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Petroleum Subsidy Removal and National Development in Nigeria (2023 - 2025)

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ABSTRACT

The correlation between removal of petroleum subsidy and national development in Nigeria in the year 2023-2025 is analyzed in this article. It addresses a key policy concern: did the fiscal and allocative effects of market-based petrol prices lead to greater macroeconomic stability, public finance and citizens' welfare? A documentary, longitudinal research design was used. The main sources of evidence included the Petroleum Industry Act 2021, official Nigerian data, Central Bank of Nigeria reports, fiscal data from the federation, International Monetary Fund country reports, the peer-reviewed literature on energy-subsidy reform, and World Bank Nigeria Development Updates. The evidence was grouped under five outcome domains: fiscal space, price stability, economic growth, household welfare and institutional accountability. This involved descriptive trend analysis, qualitative content analysis, and no causal inference is made as subsidy removal coincided with exchange rate reform, monetary tightening, food supply shocks and insecurity. The results show a mixed development record. The fiscal reform reduced an open-ended fiscal liability, and occurred in the same year as a smaller federal fiscal deficit and a more effective distribution of income. Real GDP growth was still positive and grew in 2024. However, the rate of inflation shot up, transport prices went up, and the losses in purchasing power worsened the situation. It also demonstrates that the formal announcement of the reform is not a key determinant of the developmental value of the reform, but rather the transparency of capturing savings, the credibility of budget execution, the targeted nature of social protection, and investment in transport, power, health, and education and productive infrastructure. The article ends with the conclusion that the removal of the subsidy was not enough for nation development. Fiscal adjustment must be turned into inclusive development by implementing a rules-based subsidy-savings approach, through independent public reporting of the results and by coordinating social protection and structural reform at a scale sufficient to deliver the results.

Introduction

For the first time in the history of Nigerian political economy, petroleum pricing has become a prominent issue. The price of Premium Motor Spirit (PMS) was sensitive to international prices, exchange rate changes, logistics prices, and the financial standing of the national oil company although Nigeria was a key producer of crude oil; its domestic refining capacity was limited and it depended on buying refined products from abroad. The pump price has been kept below the market-clearing price by government intervention for decades. This was often referred to as a fuel or petroleum subsidy, and it was justified as a social good in an economy in which petrol is used for private transport, small generators, informal production, and is the basis for a large proportion of urban mobility. The same policy, however, gave rise to a giant unstable fiscal commitment, facilitated arbitrage, facilitated cross-border diversion and reduced the incentive for efficient investments in refining and alternative transport.

The direction of reform in the law was already underway before the announcement was made in 2023. The Petroleum Industry Act 2021 (PIA) in section 205 stipulates that the wholesale and retail

prices of petroleum products should be determined based on an unrestricted free market price regime, subject to reasonable regulation. But the actual implementation continued to be a challenge on the political level. Such price changes sparked earlier protests as households saw cheap gas as one of the few tangible benefits of the oil wealth. The social dimension of the subsidy, however, was not limited to a price control mechanism, but also part of an implicit social contract that was defined by low trust levels, poor service delivery and unequal sharing of petroleum rents (McCulloch, Moerenhout and Yang, 2021).

The new federal government announced the end of the subsidy regime on 29 May 2023. There was an immediate shift in expectations regarding the price of domestic petrol and government financing. Prior to the reform, the World Bank estimated the petrol subsidy was using up resources at an unsustainable rate, and the government claimed the savings would be put towards infrastructure, education, health and social protection (World Bank, 2023a). Efficiency was also a major concern of reformers – universal price subsidy tends to provide greater absolute benefits to higher income groups, given that they use more fuel, and targeted subsidies can provide benefits for the poor at lower fiscal costs (Coady et al., 2017).

But the reform did happen in an unusually challenging macroeconomic environment. The naira depreciation, exchange-rate unification, insecurity, food supply limitations and monetary changes played out in tandem with the petrol price hike. Cost of fuel was included in transport charges and distribution cost of food and consumer goods. Petrol generators were also relied upon by a good number of the micro and small enterprises due to the unreliable electricity supply. Thus, the reform was passed on to non-vehicle owners, such as workers, traders, farmers, students and households. This simultaneity is of methodological relevance: Post-May 2023 changes are not necessarily just a consequence of subsidy removal.

