression estimates unreliable (Okere et al 2025b). This is particularly important in time series analysis, as models that ignore non-stationarity may falsely suggest statistically significant relationships that are purely driven by common trends rather than genuine economic linkages (Okere et al 2025c). On the other hand, cointegration testing is equally important, as it reveals whether non-stationary series move together in the long run despite short-run fluctuations (Okere et al. 2024a). Establishing cointegration ensures that estimated relationships are not spurious but represent meaningful equilibrium linkages. This is particularly valuable for empirical research, as it highlights enduring connections that remain stable over time (Okere et al. 2024b). Establishing such relationships provides a richer understanding of how fiscal imbalances transmit to

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

inflationary pressures over time. In this way, descriptive statistics, unit root tests, and cointegration tests together form a necessary foundation for a valid and credible VAR estimation.

3.3. Data description

The study employs time series data spanning the period 2000 to 2023, consistent with data availability. While some of the original series were reported annually, they were converted to monthly frequency to enhance the robustness of the analysis. The use of monthly data provides a more precise lens for examining short-term dynamics, policy responses, and inflationary fluctuations that may otherwise be obscured in annual aggregates. This higher-frequency dataset also improves the model's sensitivity to structural breaks and offers a closer alignment with the actual timing of fiscal interventions. Data were sourced from reputable publications of the Central Bank of Nigeria (CBN) as well as the National Bureau of Statistics (NBS), the National Salaries, Incomes and Wages Commission (NSIWC), the World Bank Commodity Price Update (WBCU), and the World Development Indicators (WDI).

4. Estimated results and discussions

4.1. Descriptive statistics test outcome

The descriptive statistics (Table 1) reveal key macroeconomic patterns shaping Nigeria's fiscal–inflation dynamics. Food inflation (FINF) averages 13.5%, with peaks as high as 39.5%, underscoring its persistent volatility. Such fluctuations reflect structural bottlenecks, exchange rate pass-through, and climate-related supply shocks. Domestic debt (DOD), averaging ₦8.11 trillion, dominates fiscal financing and is sourced mainly from treasury bills, bonds, and loans from local institutions. Its high variability signals fluctuating government borrowing needs, influenced by fiscal deficits and monetary policy. While mitigating exchange rate risks, excessive reliance risks crowding out private investment and fueling inflation. External debt (EXD), averaging ₦5.31 trillion, has expanded with exchange rate depreciation, multilateral borrowing, and Eurobond issuance. Its large swings highlight Nigeria's growing vulnerability to currency risk and debt servicing pressures.

Exchange rate (EXR) movements, averaging ₦216.89/$ but reaching ₦898.89/$, capture severe naira depreciation driven by weak dollar inflows, speculative activity, and inconsistent forex policies, with direct implications for inflation and investor confidence. Logistics costs (LOG), averaging 85.61, reflect persistent supply chain inefficiencies that heighten food price volatility. Climate change indicators (CLIM), averaging 79.25, underscore Nigeria's exposure to environmental pressures linked to deforestation, industrial emissions, and energy use. Monetary conditions, proxied by quantity of money (QoM), average ₦18.42 trillion, indicating sustained liquidity expansion amid recurrent inflationary episodes. Finally, wage rates (WGR), averaging

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

₦11,541, remain low relative to inflation, pointing to constrained household purchasing power and reinforcing the sensitivity of welfare outcomes to food price dynamics.

Table 1: Descriptive Statistics

Variables	Mean	Median	Min	Max	Std
Food inflation, FINF (%)	13.465	13.506	-17.502	39.535	9.248
Domestic debt, DOD (N'trn)	8.113	5.662	0.638	53.258	8.846
External debt, EXD (N'trn)	5.307	3.108	0.439	38.220	6.756
Logistics costs, LOG (index)	85.612	80.818	26.250	173.484	36.274
Quantity of money, QOM (N'trn)	18.417	14.380	0.649	79.252	16.756
Exchange, EXR (N/$)	216.891	155.216	98.491	898.898	136.208
Agricultural productivity, AGRIP (%)	6.463	4.060	1.020	57.387	10.470
Climate change, CLIM	79.251	68.301	38.718	126.258	24.892
Fiscal deficit, FID (%)	-2.151	-1.927	-5.362	0.155	1.383
Wage rate, WGR (N'000)	11.540	11.058	5.442	22.996	3.907

Source: Authors' Estimated Output

4.2. Unit root outcomes

The application of unit root tests is central to this study's regression analysis, as it enables the assessment of stationarity and detection of stochastic trends in the time series variables (Dimnwobi et al. 2022b; Aladejare & Dimnwobi, 2025b). A unit root indicates that a variable lacks a stable mean over time, which can lead to spurious regression results (Aladejare & Dimnwobi, 2025c). This study employs both the Augmented Dickey–Fuller (ADF) test, modified to account for heteroscedasticity and improve test reliability, and the Phillips–Perron (PP) test, which relaxes the assumption of uncorrelated errors and accommodates weak serial correlation.

