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10 February 2025

Online at https://mpra.ub.uni-muenchen.de/123659/
MPRA Paper No. 123659, posted 15 Feb 2025 22:07 UTC

The Short-Term Effects of Gasoline Price Subsidy Removal in Nigeria: An analysis of the Economic and Social Impacts

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Abstract

This study examines the immediate consequences of gasoline subsidy removal in Nigeria, focusing on economic and social outcomes. Utilizing monthly data from the 2000 to 2024 subsidy removals, the study analyzes inflation trends, transportation costs, public sentiment, and fiscal adjustments. It also estimated via econometrics model, the short-term partial effects of gasoline price subsidy removal on transportation costs and aggregate consumer prices. Findings reveal significant inflationary pressures, social unrest, and disproportionate impacts on low-income households, alongside modest fiscal gains. The study underscores the need for compensatory measures to mitigate short-term shocks. The conclusion is that the removal of gasoline subsidies in Nigeria is a double-edged sword with significant short-term implications. While it offers potential benefits such as reduced fiscal burden, improved government finances, and long-term economic reforms, it also poses immediate challenges, including increased inflation, higher transportation costs, and potential social unrest. The success of this policy will depend on the government's ability to manage the transition effectively, implement complementary measures to cushion the impact on the populace, and ensure that the long-term benefits outweigh the short-term pains

1. Introduction

Nigeria, Africa's largest economy and most populous nation, has long grappled with the paradox of being a leading oil producer while simultaneously struggling to provide affordable petroleum products for its citizens. For decades, the Nigerian government maintained a controversial gasoline subsidy regime, initially introduced in the 1970s to cushion the public from volatile global oil prices and ensure stable domestic fuel costs. This policy became entrenched as a socio-economic lifeline, particularly for low-income households, despite its growing fiscal unsustainability. By 2022, gasoline subsidies consumed over $10 billion annually—approximately 24% of the federal budget—diverting critical resources from infrastructure, healthcare, and education (World Bank, 2022; BudgIT, 2023).

The debate over subsidy removal has polarized Nigerian policymakers, economists, and citizens. Proponents argue that the subsidy disproportionately benefits wealthier households and smugglers, drains public coffers, and distorts market efficiency. Conversely, critics warn that abrupt removal would trigger inflationary shocks, deepen poverty, and ignite social unrest in a nation where over 40% of the population lives below the poverty line (NBS, 2023). Historical attempts to phase out subsidies, such as the 2012 partial removal under President Goodluck Jonathan, sparked nationwide protests under the "Occupy Nigeria" movement, forcing the government to partially reverse its decision (Adeniran, 2018). However, mounting

fiscal pressures, coupled with recommendations from international institutions like the International Monetary Fund (IMF), renewed the push for reform.

In June 2023, President Bola Tinubu's administration announced the immediate cessation of gasoline subsidies, triggering an overnight spike in pump prices from ₦189 to over ₦500 per liter—a 167% increase. This decision, framed as a necessary step to redirect funds toward public goods and attract investment, has reignited debates about the equity and timing of such reforms. While existing literature extensively analyzes the long-term macroeconomic benefits of subsidy removal (e.g., reduced fiscal deficits, improved foreign exchange stability), there is limited empirical focus on its short-term socio-economic consequences, particularly in fragile economies like Nigeria.

This study addresses this gap by investigating the immediate effects (0–12 months) of the 2023 gasoline subsidy removal on Nigerian households, businesses, and macroeconomic indicators. It situates Nigeria's experience within a global context, drawing parallels with countries like Ghana (2022) and Indonesia (2015), where similar reforms triggered inflationary spirals and protests. The analysis focuses on three key dimensions: (i) Price inflation, particularly in transportation, food, and essential commodities; (ii) the implications for household welfare, including changes in disposable income and poverty levels; (iii) Fiscal reallocation*, assessing how saved subsidy funds are repurposed.

The urgency of this inquiry stems from Nigeria's precarious economic state: inflation reached an 28-year high of 34.8% in November 2024, while unemployment persists at 33% (NBS, 2023). Understanding the short-term impacts is critical for designing compensatory mechanisms—such as targeted cash transfers or transport subsidies—to protect vulnerable populations during transitions. Furthermore, this study contributes to broader debates on energy subsidy reforms in developing economies, emphasizing the tension between fiscal responsibility and social equity.

The remainder of this article is structured as follows: Section 2 reviews literature on fuel subsidy reforms globally and in Nigeria. Section 3 outlines the mixed-methods approach, while Sections 4 and 5 present results and discuss their implications. The conclusion offers policy recommendations to balance austerity with social protection in future reforms.

2. Literature Review

The removal of fuel subsidies has been a contentious policy issue globally, particularly in resource-dependent economies. This section synthesizes existing scholarship on the economic

and social implications of subsidy reforms, focusing on comparative case studies, theoretical frameworks, and Nigeria-specific analyses.