The extent of the adjustment is reflected in official inflation statistics. Headline inflation climbed to 21.82 per cent year-on-year in January 2023, and peaked at 28.92 per cent in December 2023. It rose further to 34.19 per cent in June 2024 before easing to 32.15 per cent in August 2024 (National Bureau of Statistics, 2023a, 2024a, 2024b). The IMF blamed the explosion of inflation on fuel subsidy reform and currency devaluation, as well as on the sluggish performance of the agriculture sector (IMF, 2024). This mix depressed real income and made the political argument for a reform even more difficult to make because of the fiscal gains were not as quick as the inflationary impact on living costs.

The macro-fiscal evidence was not all bad, however. The federal fiscal deficit declined from 6.2 per cent of gross domestic product (GDP) in the first half of 2023 to 4.4 per cent of GDP in the first half of 2024, according to the World Bank. Real output continued to grow, and annual real GDP growth increased from 2.74 per cent in 2023 to about 3.4 per cent in 2024 (National Bureau of Statistics, 2024c; World Bank, 2025). These movements are consistent with an improvement in fiscal conditions, but do not imply that the removal of a subsidy was the sole reason for the overall improvement. Other reforms were also important such as oil production, non-oil revenue measures, services activity, exchange-rate valuation effects.

In this article, the concept of national development is not equated with gross domestic product, but rather with a multi-dimensional process. It contains the ability of the state to provide public goods, to maintain macroeconomic stability, to promote development of productive activity, to guarantee the basic living standard, to provide access to health and education, to provide infrastructure and to create employment opportunities and trust in public institutions. A policy may have a positive impact on one aspect and a negative impact on another. The removal of petroleum subsidies can help improve fiscal accounts but at the expense of short-run household welfare; it can help to improve investment incentives

at the same time that it harms political legitimacy if savings are not measurable. There is a need to differentiate between fiscal need and developmental adequacy, therefore, in the evaluation process.

The current manuscript tried to merge the results of the household surveys with interviews and official data. The tables, however, explicitly stated key correlations and regression results as hypothetical. A research article cannot be based on hypothetical estimates. The current revision thus deletes those unverified coefficients and makes a clear documentary design using only traceable sources. This modification maintains the integrity of the analysis, but does not affect the original research problem and title.

The study has three questions.There are three questions asked in the study. What fiscal and macroeconomic adjustments were made when the subsidies were phased out in 2023–2025? Second, how about indicators of household welfare: inflation and purchasing power? Third, what governance structures need to be put in place for gains to materialize as outcomes of national development? Likewise, the aim is to evaluate the reform in the fiscal space, price stability, growth, welfare and accountability; acknowledging the limitations of observational evidence.

The article can help in three ways. It incorporates official evidence over the first three years of the reform, not just one month's price change. It distinguishes between co-movement and causal inference, an important adjustment as multiple reforms took place at the same time. Last but not least, it focuses on budget transparency and quality of spending as the key to the development question. The question that matters is not just how much Government stops paying for price support, but whether the resources go into public budgets, whether they are reported in a consistent way, and whether there are services that households can observe for which the resources are needed.

Materials and methods

The study adopted a documentary longitudinal design from January 2023 to December 2025; however, when there were essential requirements, pre-reform observations were conducted to establish a baseline. A documentary design was the appropriate design due to the nature of research questions related to the national fiscal and macroeconomic and welfare outcomes of which administrative and official statistical sources are more appropriate than an unverified convenience survey. The unit of analysis was the Nigerian national economy and federal fiscal system, and the study did not make any causal identification nor state by state representativeness claims at the household level.

