



Removing Fuel Subsidy in Nigeria: A Household and Firm-Level Analysis of Inflation and Purchasing Power

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Abstract: This study investigates the private sector implications of fuel subsidy removal on inflation and purchasing power in Nigeria, using BUA Cement Plc and Purchasing Power Parity (PPP) to make a case for private sector firms and households. The removal of fuel subsidy in 2023 was intended to reduce government expenditure and promote economic efficiency. However, it led to an immediate rise in fuel prices, transportation costs, and inflation, which adversely affected household welfare because it increased production costs for private firms. An ex-post facto and descriptive research design was adopted, relying solely on secondary data obtained from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), World Bank, and BUA Cement Plc annual reports for the period 2015–2025 to ascertain the relationships among fuel subsidy removal, inflation, and purchasing power. Consequently, analytical tools such as descriptive statistics, correlation, and t-tests were employed to determine that relationship. The study findings revealed that fuel subsidy removal significantly affected the profitability of private firms ($r = 0.957$; $t = 9.84$), increased inflation ($t = 3.01 > 2.262$), and that inflation had a significant effect on purchasing power ($r = 0.91$). The study concludes that although subsidy removal may enhance fiscal stability in the long run, it creates short-term inflationary pressures that weaken purchasing power and raise operational costs for firms. Accordingly, the study recommends that government should implement some measures of social protection, provide tax incentives for affected firms, and ensure transparent reinvestment of subsidy savings into infrastructure that support economic development among others.

Keywords: Fuel Subsidy, Household, Inflation, Nigeria, Private Firm, Purchasing Power.

Introduction

Fuel subsidy represents the monetary support the government provides to maintain the retail price of petroleum products below their market value. In Nigeria, fuel subsidy has been a longstanding policy tool aimed at cushioning citizens from high energy costs and stabilizing transportation and production expenses. However, over the years, the policy has become a heavy fiscal burden, consuming

a significant portion of national revenue that could have been invested in critical sectors such as education, health, and infrastructure.

Following decades of debate over its sustainability, the Nigerian government announced the removal of fuel subsidy in 2023. The decision, though intended to reduce public expenditure and promote efficiency, triggered immediate economic reactions most notably, a sharp increase in the pump price of

fuel, transportation costs, and general price levels. This development had widespread effects on inflation and the purchasing power of households and firms alike. For households, inflation erodes real income and weakens their ability as households to purchase goods and services, and for private firms (especially those in manufacturing - such as BUA Cement Plc), rising inflation increases the cost of raw materials, energy, and logistics. Thus, operational profitability and strategic planning are affected negatively. Consequently, fuel subsidy removal indirectly reshaped the cost structure and market behaviour of many Nigerian firms.

This study therefore investigates the implications of fuel subsidy removal on inflation and purchasing power, focusing on how the subsidy removal affected the macroeconomic outcomes that have a determining effect on the performance of private firms in Nigeria, as well as the micro economic outcomes as they affect households. Data from BUA Cement Plc and purchasing power parity data are employed to study the scenarios due to the strategic role of these elements in private sector and nationwide operational scale directed at both macro and micro economic development.

Statement of the Research Problem

The persistent debate surrounding fuel subsidy in Nigeria has revolved around its economic efficiency and social impact. While subsidy removal is theoretically expected to improve government finances and attract foreign investment, it often produces short-term inflationary pressures that erode citizens' welfare and increase production costs for businesses. Since the 2023 policy reform, Nigeria has witnessed a sharp rise in inflation, with prices of essential goods and services increasing rapidly. This has significantly reduced household purchasing power and increased the cost of living. Private firms, on the other hand, face higher operational expenses and uncertain market demand due to weakened household purchasing ability.

Despite numerous policy arguments, empirical studies examining the actual impact of fuel subsidy removal on firm profitability, inflation, and purchasing power in Nigeria remain limited. In particular, there is insufficient evidence on how private firms, such as BUA Cement Plc or households, have adjusted to the post-subsidy economic realities. This gap in knowledge necessitates an investigation to determine whether the intended economic benefits of subsidy removal outweigh its inflationary and welfare costs.

Research Questions and Objectives

Based on the problem identified above, this study set out to answer the research questions: What is the effect of fuel subsidy removal on the profitability of private firms in Nigeria?; To what extent has fuel subsidy removal influenced inflation in Nigeria?; and How does inflation affect the purchasing power of households in Nigeria?. Thus, accordingly to the main objective of this study to examine the implications of fuel subsidy removal on inflation and purchasing power in Nigeria (using BUA Cement Plc and households as examples), the specific objectives are to: examine the effect of fuel subsidy removal on the profitability of private firms in Nigeria; assess the effect of fuel subsidy removal on inflation in Nigeria; and evaluate the effect of inflation on purchasing power of households in Nigeria.

