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Petroleum Subsidy Removal and equitable socio-economic allocation of the benefits: A prescription for Nigeria

DR. AMIEYEOFORI VALENTINE FELIX, (PhD)

Sustainable Energy Development

ENTEK INTEGRATED RESOURCES LIMITED

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Abstract: **The petroleum product subsidies intended to serve as a means of resource allocation to support the less privilege in the society, turned out to be a disappointment as, with most developing economies, the subsidy programme, turned out to be only beneficial to the rich and the middle class. The paper noted that the subsidy was fraught with massive corruption through smuggling and improper and inaccurate declaration of the actual quantity of petroleum product was being imported and subsidized. This all added to the colossal cost of over $30 billion as subsidy payment in the past 18 years. The huge subsidy bills were financed through government budget and borrowed funds, resulting in debt service to revenue ratio of some 102% in 2022. The Petroleum Industry Act, PIA, of August 2021 abrogated the subsidy programme, which would have ceased since February 2022, but was extended to end June 2023 by the former Mohammadu Buhari Administration. The Asiwaju Bola Ahmed Tinubu's government took the bull by the horn, and officially removed the petroleum subsidy during his inaugural speech on May 29, 2023. This was after several unsuccessful attempts by previous governments which were resisted with national protests. Just immediately, the prices of petroleum product, especially the gasoline, or premium motor spirit, PMS, or commonly called Petrol, shot up by more than 200% from N185 to N 617 per litre. Prices of goods and services, especially road transportation, went spirally up also, with threats of protests across the country. This paper observed that the Asiwaju Bola Ahmed Tinubu failed to adopt globally accepted subsidy removal plans through extensive citizen engagement, sensitization, and robust implementation plans on how to utilize and allocate the accrued benefits from the subsidy removal. Regardless, this paper recommended for government to draw up subsidy removal implementation programmes at all levels, that will spell out how the funds will be utilized and accounted for with monthly reports for the public to ensure transparency and accountability. Finally, the paper pointed out some key focus areas for government in their implementation plan such as providing mass transit, greener transportation, financing fiscal deficits, reducing the debt burden, and encouraging investments in the downstream sector of the industry.**

Keywords: **Subsidy, Petroleum Industry Act, Petroleum Products, Smuggling, Debt Service to Revenue Ration.**

1. INTRODUCTION

Economic solutions often lead to dismal outcomes of gainers and losers. Economic policymaking therefore involves a delicate art of balancing tradeoffs so that in the end social wellbeing is enhanced. In particular instances governments may be compelled to compensate the losers in order not to compromise welfare. It is possible that by such intervention, the allocative mechanism may suffer some distortion leading to either market failure, or policy failure, or both. Economists, since Adam Smith, have had a lot of faith in the allocative power of the market. The free market system is generally thought to work impersonally to allocate resources in a manner such that there are no gainers or losers. In other words, under a free

market system, the price mechanism is supposed to lead to situations where demanders of a good or service receive what they want at the price they want, and the suppliers also go home satisfied. The price mechanism allows consumers to cast their votes only for the production of what they want at certain given prices and therefore help to eliminate waste of resources. This type of mechanism is said to be superior to situations in which a government or a body attempts to intervene in the market in order to administratively allocate resources. But since markets are not necessarily "free", an intervention in the market system may sometimes be necessary to advance the course of a more equitable development. Subsidy is one such market intervention that can be used to by-pass the market system in the distribution of resources so as to enhance welfare. Its use has however created opposing camps among economists and non-economists, governments and nongovernmental organizations, policy-makers and civil society. While one group looks on subsidies as inappropriate tools which distort market structures, impose strain on government fiscal programmes, and harm the environment, the other group thinks of subsidies as essential safety nets in the development process. (Sowa, 2006)

2. WHAT IS SUBSIDY?

There is no commonly agreed definition of what constitutes a subsidy and its measurement remains problematic, which is evident in the continued inability of major international organizations such as the World Bank, the UNDP, and OPEC to agree on common terms. A widely used definition is that of de Moor and Calamai, which defines a subsidy as 'any measure that keeps prices for consumers below the market level or keeps prices for producers above the market level or that reduces costs for consumers and producers by giving direct or indirect support. (Fattouh, & El-Katiri, 2015). The Organization of Economic Cooperation Development (OECD) defined subsidy as a benefit provided to individuals or businesses as a result of government policy that raises their revenues or reduces their costs and thus affects production, consumption, trade, income, and the environment. The benefit generated by policy may take different forms such as an increase in output-price, a reduction in input-price, a tax rebate, an interest rate concession, or a direct budgetary transfer. (Pageot-LeBel etal, 2003). The WTO defined subsidy (excluding export subsidy) as a Financial contribution by a government or public body, or via government entrustment or direction of a private body (direct or potential direct transfer of funds: e.g., grant, loan, equity infusion, guarantee; government revenue foregone; provision of goods or services or purchase of goods; payments to a funding mechanism), or income or price support, which confers a benefit and is specific (to an enterprise or industry or group thereof, or limited to a designated geographical region. Another practical definition of subsidy was offered by Maulana etal 2021, as a transfer from other parties (typically the public sector or fiscal authorities) to private parties, households, or individuals in which the subsidy provider does not receive any goods or services in exchange for the transfer

2.1 Economic approach to analysing subsidy programmes

Technically, subsidies according to Triest, 2009, are ubiquitous in modern market economies such as the United States, and in other advanced and developing countries, where government creates special provisions that subsidize some endeavors at the expense of others. The government generally subsidizes activities through direct provision, payment to private organizations, or regulation. Subsidies for housing as (which benefit from the tax deduction for mortgage interest payments along with many other smaller subsidies) and some forms of agriculture are two examples of subsidies that affect nearly everyone. Though viewed as an economic instrument, the term "economic subsidy" has a negative connotation in many circles, as subsidies must be paid for by taxing other activities and endeavors more heavily, distorting market incentives. The predominant view for subsidy is that an activity worth undertaking must meet the market test: there must be sufficient demand for the private sector to profitably engage in the activity, as such, the need for a subsidy is a signal that the activity fails the market test, and so may not be worthwhile.

Even if there is a consensus that a subsidy largely benefits a group that society would like to help, out of considerations of equity or economic justice, a question arises: why not just give direct monetary grants to those who need them? Or if a subsidy is to be used, why not directly subsidize labor earnings? Even if one is concerned primarily with economic justice and equity, subsidies may not be an efficient means of advancing these goals. Advocates of this view find some support in economic theory. It has long been recognized by economists that the market mechanism has the desirable property that, using the metaphor introduced by Adam Smith in his *The Wealth of Nations* (1776), individuals are led by "an invisible hand" to promote the public interest. Subsidies, by altering the prices at which goods and services are exchanged, may interfere with the functioning of the invisible hand. However, Smith recognized that there are limits to the extent to which the invisible hand can be depended on, and later generations of economists clarified the sense in which a laissez-faire market economy promotes the public interest and the necessary conditions for it to do so. In his further presentation, Triest, 2009,

affirmed that free-market economies promote the public interest, in the sense that they tend to promote an efficient allocation of economic activity and resources. The market mechanism leads to activities being undertaken only as long as the benefits of further activity equal the incremental cost. In a sense, market forces result in automatic benefit-cost analyses guiding decision-making. However, many circumstances bring about "market failures"—the market mechanism breaks down and the actions of the unfettered invisible hand may lead to undesirable outcomes. When market failure occurs, a situation arises that economists refer to as economic inefficiency: the potential to make someone better off without making anyone else worse off—in other words, when there is a 'free lunch.' In contrast, in the absence of market failure, the free market produces economic efficiency. Subsidies can be viewed as distorting the benefit-cost calculus implicit in market decision-making, leading to the economically inefficient outcome described above.

Critical economic analysis can therefore help to highlight where subsidies are effective in meeting social goals (which encompass both efficiency and equity considerations), and where subsidies are wasteful or distorting. Avoiding distortions and correcting market failures can help a program budget achieve more of its objectives and come closer to its overall aim. The current crisis has precipitated many instances of market failure: businesses and consumers being denied access to credit; displaced workers having difficulty finding new jobs; and it is important for practitioners to be able identify economic distress caused by market failure, and to respond with appropriate proposals. A second reason for analyzing subsidies through the lens of economic analysis, in the opinion of Triest, 2009, is that in this era of fiscal austerity, nearly all government expenditures, both explicit spending and implicit "tax expenditures," are coming under close scrutiny. In order to survive, programs will have to be well designed and capable of passing benefit-cost tests. Many public subsidies do little to promote economic equity, and rather than correcting for market failure, they induce distortions in economic decisions and behavior; such programs may justifiably be scaled back or terminated when they come under increased scrutiny. In contrast, well-designed subsidies for community development have the potential to advance both equity and efficiency goals simultaneously. Practitioners need to be prepared to explain how subsidies for their programs differ from the more wasteful ones that many policymakers and others may think of. (Triest, 2009).