Four criteria were used in the selection of sources. A source was required to be from a legally mandated Nigerian institution, a multilateral institution with a country-analysis disclosure procedure and/or a peer-reviewed journal or academic press. Second, the publication needed to include information directly pertinent to petrol pricing, public finance, inflation, growth, poverty, or social protection or subsidy-governance design. Third, it required numerical claims to be linked to a report or statistical publication that was dated. Fourth, the sources published between 2023 and 2025 were given priority, and those published in the previous five years were kept for the theories and comparative principles of reform.

The major sources of data in Nigeria were, the Petroleum Industry Act 2021, Consumer Price Index and Gross Domestic Product releases of the National Bureau of Statistics, economic reports of the Central Bank of Nigeria and federal fiscal and budget documents. Evidence gathered from across the international community primarily included World Bank Nigeria Development Updates of June 2023, December 2023, October 2024 and May 2025, as well as the Article IV consultation reports by the IMF of 2024 and 2025. The following reports have been included because they bring together fiscal, growth, inflation and reform-implementation evidence and provide insight into the institutional foundation of their estimates. Distributional incidence and political economy and good-practice principles were developed using peer-reviewed sources.

A structured extraction matrix was developed, including the following fields: Publication date, reference period, indicator, value, unit, institutional source, interpretation, and limitation. The indicators were clustered into the five analytical domains. Fiscal space comprised subsidy related fiscal exposure, federal deficit indicators and federation revenue. Macroeconomic stability consisted of inflation, exchange-rate environment and reserves. Growth of real GDP was included under economic activity. The pressures on food and transport prices and the risk of poverty and access to mitigation were among the components of household welfare. Governance included statutory pricing rules, transparency of oil-sector flows, budget traceability, auditability and social-protection delivery.

The quantitative part of the study was descriptive. Values were compared across time and interpreted in light of the May 2023 policy break. Changes in percentages were differentiated from changes in percentage points. In 2025, the National Bureau of Statistics has re-based the CPI, the article did not splice the data of the old and new CPI as if they were methodologically identical. Likewise, no predictions were made in terms of actual results. Fiscal values of information from multiple sources were not added together if their definitions or fiscal periods were not compatible.

Qualitative part was done through directed content analysis. Four pre-determined mechanisms—derived from the public-finance and political-economy literature—were used for coding text passages: resource release, price transmission, compensation, and accountability. The changes in the amount of subsidy obligations that could be identified and the changes in the amount of distributable revenue were captured in the resource release. The impact of the change in the value of petrol and exchange-rate adjustment on transport, food and enterprise costs was captured by price transmission. Compensation included cash transfers, wage or transport responses and other relief measures. The rest of the elements of disclosure, monitoring, audit, and public trust were rounded up in the process of accountability.

The analytical framework is a synthesis of allocative theory of public finance and political institutionalism. The public-finance theory suggests that the elimination of a poorly designed universal benefit can free up resources and decrease distortions, especially when the benefit goes largely to higher-consumers. The institutional point of view extends this to the fact that the resources released do not necessarily become development spending. Public value is realised or not depending on the rules, credible reporting, procurement quality, administrative capacity and political incentives (Musgrave 1959; North 1990).

Source disagreement was handled using triangulation. A numerical claim was considered to be strong if it was presented in an official statistical series or if there were several credible institutional reports that presented the claim in the same way. When there were conflicting views on whether the subsidy was completely removed or had simply been re-introduced “under the radar”, this debate was preserved as a governance issue but not assumed without evidence. This is particularly important since a formal announcement to remove the subsidy may not be enough to eliminate the subsidy, as a change in the exchange rate and the difference between import-parity cost and the pump price can create an implicit subsidy.

The study has several limitations. It is an observation based and does not separate the impact of subsidy removal from the impact of exchange-rate reform, food-supply shocks, insecurity or changes in the global price of oil. National aggregates mask differences by income, gender, occupation and location. There is likely to be a degree of revision of official reports and fiscal savings are hard to estimate where the counterfactual subsidy bill is not certain. The time frame is also not long enough to assess all the infrastructure and human capital impacts. The limitations call for careful wording; the findings suggest patterns and plausible mechanisms, not a randomized policy effect.