Scope and Significance of the Study

This study covers the period from 2015 to 2025, offering a longitudinal view of the economic environment before and after fuel subsidy removal. The rationale behind this time frame is threefold: first, that BUA Cement began full-scale production in 2015, establishing a logical baseline year; next, the years 2015–2022 represent the pre-fuel subsidy removal period, capturing firm growth and macroeconomic interactions under subsidized conditions; and lastly, that the period 2023–2025 captures the post-subsidy

removal environment, enabling a comparative analysis of economic adjustments and policy outcomes. This scope focuses on: trends in fuel prices and inflation, purchasing power parity, BUA Cement's financial performance (such as sales, and profit margins), and economic policy changes affecting the private sector directly (subsidy removal) or indirectly (via inflation, etc.).

The study contributes to the existing knowledge on the relationship between government policy reforms and economic outcomes in Nigeria by examining the impact of fuel subsidy removal on key economic indicators pertaining to private firms and households. The research enhances the knowledge base on macro and micro economic policy management, business strategy, and household welfare within the Nigerian context. The study provides valuable perspectives about the complex interactions between policy changes and economic outcomes, shedding light on the mechanisms through which fuel subsidy removal affects the economy. Thus, the study is significant in several ways.

First, it provides empirical understanding into the economic effects of fuel subsidy removal, particularly its influence on inflation, purchasing power, and firm performance in Nigeria. Next, it assists policymakers in understanding the short- and medium-term consequences of subsidy reforms, enabling them to design better compensatory and stabilization measures. Then, it is also beneficial to private firms as it highlights how inflationary trends following subsidy removal can affect profitability and strategic planning because of its focus on BUA Cement Plc and household purchasing power parity.

Furthermore, this study is a useful reference for students, researchers, and future scholars interested in public policy, energy economics, public finance management and business strategy. It contributes to the body of knowledge on private sector resilience in developing economies like Nigeria, while also

providing a practical case of how large-scale firms adapt to macroeconomic shocks and manage operational efficiency during policy transitions, as well as how households navigate such micro economic shifts.

Research Methodology

Given the policy-driven and economic nature of the study, a secondary data methodology was adopted. This approach facilitates a detailed review of macroeconomic data and corporate performance records across a defined time period (2015–2025), allowing for comprehensive analysis without reliance on direct field surveys or questionnaires. The study adopts an ex-post facto and descriptive research design. This design is appropriate where variables have already occurred and cannot be manipulated by the researcher. It allows for the objective investigation of historical data related to the Nigerian fuel subsidy regime, its eventual removal, and its economic consequences. The descriptive nature supports in-depth documentation of patterns in inflation, purchasing power, and firm-level operational responses across a 10-year window. This design was chosen to provide robust perspectives into the relationship between macroeconomic variables and private sector performance outcomes.

The population of this study comprises all economic data related to fuel pricing, inflation trends, household purchasing power, and private sector performance in Nigeria between 2015 and 2025. Specifically, attention is paid to BUA Cement Plc, a major private manufacturing firm whose operations are highly sensitive to fluctuations in energy and transportation costs. BUA Cement officially began production at its Obu Cement plant in Okpella, Edo State in 2015, making it a suitable base year for analysis. The study population includes the firm's financial reports, national economic indicators (such as inflation and fuel prices), and related institutional publications.

This study relies on secondary data from reputable sources, including BUA Cement Plc Annual Financial Reports, National Bureau of Statistics (NBS) reports, Central Bank of Nigeria (CBN) Statistical Bulletins, and World Bank Development Indicators. The data were collected through a structured desk review of publicly available records and organized in spreadsheets for analysis. The study targets macroeconomic data, firm-level data, and household data, including inflation rate, fuel price, GDP growth, annual revenue, production costs, and purchasing power metrics. The analysis was performed using both quantitative and qualitative techniques, including descriptive statistics, time-series analysis, comparative analysis, correlation analysis, and content analysis. Descriptive tools such as percentages and year-on-year growth rates were used to summarize trends in inflation, fuel prices, and purchasing power.

Also, trends from 2015 to 2025 were plotted to observe significant turning points, and correlation analysis was used to examine relationships between key variables. The study ensures reliability and validity by using government and internationally verified data, triangulation across different data sources, and cross-verification of data. The study's methodology is robust, applying both correlation and t-test techniques to analyze the effect of policy change across different economic indicators. This research strengthens the understanding of private-sector resilience under policy shocks at both macro and micro economic levels, situated within Disruption and Institutional theories. The study's findings provide valuable perspectives about the dimensions of fuel subsidy removal on private firms and households in Nigeria.

