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Implications of fuel subsidy removal on the Nigerian economy

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Abstract

Using the discourse analysis methodology, we offer some insight into the macroeconomic and microeconomic implications of the 2023 fuel subsidy removal in Nigeria. The positive implications are that fuel subsidy removal would free up financial resources for other sectors of the economy, incentivize domestic refineries to produce more petroleum products, reduce Nigeria's dependence on imported fuel, increase employment, channel funds for the development of critical public infrastructure, reduce the budget deficit and generate a budget surplus in the near future, reduce government borrowing, curb corruption associated with fuel subsidy payments, increase competition, reinvigorate domestic refineries and reduce pressure on the exchange rate. The negative implications are that fuel subsidy removal may decrease economic growth in the short term, increase inflation, increase poverty, increase fuel smuggling, increase crime, increase the prices of petroleum products and loss of jobs in the informal sector. It is recommended that the government should carefully evaluate the impact of fuel subsidy removal on individuals and businesses and provide palliatives and other economic relief programs to cushion the adverse effect on individuals and firms.

Keywords: fuel subsidy removal, Nigeria, economic growth, poverty, unemployment, corruption, fiscal deficit.

JEL code: H20, H30, N77.

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1. Introduction

Fuel subsidy is a government discount on the market price of fossil fuel to make consumers pay less than the prevailing market price of fuel (Ovaga and Okechukwu, 2022). When subsidies are in place, consumers would pay below the market price per litre of the petroleum product. Globally, there are debates about fuel subsidy because of its huge amount and its effect on citizens welfare and the fiscal health of a nation.

The size of global fossil fuel subsidy is large and is estimated at \$1 trillion in 2022 from \$325 billion in 2018, according to the International Energy Agency. This amount is significantly higher than the value of global aid which was estimated at \$204 billion in 2022 and larger than the combined government revenue of developing countries. This has led to calls for the removal of global fossil fuel subsidy so that the saved funds can be channelled to assist the poor and vulnerable in need of humanitarian assistance in developing countries (Couharde and Mouhoud, 2020; Ozili and Ozen, 2021). However, the removal of fossil fuel subsidy is contentious because there is the argument that fossil fuel subsidy is a form of aid because it makes fuel more affordable for the poor. Despite this favourable argument, a large literature documents the negative consequences of fuel subsidy which include increasing air pollution and greenhouse gas emissions (Sweeney, 2020), road congestion (McCulloch, Moerenhout and Yang, 2021), road accidents and premature deaths (Parry, Black and Vernon, 2021), foregone tax revenue (Sweeney, 2020) and it increases inequality between the poor and the rich (McCulloch, Moerenhout and Yang, 2021). However, policymakers in many countries are reluctant to remove fuel subsidy and to implement fuel subsidy reforms because such reforms may result in a significant increase in fuel or electricity prices which could lead to economic hardship for low-income and poor citizens, and might lead to massive protest and increase the risk of a revolution or the overthrow of the incumbent government.

In Nigeria, fuel subsidies were first introduced in the 1970s as a response to the oil price shock in 1973. Fuel subsidies were partially removed in 1986. Since then, the fuel subsidies have been in place. In 2012, the government abruptly removed fuel subsidy. The removal led to massive protests which was intended for the government to reinstate the fuel subsidy it had removed.

The government subsequently reinstated fuel subsidy in 2012 due to the massive protests. Since then, fuel subsidy payment in Nigeria has grown enormously. In 2022, fuel subsidy reached ₦4 trillion (US\$6.088 billion) which amounted to 23 percent of the national budget of ₦17.126 trillion (US\$25.87 billion) in 2022. As a result, Nigeria could no longer sustain fuel subsidy in 2023, and the government announced that fuel subsidy would be removed in June 2023.