Ethical risk was low as the study was based on publicly available documents and no personal data were collected. No human subjects were involved, no interview quotes were fabricated and no simulated

statistical results was studied as fact. The revision also used a rule of "reference verification" – items that lacked full bibliographic information, placeholders for discoverable institutional dates of access, internal search tokens or no institutional discoverable record were excluded.

Results

Overall, there is a fairly mixed but coherent pattern in the documentary evidence. While the 2023 reform brought some clarity to the fiscal policy direction, it failed to transmit properly in the short term as it was inflationary and regressive without prompt and full compensation. Macroeconomic stabilization indicators improved slowly, and the households struggled under severe pressure of living standards. The outcomes are presented over the 5 pre-defined domains.

The benefit in the fiscal sphere is the most pronounced as the reform lowered the expected cost of keeping petrol prices fixed in the face of increasing import prices and exchange rates. In June 2023, the World Bank estimated the heavy fiscal burden and lack of priority spending would happen if the subsidy was continued. The previous system has been estimated to cost approximately ₦300 – ₦400 billion per month, but savings achieved would depend on oil prices, exchange rate, and the degree of market pricing actually achieved (World Bank, 2023a, 2023b). The reform did, however, provide fiscal opportunity rather than a cash fund that is automatically identifiable.

Fiscial indicators improve later and take careful attribution. In the first half of 2024, the federal government's fiscal deficit decreased to 4.4 per cent of GDP from 6.2 per cent in the first half of 2023 (World Bank, 2024). According to the Central Bank of Nigeria, the federally collected revenue in the fourth quarter of 2024 stood at ₦7.23 trillion, after statutory deductions and additions (CBN, 2025). Based on these data, it is concluded that the government revenue situation improved. They do not prove that each increment was a subsidy saving as all of these are valued at the exchange rate and other policy factors change taxes as well.

The second fiscal finding is that there is a lack of transparency between the gross reform gains and the development expenditure. The distinction between a counterfactual subsidy bill and actual spending was often referred to as “savings.” From an accounting perspective, though, an avoided expense doesn't always constitute an asset. It is developmentally meaningful only if it is presented as an increase in net federation revenue, a reduction in the deficit, a decrease in borrowing or an increase in spending in certain areas that has been executed. The reviewed official reports did not include a single, continuously reconciling ledger showing the full value of the import parity price through federation receipts to project level outcomes for the three years.

The negative effect was very clearly inflation. In December 2023, the headline inflation rate rose from 21.82 per cent to 28.92 per cent higher by 7.10 percentage points. It reached 34.19 per cent in June 2024, 12.37 percentage points above January 2023, before moderating to 32.15 per cent in August 2024 (NBS, 2023a, 2024a, 2024b). Increases in petrol prices had a direct impact on transport costs and an indirect impact on food distribution, services and small-scale production. The IMF also stressed that exchange-rate depreciation, food-supply limitations and agricultural issues compounded the fuel-price shock (IMF, 2024).

Table 1. Selected macroeconomic indicators before and after the May 2023 reform

Indicator	Observation	Reference point	Interpretive caution
Headline inflation	21.82%	January 2023 (year-on-year)	Pre-reform baseline; inflation was already elevated
Headline inflation	28.92%	December 2023 (year-on-year)	Reflects fuel, exchange-rate and food-supply pressures
Headline inflation	34.19%	June 2024 (year-on-year)	Peak-period pressure in the unrevised series
Headline inflation	32.15%	August 2024 (year-on-year)	Moderation, but still substantially above early 2023
Real GDP growth	2.74%	Full year 2023	Annual national aggregate; not a welfare measure
Federal fiscal deficit	6.2% to 4.4% of GDP	H1 2023 to H1 2024	Coincided with the wider macro-fiscal reform package
Real GDP growth	about 3.4%	Full year 2024	World Bank estimate/reporting based on official data
Foreign-exchange reserves	US$32.9bn to >US$38.8bn	End-2023 to mid-Oct. 2024	Affected by several external and policy factors

Sources: NBS (2023a, 2024a–d); World Bank (2024, 2025).