The global perspectives on fuel subsidy reforms note that fuel subsidies are a common but fiscally burdensome policy tool in oil-producing nations, often justified as a mechanism to protect consumers from price volatility. However, research by the International Monetary Fund (IMF, 2020) underscores that such subsidies are economically inefficient, disproportionately benefiting higher-income groups who consume more fuel. For instance, in Indonesia, the 2015 removal of gasoline subsidies led to a 30% price hike, triggering immediate inflation but ultimately reducing fiscal deficits by 1.5% of GDP (Sdralevich et al., 2014). Similarly, Iran's 2019 subsidy reform saw gasoline prices triple overnight, resulting in nationwide protests and a 40% inflation spike within six months (Salehi-Isfahani, 2020). These cases highlight a recurring tension: while subsidy removal aligns with long-term fiscal and environmental goals (e.g., reducing carbon emissions), the short-term socio-political costs are often severe.

Theoretical arguments for subsidy removal emphasize market efficiency and fiscal sustainability. Coady et al. (2019) posit that subsidies distort price signals, discourage private investment in energy infrastructure, and foster smuggling—a view corroborated by Nigeria's experience, where an estimated 30% of subsidized fuel was illicitly diverted to neighboring countries (NNPC, 2022). Conversely, opponents argue that abrupt removals violate principles of "energy justice", disproportionately harming low-income households who lack alternatives to fossil fuel-dependent livelihoods (Sovacool & Dworkin, 2015).

The literatures on the African context which draw lesson from Ghana, Angola, and Sudan, notes that in Sub-Saharan Africa, fuel subsidy reforms have followed similar trajectories. Ghana's 2022 removal of subsidies on liquefied petroleum gas (LPG) and gasoline led to a 54% year-on-year inflation surge, disproportionately affecting urban poor populations reliant on public transport (Ackah et al., 2023). Angola's 2020 subsidy phase-out, implemented amid a debt crisis, triggered a 25% increase in food prices and violent protests in Luanda (IMF, 2021). These outcomes align with Gupta et al.'s (2013) cross-country analysis, which found that subsidy removals in low-income economies consistently induce inflationary shocks due to entrenched fuel dependencies in transportation and agriculture. Sudan's experience offers a cautionary tale: the 2018 removal of fuel subsidies under IMF pressure led to the "December Revolution," toppling President Omar al-Bashir's regime (Verhoeven, 2021). Such cases underscore the political risks of reforms perceived as externally imposed or poorly timed.

The literatures relating to Nigeria's fuel subsidy debate provides historical and contemporary insights on the subject. It notes that Nigeria's subsidy regime, dating to the 1970s, has been

described as a "social contract" between the state and citizens, compensating for inadequate public services (Adeniran, 2018). However, corruption and inefficiency have plagued its implementation. For instance, despite being Africa's largest oil producer, Nigeria imports 90% of its refined petroleum due to moribund state-owned refineries (NNPC, 2023), forcing the government to subsidize imported fuel.

The 2012 subsidy removal attempt under President Goodluck Jonathan offers critical insights. The policy triggered a 120% fuel price increase, sparking the "Occupy Nigeria" protests and a six-day nationwide strike (Akinleye, 2016). Public anger stemmed not only from economic pain but also from mistrust in government promises to reinvest savings—a sentiment echoed in 2023 (NOIPolls, 2023). Economists like Odusanya (2020) argue that Nigeria's subsidy framework is fundamentally regressive: the poorest 40% of households receive just 3–5% of subsidy benefits, while elites and smuggling networks capture the majority.

Recent studies have modeled the potential impacts of subsidy removal. A World Bank (2022) simulation projected that abolishing subsidies would free ₦6.7 trillion ($14.5 billion) annually for infrastructure and social programs. However, Nwokoma (2022) warns that without compensatory measures, such reforms risk pushing 7 million Nigerians into poverty.

This study is imperative principally to bridge the gaps in existing literature on subsidy removal. While prior research extensively analyzes macroeconomic outcomes of subsidy reforms, none focus on short-term effects. Most studies emphasize long-term fiscal gains (e.g., Coady et al., 2019) or multi-year inflation trends, neglecting granular analysis of immediate (0–12 month) impacts on households and SMEs. Other gaps which cannot be accommodated in this study is the dynamics of regional disparities and behavioral responses especially coping strategies by households (e.g., fuel rationing, shifts to informal transport) or businesses (e.g., price adjustments, layoffs).

