

Economic Sensitivity

of **Petrol Subsidy** Removal in 2023

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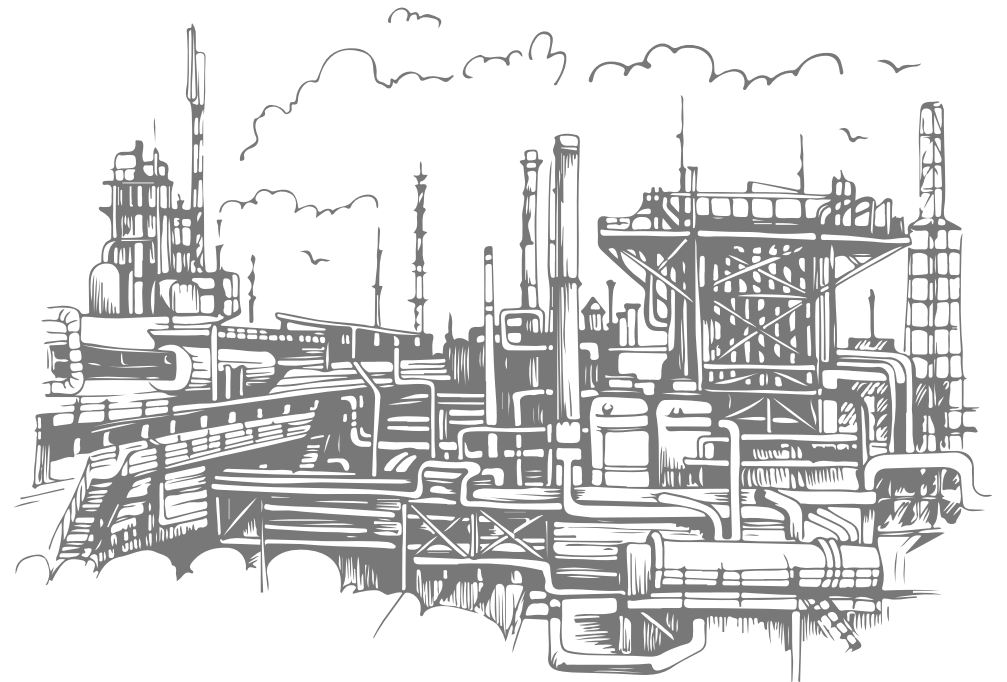
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A photograph of an offshore oil rig at sunset. The sun is low on the horizon, creating a bright orange and yellow glow that reflects on the water. The rig is silhouetted against the bright sky. A boat is visible in the distance on the left side of the frame. The sky is filled with scattered clouds, some catching the light of the setting sun.

2012

The last major attempt to end petrol subsidies occurred about 11 years ago...

Introduction





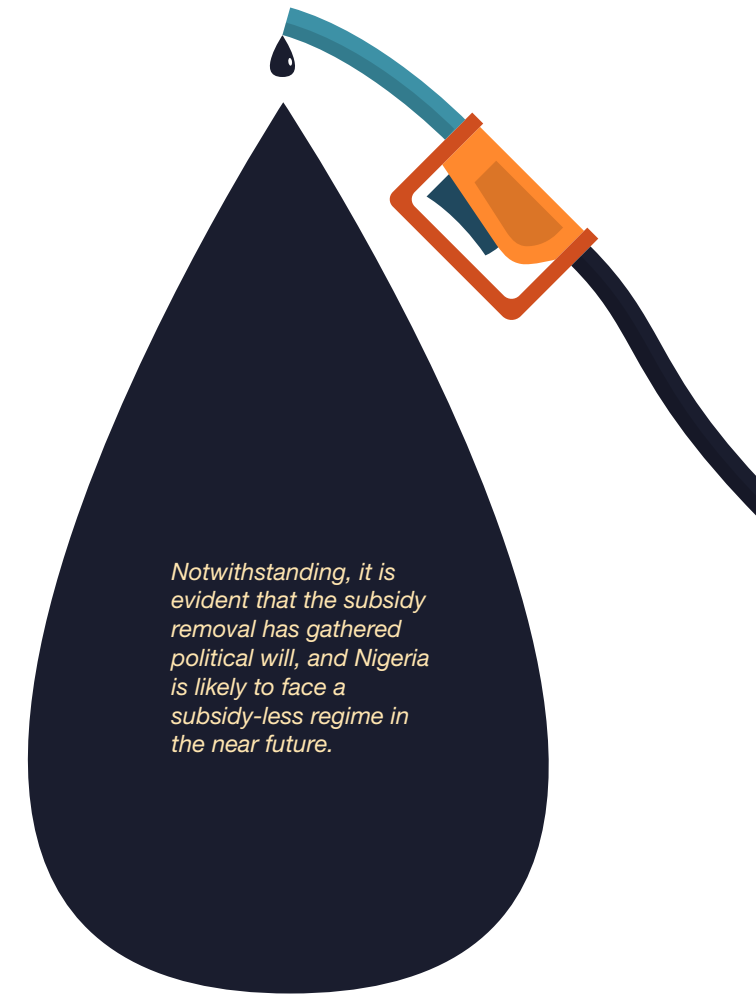
Nigeria has been locked into a petrol subsidy regime for decades as the economy is heavily dependent on imported petroleum products. As a result, domestic prices of refined petroleum and, invariably, the subsidy regime are susceptible to volatility in the exchange rate. When the Nigerian currency loses value, the landing cost of petrol in local currency soars, and hence, the level of subsidy widens unless there is an increase in pump price. While the history of the country's subsidy regime is riddled with inefficiency, leakages, waste, and corruption, subsidy payments have been extremely high in recent years, altogether providing enough reasons for the termination of the scheme.

The Nigerian government is expected to discontinue petrol subsidies from the middle of 2023. This comes after several years of running a petrol subsidy scheme that has increasingly become a burden on government revenues. The last major attempt to end petrol subsidies occurred about 11 years ago, in 2012. One of the major reasons for past fuel subsidy removal failure was the poor approach by the government, mixed with inadequate sensitization of the public. The dearth of policy information also allowed opposing politicians to hijack the intended removal for political gain. Months later, an investigative inquiry by the Federal House of Assembly on the Nigerian petrol subsidy program revealed a cesspool of corruption going on in the sector.¹ A scheme that involved only five companies, including the Nigeria National Petroleum Corporation (NNPC) in 2006, has increased to 140 companies in 2011, many of whom had fictitious or questionable subsidy claims. Public sentiment towards petrol subsidies subsequently began to swing gradually.

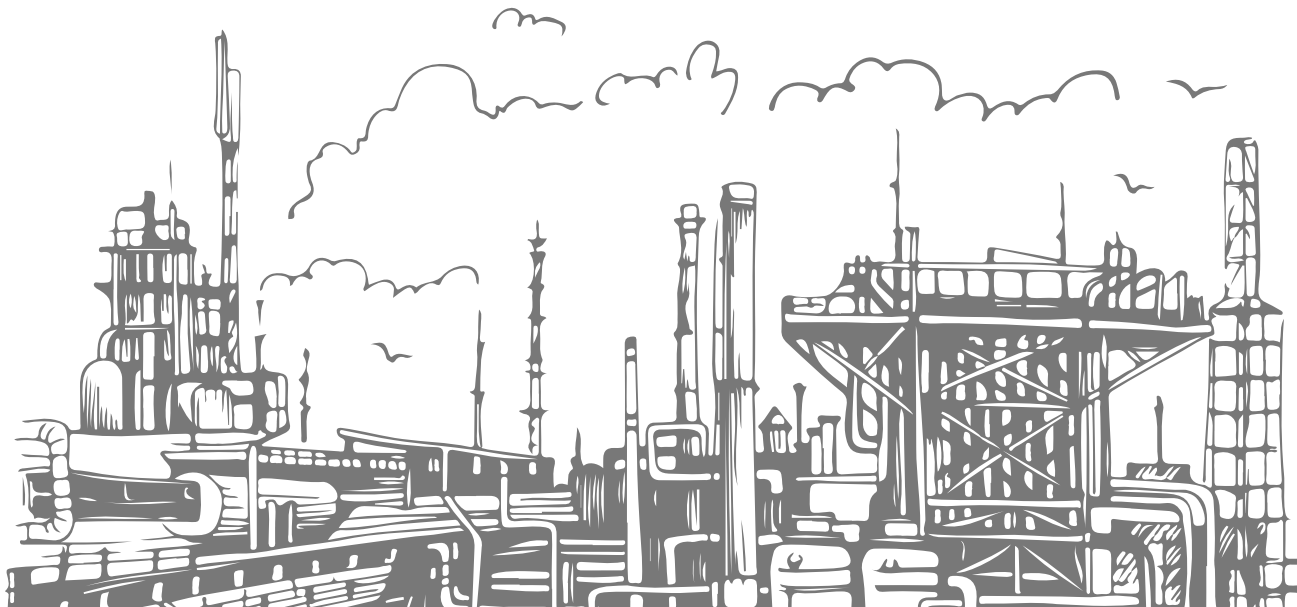
1. See Resolution No. HR. 1/2012 "Report of the ad-hoc committee to verify and determine the actual subsidy requirements and monitor the implementation of the subsidy regime in Nigeria". House of Representatives