Table 3: ADF and PP Test Summary Results

	ADF Test		Philip-Perron Test	
Variable	ADF Statistics	Order of Integration	PP Statistics	Order of Integration
FINF	-11.818***	I(1)	-11.786***	I(1)
EXD	-4.416***	I(1)	-4.049***	I(1)
DOD	-9.575***	I(1)	-8.673***	I(1)
FID	-9.168***	I(1)	-9.392***	I(1)
QOM	-9.188	I(1)	-9.182***	I(1)
EXR	-9.555***	I(1)	-9.546***	I(1)

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

WGR	-12.798***	I(1)	-7.178**	I(0)
LOG	-9.912***	I(1)	-9.938**	I(1)
CLIM	-6.187**	I(1)	-6.187***	I(1)
AGRIP	-5.817***	I(1)	-4.897**	I(1)
Obs	288		288	
Critical Values (Both ADF and PP)				
1%	-3.511262			
5%	-2.896779			
10%	-2.585626			

***Source**:* Authors' Computation

*Note: *,**,*** imply statistical significance at 10%, 5% and 1% levels.*

The results of the ADF and PP tests are presented in Table 2. Each variable was tested in line with its series attributes, including exhibition of intercept and intercepts. Only the result of the order of integration is presented. The null hypothesis of presence of unit root was evaluated at 5% significance level. The results show that the variables are not integrated of the same order. The results shows that all the variables are integrated of order one (I[1])

4.3. Cointegration output

The Johansen trace test was applied to examine the existence of a long-run relationship among the variables. The results indicate that the null hypothesis of no cointegration ($r = 0$) is rejected, as the trace statistic (130.19) exceeds the 5% critical value (125.62). However, the null of at most one cointegrating vector ($r \leq 1$) cannot be rejected, since the trace statistic (82.26) falls below the critical value (95.75). This confirms the presence of one cointegrating vector, implying that the variables are linked by a stable long-run equilibrium relationship.

Table 3: Johansen Co-integration Test Result

Null Hypothesis (r)	Trace Statistic	5% Critical Value	Decision
$r = 0$	130.19	125.62	Reject H_0
$r \leq 1$	82.26	95.75	Fail to Reject H_0
$r \leq 2$	53.20	69.82	Fail to Reject H_0
$r \leq 3$	32.58	47.86	Fail to Reject H_0
$r \leq 4$	13.30	29.80	Fail to Reject H_0
$r \leq 5$	5.30	15.49	Fail to Reject H_0
$r \leq 6$	0.09	3.84	Fail to Reject H_0

Source: Authors' Computation.

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

4.5. Estimated Outputs

Table 4: VAR estimates

	Coef.	Std. Err	t stat
FINF	0.0648***	0.0148	4.379
EXD	0.0395***	0.0134	2.954
DOD	0.0146**	0.0060	2.427
FID	0.0292***	0.0105	2.786
EXR	0.1955***	0.0434	4.505
WGR	0.0162	0.0180	0.900
LOG	0.0520***	0.0071	7.360
QOM	0.0149**	0.0069	2.179
AGRIP	-0.0679***	0.0234	-2.895
CLIM	0.0186	0.0150	1.243
C	0.3477***	0.0648	5.366
R-squared	0.751		
S.E. equation	1.090		
F-statistic	28..212675		
Log likelihood	-112.300		
Obs	288		

Source: Regression Estimates by the Researcher

*Note: *,**,*** indicates statistical significance at 10%, 5% and 1% respectively.*

The coefficient for the exchange rate (0.195, standard error = 0.0434) indicates that a depreciation of the naira against the U.S. dollar leads to a substantial increase in food inflation. This finding is consistent with the literature on exchange rate passthrough, which suggests that a weaker domestic currency raises the cost of imported food and agricultural inputs (Dornbusch, 1987; Taylor, 2000). Given Nigeria's reliance on food imports, currency fluctuations exert a direct inflationary impact. Conversely, exchange rate depreciation exerts upward pressure on food inflation, contradicting the expectation that a weaker currency benefits domestic agricultural producer. The primary reason is the high import dependence of modern agriculture. Dimnwobi et al. (2022a) note that many developing economies rely on imported inputs such as fertilizers, seeds, and machinery. Depreciation raises the cost of these imports, increasing production expenses and pushing food prices higher. Additionally, imported food items become costlier, reinforcing inflationary pressures.