The theoretical frameworks of this analysis draws on two theoretical lenses: the "Price Shock Transmission Theory" which examines how fuel price increases cascade through transportation, agriculture, and manufacturing sectors (Gelb, 2014), and the "Social Contract Theory" that explores how subsidy removal erodes public trust in governments perceived as reneging on welfare obligations (Hickey, 2020). The empirical literature on fuel subsidy removal uses both descriptive statistics and econometric models. For instance, the study by Adams and Jauro (2024) u*se descriptive statistics and multiple regressions models to establish that* subsidy removal led to increased costs for food, transportation, and healthcare, adversely affecting low-income households. Research by Musa et al. (2014) investigated the socio-economic impact of fuel subsidy removal in Nigeria using an econometric model. The study

found that while there were no immediate social benefits, the long-term impact included economic growth and improved resource allocation. The authors emphasized the need for effective utilization of subsidy funds for strategic developmental projects. Also, comparative studies have analyses the effects of subsidy removal in different countries. For example, Liu et al. (2024) conducted a systematic literature review on the impacts of subsidy removal on consumption and production patterns. The study highlighted the varying effects depending on the types of subsidies and the extent of reduction, with significant attention given to energy subsidies in developing countries. Also, most empirical research often includes policy recommendations to address the challenges of subsidy removal. These theoretical and empirical literature provide a comprehensive criteria for understanding of the impacts of energy market liberalization and subsidy removal, offering valuable insights for policymakers and stakeholders. The emerging conclusion from the literature review notes that existing evidence confirms that fuel subsidy removals are economically rational but socially destabilizing, particularly in contexts with weak safety nets. Nigeria's 2023 reform presents a pivotal case study due to its scale, timing amid a cost-of-living crisis, and potential to inform policy in other oil-dependent economies.

3. Methodology

This study relied mainly on secondary data from reputable sources such as the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), and the World Bank. The data includes historical domestic and international prices of gasoline and crude petroleum prices. production and exports, exchange rates, foreign exchange reserves and consumer price indices. The time frame includes the data which span a period from 2000 to 2024 to capture pre- and post-subsidy removal trends. The analysis uses monthly data series on all the variables which span from 2000M12:2024M12. The data measurement and adjustment were done to ensure consistency in comparative values in currency per equivalent unit of all price variables included in this analysis. Consequently, **Petroleum Products Pump Price (PPP)** is defined as the price per litre of gasoline at the pump. For Nigeria this is denoted as Pump price Nigeria (PPNig) and the data needed no adjustment as it is recorded in Naira per litre. However, for both the USA and Global gasoline prices, the dollar prices/gallon and the world crude oil prices were adjusted accordingly with appropriate ruling exchange rate and conversion factors to their equivalents in Naira/litre. The level of **Pump Price Subsidy Per Litre** is estimated as the difference between Nigeria and Global as well as Nigeria and USA Gasoline PPP for the same comparative periods. Other variables are **Consumer Price Index (CPI) which** measures

changes in the price level of a basket of consumer goods and services purchased by households. This is used to gauge inflation as well as the relative effects of trends in subsidy levels on transportation costs, and other items in the consumer baskets. **Exchange Rate (EXR):** The value of the Nigerian Naira (NGN) against the US Dollar (USD). This influences import costs and overall inflation. The **Control Variables are: Global Oil Prices (GOP)** of crude oil in the international market, which directly impacts domestic pump prices, **Foreign Exchange Reserves (FER), Crude Production and crude exports** to reflect the extent to which performance in global oil market developments informs the policy choices.

A twofold quantitative data analysis model is adopted for this study viz.: descriptive statistics and econometric modelling. The descriptive statistics summarize and describe the main features of the data, including mean, median, standard deviation, and trends over time. The econometric model estimates the relationship between fuel subsidy removal and the short-term economic indicators such as inflation transportation costs and aggregate consumer prices.

This study adopted a modified version of Adams and Jauro (2024) and Musa et al. (2014) that hitherto investigated the socio-economic impact of fuel subsidy removal in Nigeria using an econometric model. The specific form of the regression model is:

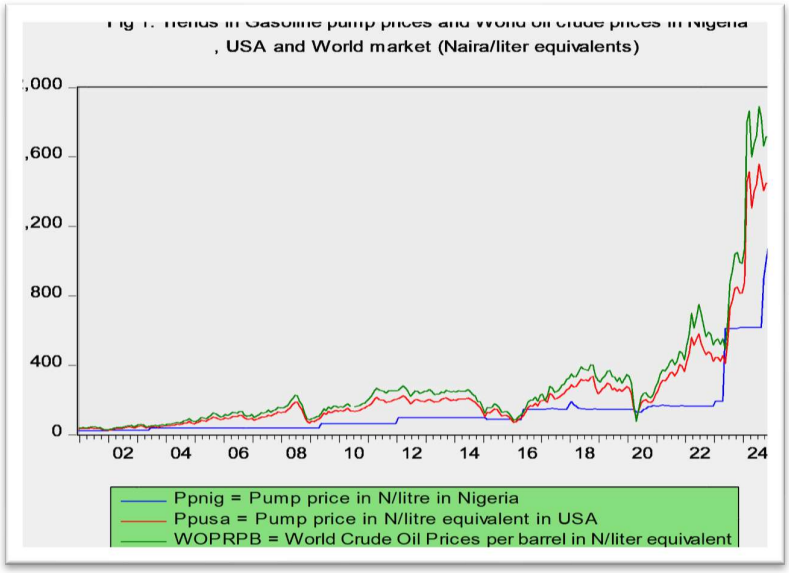
$$IR_t = \beta_0 + \beta_1 PPP_t + \beta_2 GE_t + \beta_3 ER_t + \beta_4 GDP_t + \beta_5 HI_t + \beta_6 PGR_t + \beta_7 GOP_t + \beta_8 UR_t + \varepsilon_t \quad \ldots\ldots\ldots\