While the scheme has become less popular, skepticism about the subsidy removal still persists, partly due to the public's lack of trust in the government. Why should the average Nigerian pay more for a liter of petrol if the resultant extra revenue that accrues to the government will not be used for causes that improve their life? How accountable will the incoming government be with the huge amount of money that will be saved from the subsidy removal?

Notwithstanding, it is evident that the subsidy removal has gathered political will, and Nigeria is likely to face a subsidy-less regime in the near future. The gnawing questions now are what will be the consequences of terminating the petrol subsidy scheme? How will that affect socio-economic life in the country? And what should be the best approach to discontinuing petrol subsidies? It is nonetheless important that a successful exit strategy for petrol subsidy encompasses the deployment of well-targeted interventions and the evolution of sustainable adjustment mechanisms.



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Cost of Petrol Subsidy Over the Years

It is no news that the petroleum subsidy has taken an enormous toll on the nation's revenue. Nigeria's petroleum subsidy cost has risen by 1,452% from N257.36 billion in 2006 to N4 trillion in 2022. According to the Petroleum Products Pricing Regulatory Agency (PPPRA), it costs Nigeria a cumulative sum of N8.94 trillion to subsidize petrol between 2006 and 2015. Nigeria's 2022 petroleum subsidy budget is more than half what it costs the country to subsidize the product for ten years. These funds have either come from a deficit budget or been debited to the government's revenue purse. In all, the funds come with great opportunity costs to the infrastructural development that Nigerians deserve.

More recently, disclosed information regarding the burden of subsidies on government revenues show that subsidies consume an alarming proportion of revenues. In 2011, the country's expenditure on petrol subsidy was estimated at over N730 billion.² In the same year, the landing price for petrol was N141.55 while the product sold at a pump price of N65 per liter (CPPA, 2011).³ In 2022, the government's subsidy bill rose to N4.39 trillion, according to the Nigeria National Petroleum Company Limited (NNPCL) (Reuters, 2023).⁴ In comparison, the federal government was able to retain only N586.7 billion in oil revenue between January to November (HMFBNP, 2023⁵). Petrol subsidy is estimated to cost N6.72 trillion for the entire 2023 fiscal year. Meanwhile, as of February 2022, while the official pump price had risen to N185 per liter⁶, the landing price for petrol was N315 per liter, although the NNPCL sold to distributors at N113 per liter.⁷ This translates into N202 per liter, amounting to over N400

2. Corruption in the subsidy scheme multiplied this figure to as high as three times as reported by the House or Reps investigative inquiry.

3. CPPA, 2011. Nigeria: Fuel Subsidy. Available at http://cpparesearch.org/wp-content/uploads/2015/01/Fuel-Subsidy_Study-Report_2011.pdf

4. Reuter, 2023. Nigeria's NNPC spent \$10billion on fuel subsidy in 2022. Camillus Eboh. Available at

[https://www.reuters.com/business/energy/nigerias-nnpc-spent-10-billion-fuel-subsidy-2022-2023-01-20/#:~:text=ABUJA%2C%20Jan%2020%20\(Reuters\),blamed%20for%20dwindling%20public%20finances](https://www.reuters.com/business/energy/nigerias-nnpc-spent-10-billion-fuel-subsidy-2022-2023-01-20/#:~:text=ABUJA%2C%20Jan%2020%20(Reuters),blamed%20for%20dwindling%20public%20finances).

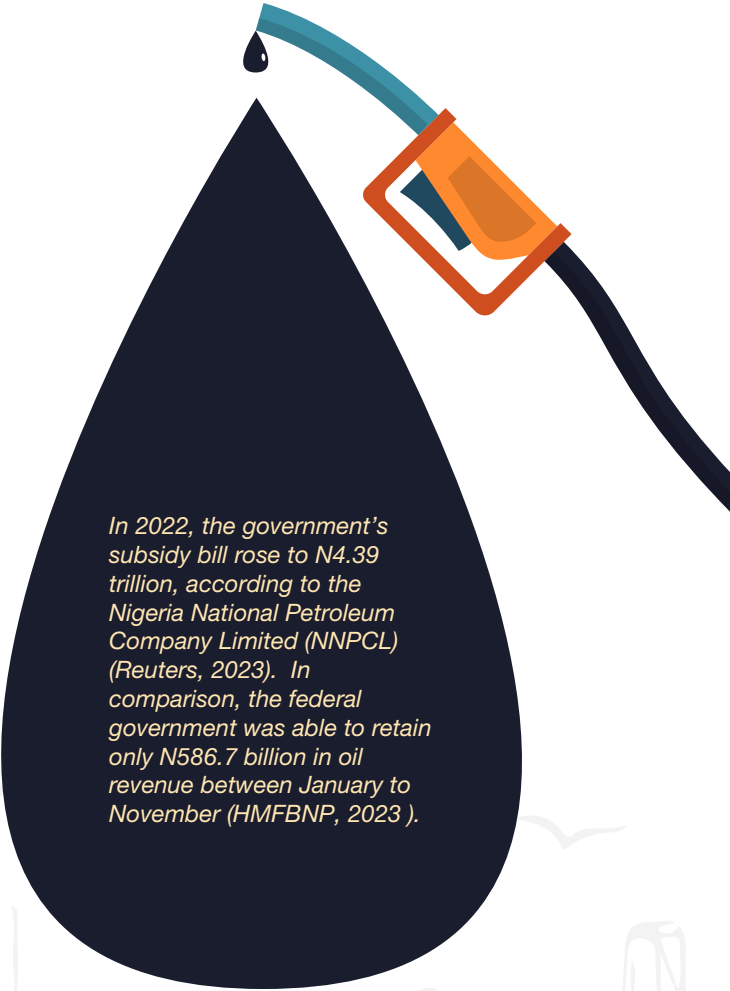
5. Office of the honourable minister of finance. Public presentation of approved 2023 FGN budget- breakdown and analysis. 4th January, 2023.

6. <https://guardian.ng/news/fg-quietly-approves-%E2%82%A6%E2%80%8E185-per-litre-as-petrol-pump-price/>

7. <https://www.premiumtimesng.com/news/top-news/582724-fuel-subsidy-now-above-n400bn-monthly-nnpcl.html>

billion monthly subsidy based on a monthly consumption estimate of 65 million liters. Since the scheme is expected to end by the middle of the year, the outgoing administration committed to payments for half of the year, amounting to N3.36 trillion, implying an end to the scheme by June 2023.

The incoming administration, which would come into office by May 29th this year, would have a very sensitive issue to deal with upon resumption. The outgoing government could not leave behind a more discomfoting parting gift for its successor. Considering the economic circumstances the country finds itself, removing subsidies in 2023 may attract more gravitas for the economy than it did 11 years ago.