After rebase the 2025 CPI series exhibited moderate changes, with a headline rate of 23.18 per cent in February 2025. This figure should not be viewed as a mechanically similar decline against the unrevised 2024 series, since the frame of reference, weights and compilation procedures changed. The defensible conclusion is more limited: inflation has been high during the period of the study and the statistical series and monthly momentum changed, albeit the cost-of-living shock did not end (NBS, 2025a).

Economic growth was not falling but positive. In 2023, annual real GDP growth was reported as 2.74 per cent by NBS and approximately 3.4 per cent by the World Bank, due to services activity and a better performance of the oil sector (NBS, 2024c; World Bank, 2025). The World Bank also reported 4.6 per cent growth in the fourth quarter of 2024 compared to the same period in 2023. The results are consistent with a gradual adjustment of the economy but with moderate growth compared to the growth in the population and the labour force. In short, aggregate growth was not necessarily accompanied by aggregate increase in real GDP per capita or aggregate increase in overall welfare of the households.

There were some positive developments in external and monetary indicators too. Foreign-exchange reserves increased from US$32.9 billion at the end of 2023 to over US$38.8 billion by mid-October 2024 (World Bank, 2024). This improvement was a result of the broader policy package (exchange-rate and monetary reforms) and cannot be attributed solely to petrol prices. It still implies, however, that the removal of subsidies was part of a stabilization plan intended to lower some macroeconomic imbalances, with immediate negative social effects.

The most deprived area of welfare was the household. Petrol subsidies cannot be an effective anti-poverty measure as they are not universally targeted at the poor.The withdrawal of petrol subsidies does not have an immediate direct effect on poor people, but rather has an indirect effect on poor households. The cost of public transport, food distribution and services using generators increased. Those households that did not have their nominal earnings adjusted saw a reduction in their real purchasing power. World Bank and IMF evaluations repeatedly found that cash transfers and social protection measures should be greater and more precisely designed to address the size of the shock, suggesting that mitigation

coverage and speed of implementation have been insufficient to the size of the shock (World Bank, 2024; IMF, 2025).

The distribution method was not even. There was an exaggerated effect on urban commuters, informal workers, farm input costs, and market-access costs for rural households, and on real-wage losses for public workers, as well as a heightened impact on generator and logistics costs for microenterprises. Households, however, with diversified income or formal wage adjustment or less transport dependence were more able to cope with the shock. National averages, therefore, underestimated the proportion of households living near the poverty line.

During the period, social-protection measures were announced, such as expansion of cash transfer and other relief measures. The evidence examined did not, however, prove that there was full coverage, a reliable timeliness and that there is a clear equivalence between household losses and compensation. The quality of the social registry, identification and payment mechanisms, intergovernmental coordination and confidence in the public institutional systems were associated with delivery issues. The reform thus revealed a sequencing issue: price liberalisation was implemented before a comprehensive shock-responsive safety net was put in place.

The governance outcomes were also significant. The Petroleum Industry Act provided for the legal framework for market-oriented pricing, but there had to be credible implementation, including disclosure of the pricing framework, NNPC Limited's fiscal relationship with the federation, import or supply costs, and any implicit support that remained. World Bank and IMF emphasized transparency in the oil sector and the importance of reform benefits reaching the government's budget for the priority areas. This is a reiteration of the previous recommendation and shows that formal policy change did not render an ongoing verification process unnecessary.

In the entire documentary corpus development was contingent on quality of spending. A smaller deficit will make debt sustainable, but citizens get development from a reliable transport system, electricity, schools, health facilities, water, security and jobs. A low debt service burden coupled with low procurement or administration re-investment efficiency reduces the social return when additional fiscal space is used for debt service. On the other hand, good fiscal policy spending and targeted transfers can turn the same fiscal adjustment into real welfare gains.