2.2 Goals of Subsidy Programs

A government subsidy, provided to achieve established political and economic goals, is an important tool by which government may participate in the market economy and carry out a macroeconomic readjustment. Well-structured subsidy programme shows the relationship between the government and the market, with the aim of improving the competitive environment of the market; support the development of enterprises; and safeguard the interests of local enterprises. As an important tool of macroeconomic readjustment and control, subsidy has a significant impact on the capital market and listed firms. Consequently, for economic purposes, the government subsidy is intended to support the development of the industry, while under political consideration, subsidies are intended to increase employment and provide public services. In addition, subsidy can also be used for market-based reasons such as refinancing or avoiding delisting. A government subsidy, while it may be viewed as 'the helping hand', can also be 'the grabbing hand', mostly due to misallocation and misdirection of subsidies away from its economic purpose of maximizing value to avarice and greed. (Wang etal, 2017). According to a study by Wang etal 2017, the purpose of a subsidy affects the efficiency of the subsidy, and a subsidy having a definite purpose is more efficient than a subsidy without a definite purpose. Specifically, a subsidy without a definite purpose has a significantly negative effect on corporate accounting performance, while a subsidy with a definite purpose has an insignificant effect on corporate performance. Comparing non-state-owned-enterprises (SOEs), a subsidy without a definite purpose in an SOE a has lower efficiency. Their study finds that the government quality has a positive effect on the extent to which the purposes of subsidies are defined and on the efficiency of subsidies whose purposes are unclear. Furthermore, the mechanism of low efficiency of those subsidies without definite purposes is that the subsidy without a definite purpose would decrease the investment efficiency and increase the rent-seeking cost.

In his contribution to the economic goals of subsidy programmes, Triest, 2009, added that subsidies could improve free-market economic outcomes, by providing resources to the poor and underprivileged, and also by correcting for the failure of the market mechanism to create an efficient allocation of goods and services. According to Triest, 2009, the first rationale concerns the goal of economic justice: well-designed subsidies have the potential to bring about a more equitable distribution of economic well-being than that generated by an unfettered free-market economy. In contrast, the second rationale concerns the role of subsidies in correcting for market inefficiencies. The relative importance of the two rationales will vary from case to case, and sometimes only one will be of substantial importance. However, in many cases related to community development, both rationales are operative. In these cases, subsidies may simultaneously generate a more just

distribution of economic well-being while also promoting more efficient operation of the market economy. Although much of economic policy analysis is concerned with the trade-off between the primary economic goals of equity and efficiency, some subsidies for community development may advance both goals. Triest, 2009 added that although the equity goal is likely paramount in most community development programs, in the absence of market failure, equity goals will generally be best met by providing direct cash assistance to those in need. When a subsidy also corrects for market failure, equity goals may be met more cost-effectively through community development subsidies rather than through cash assistance.

2.3 Classification of Subsidies

From the accountability standpoint, the government has the choice on whether the subsidy will be given explicitly or implicitly. Explicit subsidies are defined as transfers from government to service provider or beneficiary which are explicitly budgeted above the line as government expenditure. The amount of subsidy, ultimate beneficiaries, and its mechanism are clearly defined and stated as a subsidy in the public budget documents (Maulana etal, 2021). For instance, a government may mandate that a public utility to set the selling price below the cost of production, and thereafter, finances the public utility's losses by transferring funds from the general budget. Energy subsidies can also be cross-financed between different energy user groups. (Fattouh, & El-Katriri, 2015). On the other hand, an implicit subsidy is not clearly stipulated as a government expense. An implicit subsidy can be posted below the line in the government's budget document. For example, the government may post its subsidy to a State Owned Enterprise (SOE) as an equity injection, which is recorded as a government financing activity. The difference will lie in the absence of an SOE's obligation to repay this equity through dividends. With a lower cost of financing, such a subsidy will enable them to operate at a lower cost. Implicit subsidy can also be transferred as an interest rate subsidy on the debt side in which SOEs receive a below-market interest rate for their debt. In some cases, an implicit subsidy can also be even more elusive, in the form of a silent guarantee on SOE debt issuances in which the government is expected to fully cover the risk premium needed to qualify for an AAA rating. (Maulana etal 2021)

Implicit subsidy is also very typically deployed in oil and gas producing countries, where mostly state-owned oil and gas companies produce, refine, and market petroleum products. For instance, the national oil company can be mandated to sell petroleum products for the domestic market at below-international prices but above-production costs. In this case, the national oil company does not incur financial losses, and hence the government does not need to make an explicit transfer to compensate it for losses. The implicit subsidy represents the opportunity cost (the economic rent/revenue wasted by failing to sell oil at higher market prices); this entails a transfer from the government to the final consumers without such a transfer appearing explicitly on state oil companies' records or in the government budget. If this foregone revenue had been collected, it could have been used by the government in a variety of ways such as: reducing the budget deficit and the size of the public debt; increasing expenditure in more productive areas such as infrastructure, education, and health; distributing it directly to its people through cash transfers; or reducing, where applicable, taxation. (Fattouh, & El-Katriri, 2015)

Fattouh, & El-Katriri, 2015 further posited that implicit subsidies also create important domestic pricing signals – for instance favouring energy-intensive industrialization strategies or reducing the marginal private cost of energy for individuals – in the same way as explicit subsidies do, hence influencing economic agents' energy consumption patterns. The most important issue for an implicit subsidy, according to Maulana etal, 2021, is its lack of clarity and transparency. A lack of clarity around its process hinders informed and structured policy debate about better alternative uses of public funds. A lack of transparency in terms of the amount, mechanism, and end beneficiaries makes evaluating an implicit subsidy difficult, particularly in terms of its effectiveness. This further implies difficulty in subsidy targeting, which may result in a high opportunity cost for public expenditure. Lastly, non-transparency in the implicit subsidy amount may also lead to hidden deficits and contingent liabilities in the future. Subsidies that are implicit – passed as government financing activity instead of being recorded as public expenditure – may have a higher chance of driving further contingent liabilities if the regulation does not mandate reporting and monitoring on potential fiscal risk due to the government capital commitment. The monitoring of this by responsible public agencies is likely to be insufficient in nature due to the lesser extent of information and accountability. In other words, insufficient risk identification and monitoring may overlook triggering factors and events until the risk has been materialised.

There are several possible reasons, according to Maulana etal, 2021, why a government may choose to make subsidies implicit instead of recording them explicitly. First, the choice could be motivated by political reasons should making the expenditure explicit result in some form of political backlash or pushback from the public or legislative arm. Second, it

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could also be based on myopic practicalities, for example when the executive arm chooses to inject capital into an SOE as a conduit to accelerate project delivery instead of going through the proper budgeting process that involves legislative scrutiny. Lastly, it could also be driven by the motive to obscure a true deficit due to the statutory deficit limits that may exist in several countries.

3. ENERGY SUBSIDIES AND SOCIAL EQUITY

Energy subsidies are among the most pervasive, and most controversial fiscal policy tools, with intended original objectives of protecting the income of low-income households and fostering domestic industrial growth. In most oil and gas producing regions of the world, especially amongst developing economies, with few functioning social welfare systems, subsidized energy prices continue to form an important social safety net, albeit a highly costly and inefficient one. Energy subsidies play a crucial role; widely perceived as being a fundamental economic and social benefit, they have placed huge pressure on government finances, undermining the fiscal sustainability of many of the region's lower middle-income countries. (Fattouh, & El-Katriri, 2015). In the view of Salim etal, 2020, while fuel subsidies are widespread and debated extensively, and fully acknowledged by many energy economists, energy subsidies are often closely related to the political economy viewpoint. The central objective of such subsidy, in the context of political, economic, and social development, is to reduce energy poverty, ensure access to energy, and redistribute the wealth that stems from the exploitation of national resources. Although there is considerable controversy surrounding the efficiency of these policies, energy subsidies confer private benefits on particular interest groups and, once implemented, tend to persist. If properly managed, energy subsidy policy is to primarily protect the lowest-income households and foster domestic industrial growth. However, in most cases, a government's energy bill is enormous and deleterious; it strains a country's fiscal revenues, misallocates the distribution of income, and perpetuates damaging a large proportion of economic activity. Energy subsidies are a costly way of benefitting the poor, but from the governments' perspective, this assistance should be minimal. (Salim etal, 2020).

3.1 Measuring Fossil Fuel Subsidies

As had earlier presented in 2.1 of this paper, subsidies are broadly decomposed into explicit and implicit subsidies. Explicit subsidies occur when the retail price is below a fuel's supply cost, for instance, for a non-tradable product (e.g., coal), the supply cost is the domestic production cost, inclusive of any costs to deliver the energy to the consumer, such as distribution costs and margins. In contrast, for an internationally tradable product (e.g., oil), the supply cost is the opportunity cost of consuming the product domestically rather than selling it abroad plus any costs to deliver the energy to the consumer. Explicit subsidies also include direct support to producers, such as accelerated depreciation, but these are relatively small. (IMF, 2022). On the other hand, implicit subsidies occur when the retail price fails to include external costs and/or there are preferential consumption tax rates on energy. External costs include contributions to climate change through greenhouse gas emissions, local health damages (primarily pre-mature deaths) through the release of harmful local pollutants like particulates, and traffic congestion and accident externalities associated with the use of road fuels. Getting energy prices right involves reflecting these adverse effects on society in prices and applying general consumption taxes to household fuels. For instance, using the example in figure xxxx, where the retail price for gasoline is $0.30 per liter, and the supply cost is $0.50 per liter (inclusive of VAT), total external costs are $0.60 per liter, and the value-added tax (VAT) rate on gasoline is equal to the standard rate of 14 percent. Thus, the explicit subsidy is $0.20 per liter and the implicit subsidy is $0.75 per liter ($0.60 in undercharging for external costs and $0.15 per liter due to the VAT base including all social costs). It then follows that if national consumption of gasoline is 100 million liters, then the total subsidy is ca. $475 million ($100 and ~$375 million from explicit and implicit, respectively)

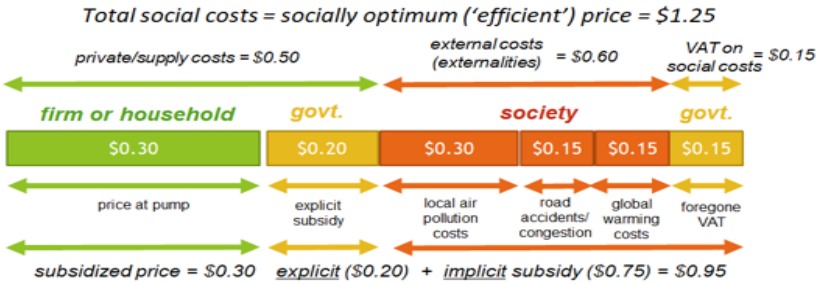

Figure 1: Model breakdown of subsidy application. Source: IMF, 2022

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Section 6.1 of the paper presents the subsidy computation model for Nigeria.