In view of the findings and limitations of this study, several suggestions are made for future research. Firstly, comparative analyses across multiple private firms or sectors, such as agriculture, transportation, and manufacturing, would provide valuable understanding about

industry-specific effects of fuel subsidy removal. In addition, primary data collection on household-level impacts would offer a more nuanced understanding of how inflation affects living standards and household welfare. A post-reform longitudinal study extending beyond 2025 would capture the long-term economic adjustments and performance of firms after subsidy removal. Exploring energy transition and renewable energy adoption as alternative strategies for minimizing the negative effects of high fuel prices would also be beneficial. Finally, regional or gender-based analyses could reveal important differences in the impacts of subsidy removal across different parts of Nigeria or between male/female-owned enterprises and households.

Literature Review And Empirical Framework

This literature review examines the concepts, theories and empirical studies as explained by different authors in order to provide the needed overview of the current state of knowledge on the topic, x-ray gaps in the existing literature, and provide a framework for the current study.

Conceptual Review

The dependent variables in this study are inflation and purchasing power, while fuel subsidy is the independent variable. Subsidies are financial incentives provided by governments to promote economic activities or alleviate financial burdens (Owota et al., 2024). In Nigeria, fuel subsidy removal has been contentious, with proponents arguing it can lead to increased revenue for government investments and stimulate private sector growth (Bhattacharyya and Ganguly, 2017). However, critics argue that it disproportionately affects the poor and vulnerable segments of society, leading to higher costs of living, transport, and food prices. The removal of fossil fuel subsidies is contentious due to its potential impact on the poor. Despite arguments that fossil fuel subsidy is a form of aid, a large literature

documents its negative consequences, including increasing air pollution and greenhouse gas emissions (Sweeney, 2020), road congestion (McCulloch et al., 2021), and inequality between the poor and the rich (McCulloch et al., 2021).

In Nigeria, fuel subsidies were introduced in the 1970s, and since then, the fuel subsidy regime has been in place with periods of partial removal. Recent evidence shows mixed effects of fuel subsidy, with some studies identifying benefits and others highlighting negative consequences. Some studies suggest that fuel subsidy removal could reduce carbon emissions (Omitogun et al., 2021; Adekunle and Oseni, 2021), provide additional resources for the government to respond to crises (Asare et al., 2020; Ozili and Arun, 2023), and stimulate economic growth. However, others argue that fuel subsidy removal could lead to higher energy prices, macroeconomic instability (Omotosho, 2020), increased corruption (Ovaga and Okechukwu, 2022), and severe consequences for the poor (Umeji and Eleanya, 2021).

Inflation is a persistent challenge in Nigeria, affecting economic stability and growth. It is defined as a sustained increase in the general price level of goods and services over time (Adeniyi & Ojo, 2020). The Nigerian economy has experienced fluctuating inflation rates, influenced by domestic factors such as fiscal policies, structural challenges, and external factors like global economic conditions and commodity price volatility (Adewuyi & Akpokodje, 2018). Historically, Nigeria has experienced cycles of high inflation driven by internal and external forces, including global oil price shocks, currency devaluation, and supply chain disruptions. Inflation erodes purchasing power, distorts investment decisions, and creates uncertainty in the financial environment (Abiodun & Yusuf, 2020). The effects of inflation are far-reaching, reducing the purchasing power of households, especially low-income families, and pushing more people into poverty. It also

affects businesses, as rising input costs reduce profitability and discourage investment.

As a result of this, the Central Bank of Nigeria (CBN) implemented monetary policies to combat inflation, such as adjusting interest rates and controlling money supply (Mordi et al., 2014; CBN, 2022). The country's dependence on crude oil exports and imports also contributes to inflation, as any volatility in global oil prices can significantly affect the value of the naira and the overall economy (IMF, 2023). The CBN continues to face challenges in achieving price stability while promoting economic growth. The current inflationary trends, exacerbated by rising food prices and exchange rate fluctuations, continue to challenge Nigeria's economic stability (IMF, 2021). Understanding the relationship between inflation and financial market performance is crucial for stakeholders seeking to navigate the complexities of the Nigerian economy.

Purchasing power refers to the real value of money in terms of the quantity of goods and services it can acquire. It is a fundamental economic indicator that shapes both microeconomic behavior and macroeconomic policy (Mankiw, 2021). The concept has been explored through monetary, social, and spatial lenses, providing a nuanced understanding of its determinants and implications. From a monetary perspective, purchasing power is inversely related to inflation, as price levels rise, the real value of money declines, reducing what can be bought with a given nominal amount (Mankiw, 2021). The spatial perspective defines purchasing power as the extent to which income enables individuals or households to consume goods and services relative to local or national price levels (OECD, 2023). This is evident in countries like Nigeria, where the same amount of money can afford different consumption baskets in urban and rural areas.