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A Decade Apart: A Comparative Analysis of Two Subsidy Removal Periods

Figures 1 to 4 show a graphical representation of Nigeria's economic indicators across the two periods. In 2011 the naira averaged N156 against the dollar while exchanging at N163 per dollar in the parallel market, creating a difference or arbitrage of N7. Oil revenue was approximately N8.88 trillion, contributing 80% of a total federally collected revenue of N11.11 trillion, of which 32% (N3.55 trillion) was retained at the federal level. In the same year, the federal government operated a trade surplus of N239 billion, a trend that was sustained for most of the previous five years, and operated a deficit of 1.2 trillion. Debt servicing amounted to N527.18 billion, equivalent to 15% of federal government retained revenue and 0.83% of nominal Gross Domestic Product (GDP); while total debt stock as of December 31st, 2012, was N7.55 trillion.⁸ At the end of 2011, inflation stood at 10.3%.⁹

Fast forward to eleven years later, the economic conditions are less tolerant. As of April 2021, the latest official data from the Central Bank of Nigeria (CBN)¹⁰ showing parallel market rates indicated that the naira exchanged at the Interbank Foreign Exchange Market (IFEM) at N381 per dollar, while Bureau De Change (BDC) operators traded at N481.6 to a dollar, a staggering N100 difference. At the end of 2022, the naira had depreciated further, exchanging at an official rate of N448 per dollar, almost three times the value in 2011. At the same time, the parallel market rate (BDC) reportedly traded around N740 to a dollar, a N259 difference from

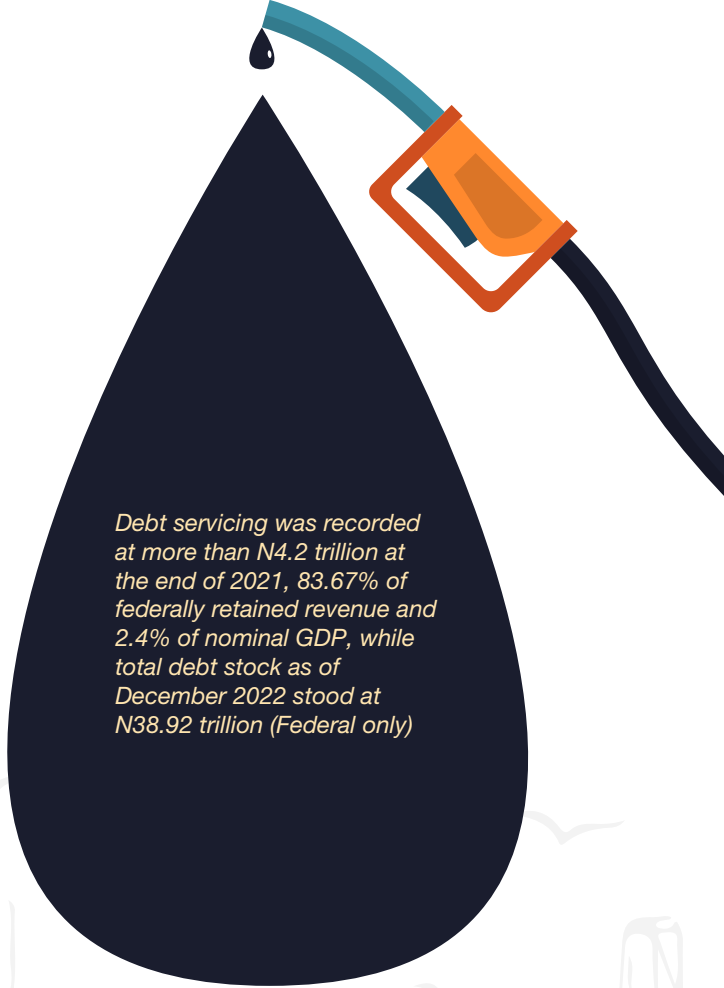
8. Debt Management office. Available at <https://www.dmo.gov.ng/debt-profile/total-public-debts?limit=20&limitstart=40>

9. CBN. <https://www.cbn.gov.ng/rates/infrates.asp>

10. CBN. Monthly average exchange rate of the naira. Available at <https://www.cbn.gov.ng/rates/exrate.asp>

the official rate. Total federally collected revenue in 2021, according to public finance statistics reported by the CBN,¹¹ stood at N10.76 trillion, of which 40.5% was supplied from oil revenue and 47% was retained by the federal government.

The trade surplus that was the trend ten years earlier had turned into a deficit over the preceding six years, amounting to N4.1 trillion in 2021. Similarly, the overall operating deficit had multiplied by six-fold to more than N7.1 trillion. Debt servicing was recorded at more than N4.2 trillion at the end of 2021, 83.67% of federally retained revenue and 2.4% of nominal GDP, while total debt stock as of December 2022 stood at N38.92 trillion (Federal only).¹² The inflation rate, which stood at 15.63% at the end of 2021, had worsened to 21.34% at the end of 2022 and 21.91% as of February 2023.¹³



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11. <https://www.cbn.gov.ng/documents/Statbulletin.asp>

12. Debt Management Office. Available at <https://www.dmo.gov.ng/debt-profile/total-public-debts?limit=20&limitstart=0>

13. <https://www.cbn.gov.ng/rates/inflrates.asp>

Figure 1: Comparing petrol price (N/liter) and exchange rates across eleven years

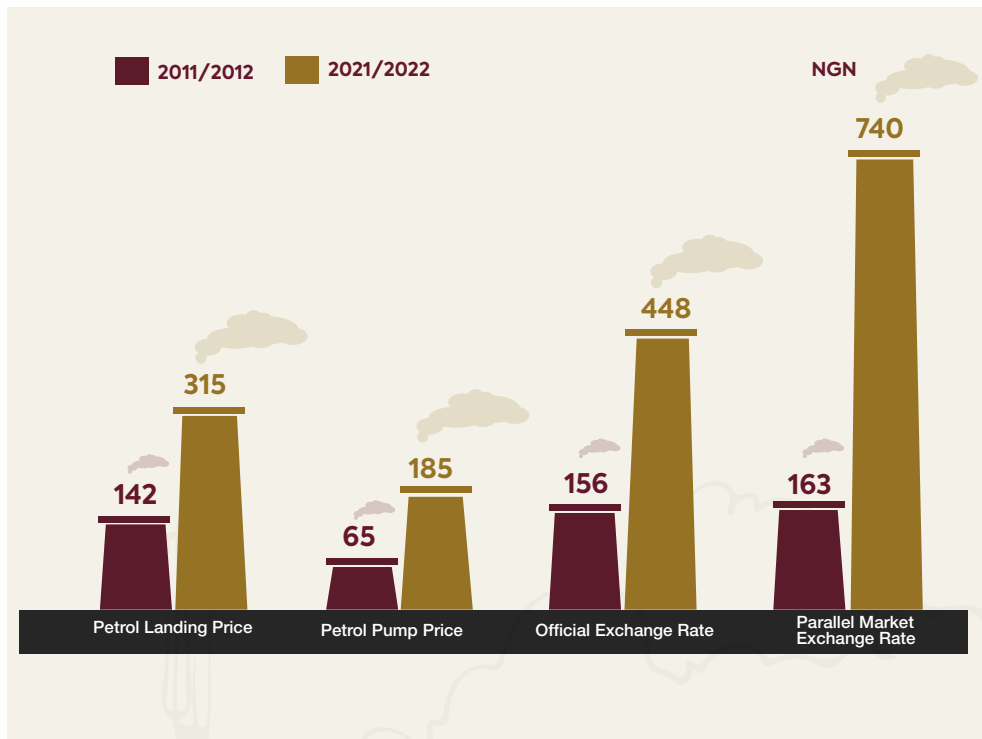


Figure 2: Comparing inflation and debt parameter in the two subsidy removal periods