3.2 Size of Fossil Fuel Subsidies

Globally, fossil fuel subsidies reached $5.9 trillion or 6.8 percent of GDP in 2020 and are expected to increase to 7.4 percent of GDP in 2025 as the share of fuel consumption in emerging markets (where price gaps are generally larger) continues to climb. The 2020 subsidies cost only has just 8 percent as undercharging for supply costs (explicit subsidies) while 92 percent were for undercharging for environmental costs and foregone consumption taxes (implicit subsidies).

Figure 2 shows the performance of global subsidy payments from 2015 with a projection to 2025 showing both explicit and implicit subsidies.

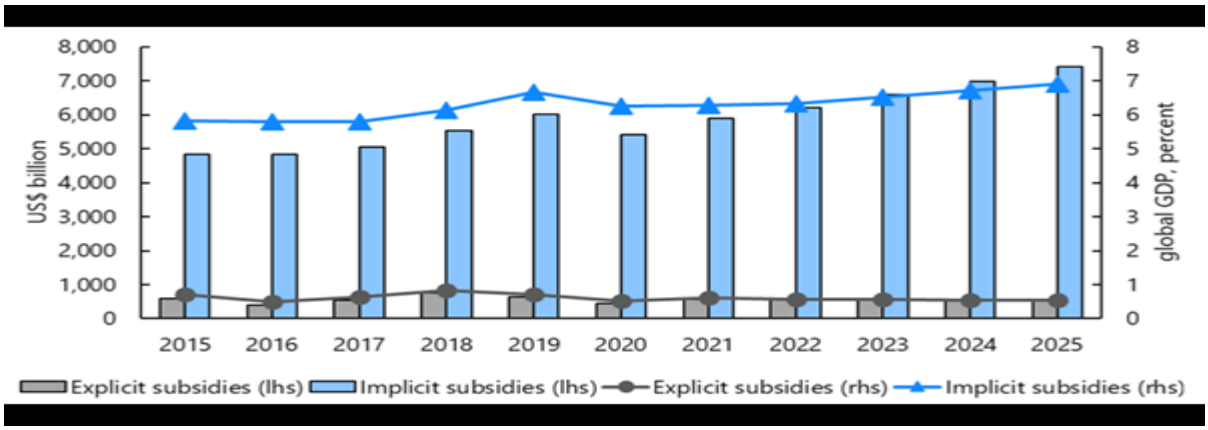

Figure 2: Global Subsidy payments from 2015 with a projection to 2025. Source: IMF 2022

According to IMF, 2022, the 92% component of implicit subsidy is made up mostly of underpricing for local air pollution costs, accounting for 42 percent, followed by global warming costs (29 percent), other local externalities such as congestion and road accidents (15 percent), explicit subsidies (8 percent) and foregone consumption tax revenue (6 percent). However, explicit subsidies are mostly concentrated in the Middle East and North Africa (MENA) region and Commonwealth of Independent States (CIS) while total (explicit plus implicit) subsidies are concentrated in the East Asia and Pacific (EAP). Relative to regional GDP however, the IMF, 2022, noted that total subsidies for Europe are smallest at about 2 percent, while subsidies are 32 percent of regional GDP in CIS and 16 and 10 percent respectively in MENA and EAP.

This is shown in figure 3

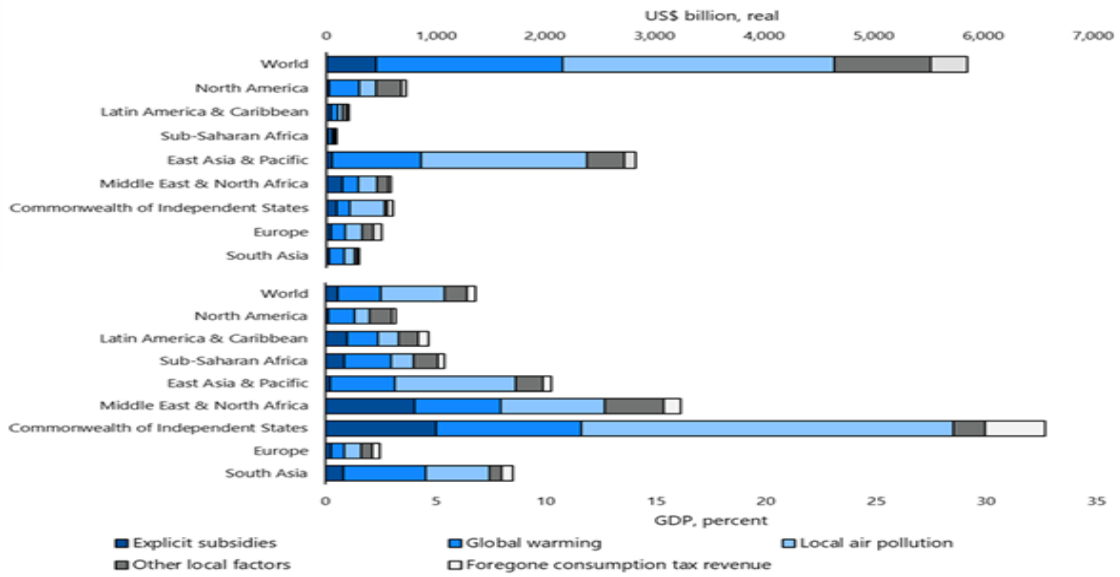

Figure 3: Distribution of Global Subsidies payment across regions. Source: IMF, 2022

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In its contribution to the global subsidies figure, the IEA noted in its latest estimate that in 2022, subsidies worldwide for fossil fuel consumption skyrocketed to more than USD 1 trillion, by far the largest annual value ever seen as shown in figure 4 below:

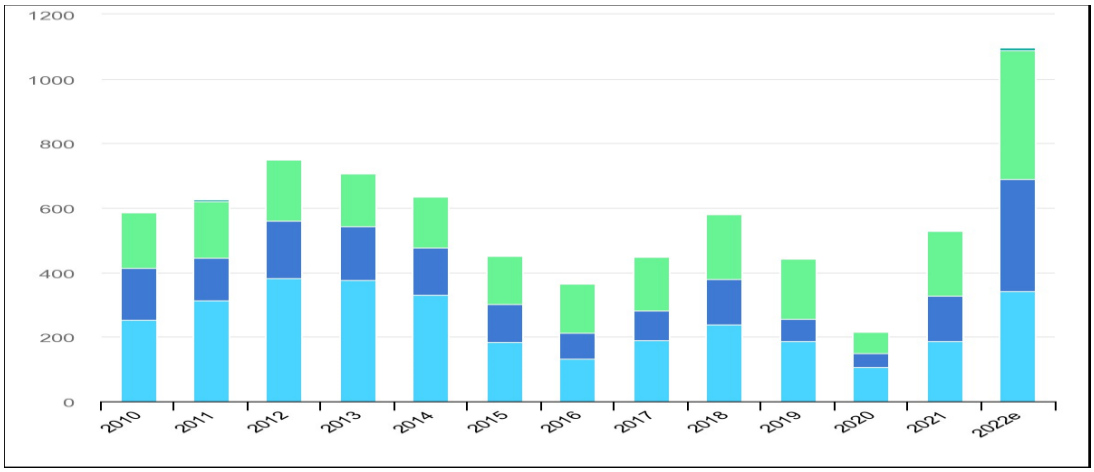

Figure 4: Fossil fuel consumption subsidies by fuel, 2010-2022. Source: IEA, 2022

The breakdown for 2022 showed subsidy for oil at $ 343 billion; gas =$ 346 billion; electricity = $399 billion, while coal recorded marginally $9 billion. According to the IEA report, the subsidies are mainly concentrated in emerging market and developing economies, and more than half were in fossil-fuel exporting countries. In addition to these consumption subsidies, the IEA has tracked more than USD 500 billion in extra spending to reduce energy bills in 2022, mainly in advanced economies, with around USD 350 billion of this in Europe, as shown in figure 5. In Europe, preliminary analysis shows that average end-user prices were close, in some cases, to the market reference values. Nonetheless, spending to bring down energy bills represents a significant fiscal burden for governments and, as is often the case with such measures, these interventions have not always been well targeted. Furthermore, it risks diminishing the incentive to use energy efficiently or to switch to cleaner fuels.