Table 1: Descriptive Statistics of Gasoline Prices in Nigeria, World and USA 2000 - 2024 (US $/litre & N/litre)						
Pump Price	US Dollar/litre			Naira per litre		
Country	Nigeria	World	USA	Nigeria	World	USA
Mean	0.41	0.80	0.36	130.13	289.56	238.26
Median	0.40	0.77	0.25	87.00	197.63	168.20
Maximum	1.33	1.59	1.18	1100.00	1891.33	1558.82
Minimum	0.19	0.22	0.04	22.00	29.27	25.11
Std. Dev.	0.14	0.32	0.24	168.35	346.12	283.82
Skewness	1.52	0.16	0.87	3.37	3.08	3.11
Kurtosis	8.92	2.13	2.92	15.23	12.95	13.13
Jarque-Bera	530.94	10.36	36.02	2339.47	1645.33	1697.97
Probability	0.00	0.01	0.00	0.00	0.00	0.00
Sum	118.31	229.05	104.68	37476.18	83393.00	68618.78
Sum Sq. Dev.	5.89	29.95	16.54	8134035.00	34382448.00	23119234.00
Observations	288	288	288	288	288	288
Source: Estimated from data compiled from CBN, NBS and the World Bank						

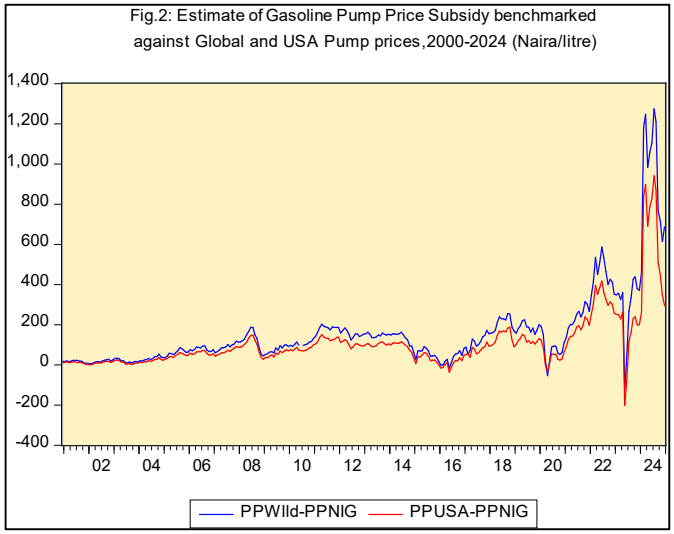
era (Dummy = 1). The model is also estimated making the $CPITrpt_t$ the dependent variable to ascertain the partial influence of the general rise in prices on transportation costs and vice versa. The EViews software was used to perform Ordinary Least Squares (OLS) regression to estimate the coefficients β0, β1,…,β7. Also, some diagnostic tests were done to check for multicollinearity using Variance Inflation Factor (VIF) to ensure independent variables are not highly correlated. The Durbin-Watson test is carried out to check for autocorrelation in the residuals while the Breusch-Pagan test was applied to detect heteroscedasticity in the residuals.

4. Results and Discussion

This section presents the results and discussion of both the descriptive statistics and econometric analysis in line with the objectives of the study. Figure 1 display the monthly trend in gasoline prices in Nigeria, the World and the USA from 2000 to 2024. In general, the trends reflected global market fundamentals for the rest of the world except in Nigeria, where the periodic adjustment in exchange rate and subsequent liberalization resulted in steep rise since 2023 to date. The trend line for Nigeria's gasoline pump prices show that it was pegged below both the global and USA prices that were market determined. This is evident from Table 1 which show the descriptive statistics in Naira per litre and the corresponding US Dollar per litre of gasoline pump prices in Nigeria, the World and



the USA. Although the average gasoline price which stood at $0.41/litre in Nigeria was considerably lower than the global average of $0.80/litre, it was higher than the average USA gasoline price estimated at $0.36/litre for the same period. The Table 1 further show that actual average pump prices in Nigeria was kept low at N130.13 per litre through the implementation of several fiscal, trade and exchange rate regime. These include price subsidy for local consumption of petroleum products, import licenses to supplement supply shortages and cheap access to foreign exchange at the official market as well as support to transporters to guarantee that pump prices remain the same nationally. Consequently, the implicit subsidies which were low initially became quite large by 2022 but subsequently trended down from late 2023 to a significantly low level by the end of 2024. Indeed, Table 2 show that average gasoline pump price subsidy stood at about N159.43 and N108.13 per litre when compared to global and USA pump prices during the same period. It was however negative during the pre-subsidy removal transition period but escalated to peak at about N1274.33/litre ex post before sliding to less than N200/litre subsidy in 2024. The subsidy removal policies not only reduced fiscal transfers to petroleum products importers but also translated to increased revenues which resulted from associated liberalisation of the domestic foreign exchange markets as export proceeds were now converted at market determined exchange rates. Thus, the erstwhile subsidies which was a major drain on fiscal accounts were replaced with the realization of huge exchange rate gains following the sharp devaluation of the Naira exchange rates.