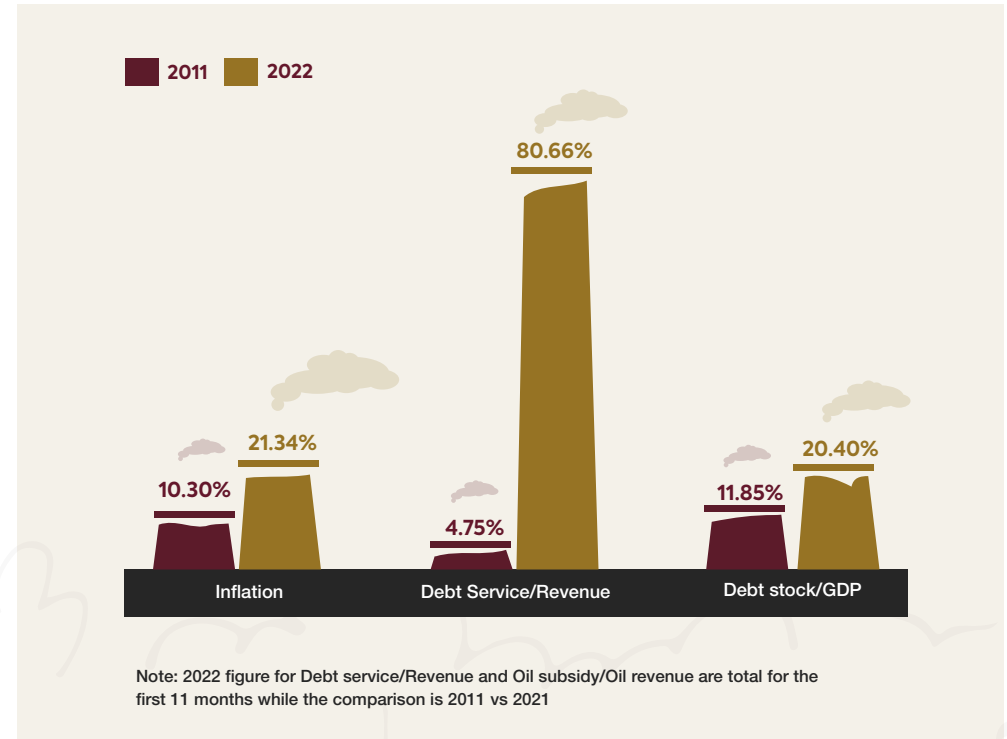


Figure 3: Macroeconomic conditions surrounding the two subsidy removal periods

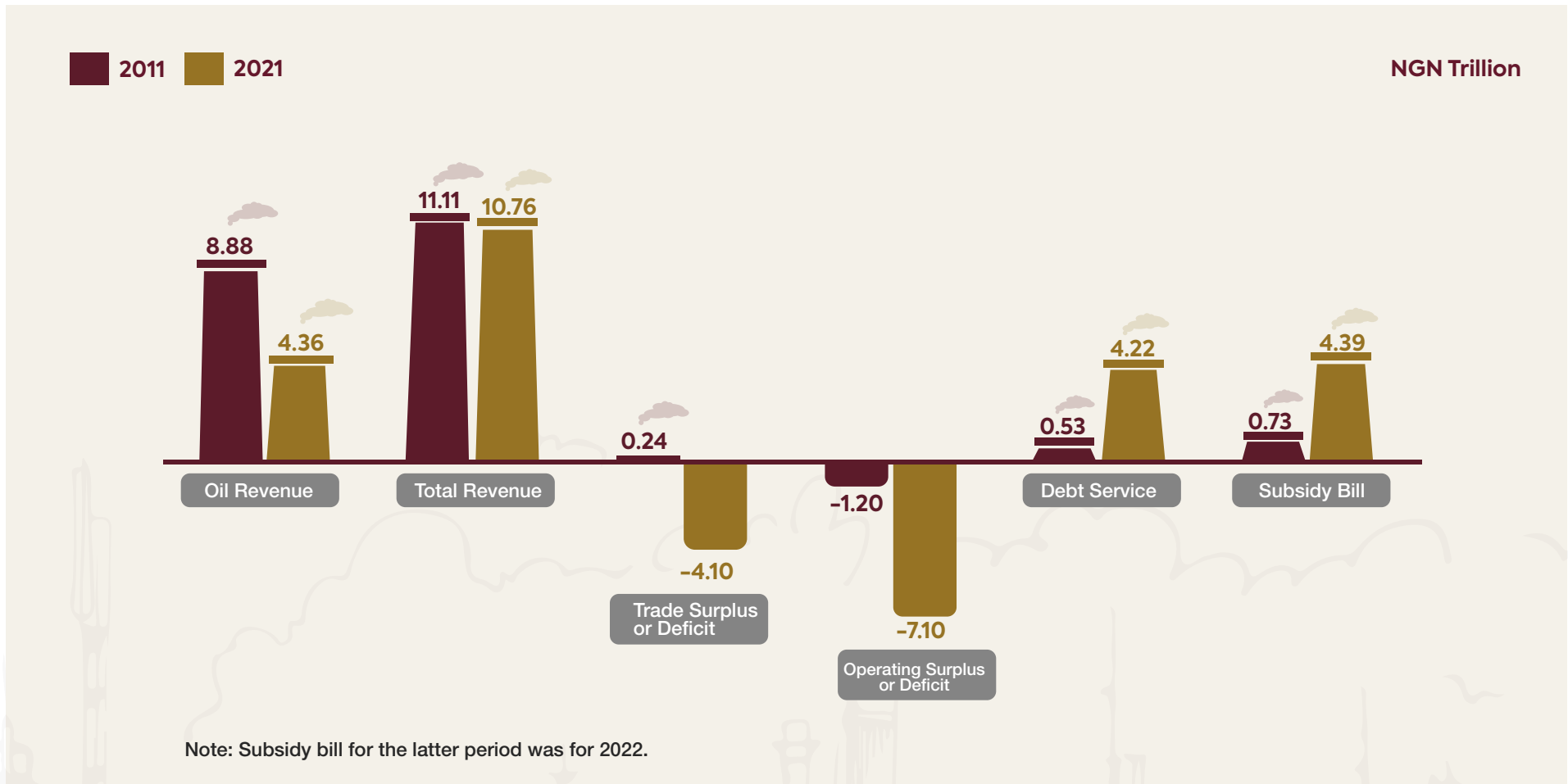
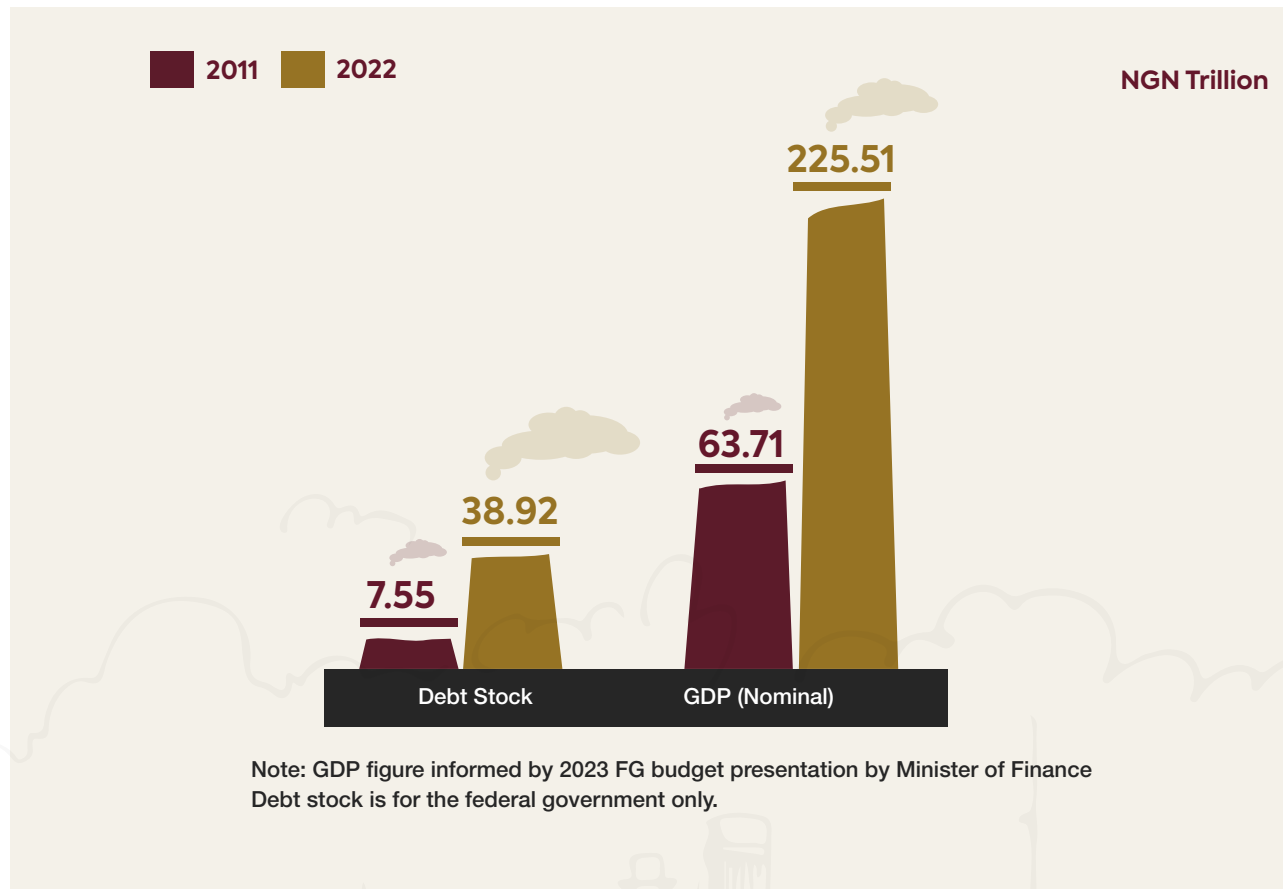
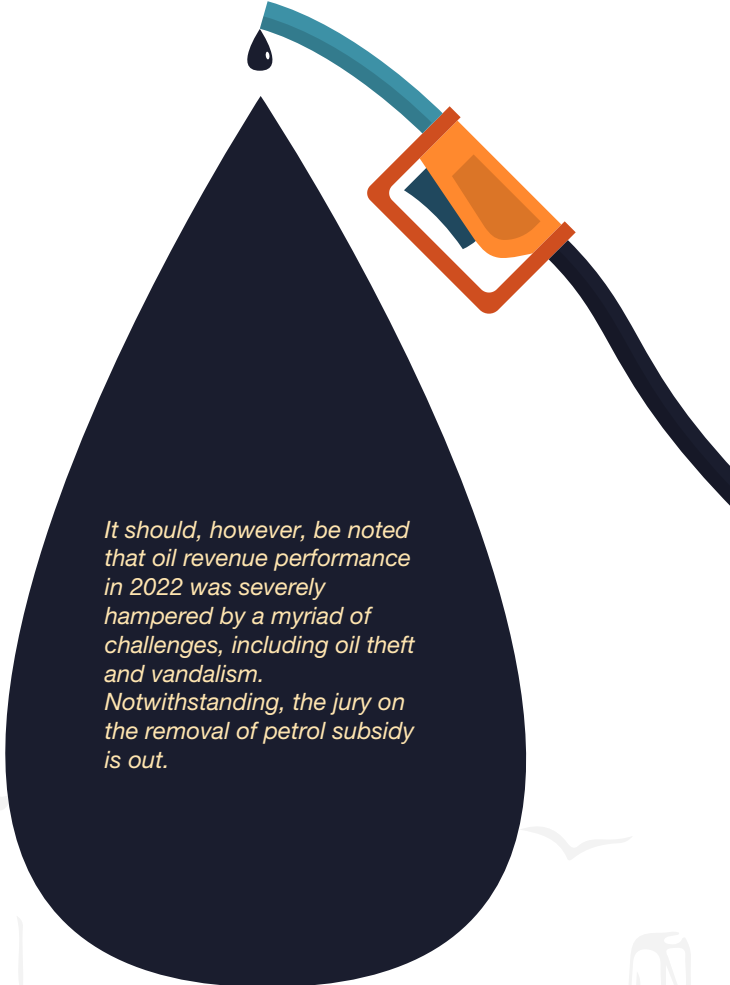