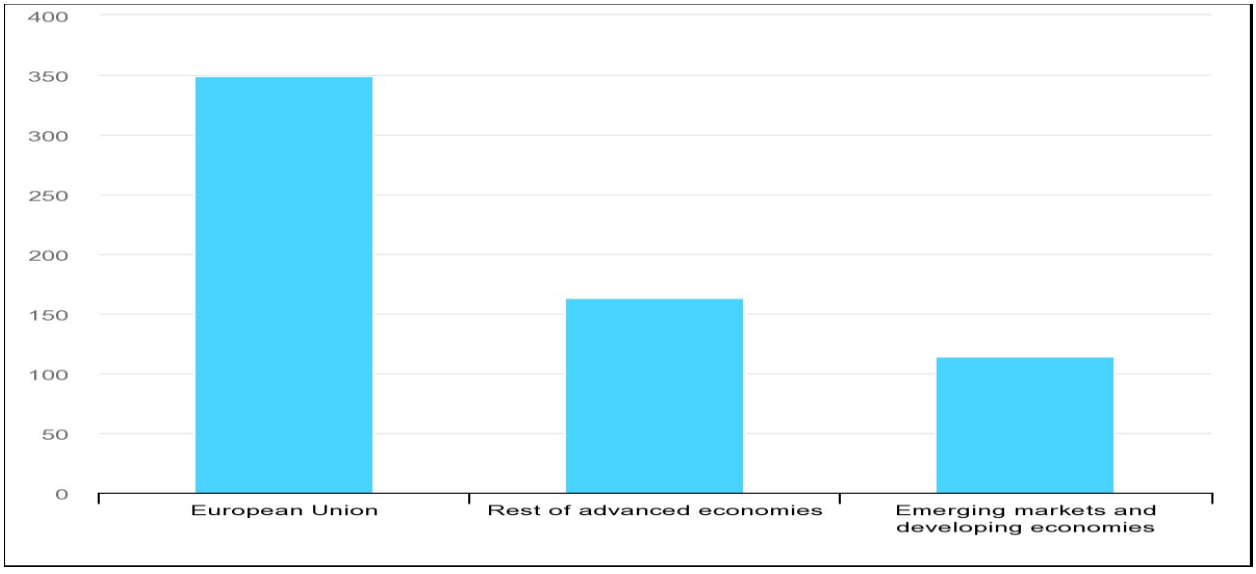

Figure 5: Government consumer measures to reduce energy bills during the energy crisis: Source: IEA, 2022

This has prompted the Glasgow Climate Pact in November 2021, to call for countries to "phase-out … inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable". The IEA reported that they have observed that, in the past year, many new government measures were implemented that limited the passing on of high international fossil fuel prices to consumers. Some of these measures can be defended as social or political necessities, given the hardship that full exposure to market-driven prices could have caused.

4. NEGATIVE REALITIES OF ENERGY SUBSIDIES

Energy subsidies represent a fiscal burden on the government budget, often contribute to large fiscal deficits, and drain resources from more growth-promoting and poverty-reducing spending, such as on infrastructure, education, and health. The existence of subsidies and related incentives for overconsumption of energy can also contribute to a deterioration in the balance of payments, owing to higher energy imports (for energy-importing countries). High levels of subsidy also often lead to distortions in the economy, as energy subsidies usually create a bias in favor of capital-intensive and energy-intensive industries, such as petrochemicals, steel, cement, fertilizers, aluminum, and copper,) diverting resources towards these sectors at the expense of more labor-intensive and, thus, job-creating industries. Energy subsidies often hinder economic diversification and reduce incentives towards the adoption of more innovative technologies, especially energy-efficient technologies. The widespread use of energy subsidies in developing countries continues to be widely defended on the basis of social safety and ensuring energy access. However, energy subsidies are largely inequitable as they naturally accrue most to the largest users – energy-intensive industries, and medium- to high-income households. Petroleum product subsidies in particular benefit primarily the urban middle class, and households that can afford a car. In a recent study on the MENA economic block, the IMF found that the poorest quintile in Egypt, Jordan, Mauritania, Morocco, and Yemen receives only about 1–7 per cent of total diesel subsidies, while the richest quintile received subsidies of 42–77 per cent of the total. In Egypt, the poorest 40 per cent of the population receives only 3 per cent of direct gasoline subsidies, per cent of natural gas subsidies, and 10 per cent of diesel subsidies. (Fattouh, & El-Katriri, 2015)

Energy subsidies, much of which leak to higher income groups and industries, could otherwise have been invested into channels – free public health and education, infrastructure improvements, or alternative tax reductions for small and medium-sized businesses that would benefit all members of society. All these would provide substantially higher social and economic returns than perceived citizens' benefits bound to energy consumption. Separate funds could have been spent targeting low income households more effectively, for instance, through comprehensive social safety nets. Fattouh, & El-Katriri, 2015, observed that the size of energy subsidies in some MENA countries relative to other forms of expenditure is staggering, for instance, in Egypt, total government expenditure on energy subsidies in 2008 equalled its combined expenditure on health and education, as did fuel subsidies in Jordan prior to the country's 2008 reform of fuel prices. Fattouh, & El-Katriri, 2015 also noted that the continued sharp price differences between fuels in neighbouring countries in the MENA, owing to different subsidy regimes, have also incentivized large-scale fuel smuggling across borders. Fuel smuggling has been of particular concern among neighbouring countries in the Levant, such as Syria, Jordan, and Lebanon; between Egypt and the Palestinian territories; across the closed borders between Algeria and Morocco and between Tunisia and Libya (resulting from the 2011 uprisings). Iran with (up to end-2010) some of the world's lowest prices for fuel, has suffered from endemic cross-border fuel smuggling to all its neighbours, a problem increasingly incurred by the wealthy Gulf states. Fuel smuggling not only contributes to illegal contraband trade at the expense of the domestic economy, but in many cases substantially exacerbates existing fuel shortages in subsidizing countries, as seen most recently in Yemen. (Fattouh, & El-Katriri, 2015)

5. SUBSIDY REFORMS

A government's institutional capacity appears to be incorporated into the type of political system in a country. Governments with weak institutions, e.g., a large number of developing countries that lack a workable mechanism for dialogue and resolution, particularly non-democratic regimes, have tended to introduce or extend universal energy subsidies, sometimes irrespective of fiscal and other consequences. In general, policy decision-making appears to be problematic for governments when implementing energy reforms (Salim etal, 2020). The call for subsidy reforms therefore is predicated on findings from a large body of empirical literature that shows the often-inequitable distribution of subsidies and suggests that they no longer meet their intended objectives of reducing inequality and protecting the most vulnerable.

Given the recent significant deterioration in public finances, these resources are now needed more than ever. Overall government debt rose by 16.3 percent of gross domestic product (GDP) in low-income and developing countries between 2012 and 2020 and by 23 percent among the subset of oil-producing nations over the same period (IMF, 2020). The COVID-19 crisis and policy responses to it only deepen the challenge, with the fiscal balance in these countries projected to worsen by 1.6 percent of GDP in 2020 compared to 2019, and by 6.6 percent among oil producers. Fossil fuel subsidies also contribute to wider social and environmental problems that are being felt acutely, particularly in developing countries. Fossil fuel combustion exacerbates air and water pollution and contributes to wider social and economic issues, including urban congestion. Fossil fuel subsidy reforms would thus benefit human health and well-being: according to World Health

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Organization, WHO, air pollution alone is currently estimated to cause 4.2 million premature deaths globally each year, 90 percent of which are in developing countries. (UNDP, 2021). In 2009, the Group of 20 advanced and emerging market economies called for a phase out of inefficient fossil fuel subsidies in all countries and reaffirmed this again in 2012. At COP26 in 2021, 197 countries agreed to accelerate efforts to phase-out inefficient fossil fuel subsidies. Despite the potential gains, many countries have had difficulty reforming subsidies. When reforms are made, prices increase, and this has often led to widespread public protests. The absence of public support for subsidy reform is in part due to a lack of confidence in the ability of governments to shift the resulting budgetary savings to programs that would compensate the poor and middle class for the higher energy prices they face. This problem is particularly challenging in oil-exporting countries, where subsidies are seen as a mechanism to distribute the benefits of natural resource endowments to their populations and where the capacity to administer targeted social programs is typically limited. Governments are also often concerned that higher energy prices will contribute to a higher rate of inflation and adversely affect their competitiveness. Subsidy reform can also be complex when it includes efforts to reduce inefficiencies and production costs, as is often the case for the electricity sector. (IMF, 2022).