Purchasing power is also closely linked to real income, which determines actual consumption capabilities (Samuelson & Nordhaus, 2020).

During inflationary periods or economic shocks, such as fuel subsidy removals, real incomes may remain stagnant while prices surge, eroding purchasing power. Key Factors Affecting Purchasing Power: Inflation (Friedman, 1970) Price levels (Mankiw, 2021) Real income (Samuelson & Nordhaus, 2020) Monetary policy (Blanchard & Johnson, 2022) In Nigeria, purchasing power has been affected by fuel subsidy removal, which led to increased transportation costs and prices of goods and services (Ishola et al., 2023; Akpan & Udo, 2024). The Consumer Price Index (CPI) and Producer Price Index (PPI) are important indicators of inflation and purchasing power, with CPI measuring household costs and PPI tracking producer prices (Diewert, 2020; De Lira & Costa, 2018). Understanding purchasing power is crucial for policymakers to develop effective strategies to protect real household consumption capacity and promote economic stability.

In the case of private firms and households, suffice it may be to note that private firms are business entities owned and operated by individuals or groups operating in various sectors, producing goods and services, driving innovation, and creating employment opportunities with the primary goal of generating profit. Households, however, are fundamental units of economic activity, providing labor, consuming goods and services, and saving or investing thus, as primary consumers, households drive demand in the economy, and their consumption choices significantly influence production and pricing decisions. For the purpose of this study, while a private firm is a company operating in the manufacturing sector, producing goods for the Nigerian market and beyond, with the primary goal of maximizing profits - thus, the choice of BUA cement Plc. Similarly, a household is any individual or group of individuals living together, making consumption decisions, utilizing economic resources, and whose economic well-being

can be assessed by way of the purchasing power parity index.

In any economy, private firms play a crucial role in driving economic growth through investments in new technologies and expansion of operations. From a micro economic perspective, private firms are studied in terms of their production decisions, cost structures, and pricing strategies, with a focus on profit maximization. In terms of macro economy, their investment decisions, production levels, and employment practices influence overall economic activity, inflation, and growth. Households, also, supply labor to firms in exchange for income, which is then used for consumption, savings, or investments. Micro economic, households are analyzed in terms of their consumption choices, labor supply decisions, and savings behavior, with a focus on utility maximization. From a macroeconomic perspective, households' aggregate consumption, saving, and investment decisions impact overall demand, economic growth, and the effectiveness of fiscal and monetary policies.

Theoretical Review

The study of fuel subsidy removal and its implication on inflation and purchasing power on private firms, has been grounded in several key economic theories. These theories offer a framework for understanding the dynamic relationship between subsidy removal, inflation, and private firm performance.

Disruption theory posits that unexpected events can significantly impact established systems. In the context of Nigeria's fuel subsidy removal, this unforeseen disruption affects the existing pricing structure and operational practices within the supply chain. The removal is likely to trigger a period of adjustment, marked by short-term supply chain bottlenecks, operational challenges for businesses, and consumer uncertainty with potential price increases. As businesses grapple with the new cost structure, higher fuel costs translate into increased

transportation expenses, potentially leading to temporary shortages of essential goods. The impact of this disruption will be felt across the supply chain, with businesses facing difficulties adapting to the new pricing framework. This may result in delays in deliveries, inefficiencies in logistics planning, and a need to re-evaluate profit margins in light of increased transportation costs.

Households, too, will experience uncertainty as businesses adjust their pricing strategies, with the potential for higher transportation costs to translate into increased prices for a range of goods and services, ultimately impacting household purchasing power. Institutional theory focuses on how formal and informal institutions shape economic behavior. In Nigeria, fuel subsidies have been an established institutional practice influencing the way businesses operate and household make decisions. The removal of these subsidies disrupts this existing institutional framework, necessitating a re-evaluation of established practices and a search for alternative solutions. With the removal of subsidies, businesses that previously relied on artificially low fuel prices for transportation may no longer be able to operate under the same model, leading to destabilization of established practices.

While disruption creates opportunities for new institutions to emerge, potentially leading to a long-term transformation of the supply chain. New institutions may take various forms, such as alternative fuel sources like LNG or biofuels, investments in logistics infrastructure to create a more efficient and cost-effective system, or changes in household behavior as individuals adapt to potential price increases. These changes could include a shift towards locally produced goods to reduce dependence on long-distance transportation or a greater use of public transportation options, ultimately reshaping the supply chain in response to the policy shift.