Figure 4: GDP and Debt Stock across the two subsidy removal periods



Apparently, if there was a better time between both periods to remove the petrol subsidy, it was 11 years ago. Sadly, that attempt failed. Now more than ever, it has become increasingly difficult to sustain petrol subsidies. The 2022 subsidy bill for eleven months was equivalent to 67.5% of actual revenue over the same period. Added to a debt service bill of N5.24 trillion, they represent 148% of actual revenue for the 2022 fiscal year. This implies that salaries of civil servants, government overhead costs, and capital expenditure were technically funded by borrowings. It should, however, be noted that oil revenue performance in 2022 was severely hampered by a myriad of challenges, including oil theft and vandalism. Notwithstanding, the jury on the removal of petrol subsidy is out. The scheme, as it stands now, has to go, as it is obviously detrimental to the fiscal sustainability of Nigeria. This may, however, not be done without severe socio-economic consequences, especially if the approach to its removal is botched like the previous attempt.



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Economic Impact on Key Sectors

This time, it is crucial that the government's approach is strategic and empathetic to the conditions of Nigerians. Any changes in petrol prices will likely resonate across the country's economic sectors. A 2020 study¹⁴ on the impact of fuel subsidy removal of economic sectors suggested that a 10% reduction in petrol subsidy would translate to a 26.6%, 66.7%, 51.1%, and 68.9% increase in the sectorial prices of agriculture, petroleum products, transport cost, and other sectors respectively.

Transportation: When the petrol subsidy is reduced by 50%, the cost of transport increases by more than 200%, up from 51% under the 10% scenario. If this analysis is to be taken seriously, the impact of a total abrupt removal of petrol subsidy can be left to the imagination. Shockwaves will be felt in the transport sector as costs will respond to petrol prices. If the cost of moving goods and services increases, the cost of production would likely increase as well. Agriculture and food prices would equally skyrocket, all of which would be transferred to the final consumer.

Small and Medium Scale Businesses: Businesses would not be left out. In addition to logistic costs, energy costs would increase egregiously. According to the National Development Plan (2021 to 2025), Nigerians self-generate 8GW to 14GW of their power needs through petrol and diesel generators. This is a result of the inadequate and unreliable supply of electricity from the national grid, which has an installed capacity of over 13GW but, in effect, delivers less than 4GW to consumers. Also, comments credited to the Manufacturers