5.1 Impact of removing energy subsidies

However, research and empirical evidence shows that phasing out energy subsidies can lead to a short-term decline in GDP during the adjustment process as enterprises face higher costs of energy inputs. Moreover, the increase in energy prices negatively affect real household incomes directly through higher energy prices and indirectly through higher prices of other goods and services that come with the higher costs for intermediate inputs, such as transportation, trade, and others. Wiebelt etal, 2018, reported the work of Coady et al (2015) which estimated that an increase of $0.25 per liter in fuel prices may results in a 5.5 percent decline in real household incomes, on average, across 32 countries. The impact ranges from 3.5 percent in South and Central America to 7.0 percent in MENA, where retail prices are still comparatively low. (Wiebelt etal, 2018)

Removing fossil fuel subsidies is also an essential first step towards climate mitigation. Energy subsidy reform is key to reducing emissions. By lowering the final price to consumers, an energy subsidy may be viewed, somewhat simplistically, as a negative carbon price. For example, in a study of 26 developing countries, removing fossil fuel subsidies was found to reduce emissions by an average of 6.4 percent by 2025 compared to business as usual. Liberalizing energy prices, which is a significant undertaking in some cases, is thus an important first step towards climate change mitigation in many developing countries. Subsidy reform is also likely to be more cost-effective than alternative policies, such as subsidies for clean technologies. As with broader carbon pricing, energy subsidy reform could be a highly cost-effective means of reducing greenhouse gases, in part because it creates stronger incentives to use energy more efficiently. For example, the Organisation for Economic Co-operation and Development (OECD) found that carbon pricing could reduce emissions in the electricity sector for less than one-fifth the cost, on average, of alternative policies such as feed-in tariffs or capital subsidies (UNDP 2021).

The IMF also reported that raising fuel prices to their fully efficient levels reduces projected global fossil fuel CO2 emissions 36 percent below baseline levels in 2025—or 32 percent below 2018 emissions. This reduction is in line with the 25-50 percent reduction in global GHGs below 2018 levels needed by 2030 to be on track with containing global warming to the Paris goal of 1.5-2C. Globally, around 74 percent of the CO2 reduction comes from reduced use of coal, while 21 and 3 percent respectively are from reductions in consumption of petroleum and natural gas.

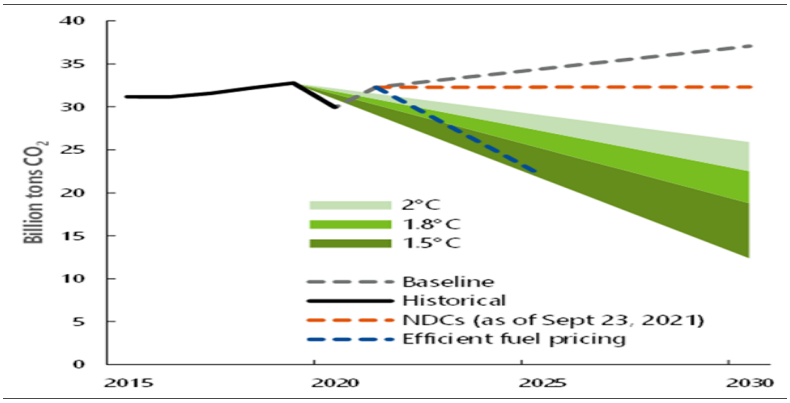

Figure 6: Impact of subsidy reforms on net zero Carbon Emissions. Source: IMF, 2022.

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Besides the impact on net zero emission obligations, the IMF also reported that full price reform could raise revenues of $4.2 trillion, 3.8 percent of global GDP, in 2025 (relative to baseline levels and accounting for revenue losses due to erosion of pre-existing fuel tax bases). Revenue gains vary substantially across regions, largely mirroring the distribution of (explicit and implicit) subsidies. The revenues generated by full price reform in 121 emerging economies and developing countries in 2025 would amount to $3 trillion, which is broadly in line with their additional spending needs for Sustainable Development Goals, as shown in figure 7.

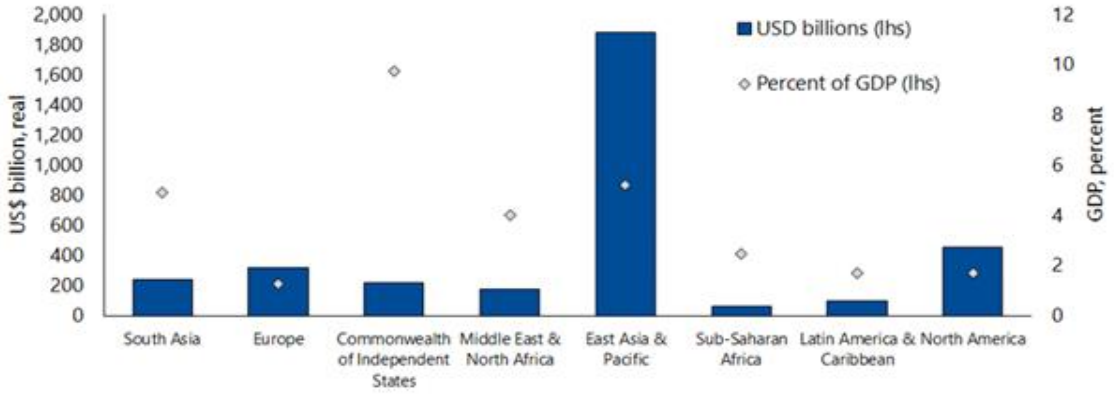

Figure 7: Impact of subsidy reforms on regional GDPs. Source: IMF, 2022.

5.2 Strategy for subsidy reforms

The call for a reform of the current system of subsidies, not only for fiscal reasons, but also for better income redistribution. Subsidy reforms can improve macroeconomic performance and help create the fiscal space needed for green investments, correcting environmental externalities, and enhancing social protection programmes. The reallocation of subsidies could therefore deliver an important boost to achieving the Sustainable Development Goals (SDGs). (Bibi et al ()). Fossil fuel subsidy reforms risk lowering consumer welfare, particularly among the poorest and most marginalized households, if they do not incorporate targeted support for disproportionally affected groups. Such issues have been brought into sharp focus by a wave of social disturbances in response to price reforms and widening inequalities in countries such as Chile, France, Iran, Bolivia and Lebanon in 2018 and 2019. However, successfully removing energy subsidies is key to strengthening fiscal positions and improving human health in many developing countries, as well as reducing greenhouse gas emissions cost-effectively (UNDP, 2021)

The UNDP, 2021 report identified four critical factors that can successfully midwife subsidy transformation; (i) political factors as very important driver shaping the timing and intensity of reform implementation. While gradual and predictable price increases are desirable from economic and social perspectives to limit disruptions to households and firms, political economy factors are key to successful implementation. Specifically, the ability to execute political leadership which is often linked to the timing and outcome of election cycles creates windows of opportunity that may justify a less gradualist approach to reform during opportune periods. (ii) The report also recommended the development of social safety nets to protect and empower people is central to promoting more socially and politically acceptable outcomes. Such reforms should focus initially on extending and reinforcing existing social welfare benefits, including cash transfer mechanisms such as temporary basic incomes. Support should prioritize vulnerable populations like informal and low-wage workers, women and young people, refugees and migrants and people with disabilities, all of whom are disproportionately impacted. However, many of the case studies show that technical and capacity constraints weaken the implementation of complementary measures. As such, reinforcing and extending social assistance programmes requires broader efforts to develop institutional and technical capacity as part of longer-term investment in social protection. This is an opportunity for transformative change, one that links the COVID response to an equalizing, resilient and sustainable post-COVID recovery. (iii) The UNDP 2021 report also stressed the need for effective public communication strategies and deep stakeholder engagement as strategic key to successful subsidy reform. Achieving this requires clear, direct interaction with stakeholders: an emphasis on the underlying rationale for change is central to effective energy pricing reform. Communication strategies should reflect public priorities and clearly demonstrate the links between energy pricing reform and wider policy outcomes. Managing and coordinating internal governmental stakeholders is also critical for effective

policy development and implementation, and finally (iv) a better understanding of the socio-economic contexts of communities likely to be affected by such reforms: Undertaking successful fossil fuel subsidy reform requires a clear analysis of existing levels of subsidy support, the reasons for their existence in the first place, as well as the distributional impacts of withdrawing it. A key factor is stronger expenditure survey data and accompanying analysis, complemented by qualitative research into local vulnerability and the spill over effects of subsidies. (UNDP, 2021).

In its contribution to a safe handling of subsidy transformation, the IMF 2022, recognizing that while there is no single recipe for successful subsidy reform, a particular country's experiences may suggest that the following ingredients may lead to a successful subsidy programme transformation:

(i) A **comprehensive energy sector reform plan** with clear long-term objectives with an analysis of the impact of reforms;

(ii) **Transparent and extensive communication** and consultation with stakeholders, including information on the size of subsidies and how they affect the government's budget;

(iii) **Price increases** that are **phased-in** over time;

(iv) Improving the **efficiency in state-owned enterprises** to reduce producer subsidies;

(v) Measures to **protect the poor** through targeted cash or near-cash transfers or, if this option is not feasible, a focus on existing targeted programs that can be expanded quickly; and

(vi) Institutional reforms that depoliticize energy pricing, such as the introduction of automatic pricing mechanisms**.**

6. FUEL SUBSIDY SITUATION IN NIGERIA

Nigeria, just like any other country has its own fair share of subsidies in several sectors of the economy, but the one that has been visible and topical is the subsidy in the petroleum sector. Fuel subsidies were first introduced in 1977 as a response to the oil price shock in 1973 (Yang etal 2020). Before 1973, prices of petroleum products varied from one place to another in Nigeria to the extent of transportation costs incurred in delivering products from the major sources of supply. However, with effect from October 1973, that ceased to be, with the introduction of uniform pricing regime in the country. A Petroleum Equalization Fund (Management) Board was set up by the Federal Military Government via a Decree promulgated on 17th February 1975 but with retroactive effect from 15th October 1973 to administer the uniform pricing system throughout the country (Akpieye, 2012). Though the 1977 subsidy was intended as a temporary fiscal response but were continuously retained by subsequent governments as attempts by successive governments to reform petroleum subsidies, have lacked the political will to carry it through mainly due to a strong popular opposition to reform. Nigerians have come to consider fuel subsidy as their share of the national cake or benefit from the federal government, as as such attracted protests whenever government attempts to reform the subsidy programme. (Adetayo, 2023). Moreover, there forms were done simply by increasing to a new regulated price instead of introducing a market based pricing mechanism. As a result, fuel subsidies always reemerged particularly following currency depreciation and related increase in inflation (IMF 2022).