Table 2. Evidence synthesis by development mechanism

Mechanism	Observed evidence	Development implication
Fiscal release	Lower prospective subsidy liability; narrower H1 federal deficit; stronger federation revenue	Creates fiscal opportunity but does not establish a separately accumulated savings fund
Price transmission	Higher petrol, transport and food costs; headline inflation accelerated in 2023–2024	Reduces real income and can offset macro-fiscal gains for vulnerable households
Growth and stability	Positive GDP growth; improved reserves and fiscal balance by 2024	Suggests gradual stabilization, but attribution must include other reforms
Compensation	Cash-transfer and relief measures announced; institutional sources continued to urge wider coverage	Mitigation was slower and narrower than the price shock
Accountability	Repeated calls for NNPC, oil-revenue and subsidy-gain transparency	Traceability and audit determine whether fiscal space becomes public value

Table 1 summarizes the verified trend indicators. It deliberately excludes unverified claims about a precise cumulative subsidy-savings fund. Table 2 presents the mechanism-based synthesis. Taken

together, the results reject two extreme interpretations: the reform was neither an immediate development success nor an economically meaningless policy. It was a significant fiscal correction whose net national-development effect depended on complementary institutions and the distribution of adjustment costs.

Discussion

The results provide a generalized public-finance argument against a universal petrol subsidy. The specific effects on CPI of a rise in import costs or in the exchange rate are represented as an increase in the value of the CPI; benefit is poorly targeted since fuel consumption rises with income. International studies have found that, when energy subsidies are opaque, they tend to displace more efficient spending, and that when the costs of energy subsidies are received transparently, they can be used to create more efficient outcomes (Coady et al., 2017; Rentschler and Bazilian, 2017). These weaknesses were exposed in Nigeria's pre-2023 structure, and were therefore economically sustainable.

But fiscal defensibility doesn't necessarily equal developmental success. The Nigerian example demonstrates the avoided subsidy expenditure to public value conversion problem. The gain could be in the form of a reduction in the size of an unrecorded liability, and not as a new expenditure item. Without common reporting standards, citizens may not be able to know what services are funded by the reform if any additional federation revenue comes to the federal, state, and local governments. A credible evaluation therefore needs to be done with a consolidated fiscal bridge where the cost of the subsidy in the absence of the subsidy (counterfactual) is indicated, along with the realized petroleum revenue, the deductions in the statute, transfers, the impact of borrowing, and the priority expenditure that have been done.

The inflation findings are also in line with economic theory. Petrol is an end product and a product used as an intermediate. The price increase has direct and indirect (transport and logistics/expectations) effects round one. However, the evidence warns of monocausal explanations. The devaluation of the naira increased the cost of imported fuel and other items and insecurity and flood hindered food supply. Monetary accommodation and inflation expectations were also factors. A subsidy effect should therefore be a combined effect and not the entire inflation increase.

Fuel and foreign-exchange reform were simultaneous, causing an especially large shock. A stable currency and steady domestic supply may have been easier to bear on the market. Rather, naira depreciation bounced back on the import-parity threshold time and time again, leaving the end consumer price index uncertain and doubts about a return of implicit support. This experience confirms a design principle that came from comparative reform: automatic pricing rules, stabilization mechanisms in case of exceptional volatility and communication with the public beforehand before the implementation (Vagliasindi, 2013).

The growth results illustrate why GDP is a partial indicator of national development. Nigeria did not experience a recession in 2024 and economic growth increased, but inflation grew faster than many nominal incomes, and population growth reduced the per capita growth. Economic growth can make a family poorer. Assessment of development should therefore involve real household consumption along with GDP, poverty, the quality of employment, school attendance, access to health services, and the reliability of public services.

The political-economy framework is a setting that highlights the importance of trust. The Nigerians had already had previous pledges of reforms, but with no lasting link that could be made between the increase in the price of fuel and the quality of service provided. The costs were immediately transferred in 2023, while the costs of infrastructure and institutional benefits were only transferred in the long term. This misjudgment in timing destroyed the social contract. The higher public perceptions of government competence, lower perceptions of government corruption and compensation, the greater the support for

subsidy reform, McCulloch, Moerenhout and Yang (2021) demonstrate. This is the same scenario in Nigeria.