Since the adoption of these policies in 2023, the huge financial gains in unbudgeted revenue incentivised all fiscal authorities in Nigeria to engage in less transparent expenditures to cushion the perceived temporary hardship imposed through the provision of temporary palliatives. Prominent among the actions taken were disbursement of cash, food and essential materials to the vulnerable poor; supply and

Table 2:
Descriptive Statistics of Gasoline Pump Price Subsidy in Nigeria, 2000-2024 (N/litre)

Variable	PPSubi	PPSubj
Mean	159.4334	108.134
Median	100.4913	73.595
Maximum	1274.333	941.82
Minimum	-119.4835	-202.05
Std. Dev.	203.4188	145.2023
Skewness	3.278625	3.391231
Kurtosis	15.75559	17.24999
Jarque-Bera	2468.431	2988.766
Probability	0	0
Sum	45916.82	31142.6
Sum Sq. Dev.	11875832	6051024
Observations	288	288

PPSubi=PPWld-PPNig & PPSubj=PPUSA-PPNig

installations of compressed natural gas (CNG kits for inter and intra-state commercial buses as alternatives to dampen the demand for gasoline and the promotion of solar energy and cooking gas to mitigate rising cost of both household and commercial energy consumption. States and cities with well established intra-city transportation networks provided rebates on available train and other transport mode for commuters.

Fig 3 shows the trends in aggregate consumer price index, the transportation component of the CPI and gasoline pump prices in Nigeria for the period 2000 to 2024. The trend line shows that prior to the reduction in subsidies, both the transportation index and gasoline pump prices curves were quite below the aggregate CPI up to 2023 when inflection occurred. Indeed, transportation index component has since trended higher than the aggregate CPI and reflected spiralling inflation which is not unlikely to stem from the fuel subsidy removal. There also seems to be anecdotal evidence that the rise in transportation costs affected aggregate consumer prices via food, health and educational expenditure component which form very significant proportion of the household consumer basket. Other factors which propelled prices include speculations in the domestic money and foreign exchange markets and the poor response to distortions created by the fiscal authorities' actions especially with the windfall gains which stemmed from the pump price subsidy removal policies and the merger of the domestic foreign exchange markets. The automatic accommodations by the monetary authority via high powered money creation and ways and means advances to the fiscal authorities resulted in excess liquidity in the system which tended to compromise the efficacy of demand management copping strategy for price stabilization. This was accentuated by monetary policy rules which reward financial savings with high returns and made lending cost very high resulting in credit apathy on the part of lenders and borrowers.

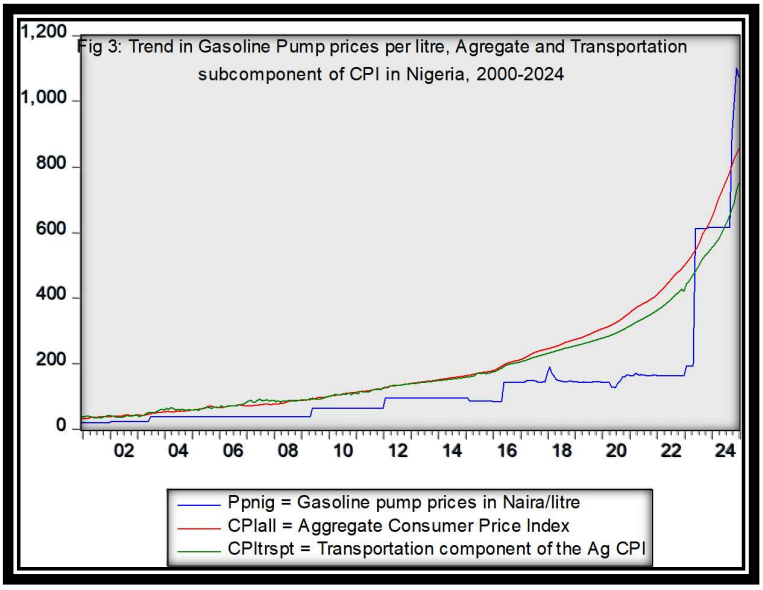


Table 3 presents the regression results estimated using a modified form of equation 2 as follows:

$$CPI_t = C + \beta_1\, PPSub_{it\,v\,jt} + \beta_2\, CPITrpt_t + \beta_4 WOPrB_t + \beta_5 FER_t + \beta_6 Dummy + \varepsilon_t \quad \ldots\ldots\ldots\ldots\ Eq.3$$