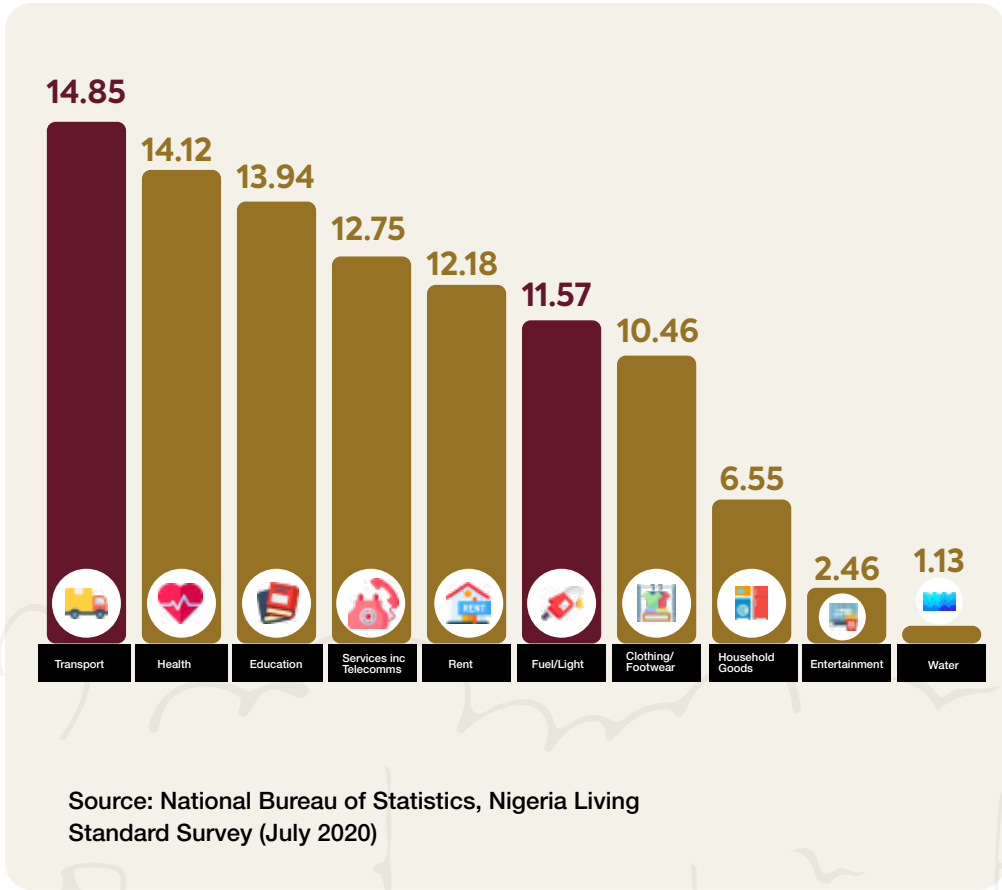
14. Inegbedion et al, 2020. Petrol subsidy withdrawal, fuel price hikes and the Nigerian economy. International journal of energy economics and policy, 10(4), 258-265. DOI: <https://doi.org/10.32479/ijeeep.8307> ISSN: 2146-4553

Association of Nigeria (MAN) indicate that power generation expenditure represents 40% of the cost of doing business in the country.¹⁵ Evidently, petrol has a significant role in social life and in the operational costs of businesses in the country.


Food Prices: More so, according to the Nigerian Living Standards Survey, fuel and transport together represent more than 26% of non-food household expenditure. As fuel is price inelastic, consumers would hardly have alternatives, especially in the short term, leaving smaller proportions of disposable income. The removal of petrol subsidies would consequently have far-reaching effects across the country, impacting individuals, families, and businesses. With micro, small, and medium-scale enterprises (MSMEs) accounting for a substantial chunk of the services sector for over 50% of Nigeria’s GDP, the ripple effect may comprise economic contraction due to, among other things, reduced consumer spending on economic goods and services.

The resultant higher transport and energy costs will surely cascade into higher food costs and the production of goods and services. This would eventually spread to other sectors resulting in an overall price rise. Inflation which was already at a precarious level of 21.91% at the end of February 2023, could climb even higher.

Figure 5: National household non-food expenditure %



15. Thisday, 2023. How Nigerian businesses get 80% power supply from private generating sets. Available at <https://www.thisdaylive.com/index.php/2022/12/06/how-nigerian-businesses-get-80-power-supply-from-private-generating-sets/>

An offshore oil rig is silhouetted against a bright, golden sunset sky. The sun is a large, glowing orb in the upper center, with a few wispy clouds nearby. The rig's complex structure of towers and walkways is visible against the horizon. The sea below is dark with some whitecaps.

Nigeria could not face a more discomfoting dilemma at this time. The continuation or removal of petrol subsidies can potentially wreak fiscal havoc on the economy.



**What Should
the Incoming
Government Do?**

Phased Removal of Petrol Subsidy

The effects of the recent hike in fuel prices due to scarcity of products could serve as an illustration of how a subsidy removal would affect the economy. Through the last quarter of 2022 and the first quarter of 2023, the country experienced scarcity of petrol for several reasons, which began with severe flooding in parts of the country that hindered the distribution of petrol products to other parts of the country. However, after the floods receded, the scarcity lingered, even into the new year, for reasons best known to the government. As a result, fuel prices increased to more than N500 per liter in many parts of the country.¹⁶ Although official rates remained at N185, availability was limited to a few petrol stations. It would be difficult to ascertain the impact of fuel scarcity on the economy as a currency redesign policy was implemented at the same time. Normally, this should be of no consequence, however, the poor implementation approach, concurrently with high petrol prices amidst limited supply, resulted in harsh economic conditions, impacting economic activities and likely increasing inflationary pressures. While the effect of both events may be difficult to decouple, it may provide practical examples of the possible impacts of a subsidy removal based on how high petrol prices may climb post-subsidy.

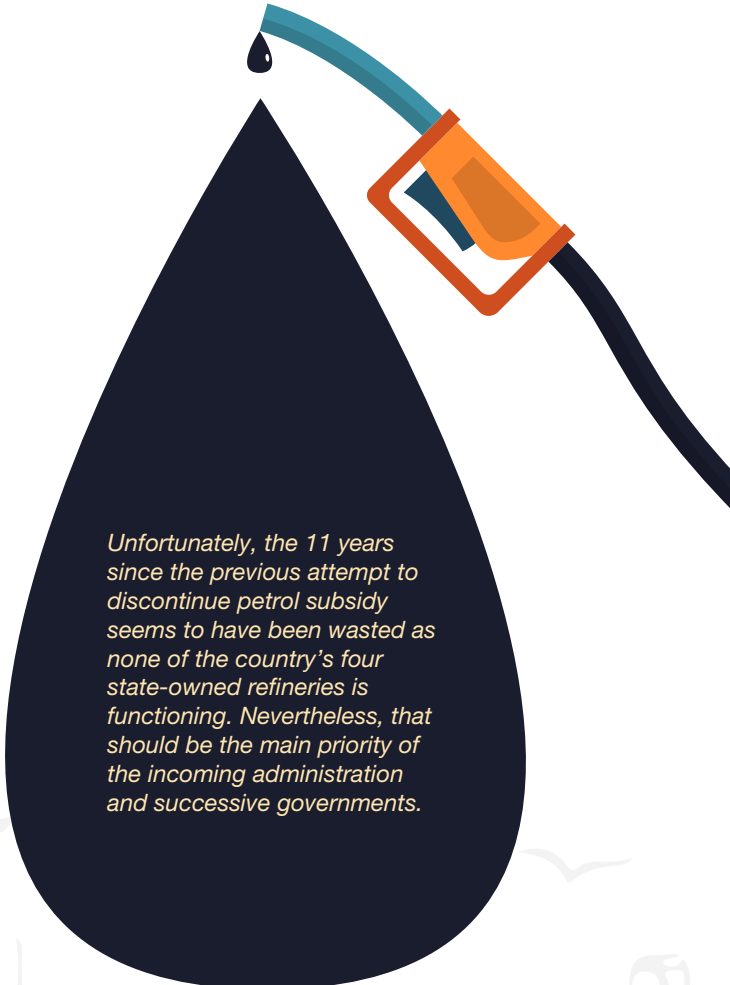
As mentioned earlier, the landing cost of PMS in February 2023 was N315 per liter. This represents the cost of bringing the product to Nigeria's shores. Additional costs include distribution margins which comprise retailers' profits, national transport allowance, dealers fee, bridging fund, marine transport allowance, and administrative charges. Under a deregulated system, some of these components would become irrelevant as the price would be determined by market forces which would vary across the country.