The integration of disruption theory and institutional theory provides a comprehensive

framework for this study. Combining these theories, we can better understand the dynamics of the supply chain's response to the fuel subsidy removal. Disruption theory helps predict potential short-term challenges, such as shortages and price increases, resulting from higher transportation costs. Meanwhile, institutional theory offers ideas about how these disruptions can drive institutional changes, such as investments in local production, adoption of alternative fuel sources, or shifts in household behavior, ultimately leading to a more resilient and adaptive supply chain.

Examining the Effect of Fuel Subsidy Removal on the Profitability of Private Firms in Nigeria

Examining the effect of fuel subsidy removal on the profitability of private firms - believed to have significantly impacted the profitability of private firms in Nigeria, Ilodigwe (2023) found that the elimination of gasoline subsidies severely impacted small and medium-sized enterprises (SMEs) in Anambra State, leading to increased production costs, decreased profitability, and reduced sales and revenue. Similarly, Ohonba and Ogbeide (2023) noted that the removal of fuel subsidies leads to elevated gasoline prices, which affect transportation costs and pricing of products and services. SMEDAN and UNDP (2024) also reported that logistics expenses for firms surged over 25-30%, pushing many SMEs into temporary closure or workforce reduction.

Assessing the Effect of Fuel Subsidy Removal on Inflation in Nigeria

The World Bank (2023) reported that the withdrawal of fuel subsidy in mid-2023 led to a rapid surge in inflation, with headline inflation rising from 22.4% in May to over 27% by October of the same year. The NBS (2024) supported this finding, noting that over 60% of Nigeria's inflationary growth in the post-subsidy period was directly tied to energy and logistics cost increases. CSEA

(2024) also found that inflation not only increased the cost of living but also escalated the cost of doing business, which had negative ripple effects on the private sector. These evidence, though unanimous in their claim that fuel subsidy removal has resulted to considerable inflationary pressure in Nigeria, suggest that the degree of inflation might depend on the affected segments (firms or households) of the economy.

Evaluating the Effect of Inflation on Purchasing Power of Households in Nigeria

Evaluating the effect of inflation on purchasing power of households in Nigeria, it is observed across various studies that the weakening of household purchasing power is a recurring problem since the post-2023 fuel subsidy reform. BudgIT (2024) found that rising fuel prices significantly reduced the real income households, leading to reduced consumption and disposable income. CSEA (2024) reported a 34% increase in average household expenditure on transportation within the first six months of subsidy removal, resulting in reduced purchasing power and declining household demand. The World Bank (2023) also emphasized that the fall in purchasing power affects economic growth by depressing household consumption, which constitutes a major component of GDP.

Empirical Gap

Despite the growing body of empirical studies examining the impact of fuel subsidy removal on macroeconomic indicators in Nigeria, limited research has specifically and comprehensively addressed the interrelationship between inflation, purchasing power, and the operational sustainability of private firms particularly SMEs within the post-2023 subsidy reform era. Most existing studies (e.g., Adepoju et al., 2023; World Bank, 2023; CSEA, 2024) have focused on either macroeconomic outcomes or general business environment effects. While studies such as Ilodigwe (2023) and SMEDAN and UNDP (2024) have explored

firm-level implications, their findings are region-specific (e.g., Anambra State) or lack integration with broader inflationary and purchasing power dynamics across private firms nationally. Furthermore, there remains a scarcity of updated empirical investigations that assess how fuel subsidy removal influences the purchasing power of household and its cascading effects on demand, pricing, and productivity among private firms across diverse sectors in Nigeria between 2023 and 2025. Hence, this study.

Data Presentation And Analysis

The key financial metrics used, were extracted from the annual reports of BUA Cement Plc (2015–2025), while macroeconomic data specifically inflation rates and purchasing power indicators were derived from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS). The analysis aims to evaluate the impact of fuel subsidy removal and the subsequent inflation surge on the purchasing power of firms in Nigeria, with BUA Cement Plc serving as the focal private firm. Particular attention is given to changes observed from 2023 onwards, following the official termination of fuel subsidy.

Data Presentation

Table 1 presents financial summary of BUA Cement Plc's performance from 2015 to 2025. The key metrics given are as follows. The company's revenue (₦,bn) has consistently increased over the years, from ₦68.40 billion in 2015 to ₦570.20 billion in 2025, indicating growth in turnover (net-sales). Profit After Tax (PAT, ₦,bn) has also shown a steady increase, from ₦12.10 billion in 2015 to ₦162.80 billion in 2025, suggesting effective cost management and profitability. Earnings Per Share (EPS, ₦) rose from ₦0.38 in 2015 to ₦4.57 in 2025, indicating increasing profitability per share, while dividend payments (₦,bn) have consistently increased, from ₦8.40 billion in 2015 to ₦120 billion in

2025, showing the company's commitment to rewarding shareholders.