Whereby $PPSub_t$ is the implicit subsidy level per litre when compared to the average World pump prices $PPWld_t$, the USA gasoline pump prices $PPUSA_t$ and the equivalent pump prices of gasoline in Nigeria $PPNig_t$. To ensure data consistency, both $PPWld_t$ and $PPUSA_t$ were converted to the Naira equivalent prices at the ruling exchange rate. This also warranted the explicit exclusion of the exchange rate variable from the estimated model and the elimination of crude oil production ($CrdOPrdn_t$) and exports ($CrdOExp_t$) which effects were implicitly reflected in trends in world oil prices ($WOPrB_t$) variables and the tendency of both to reflect medium to long term effects which were apparently not significant in the short term. The result of four equations which were estimated is summarised in Table 3 as Equations 3(i) to 3(iv). These equations are mainly static equilibrium single equation analysis targeted at evaluating the partial effects of the key variables of interest namely aggregate consumer prices, transportation costs, subsidy levels and the regime shift dummy in the estimated model results. The adjusted R^2 value which measure the overall goodness of fit of the four regression equations suggest that all the included independent variables accounted for about 99 percent of the behavior of consumer prices and transportation costs. Also, the results show that all the coefficients of the explanatory variables were very significant. Equations 3(ii) and (3iv) show that the coefficients β_1 of the gasoline subsidy removal variables $PPSub_t$ in relation to the transportation costs $CPITrpt_t$ dependent variable were negative indicating an inverse relationship exists. This implies that reduction in gasoline price subsidies result in rise in

Table 3: Regression Results of the Effect of Estimated Nigeria Relative Subsidy on Aggregate and Transportation CPI

Country Benchmark	**USA Gasoline Price Benchmarked (j)**						**World Gasoline Price Benchmarked (i)**					
Dependent variable	**Equation 3(i): CPIAll**			**Equation 3(ii): CPITRSPT**			**Equation 3(iii): CPIALL**			**Equation 3(iv): CPITRSPT**		
Variable	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.
C	-6.841	-6.51	0.00	6.18	6.83	0.00	-6.61	-6.12	0.00	6.06	6.49	0.00
PPSubij	**0.054**	**13.91**	**0.00**	**-0.05**	**-13.17**	**0.00**	**0.04**	**13.18**	**0.00**	**-0.04**	**-12.28**	**0.00**
FER	-0.000234	-6.03	0.00	0.000212	6.33	0	-0.000226	-5.68	0.00	0.0002	6.02	0.00
WOPRPB	-0.07	-3.90	0.0001	0.06	3.72	0.0002	-0.08	-4.14	0.00	0.06	3.89	0.0001
CPITRSPT	**1.151**	**295.69**	**0.00**	**n/a**	**n/a**	**n/a**	**1.146**	**272.48**	**0.00**	**n/a**	**n/a**	**n/a**
CPIALL	**n/a**	**n/a**	**n/a**	**0.87**	**295.69**	**0.00**	**n/a**	**n/a**	**n/a**	**0.87**	**272.48**	**0.00**
Dummy	**10.36656**	**4.82**	**0.00**	**-8.10**	**-4.31**	**0.00**	**6.99**	**3.05**	**0.00**	**-5.35**	**-2.67**	**0.008**
R-squared		0.998979			0.998906			0.998935			0.998848	
Adjusted R-squared		0.998961			0.998886			0.998916			0.998828	
S.E. of regression		5.8			5.1			6.0			5.2	
Sum squared resid		9595.4			7214.4			10009.3			7591.7	
Log likelihood		-913.5			-872.5			-919.6			-879.8	
F-statistic		55186.8			51484.2			52902.7			48922.4	
Prob(F-statistic)		0.0			0.0			0.0			0.0	
Mean dependent var		204.8			189.0			204.8			189.0	
S.D. dependent var		181.0			151.6			181.0			151.6	
Akaike info criterion		6.4			6.1			6.4			6.2	
Schwarz criterion		6.5			6.2			6.5			6.2	
Hannan-Quinn criter.		6.4			6.1			6.5			6.2	
Durbin-Watson stat		0.5			0.506273			0.5			0.5	

Source: Eviews10 Least Squares Method. Sample size: 2000M12 2024M12 which included 288 observations. n/a = not applicable