One of such attempts was announced by Goodluck Jonathan in the new year day of 2012, that it was deregulating the petroleum sector, so that Nigerians would begin to buy the products at international market price, which immediately saw the price jump from N65 to N141. This created a domino effect at a level perhaps: transportation costs increased by more than 200 per cent and many Nigerians forsook their new year celebrations, while auctioned their belongings far less than their original values to raise money for transportation. Though the President Jonathan tried to assuage the populace that the money saved from the subsidy would be channelled into a government programme to help the youths, a nationwide strike began two days after, followed by a series of protests, particularly in Lagos and Abuja tagged 'Occupy Nigeria'. This protests yielded some gains as the president announced a reduction the price of fuel from N141 to N97 per liter, and in return, the NLC announced the suspension of the protests and strike action. However, unfortunately, the protest costs the lives of 15 protesters reportedly gunned down by the police, while many more were injured.(Omotayo, 2023)

The Jonathan administration was the first administration to indicate its plan to stop fuel subsidy payments, and did so on the basis that the subsidy was not economically sustainable. With all four refineries in the country working below capacity,

Nigeria was importing more than 90 per cent of its petrol. Marketers thus were subsidized by the government for the imported fuel they brought into the country. As president, Jonathan argued in 2012 that it was either the country 'deregulate and survive economically, or we continue with a subsidy regime that will continue to undermine our economy and potential for growth, and face serious consequences.' While General Buhari initially claimed ignorance of the existence of fuel subsidy, during the administration of President Jonathan in 2012, his government, which took over in 2015, continued the payment of subsidy and despite raising the pump price to N185 per litre, his administration paid about N11 trillion in fuel subsidies, the highest since 1999. (Ogwu, 2023).

So, coming to terms with the realities of fuel subsidy, and financial and economic hemorrhage that it has brought to the nation, President Muhammadu Buhari in October 2022, during the presentation of the 2023 budget to the National Assembly, announced that the subsidization of petrol would end by June 2023, arguing that the scheme was unsustainable. His position was supported by the facts that the federal government budget for subsidy would have cost the nations some N6.7 trillion in 2023, but this had to be reduced to N3.35 trillion to fund the subsidy till June 2023. Asiwaju Bola Ahmed Tinubu had repeatedly during his presidential campaign promised to remove subsidy if elected into power, and this promise was dutifully kept on 29 May 2023 when he announced during his inaugural speech that fuel subsidy has been scrapped. This statement immediately changed the product market as fuel stations raised the pump price with some selling for as high as N1,000, thus forcing the return of long queues. However, the situation was brought to some sanity when the Nigerian National Petroleum Company (NNPC) Limited announced a new pump price across the nation at an average of N500. (Omotayo, 2023). As of the time of writing, petrol pump price sells for between N577/litre to N617/litre across major stations in the country.

It is of interest to note that other price adjustments were made in 2016, 2020 and 2023, prior to the full subsidy removal by President Asiwaju Bola Tinubu in May 2023. The 2016 was the second attempt towards fuel subsidy reform. In May 2016, the Nigerian government raised the petrol price from NGN 86.5 to NGN 145 per liter (66 percent increase) . At that time, Nigeria was experiencing a severe fuel shortage, with consumers queuing for hours outside gas stations and often paying way over the new price for black-market products. Due to the fuel shortage, the political resistance to the fuel price increase was relatively less than in 2012 However, the labor unions that went on strike in 2012 still opposed the reform. After that, as the international crude oil price rebounded, the fuel subsidy reemerged. The crash in global oil prices in 2020 gave Nigeria another opportunity to reform, but as global oil prices rebounded implicit fuel subsidy reemerged as before. The Nigerian government had to lower the fuel price from capped regulatory pump price of NGN 145 per liter to NGN 130 in March 2020, and again to NGN 108 in May 2020, due to the falling global oil price. In June 2020, eventually, the government removed the price cap for PMS. However, after that, as global oil prices rebounded, the government readjusted the pump price to NGN 167, which was far below the imported (market) price of NGN 233, creating large implicit fuel subsidy since January 2021. The federal government due to booming black market prices in Lagos and other parts of the country, on January 19, 2023 quietly approved N180-N185 per litre as the new official pump price range for petrol amid the scarcity of the product. This increase was to compensate for the current market realities associated with escalating foreign exchange and high lightering charges such as the cost of chartering shuttle vessels for the discharge of petrol (Oladipo, 2023)

6.1 Fuel subsidy methodology in Nigeria

The fuel subsidy in Nigeria is of the implicit type which is administered through the introduction of a market-based pricing mechanism such that as oil prices rose, considerable fiscal costs builds up from implicit subsidies resulting from the difference between higher prices of imported fuel products and regulated pump prices. (IMF 2022). The import petroleum subsidy model operated by the former Petroleum Product Pricing and Regulatory Agency (PPPRA) consist of (i) cost and freight (ii) trader's margin (iii) lightering expenses – which the cost of using a smaller vessel to transfer product from a mother vessel due to draft restrictions (iv) NPA charges (v) financing costs (vi) Fx differential and interest costs (vii) Jetty costs (viii) storage charge (ix) distribution margins (x) taxes. Table 1 shows a sample computation of fuel subsidy based on the PPPRA model. Some of the inherent costs such as lightering expenses and landing costs were due to:inadequate port facilities for large number of marketers, Systemic inefficiencies,overt rent-seeking & gaming, collusion between fraudulent marketers and some regulatory entities, and lack of adequate sanctions for non-performance, and finally opaque pricing & inherently costly (Adefulu and Omonbode, 2017)

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Table 1. PPPRA product-pricing template for PMS (Based on Average Platts' Prices for May 21, 2015 and average exchange rate of the N197 to USD for May 21, 2015). Source: Clarke etal, 2016

Item	Cost Element	USD/MT	Naira/Litre
1	C + F*	729.82	107.21
2	Trader's Margin	10	1.47
3	Lightering Expenses (SVH)	28.54	4.19
4	NPA	5.25	0.77
5	Financing (SVH)	11.93	1.75
6	Jetty Depot Thru' Put Charge	5.45	0.80
7	Storage Charge	20.42	3.00
	A. Landing Cost	**811.41**	**119.20**
Distribution Margins			
8	Retailers	31.31	4.60
9	Transporters	20.35	2.99
10	Dealers	11.91	1.75
11	Bridging Fund	39.82	5.85
12	Marine Transport Average (MTA)	1.02	0.15
13	Admin Charge	1.02	0.15
	B. Margins	**105.44**	**15.49**
Taxes			
14	Highway maintenance	0.00	0.00
15	Government Tax	0.00	0.00
16	Import Tax	0.00	0.00
17	Fuel Tax	0.00	0.00
	C. Taxes	**0.00**	**0.00**
	Total Cost/ Expected Open Market Price (A+B+C)	**916.85**	**134.69**
	Retail Price	592.22	87.00
	Subsidy Claim	**324.63**	**47.69**

** C+F price is Cost + Freight Offshore Nigeria; Conversion Rate (MT to litres): 1,341 Exchange Rate (N to USD) = 197*
**** Effective Date of New Approved Pricing Template is January 19, 2015 Source: PPPRA website, n.d.*

Figure 8 also shows chart of the composition of the implicit subsidy regime in Nigeria. The model in figure 8 shows that the cost (NGN 233) of delivering a liter of Premium Motor Spirit (PMS) in 2021 has exceeded the regulatory retail price (NGN 167) by around 40 percent. The gap (NGN 66)is estimated as a proxy for implicit fuel subsidy per liter of PMS. At this level of price under-recovery and with the assumption for consumption of about 54million liters per day in Nigeria, the annual implicit subsidy cost is estimated at NGN1,912 billion in 2021. However, most of the subsidies are for PMS, although fuel oil price is also subsidized. There is no subsidy for kerosene (a cooking/heating fuel used mainlyby poorer households) whereas the PMS subsidy (used more by richer households) is very large ,implying a "regressive" pricing policy, which will be discussed in the next section (IMF, 2022)