Table 1: BUA Cement Plc Financial Summary (2015–2025)

Year	Revenue (₦,bn)	PAT (₦,bn)	EPS (₦)	Dividend Paid (₦,bn)	Cash at Year-End (₦,bn)
2015	68.40	12.10	0.38	8.40	1.00
2016	91.80	26.40	0.82	22.80	1.60
2017	119.00	39.00	1.17	35.40	2.50
2018	159.00	50.90	1.53	47.00	6.20
2019	175.52	60.61	1.79	51.64	15.02
2020	209.44	72.34	2.14	59.26	123.82
2021	257.33	90.08	2.66	70.00	62.30
2022	361.40	110.20	3.26	90.00	78.70
2023	433.60	130.40	3.80	100.00	83.20
2024	502.80	149.70	4.25	110.00	90.50
*2025	570.20	162.80	4.57	120.00	96.10

*Source: BUA Cement (2015 to 2025) Audited Financial Reports, *these figures are for the half year ending June.*

Cash at Year-End (₦,bn), which is also the company's cash reserves, have fluctuated significantly. It surged in 2020 likely due to strategic transaction decisions. Despite the fluctuations, the cash position has generally trended upwards. In general, the table suggests BUA Cement Plc has experienced significant growth in revenue, profitability, and dividend payments over the period, indicating a strong financial performance.

Table 2: Inflation Rates in Nigeria (2015–2025)

Table 2 below, explains the inflation rates from 2015 - 2025. It outlines the inflation rates in Nigeria from 2015 to 2025. Inflation rate is a crucial economic indicator that measures the rate of increase in prices of goods and services in an economy.

Year	Inflation Rate (%)
2015	9.00
2016	15.70
2017	16.50
2018	12.10
2019	11.40
2020	13.20
2021	15.60
2022	21.30
2023	24.50
2024	29.90
2025	22.22 (as at June)

Source: National Bureau of Statistics (2024) Inflation Trend Report.

Over the years, Nigeria's inflation rate has fluctuated, with a significant spike in 2023 and 2024, reaching a peak of 29.90%. This rapid increase in inflation suggests that the prices of goods and

services rose sharply during this period, potentially impacting the purchasing power of individuals. However, the inflation rate appears to have slowed down in 2025, with a rate of 22.22% as of June.

Table 3: Purchasing Power Proxy via PPP (USD values)

Table 3 below presents the estimated Purchasing Power Parity (PPP) values for Nigeria from 2015 to 2025. PPP is an economic measure that takes into account the differences in the cost of living between countries, allowing for a more accurate comparison of purchasing power. The table shows that despite the high inflation rates in 2023 and 2024, the estimated PPP values have continued to rise, indicating an increase in the real purchasing capacity of individuals in Nigeria relative to global price standards. This suggests that the economy is still growing, and people's purchasing power is increasing, albeit potentially at a slower rate due to the high inflation rates.

Year	Estimated PPP (USD)
2015	96.2
2016	102.3
2017	110.4
2018	118.9
2019	126.7
2020	134.1
2021	142.3
2022	152.6
2023	165.8
2024	169.1
2025 (est.)	171.4

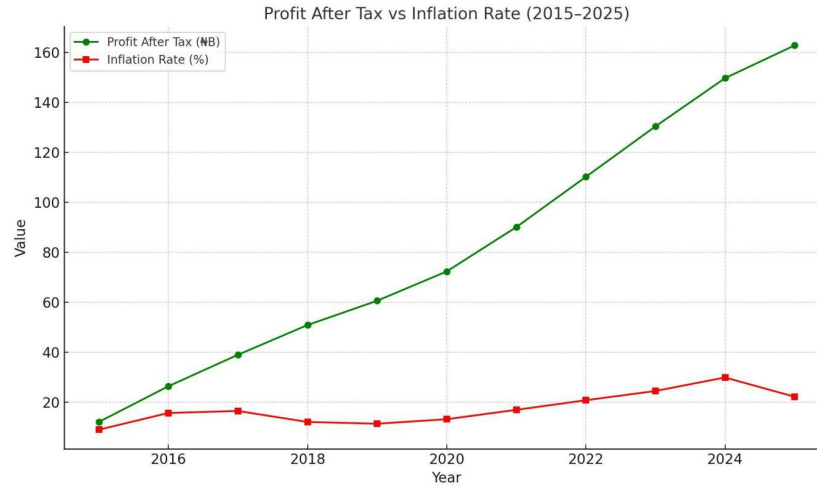
Source: OECD and CEIC (2025) International Databases.

Analyses of Revenue and Inflation Trends

Revenue increased steadily from ₦68.4 billion in 2015 to ₦570.2 billion by Q1 2025. This rapid growth was particularly noticeable from 2020 onward, coinciding with inflation spikes and increasing cement demand due to infrastructure growth. Despite the inflationary environment, BUA Cement successfully passed increased production costs to households, as seen in revenue growth. The inflation rate surged to 29.9% in early 2024, yet profitability did not decline, suggesting

strong market positioning and pricing flexibility.