transportation costs. This result is consistent with Arze del Granado, Coady, and Gillingham (2012) findings that the pass-through effect of higher fuel prices can lead to increased costs for goods and services, affecting overall economic stability. This is borne out by the coefficients β_2 of transportation costs explanatory variables $CPITrpt_t$ in equation 3(i) and 3(iii) which are positive and greater than one confirming that transportations costs lead to a more than proportionate increase in consumer prices. This is consistent with the literature which points to the potential negative impacts of subsidy removal to include higher transportation and production costs, which can contribute to inflation. The $Dummy$ variable coefficient β_6 estimates are significant in the four equations and largely reflect the predominant effect of regime shift, especially the astronomical leap in domestic prices of food, healthcare and basic social amenities that accompanied the sharp exchange rate devaluation. While this coefficient is negative for equations 3(ii) and 3(iv) suggesting a strong inverse relation to transportations costs, it is positive in 3(i) and 3(iii) which shows that regime shift factors have direct bearing on aggregate costs of living. Available anecdotal evidence show that the regime shifts which created huge unbudgeted revenue gains financed by new money creation by the central bank incentivized all fiscal authorities in Nigeria to engage in commensurate extra budgetary expenditures to provide palliatives and wage review. This manifested in liquidity surfeit in the banking system and the monetary authority reactions were to persistently raise the minimum rediscount and treasury bills rates, increase cash reserve requirements and expanded the scope of treasury single account operations. Although these actions were targeted at sterilizing the apparent excess liquidity, it made the returns on financial markets savings instrument more lucrative than lending portfolios characterized by exorbitant borrowing rates. It can be inferred that a monetary policy regime shifts which sterilize excess liquidity at the central bank (instead of the deposit money banks) combined with high cost of borrowing became a recipe for speculation in the money markets for financial gains instead of real sector investments. While the short-term outcomes are inflationary, it can also lead to economic recession.

Overall, the analysis shows that following gasoline subsidy removal, there is a surge in fuel prices as it rose to 167% overnight, from ₦189 to ₦506 per liter in June 2023 to peak at N1100 in December 2024 (NNPC, December 2024). Monthly inflation spiked to 26.7% by September 2023, up from 22.4% in May (NBS) and is estimated at 36.8% as at December 2024. Transportation costs especially intra-city fares doubled, exacerbating food inflation (15% increase) while social unrest in the form of nationwide protests and strikes erupted, mirroring 2012 demonstrations. In terms of fiscal impact, subsidy expenditures dropped by 58%, freeing ₦1.2 trillion for social programs (BudgIT, 2023). Also, the abrupt price hike strained

households, particularly low-income groups spending 60% of income on food/transport (NBS 2024). Small businesses faced liquidity crises due to higher logistics costs, leading to layoffs. Positive fiscal gains were overshadowed by eroding public trust, with 72% of citizens opposing the policy (NOIPolls, 2023). Comparatively, Nigeria's experience aligns with Ghana's 2022 subsidy removal, which saw inflation peak at 54% amid protests (Ackah, I., et al. 2023).

5. Short-Term Policy Implications for the Economy and Concluding Remarks

The removal of gasoline subsidies in Nigeria is a significant economic policy decision with far-reaching negative and positive implications in the short term.

On the negative side, the most immediate effect of subsidy removal is a sharp increase in the price of gasoline. This directly affects households, as transportation costs rise, leading to higher prices for goods and services. The cost of commuting for workers and students has increased, reducing disposable income and potentially lowering the standard of living for many Nigerians. This also implies mounting inflationary pressures, given that transportation costs are a significant component of the prices of goods and services. This led to a general increase in the price level, eroding purchasing power and potentially leading to a cost-of-living crisis. Related to this is the impact on transportation and logistics. The cost of public transportation, including buses, taxis, and motorcycles, rose. This led to reduced mobility for many Nigerians, particularly those in lower-income brackets, who may find it difficult to afford daily transportation. Also, the cost of transporting goods across the country rose, leading to higher prices for food, manufactured goods, and other essentials. This could exacerbate food insecurity and reduce access to necessities for many households.

Regarding its impact on businesses, subsidy removal may lead to increased operational costs particularly for those that rely heavily on transportation and fuel, such as logistics, manufacturing, and agriculture. This could lead to reduced profitability and potentially job losses as businesses struggle to cope with the increased costs. Consequently, most of these Nigerian businesses may become less competitive both domestically and internationally due to higher production and transportation costs. This could lead to a reduction in exports and an increase in imports, negatively affecting the trade balance.

The social and political implications of subsidy removal manifest by way of public unrest as it has historically been met with public resistance in Nigeria. There were widespread protests, strikes, and social unrest as citizens react to the increased cost of living. This could disrupt economic activities and lead to a loss of productivity. The government may face significant political pressure to reverse the decision or implement palliative measures to cushion the

impact on the populace. This could lead to policy instability and uncertainty, which may deter investment. In particular, the informal sector, which constitutes a significant portion of Nigeria's economy, will be heavily impacted by the increase in fuel prices. Small businesses, such as street vendors, artisans, and small-scale farmers, will face higher costs, potentially leading to reduced profitability and economic activity. The increase in fuel prices could threaten their livelihoods, leading to increased poverty and economic hardship.

On the positive side, subsidy removal could foster energy sector dynamics that can attract private investment. This could make the downstream oil sector more attractive to private investors, as it would allow for market-determined pricing. This could lead to increased investment in refining and distribution infrastructure, potentially reducing Nigeria's reliance on imported refined petroleum products in the long term. Despite the prevalence of marked volatility and uncertainty that accompanied downstream oil sector deregulation, this could lead to more efficient market operations and better service delivery. The implicit higher fuel prices and reduced fuel consumption could have a positive environmental impact by reducing greenhouse gas emissions and pollution. This could contribute to Nigeria's efforts to meet its climate change commitments. This may encourage a shift towards alternative energy sources, such as electric vehicles, solar power, and other renewable energy options. However, this transition may be slow and require significant investment and infrastructure development.