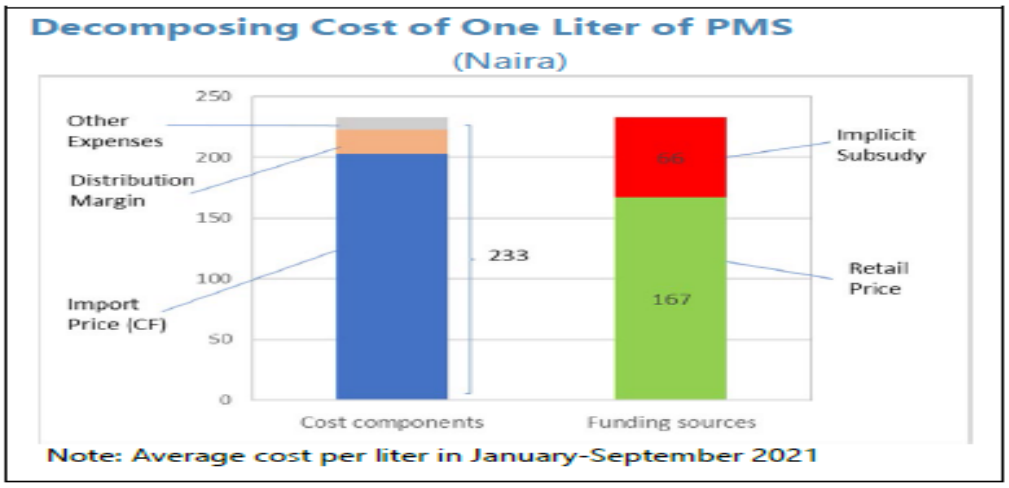

Figure 8: Decomposing the cost of importing one litre of PMS in Nigeria: Source IMF, 2022

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6.2 Challenges of funding fuel subsidy in Nigeria

On an annual basis, a substantial portion of the national inflow is committed to funding the subsidy scheme. Of course there are good reasons for the astronomical growth in subsidy amount - price of crude oil in the international market, volume of PMS consumed albeit debatable, and Naira devaluation are some of the drivers

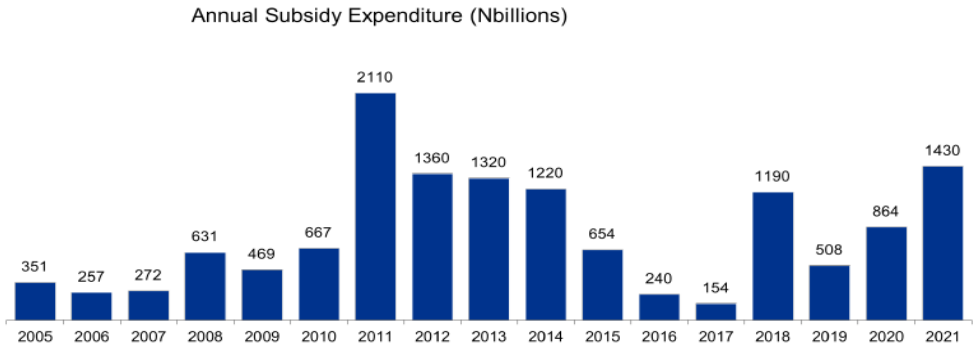

Figure 9: shows a chart of fuel subsidy payments from 2005 through 2021. (KPMG, 2023).

According to the World Bank, the Nigerian government has spent over USD30bn on fuel subsidies over the past 18 years, which has adversely impacted on available funds for critical infrastructure and other essential sectors, such as education, health, and defence. The Debt Management Office confirmed that the country had to borrow to finance fuel subsidy in 2022. (Ogwu, 2023). The Nigerian National Petroleum Company Limited (NNPCL) claimed that the country was spending over N400 billion monthly on petroleum subsidy. He claimed that prior to the removal of subsidy, the landing cost was around N315/litre,, while they were selling to their customers at N113 per litre, indicating a difference of close to N202 for every litre of PMS as subsidy. According to the Group CEO of NNPCL, this translates to N400 billion of subsidy every month using a daily consumption quantity of 66.5 million liters. (Izuaka, 2023). Since the subdidy was being funded through debts by the past Buhari administration, his government bequeathed a 77 trillion naira ($167bn) debt from local and foreign creditors to the Asiwaju Bola Tinubu's government, with about 96 percent of the government's revenue being used to service debt, and unless there are very serious steps, the government's cash crunch could worsen if subsidy payments continue**.** (Adetayo, 2023)

6.3 Economic distortion

The subsidy regime has created economic distortion as shown in figures 10

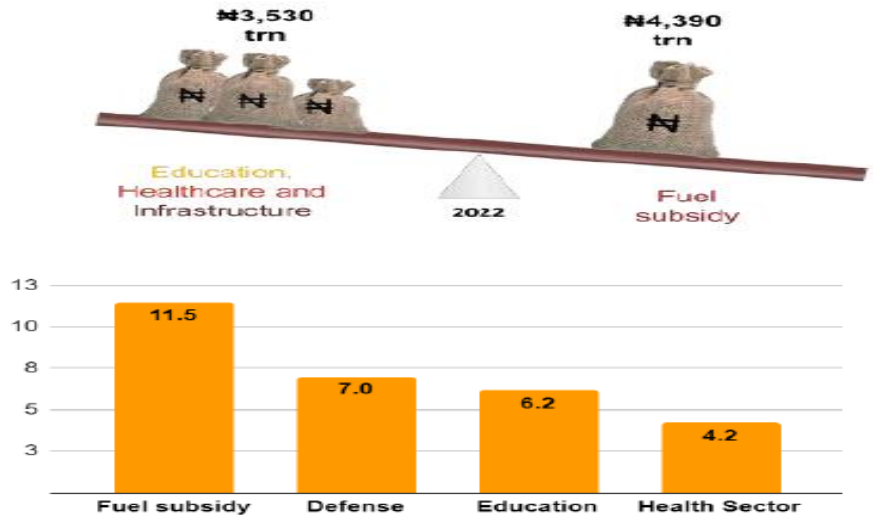

Figure 10: Fuel subsidy vs Federal Government Allocations to critical sectors in the past 9 years. Source – PWC, 2023

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Another significant distortion is evident in the distribution of the subsidy benefits across five income groups in Nigeria as shown in a study conducted by the National Bureau of Statistics (NBS), on expenditure on petroleum products by the five income groups in Nigeria. The study showed that the richest 20 per cent consumes 75 per cent of petrol in Nigeria while the poorest 20 per cent consumes just 1 per cent of the product. The NBS data also showed that the richest 40 per cent consumes 90 per cent of the fuel while the poorest 40 per cent consume 4 per cent of fuel subsidy spending. This lopsided trend is attributable to the vehicle ownership data in the country where the rich have multiple cars with the use of Premium Motor Spirit (PMS) accounting for 96 per cent of total products consumed in the country. This implies that 90 per cent of PMS subsidy benefits go to the rich, and just 4 per cent to the poor,. (Addeh, 2023**).** Again, most vehicles used for carrying large numbers of people and goods are diesel-powered, which is already deregulated, so also household kerosene, which is mostly used by the poor. This clearly shows that the government was subsidizing mostly those who could afford petrol at market rates and not the poorest of the poor that truly requires subsidy.

6.4 Corruption and Nigerian Subsidy programmes

Fuel subsidies in Nigeria have historically been associated with allegations of corruption; there are incidence of proper accounting of the quantity of fuel that is imported by NNPCL. While Official data from NNPC pegged Nigerians' daily consumption to 66.8 million litres, the organization also released another figure- 98 million litres per day as the daily consumption. The former CBN Governor, Sanusi was very vocal about fuel subsidy being a scam as some people benefit from it at the expense of ordinary Nigerians who are being denied government intervention in key areas like education and health. According to him:

"A lot of the petroleum subsidy that we say is being paid is from phantom fuel that never came into this country. The only reason it makes sense is that there are a number of people who control the levers of power, who are making billions and billions of dollars out of this scam that is called fuel subsidy" In 2012, Nigeria's former minister of finance and the current director-general of the World Trade Organization, Ngozi Okonjo-Iweala reported that the government recovered N29 billion from oil marketers who had initially been paid by the government but were later found out to have made fraudulent claims either by not importing fuel or overstating the amount of petrol imported into the country. Like Sanusi, Okonjo-Iweala also admitted that the scheme was a fertile ground for fraud and supported its attempted removal by the Jonathan administration. Apart from alleged fraud perpetuated by oil marketers, in an investigation, NNPC also reported that more than 60 million litres of Nigeria's subsidized petrol were smuggled out of Nigeria each month to neighbouring countries. Smugglers were even very brazen to secure licences to open filling stations in border towns to sell smuggled petrol to other countries like Niger, Chad, Benin Republic and Cameroon. A 2018 NNPC report showed that 16 states, having amongst them 61 Local Government Areas with border communities, account for 2,201 registered fuel stations.

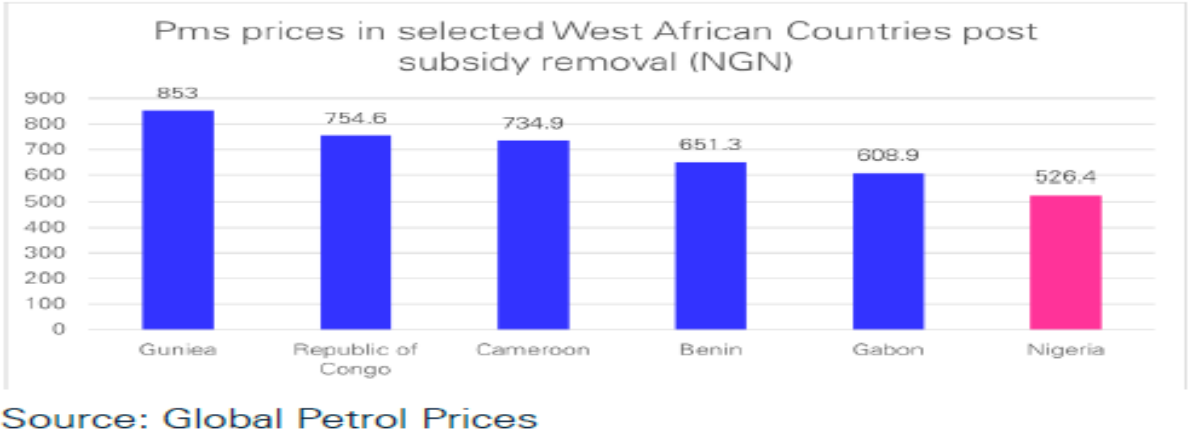

Figure 11: PMS prices in selected West African Countries post subsidy removal.