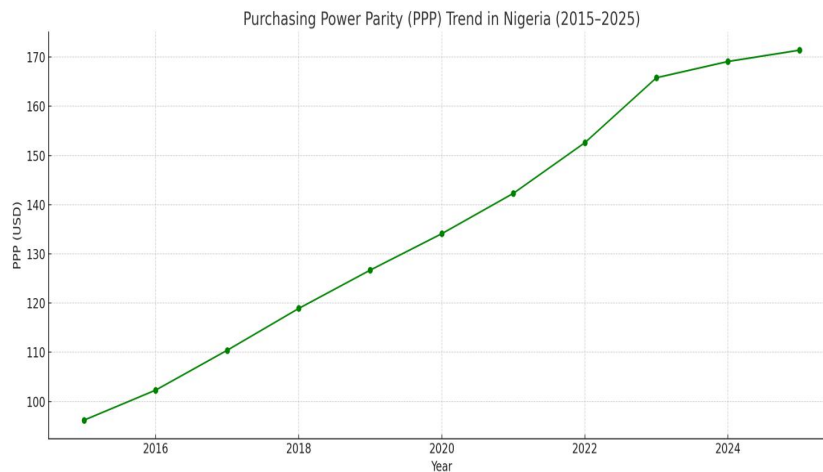
Graph 1 depicts the relationship between profit after tax and inflation rate from 2015 - 2025. It highlights the consistent growth in profit despite rising inflation, and how inflation spiked dramatically from 2022 to 2024, despite the fact that BUA Cement still reported strong profit increases suggesting strong operational resilience.

Graph 1: Relationship between Profit After Tax and Inflation from 2015 to 2025

Source: Authors' Computation using MS Excel 2021.

Analyses of Profit After Tax and Purchasing Power

From ₦12.1 billion in 2015, profit rose to ₦162.8 billion by Q1 2025. In USD PPP terms, the real value of profit may have been lower due to naira devaluation and inflation, but in nominal naira terms, profitability was strong. However, real household purchasing power was diminished domestically due to high inflation, especially in 2023–2024. While PPP (USD) shows marginal improvement, domestic cost of living pressures increased sharply, possibly reducing demand elasticity in 2025 and beyond.

Graph 2: Purchasing Power Parity (PPP) Trend in Nigeria from 2015 to 2025

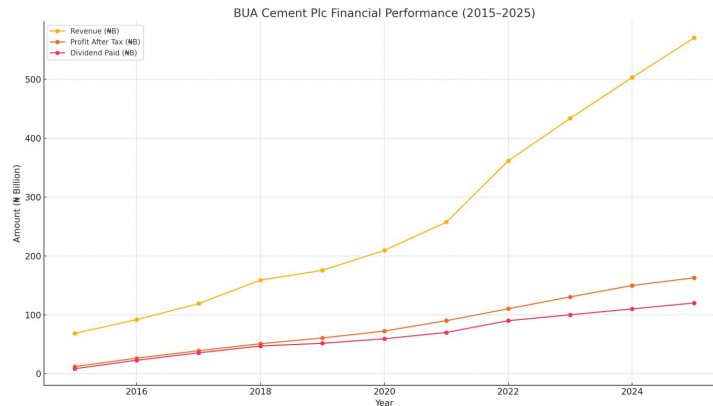
Source: Authors' Computation using MS Excel 2021.

Graph 2 shows Nigeria's Purchasing Power Parity (PPP) from 2015 to 2025. There is a steady increase, suggesting Nigeria's economic output adjusted for price level improved over time. However, this does not directly translate to stronger domestic purchasing power, especially during inflationary periods like 2023–2024.

Dividend Distribution Analysis

Dividend payments increased from ₦8.4 billion in 2015 to ₦120 billion in 2025. This signals BUA's commitment to shareholder value. However, in real terms (inflation-adjusted), the purchasing power of those dividends may be lower than the nominal figures suggest.

Graph 3: BUA Cement Plc Financial Performance from 2015 to 2025



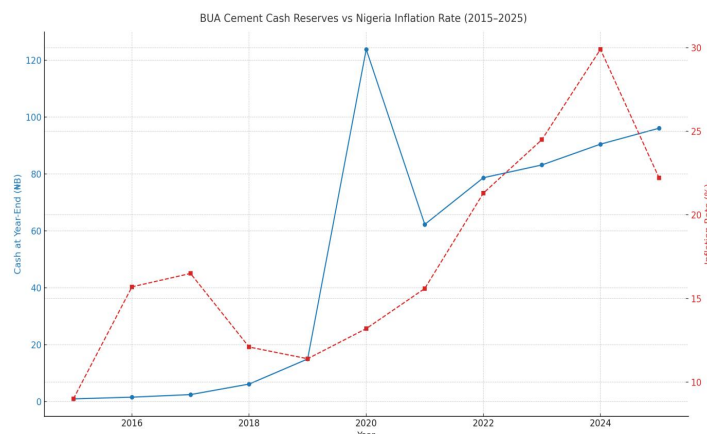
Source: Authors' Computation using MS Excel 2021.