Sequencing, then, is a substantive issue, rather than a communicative one. If there is a price adjustment, a strong social registry and payment system and transport-support plan should be in place before or at the time of the price adjustment. Postponing compensation for months will not eliminate the negative effects of distress sales, debt building, or loss of nutrition or school attendance. Government should establish eligibility criteria, announce payment schedules ahead of time, try grievance procedures and make coverage known in future adjustments.

Care needs to be taken in targeting as well. While the shift from a universal fuel subsidy to a more targeted cash transfer is progressive in theory, some who are excluded may be near-poor informal workers. A layered package is desirable: targeted cash to the poorest; time-limited mass-transit support to commuters; measures related to school feeding and nutrition in schools for children; and assistance for productive microenterprises that are vulnerable to energy prices. For example, sunset clauses and evaluation criteria should be included to prevent the establishment of an additional ‘opaque subsidy regime'.

An especially high return channel is public transport. Increase in prices of petrol reaches households as the cost of mobility which can be mitigated by investment in buses, urban transport governance, road maintenance and non-petrol alternatives, which can both enhance productivity and lower the indirect cost of petrol increase. The transport support should be paid to verified services/passengers and not be given as a discount (on pump price) on a national basis. This way, the price signal will be preserved and the mechanism that affects low-income families will be covered.

It is also crucial to diversify energy sources. Petrol generators are used by small businesses and houses as an alternative to the unreliable electricity grid. The elimination of a petrol subsidy without any changes in electricity doesn't necessarily lead to a quick adoption of cleaner electricity. Fiscal space should, therefore, be used to facilitate improvements to transmission and distribution, decentralized renewable energy and energy-efficient equipment and financing for conversion where economically justified. The goal is not to provide funding for all energy sources indefinitely, but to reduce the structural reliance that makes petrol-price reform socially explosive.

Transparency needs to be taken from an announcement to an audit. Government should release a quarterly statement on subsidy reform, which balances the estimated counterfactual subsidy costs, actual subsidy remittances by NNPC, deflationary effects of the subsidy, and subsidy spending at the project level. Definitions must be consistent over time and the Auditor-General, the National Assembly and civil society should be able to check the numbers. Open contracting data should be connected to allocation and procurement, disbursement and physical completion.

A dedicated fund may also help to raise visibility but can involve risks. The use of earmarked funds can lead to the dispersion of the budget, diminish legislative oversight and foster parallel bureaucracies. If a subsidy-savings account is created, it should be in the treasury single-account and appropriation framework, have clear additionality rules, should be in audited statements and should not have off-budget spending. An alternative is a clear budget tag on programmes funded for reform in ministries. The principle of the design is to build traceability and not the proliferation of institutions.

Intergovernmental accountability is important because there is proliferation of federal, state and local governments with receipts from federation. This would miss the full extent of the fiscal space that could be used through the federal budget for reform. Standard reporting templates should report the impacts of each tier on health, education, transport, water and social protection. The criteria for performance should be more about what is produced and the quality of the service delivered, rather than the quantity of funds provided.

The findings also lend credibility to claims that investment will only come in if subsidies are eliminated. Investors need foreign exchange, security, contract enforcing, infrastructure and regulatory credibility, as well as predictable pricing of markets for refining, storage and distribution. Frequent price freezes or ambiguous payments to suppliers can again cause uncertainty. Therefore, the law has to be accompanied by a stable implementation and competition policy.

The counterfactual from a national development point of view is not subsidy versus no support. It is an un-targeted price subsidy instead of a portfolio of targeted protection and productive public spending. The latter is better if government can be able to identify beneficiaries, be able to carry out projects and prevent leakage of benefits. Administrative capacity is therefore included in the economic calculation. When capacity is lacking, design for reform needs to build or strengthen that capacity, not presume it exists.

There is agreement of evidence in the study for a conditional conclusion. The reforms made it more likely for fiscal sustainability, and by 2024 were linked to improved deficit and growth indicators. But the short run welfare loss was substantial and the connection between fiscal space and services that could be observed was not well understood. Thus, the national-development balance of the policy hinges on the price change's aftermath: market discipline; support for vulnerable households; expenditure quality, trustworthy institutions.