A report published by Chapel Hill Denham estimates that 15.64 million litres of petrol are smuggled out of Nigeria daily as the retail price of Nigerian petroleum products on average is 3.7 times cheaper than those of its neighbours, and this has given smugglers undue opportunities for arbitrage. (Ogwu, 2023).

6.5 Further justifications for fuel subsidy removal in Nigeria

It was clear that Nigeria was bleeding to death with the payment of subsidies, especially as its crude oil production plummeted resulting in less oil revenue for the treasure due to militancy and other criminal activities within the Niger Delta region. The subsidies are draining the government's finances and preventing investments in critical areas such as education, health, and infrastructure. Nigeria's public expenditure overall is already low compared to global averages, and the subsidies only exacerbate this problem. According to a report by KPMG, 2023 that captured some statistics by World Bank and the IMF, Nigeria was visibly behind its peers in sub-Saharan Africa in key development numbers; (KPMG, 2023)

a. Average global public expenditure to GDP is about 30% of GDP. At 13.1% of GDP in 2021, Nigeria's government expenditure ranks quite low globally;

b. Nigeria spent an average of USD 23 on every Nigerian on Education, compared to USD 32 dollars in Mali, USD 88 dollars in Ghana and USD 350 in South Africa. Nigeria's average per capita Education spend is about half the per capita Sub-Saharan African average. Nigeria simply cannot keep the subsidies and at the same time reduce its 14 million children of school attending ages that are out of school, particularly when 1 out of every 5 of the world's out-of-school children are in Nigeria;

c. Nigeria spends even less on health (USD 15) than it peers, and this gross underspend has profound implications on not only productivity, and human capital development but also on life expectancy; and

d. As a result of the crowding out effect of subsidies, public investment spending on infrastructure in Nigeria is a low 1.7% of GDP, compared to 2.3%, 3.2% and 6% of GDP in Ghana, Egypt and Kenya. This explains why access to electricity in Nigeria is 55.4%, lower than 85.9% in Ghana, and 100% in Egypt.

Besides its obvious lag in basic infrastructure amongst its sub-Saharan peers, it is imperative that the country must also eliminate its subsidies if it must free its citizens from debt burdens. Due to the increasing debt burden, Nigeria's revenue receipts are being crowded out by its debt service obligations. In 2016, Nigeria's debt service was 96.8% of its revenue, and while there was a little reprieve in 2019 as it fell to 70.4% in 2019, it ballooned to about 102% in 2022. It is estimated that unless something is done drastically, Nigeria's debt service obligations will increase to as high as 160% of revenue by 2027.

7. BENEFITS OF THE CURRENT FUEL SUBSIDY REMOVAL

Since, the Nigerian subsidies regime only benefit the rich and the smugglers, and their cohorts in government, the current subsidy removal can also be seen as a blessing in disguise for the less privileged in the long run, though, the short term effects may be stressful. Some key benefits are highlight below: (PWC, 2023).

7.1 Reduces government borrowing and the associated huge deficit

The subsidy removal will create the needed buffer in the economy and will therefore reduce government borrowing and debt burden.

7.2 Free resources for investment in other critical sectors

Evidently, the savings can be channeled to build other critical sectors such as education, healthcare, security and infrastructure. This will not only improve the standard of living for citizens but also enhance economic growth.

7.3 Reduce/remove incentive for smuggling and associated security risk

Removing the subsidy will directly reduce the incentive for smuggling which will also directly reduce security risks associated with fuel smuggling.

7.4 Stronger Naira and decline in imported inflation

Fuel imports and foreign exchange are directly correlated, especially where the imported quantities are far more than local demand, and the surplus smuggled and sold across the borders. Subsidy removal will eliminate the "inflated" volumes, and also reduce smuggling, and hence a reduction in the demand for foreign exchange which will lead to a stronger Naira. This will also reduce imported inflation and its pass-through effect, as the cost of importing petroleum products is a major contributor to inflation in Nigeria

7.5 Investment flow to the downstream sector

There is already increasing interest in local refining capacity as more private investors now look to investing in downstream projects in the country. This will enhance job creation the country's energy security and reduce dependence on imported petroleum products.

7.6 Improved sovereign credit rating

Nigeria's sovereign credit rating has been adversely affected by its low revenue, high debt levels, rising deficit, and vulnerability to oil price shocks. Removal of the subsidy will increase government's revenue, reduce borrowing and the associated deficit, leading to an improvement in the country's sovereign credit rating and lower cost of borrowing.

7.7 Become a refinery hub within Africa

The African Continental Free Trade Area (AfCFTA) agreement provides a platform for Nigeria to competitively export refined petroleum products to other African countries. With the removal of fuel subsidy, Nigeria can become a refinery hub and increase its exports of refined products, generating foreign exchange and enhancing economic growth

7.8 Additional benefits by appropriating the savings from Subsidy Removal

In addition to the benefits mentioned above, more benefits are accruable from the subsidy removal than can be channeled to pro-poor development of key sectors of the economy that will also directly reduce poverty incidence in the country. Results of the 2022 Multidimensional Index Survey of the National Bureau of Statistics indicate that 63% of persons living within Nigeria. Indeed, 133 million people are considered to multidimensionally poor with high prevalence rates in the Northern Regions (65%) compared to the Southern Regions (35%).

7.8.1 Financing the Fiscal Deficit:

The savings from the subsidy removal can be used to finance government's fiscal deficit, such that the resulting fiscal space should be utilised to prioritise pro-poor capital and recurrent expenditures that would have an immediate impact on improving the welfare of the most vulnerable segments of citizens and communities nationwide

7.8.2 Mass Transit Schemes:

Introduction of Mass Transit Schemes for the urban working population at the State and Federal Level, could provide additional succour to the commuting poor in key States.

7.8.3 Leveraging New & Greener Transportation Technologies:

The government at state and federal levels and even private investors should take advantage of the subsidy removal to invest in greener and more environmentally friendly energy sources in fueling public transportation. Such technologies include deploying electric busses, CNG, LNG, and LPG as vehicular fuels. This will reduce dependence on petrol fuel. With Nigeria's vast gas resources, the federal government must encourage more private investment in the use of gas as fuel, which is also in line with its Net Zero obligations with the Paris Agreement. Electric buses, due to their low emissions, are a more environmentally friendly and sustainable alternative to diesel powered buses. Preliminary efforts are already being made in Lagos State, as the recent partnership of Lagos State Mass Transit Agency ('LAMATA') and Oando Clean Energy for the delivery of electric buses, charging stations and other infrastructure is a formidable step in the right direction.

7.8.4 Clearing Nigeria National Petroleum Corporation ('NNPC') Ltd. Arrears:

Savings from the subsidy removal can also be directed to clear outstanding N2.8 trillion debt owed to NNPC Limited by the federal government.

8. CONCLUSION AND RECOMMENDATIONS.

The Asiwaju Bola Ahmed Tinubu's government took the bull by the horn to completely remove the subsidy in his inaugural speech on May 29, 2023, even though by the PIA, petroleum subsidy must be priced at market rates, six months after the Act came into being, which would have been February 17, 2022, since the Act was signed on August 16, 2021. However, as is always the case, the subsidy was extended through budgetary provision to June 2023, beyond which, there will be no provision in the budget to make subsidy transfers.

As bold and pragmatic the removal may have been, the Asiwaju Bola Ahmed Tinubu came short of recognized global practices in handling subsidy removal. However, there is still room for corrective measures to ensure that the reforms are well received:

8.1 The authorities needed to have conducted a well-designed "communication campaign", which is crucial to any reform success**.** Empirical studies have also shown that "communication" is a key part of successful reforms. The government must make clear the reasons for the reforms, compensate those worst affected, and ensure that the benefits are widely shared. Though the President repeatedly mentioned the removal of the subsidy in his election campaigns, the decision to drop the "gavel" should have been a product of further engagement with key segments of the society to ensure that everyone fully understood the issues and the remedies proffered after the removal. The government needed to also stress the adverse effects of removing the fuel subsidy and the benefits from its removal and compensating measures for the poor**.** Empirical study has also confirmed, for example in the case of India power tariff reforms, that when consumers were aware of the negative impacts of energy subsidies, they had a more positive attitude towards reform.

8.2 The government must work hard to establish credibility that the proceeds from the subsidy removal will be used for the general population**.** The government must demonstrate the ability to handle the proceeds from the subsidy removal, and in a transparent matter redistribute the savings from reforms. One such measures must be to report the savings each month to the public and what the government intends to do with every kobo. The government must be accountable to the Nigerian people in managing the subsidy proceeds.

In conclusion, we implore the government to pay close attention to the recommendations in 7.0 in this paper for better management of the proceeds from the subsidy removal.

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