Furthermore, pass-through effects amplify food price volatility. Burstein and Gopinath (2014) argue that currency depreciation leads to cost-push inflation, which extends beyond tradable goods to domestic food markets. This is particularly evident in economies with weak price

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

transmission mechanisms, where exchange rate shocks rapidly translate into higher consumer prices.

The results also show that the coefficient for quantity of money is 0.015, suggesting that an expansion in money supply contributes to food inflation. This is consistent with the monetarist view that excess liquidity fuels inflation, particularly in economies with supply-side constraints (Friedman, 1968). On the other hand, the negative coefficient of -0.068 for agricultural productivity growth indicates that increases in domestic agricultural output reduce food inflation. This supports the supply-side argument that improving agricultural productivity enhances food availability, stabilizing prices (Schultz, 1964). The coefficient of climate change is 0.0186 and the standard error is 0.015. According to Tiffin and Irz (2006), higher agricultural yields lead to greater food availability, reducing market prices. This aligns with classical supply-demand principles, where an outward shift in the supply curve lowers equilibrium prices. Moreover, Gollin et al., (2014) highlight that improved agricultural productivity raises rural incomes, fostering economic diversification and stabilizing food prices over time.

The findings obtained in this study also suggest that fiscal policies, including fiscal deficit, external debt and domestic debt, worsen inflationary pressures. These finding highlights that in Nigeria, rising external debt could heighten food inflation. One primary channel through which external debts exacerbate food inflation is exchange rate pressure. Large external debt obligations increase demand for foreign exchange, leading to currency depreciation, which raises the cost of imported agricultural inputs such as fertilizers, machinery, and food commodities (Onuoha et al. 2023a; Onuoha et al. 2023b). In food-import-dependent countries, this directly transmits into higher domestic food prices.

Monetary expansion linked to domestic debt financing represents another key channel. According to Reinhart and Rogoff (2010), when governments finance fiscal deficits through domestic borrowing, particularly from the central bank, it increases the money supply, fueling demand-pull inflation. Given the inelastic nature of food demand, even small increases in liquidity can significantly impact food prices.

A further pathway is cost-push inflation through rising production costs. High fiscal deficits often lead to rising government expenditures, including subsidies and wage increases, which contribute to inflationary pressures. If government borrowing leads to higher interest rates, it raises the cost of credit for farmers and agribusinesses, increasing production costs and subsequently food prices (Bleaney & Fielding, 2002). Additionally, fiscal imbalances and inflation expectations interact to reinforce food price volatility. Persistent deficits undermine investor confidence, raising inflation expectations, which may lead to speculative hoarding of food commodities, exacerbating price spikes (Sargent & Wallace, 1981).

ISSN: 2455-8834

Volume:10, Issue:09 "September 2025"

5. Conclusion and policy suggestions

This study examined the impact of fiscal policy on food inflation in Nigeria between 2000 and 2023, using monthly data. The results indicate that fiscal deficit, external debt, and domestic debt are significant drivers of food price increases, reflecting both demand-pull and cost-push inflationary dynamics. External debt exerts pressure through exchange rate depreciation and import-cost pass-through, while domestic debt fosters monetary expansion and higher financing costs, both of which amplify food inflation. Overall, the findings suggest that fiscal imbalances have entrenched inflationary pressures in Nigeria's food sector, heightening food insecurity and undermining macroeconomic stability.

The evidence underscores the urgency of adopting a more disciplined and growth-oriented fiscal framework. First, improving debt management by aligning borrowing with productive investments rather than recurrent expenditure would reduce inflationary spillovers. Second, curbing reliance on central bank financing of deficits is essential to limit excess monetary expansion and demand-pull pressures. Third, targeted fiscal measures, such as supporting domestic food production through concessional credit and agricultural infrastructure investment, could mitigate the exchange rate pass-through from external debt and reduce reliance on food imports. Finally, enhancing fiscal transparency and credibility would help anchor inflation expectations, reduce speculative behaviors in food markets, and strengthen overall macroeconomic stability.

While this study provides fresh evidence on the fiscal policy–food inflation nexus in Nigeria using monthly data, several avenues remain open for further inquiry. First, comparative studies across sub-Saharan African economies could help determine whether Nigeria's experience reflects broader regional dynamics or is country-specific. Such cross-country analyses would enrich the understanding of structural similarities and policy divergences in food inflation outcomes. Second, future research should consider employing nonlinear approaches such as threshold models or regime-switching techniques to capture possible asymmetries and structural shifts in the fiscal policy–inflation relationship. This would account for the possibility that the effects of fiscal deficits or debt may vary under different inflationary environments or debt sustainability conditions. Finally, examining the moderating role of governance or institutional quality would offer valuable insights into how fiscal credibility, transparency, and accountability shape the transmission of fiscal policies to food prices.

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