This conclusion also helps demonstrate the reason why the original hypothetical regression shouldn't be kept. A positive coefficient for perceived subsidy removal would not be a solution to the endogeneity, common-method bias or concurrent reforms problem. The official longitudinal data is more accurate for the present article, but does not prove causality. Further research is needed to assess the distributional impacts more precisely using a household panel data set, price microdata and subnational variation.

Conclusion and policy implications

The impact of the phase-out of petroleum subsidies was far-reaching, with the effects on national development not being automatic or necessarily positive, in the medium term (2023-2025). The policy decreased the potential cost of subsidizing low prices for petrol and coincided with the federal fiscal deficit being smaller, distributable revenue being larger, and stronger real GDP growth in 2024. These enhancements allowed for a space for stabilization, and perhaps investment spending, to be added to the budget.

During the same time there was a great deal of pressure on welfare. Inflation picked up, transportation prices rose and the real value of purchasing power fell. The full deterioration of the situation cannot be blamed on the removal of subsidies alone because it was accompanied by other constraints and shocks on the agricultural sector, such as exchange-rate liberalization and insecurity. However, the transmission of petrol prices constituted a significant component of the cost-of-living crisis and mitigation was not as rapid and extensive as the shock itself.

The main policy takeaway is that the removal of subsidies must be managed as a fiscal and social transition, rather than a one day price announcement. Government must report the fiscal impact of the reform on a quarterly basis in an independent audit and be publicly available; government must tag and track the spending of the reform, as part of the regular budget; and government should report results at all levels of government. The savings should be clearly separated from the expenditure avoided, from additional revenues generated, from the reduction of the budget deficit, and from the budget expenditure for the project itself.

Secondly, social protection needs to be scaled up and pre-positioned. The social registry is required to be verified, the payment system is to be interoperable, there is to be a grievance procedure and a public coverage dashboard. To accompany cash transfer, temporary mass-transit measures, child nutrition

support and targeted assistance for vulnerable productive enterprises should be used. Programmes should be time-limited and monitored and revised in response to changes in inflation and household needs.

Third, spending should focus on the mechanisms which lead to the high cost of petrol to households and firms. Priorities are the provision of reliable electricity, public transport, competition in domestic refining and distribution, road and logistics infrastructure, health and education. These investments transform the fiscal space of the moment into reduced production costs and better human capital, which makes the reform more sustainable.

Lastly, the uncertainty of policymakers should be conveyed in an honest manner. There is no single number that reflects subsidy savings given that prices, exchange rates and supply arrangements in the markets are dynamic. It's more trustworthy to have transparent assumptions, reconcile accounts and independent audit than big unverifiable claims. Based on the available evidence, removing petroleum subsidies was the only way to address a major distortion, but it was not a contribution to national development until institutions used the released fiscal space to create public value, which was made inclusive, visible, and measurable.

Table 3. Recommended implementation and accountability framework

Policy area	Immediate action	Measurable indicator	Accountability safeguard
Fiscal reporting	Publish quarterly reform reconciliation	Avoided cost, net revenue, deficit effect and executed spending	Independent audit and legislative review
Social protection	Maintain shock-responsive registry and payments	Coverage, payment timeliness, exclusion and grievance rates	Public dashboard and beneficiary verification
Public transport	Fund verified mass-transit services	Passenger volume, fare burden and service reliability	Competitive procurement and route-level reporting
Energy transition	Improve grid and decentralized supply	Outage hours, connection rates and enterprise energy cost	Project milestones and value-for-money audit
Intergovernmental use	Apply common reporting template	State/local spending and service outputs	Open data and civil-society monitoring

Declarations

Ethical approval: Not applicable. The study used publicly available documentary sources and collected no personal data.

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Conflict of interest: The author declares no conflict of interest.

Data availability: All data used in the study are contained in the cited public reports and official statistical releases.

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