Graph 3 portrays BUA Cement Plc's financial performance (2015–2025) - including Revenue, Profit After Tax, and Dividend Paid. It is clearly observable, that BUA revenue and profits grow steadily and strong post-2020 and the consistent rise in dividend payouts aligned with profit trends.

Analyses of Cash Reserves and Inflation Buffering

BUA's year-end cash rose significantly in 2020 (₦123.82 billion), then fluctuated moderately. Despite rising operating costs, the firm maintained healthy liquidity, likely to buffer against inflation shocks and raw material import costs.

Graph 4: BUA Cement Plc's Cash Reserves vs Nigeria's Inflation from 2015 to 2025



Source: Authors' Computation using MS Excel 2021.

Graph 4 illustrates the relationship between BUA Cement's year-end cash reserves and Nigeria's inflation rate from 2015 to 2025. Cash reserves surged in 2020, likely due to operational efficiency or strategic liquidity

holding, and Inflation sharply increased post-2022, peaking in 2024 yet BUA maintained positive liquidity, reflecting resilience despite macroeconomic pressure.

Test of Hypothesis

Fuel subsidy removal has no significant effect on the profitability of private firms in Nigeria (H_{01})

Using the Pearson Product Moment Correlation Coefficient (PPMC), the results are as follows. The correlation (r) = 0.957, $t_{cal} = 9.84$, $t_{tab} (0.05, df=9) = 2.262$. Thus the decision is to reject H_{01} . The

outcome suggests that fuel subsidy removal significantly affects profitability of private firms.

Fuel subsidy removal has no significant effect on inflation in Nigeria (H_{02})

Using the paired t-test method to compare average inflation before and after subsidy removal, the results are as follows.

Table 4: Average Inflation

Period	Average Inflation (%)
Pre-Subsidy Removal (2015–2022)	14.85
Post-Subsidy Removal (2023–2025)	25.53

Source: Authors' Computation using Simple Average Formula.

The results reveal that: $t_{cal} = 3.01$, $t_{tab} (0.05, df=9) = 2.262$, suggest that fuel subsidy removal significantly increased inflation in Nigeria hence, the decision to reject H_{02} .

Inflation has no significant effect on purchasing power in Nigeria (H_{03})

The Pearson Correlation was employed as a method to test the relationship between inflation and purchasing power parity (PPP, USD). The results reveals that correlation (r) = 0.91. Hence, the decision to reject H_{03} because of the strong positive correlation between inflation and purchasing power parity (PPP) in Nigeria, which contradicts the initial statement that 'inflation has no significant effect on purchasing power in Nigeria'. The data, therefore, indicated that as inflation increases, purchasing power also tends to increase. This, however, seems counter intuitive since typically, inflation would erode purchasing power. The positive correlation here might be due to other economic factors at play.

Summary of Findings

The summary of findings based on the study objectives is as follows. With regards to the first objective, fuel subsidy removal

significantly affects profitability of private firms ($r = 0.957$; $t = 9.84$) while in the case of the second objective, fuel subsidy removal significantly increased inflation in Nigeria ($t = 3.01 > 2.262$). For the third objective, it was discovered that inflation significantly affects purchasing power in Nigeria ($r = 0.91$).

Summary, Conclusion, and Recommendations

The research revealed that while subsidy removal may yield long-term fiscal benefits, it also leads to short-term challenges, including increased inflation, reduced real income, and higher production costs. The findings highlight the need for targeted interventions to mitigate the adverse effects on low-income households and private firms.

While subsidy removal may improve fiscal balance in the long run, its short-term impact includes increased inflation, reduced real income, and higher production costs. BUA Cement Plc demonstrated resilience during the period studied, but still faces inflation-driven challenges, while households in Nigeria struggled.

Accordingly, the following recommendations are directed at the federal government of Nigeria and her agencies:

1. Governments at all levels need to implement effective social protection program to mitigate inflation's impact on low-income households.
2. Federal and State governments have to provide: tax relief to private firms; and low-interest loans to households within their jurisdictions.
3. The Federal Government (and National Assembly through its oversight functions) must ensure the transparent utilization of savings from subsidy removal on infrastructure and other economic development investments.

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