16. BudgIT, PMS price survey

Notwithstanding, for the sake of analysis, the difference between the NNPC price to marketers and the pump price gives an idea of the cost of distribution. That is, the difference between N185 and N113, which is N72, is the distribution margins, at least based on the latest available information under the current framework. This would bring the final price of petrol without subsidies to N387 per liter. This is more than double the current pump price of petrol. The ripple effect will be felt across sectors, including transport, agribusiness and food, production cost, living, inflation, etc. Making Nigerians buy petrol at this price, given the present macroeconomic challenges, may replicate some of the socio-economic frustrations experienced in Q4-2022 and Q1-2023, if not worse. An abrupt total removal of petrol subsidies could spell doom for Nigeria and Nigerians. A more humane and, frankly, economically practical and safe approach would be the gradual phase-out of subsidies while ensuring that lasting measures to mitigate shocks are implemented. Such lasting measures include the domestic refining of crude oil to meet domestic petrol demand before subsidies are completely removed.

Domestic Refining of Crude Oil and the Implication of Dangote Refinery

The ideal situation would be to build domestic refining capacity to meet local demand. Unfortunately, the 11 years since the previous attempt to discontinue petrol subsidy seems to have been wasted as none of the country's four state-owned refineries is

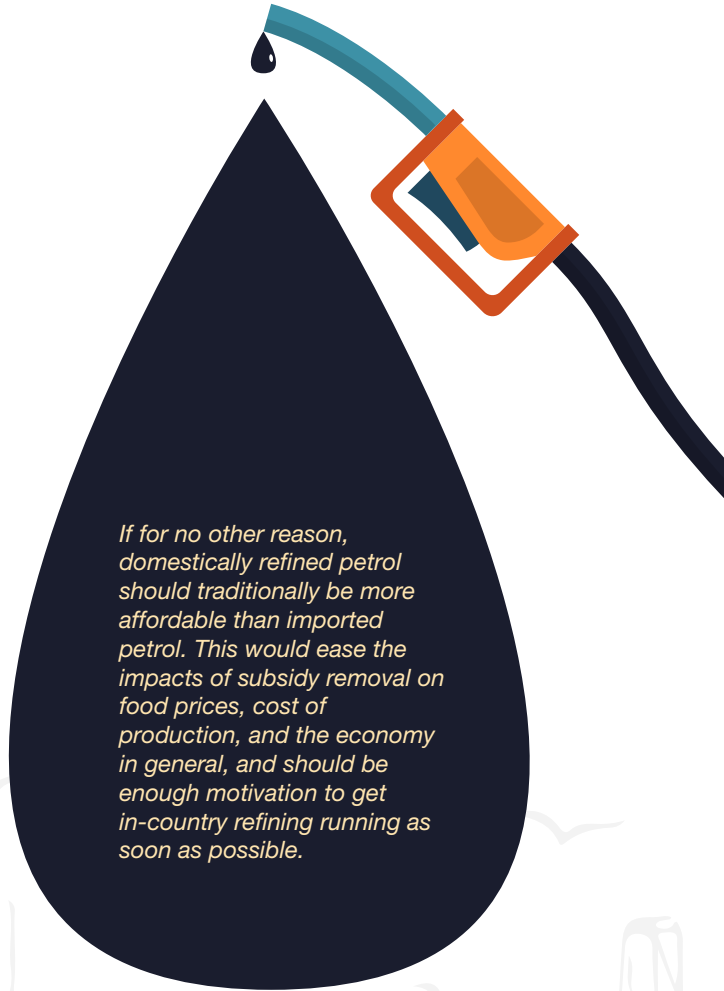


Unfortunately, the 11 years since the previous attempt to discontinue petrol subsidy seems to have been wasted as none of the country's four state-owned refineries is functioning. Nevertheless, that should be the main priority of the incoming administration and successive governments.

functioning. Nevertheless, that should be the main priority of the incoming administration and successive governments. The outgoing administration began the revitalization of the Port Harcourt refinery, and it is expected that the refinery should resume operation in phases between 2023 and 2024, when it is anticipated to operate at maximum capacity.¹⁷ However, reports indicating that the rehabilitation is behind schedule diminish hope that the refinery will resume operations before the June 2023 deadline for the removal of the petrol subsidy.

Privately run refineries have also been put forward, and one, the Dangote refinery, shows promise. The refinery is anticipated to become operational by the end of 2023, with full-scale operations set for 2024, according to news reports.¹⁸ Nonetheless, assuming the refinery goes operational as expected, operates at maximum capacity, and dedicates 100% of its output to Nigeria's domestic market, the latter of which is less likely, it still would not be sufficient to meet Nigeria's total petrol consumption of 65 million liters per day. With a nameplate capacity of 650,000 bpd, the refinery can theoretically supply a maximum of 47.5 million liters of petrol a day,¹⁹ 73% of local demand. However, in practice, refinery operational efficiency range from 86% to 94%²⁰ of nameplate capacity. This slightly reduces the volume of petroleum available to the country from the refinery to 40.8 to 44.7 million liters daily, 69% of domestic consumption.

Assuming this is supplemented by the Port Harcourt refinery, which could provide additional four million liters at the end of the first phase of rehabilitation, it could be a start to meeting domestic demand while scaling up in-country production to meet total local consumption and possibly be a net exporter of petrol.



If for no other reason, domestically refined petrol should traditionally be more affordable than imported petrol. This would ease the impacts of subsidy removal on food prices, cost of production, and the economy in general, and should be enough motivation to get in-country refining running as soon as possible.

17. <https://www.premiumtimesng.com/news/headlines/557515-analysis-nigerian-govt-says-port-harcourt-refinery-will-restart-in-december-thats-unlikely.html?tztc=1>

18. <https://www.premiumtimesng.com/news/more-news/580423-nigeria-could-become-africas-biggest-oil-refiner-by-2025-report.html>

19. A barrel of crude is 46% petrol. A barrel is also equivalent to 159 litres. Applying these to

20. Forman et al, 2014. US Refinery efficiency: Impacts analysis and implications for fuel carbon policy implementation.

Table 1: Cost of Domestically Refined Petrol

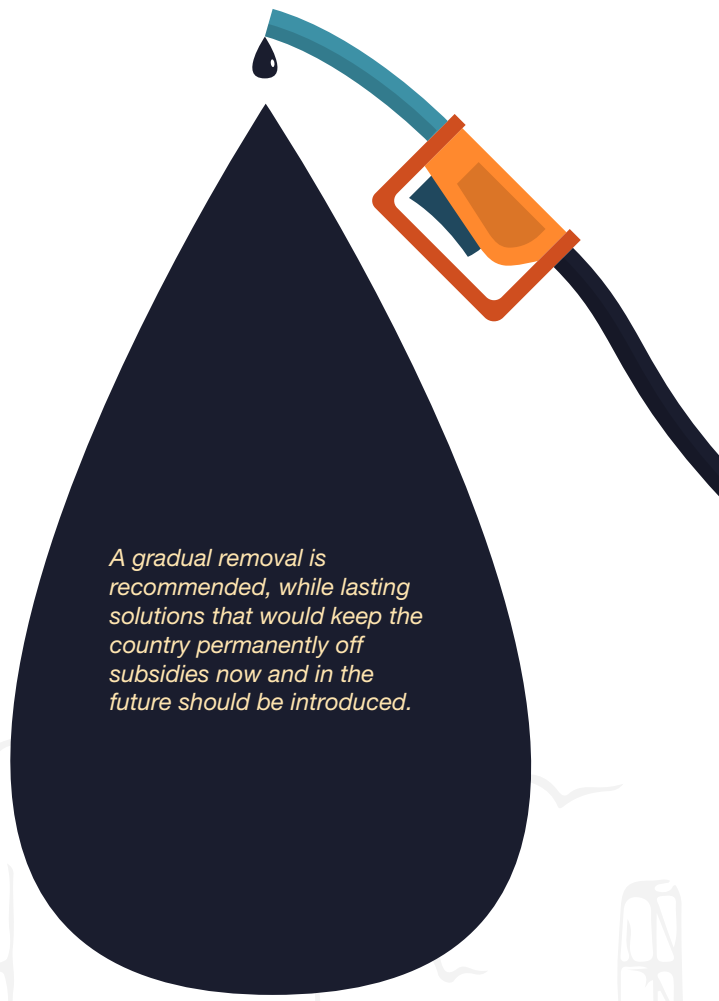
If for no other reason, domestically refined petrol should traditionally be more affordable than imported petrol. This would ease the impacts of subsidy removal on food prices, cost of production, and the economy in general, and should be enough motivation to get in-country refining running as soon as possible. Analysis of extraction and refining costs indicates that domestically refined petrol at the refinery gates (that is, for onward distribution) could range from less than N100 per liter to almost N170 per liter. See Table 1 below. In a deregulated market, distribution costs should no longer comprise certain components such as National Transport Allowance and Bridging funds. These components were instrumental in ensuring that petrol was sold at the same regulated price across the country. As a result, these funds were incorporated into the price framework to compensate distributors for transport costs incurred from the depots in the Southern and Western coastal cities to other parts of the country. With these components excluded, the final cost of domestically refined petrol could be under or around N200 per liter.