Another short-term implication is the improvement in government fiscal position because of reduced subsidy expenditure. This will free up significant government funds previously allocated to subsidizing gasoline, allowing for reallocation of resources to other critical sectors such as healthcare, education, and infrastructure. The savings could be used to reduce the national debt, improving Nigeria's credit rating and reducing the burden of debt servicing. A related short-term implication is the reduced demand for foreign exchange used to import refined petroleum products, thereby easing pressure on Nigeria's foreign reserves. This could stabilize the exchange rate and improve the country's balance of payments position. With reduced demand for foreign exchange to fund fuel imports, the Nigerian Naira may experience some stability in the short term. However, this depends on other macroeconomic factors and the overall management of the economy.

The conflict in outcomes, especially the gains by fiscal authority and the stress imposed on the monetary authority's capacity to contend with spiraling inflation calls for broader reforms aimed at improving efficiency, transparency, and accountability in the oil sector and the economy. This could include measures to combat corruption, improve governance, and enhance the regulatory framework. The government may introduce or expand social safety

nets to mitigate the impact of subsidy removal on vulnerable populations. This could include cash transfers, food subsidies, and other forms of social support. Above all, coordination between fiscal and monetary policies is crucial for achieving macroeconomic stability. Four areas of macroeconomic policy conflicts between fiscal and monetary authorities that would require further reforms are:

Stabilizing Economic Output: The current approach by Fiscal Policy is to use government spending and tax policies to influence aggregate demand. During an economic downturn, increased government spending or tax cuts can stimulate demand and boost economic activity. While there has been a quantum lip in government spending following the enormous windfall gains from exchange rate devaluation, the fiscal authority seems to raise taxes instead of cuts through new tax laws. Many public infrastructure enterprises especially in the energy and telecommunications sectors came up with new tariffs which tended to limit aggregate demand. The reaction of monetary policy seems to deny this apparent conflict in policy outcomes, and the central bank consistently complements fiscal measures by raising interest rates and conducting open market operations to manage liquidity. This action led to sterilization of liquidity at the CBN, and liquidity squeeze at the commercial banks who found the CBN portfolios more lucrative than lending to the economy that is capable of boosting demand. The resultant higher interest rates can make fiscal stimulus less effective by discouraging borrowing and investment.

Maintaining Price Stability: There is consensus that large fiscal deficits can lead to inflationary pressures if not matched by corresponding monetary tightening. The Nigerian situation so far indicate that there are more extenuating factors such as the huge foreign resource content of both consumption and production and speculative attacks in the domestic foreign exchange markets that tended to drive inflation more than fiscal deficits. In this circumstance, a quantitative ease instead of quantitative squeeze would serve as a better monetary policy instrument especially when interests rates are very high. Thus, in the pursuits of its mandate to manage inflation, the central bank must ensure that fiscal expansion which resulted from high powered money can become beneficial through lowering interests rates to stimulate production as the means to curb excessive inflation.

Managing Public Debt: Fiscal Policy: Sustainable fiscal policies are essential for managing public debt. This includes prudent spending, efficient tax collection, and avoiding excessive borrowing. An appropriate monetary policy suggest that the central bank can support debt management by maintaining low and stable interest rates, which reduces the cost of servicing debt. Additionally, the central bank can provide liquidity to ensure smooth functioning of

financial markets. Unfortunately, aside from liquidity squeeze, the high costs of operations and lending rates have tended to stifle financial markets.

Enhancing Investor Confidence: Although transparent and consistent fiscal policies can enhance investor confidence, there has not been a clear communication of fiscal plans and adherence to fiscal rules that can reassure investors about the government's commitment to economic stability. It does appear that the central bank's commitment to price stability and low inflation is not very apparent which tended to dampen investor confidence. There is the urgent need to foster a well-coordinated efforts between fiscal and monetary authorities to create a stable macroeconomic environment that attracts investment.

It is imperative therefore to overcome coordination challenges as differences in objectives and time horizons between fiscal and monetary authorities can pose challenges. Fiscal authorities may focus on short-term economic growth, while monetary authorities prioritize long-term price stability. This would require the need to establish and strengthened formal mechanisms for policy coordination, such as regular meetings between fiscal and monetary authorities, can help align objectives. Clear communication and transparency in policy decisions can also enhance coordination.

The conclusion is that the removal of gasoline subsidies in Nigeria is a double-edged sword with significant short-term implications. While it offers potential benefits such as reduced fiscal burden, improved government finances, and long-term economic reforms, it also poses immediate challenges, including increased inflation, higher transportation costs, and potential social unrest. The success of this policy will depend on the government’s ability to manage the transition effectively, implement complementary measures to cushion the impact on the populace, and ensure that the long-term benefits outweigh the short-term pains.

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