Type of extraction Site	Cost Per Liter			
	On-shore		Off-shore	
Activity	Lower Margin	Upper Margin	Lower Margin	Upper Margin
Production (extraction, taxes, transportation) \$	0.094	0.094	0.189	0.189
Refining cost \$	0.1053	0.1842	0.1053	0.1842
Subtotal \$	0.1996	0.2786	0.2939	0.3729
Subtotal Extraction + Refining NGN	89.82	125.35	132.27	167.80
Distribution cost NGN (less NTA & Bridging)	19.88	19.88	19.88	19.88
Final Price Per Liter NGN	110.10	145.78	152.74	188.42

Note to Table 1: Extraction costs for Nigerian onshore and offshore fields of \$15 and \$30 per barrel respectively were utilized for the extraction segment of the analysis. Refining costs for refineries in the US were utilized for the refining segment of the analysis. US refining costs range from \$0.4 to \$0.7 per gallon. For distribution costs, distribution margins from the 2016 PPPRA template were obtained. This is because the NMDPRA, the successor to PPPRA, is yet to publicly provide an updated template for imported petrol. The 2016 template was the last publicly available template for petrol. This was converted to USD using the 2016 naira/dollar exchange rate and reconverted to naira using the exchange rate as of early January 2023. This rate (N450 to \$1) also applied to other parts of the analysis where dollar/naira conversion was carried out. With regard to distribution costs, the analysis may be limited in accounting for the time value of the naira between 2016 and 2023.

It should be noted that this would require special arrangements between NNPC Limited and refiners. Such arrangements would require NNPC Limited to feed refineries slightly above the production cost and not at the international crude oil price. This also creates new challenges as private oil extracting firms operating in the country would rather sell to the international market than to local markets, hence the need for NNPC Limited to be the source of the feedstock for domestically refined crude. It could also be viewed as a new form of subsidy, although the framework allows room for selling crude at a price high enough for the NNPC to make a profit while easing the cost of production for refiners.

In summary, while it is exigent that petrol subsidies be discontinued to preserve the fiscal sustainability of the country, they should be implemented in a manner that minimizes the adverse impacts that would result from the loss of the cushioning effect on socio-economic conditions that the subsidy provided. A gradual removal is recommended, while lasting solutions that would keep the country permanently off subsidies now and in the future should be introduced.

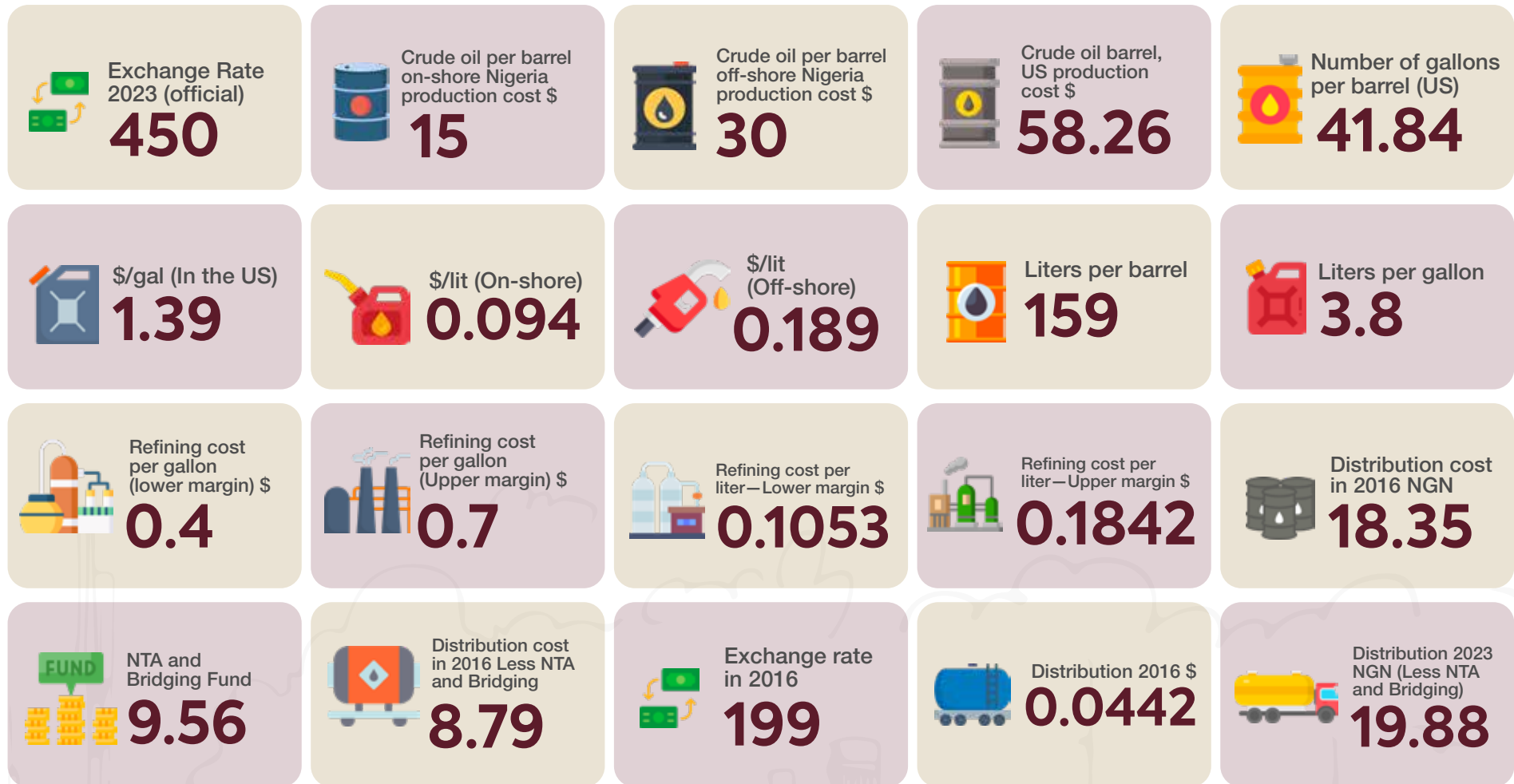


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A large offshore oil rig is shown at sunset. The rig is a complex structure of steel beams, ladders, and platforms, illuminated by warm orange and yellow light from the setting sun. Several red lifeboats are visible on the rig's deck. A long, narrow walkway or platform extends from the foreground towards the rig, with railings and various pieces of equipment. The ocean is dark blue, and the sky is filled with soft, colorful clouds. The overall scene is industrial and serene.

Annex

Calculations Estimating the Price of Domestically Refined Petrol







Get to know more about the extractive industry, BudgIT's advocacy in the Extractive Sector spotlights issues and recommendations on extractive transparency and fiscal governance in Nigeria, including Beneficial Ownership, NNPC Reforms, Industry Legislation and Revenue Accountability.

#FixOurOil