Recent evidence in the Nigerian literature shows mixed effect of fuel subsidy. Some studies identify some benefits of fuel subsidy and call for transparency in the administration of fuel subsidy while other studies highlight the negative consequences of fuel subsidy and advocate for its removal. For example, Omitogun et al (2021) show that the removal of fuel subsidy might reduce the amount of carbon emission in the Nigerian economy. Similarly, Adekunle and Oseni (2021) argue that fuel subsidy removal could reduce the growth in carbon emissions through low energy consumption channels even though it could lead to higher energy prices. Asare et al (2020) argue in support of fuel subsidy removal and that the revenue gained from removing fuel subsidy could provide additional resources for the government to respond with immediate interventions to address the COVID-19 crisis and enable the government to shift resources into more productive spending for long-run post-COVID recovery and resilience (Ozili and Arun, 2023). Other studies highlight the consequence of fuel subsidy removal. Umeji and Eleanya (2021) argue that Nigerian oil wealth has not translated to improved standard of living despite the introduction of fuel subsidy, and that fuel subsidy removal could have severe consequences which can be mitigated by transparency on the part of government in spending the funds saved from fuel subsidy removal for infrastructural development. Also, Ovaga and Okechukwu (2022) argue that fuel subsidy breeds corruption in Nigeria because a group of corrupt people have been working against the functioning of existing refineries and they undermine efforts to build new refineries in Nigeria so that fuel importation would be sustained and fuel subsidy would be retained for the purpose of satisfying their selfish desires. Omotosho (2020) points out that fuel subsidy removal could lead to higher macroeconomic instability through rising energy prices and inflation in Nigeria. Furthermore, McCulloch, Moerenhout and Yang (2021) show that many

Nigerian citizens oppose fuel subsidy removal or reforms because they believe the government is corrupt and lacks the capability to undertake transparent reforms.

Despite these evidence in the literature, there is little or no discussion about the impact of the recent fuel removal in Nigeria in 2023. The way the fuel subsidy was removed, without first providing some palliatives, led to controversy about how the fuel subsidy removal would affect the Nigerian economy and Nigerians. Therefore, there is a need to identify and understand the macroeconomic implications and the microeconomic implications of the 2023 fuel subsidy removal in Nigeria. This paper provides a rigorous assessment of the macroeconomic and macroeconomic implications of the recent fuel subsidy removal in Africa's largest economy – Nigeria.

This study contributes to the literature that examine the beneficial and harmful effects of fuel subsidy (see, for example, Omitogun et al, 2021; Adekunle and Oseni, 2021; Asare et al, 2020; Umeji and Eleanya, 2021; Ovaga and Okechukwu, 2022; Omotosho, 2020; McCulloch, Moerenhout and Yang, 2021). The study also contributes to the literature that examine the contribution of fossil fuels to climate change. The study further contributes to on-going debates about the negative consequences of fuel subsidy for climate change mitigation and adaption.

This rest of the paper is structured as follows. Section 2 presents the review of related literature. Section 3 presents the macroeconomic implications of fuel subsidy removal in Nigeria. Section 4 presents the microeconomic implications of fuel subsidy removal in Nigeria. Section 5 presents other implications. Section 6 presents the concluding section.

2. Related literature

Nigeria is not the only country to remove fuel subsidy. In 1997, Indonesia removed fuel subsidy after the Asian financial crisis. The removal of fuel subsidy increased the domestic price of fuel and suddenly ignited protests and violent riots which occurred for weeks and forced the incumbent government to resign in 1998 (Chelminski, 2018). Dartanto (2013) examined the relationship between existing fuel subsidies and fiscal balance in Indonesia between 1998 and 2013 and found that removing 25 percent of fuel subsidies increased poverty by 0.259 percentage points while 100 percent removal of fuel subsidies and the reallocation of 50 percent of them to government spending decreased poverty by 0.277 percentage points. Fathurrahman et al. (2017) showed that the reallocation of subsidy payments to low-income households could slow down economic development but improve social welfare. However, removing fuel subsidy usually comes with the promise of using the money saved from subsidy to undertake targeted reform. But in Indonesia, citizens find promises to replace fuel subsidies with targeted spending less credible and would resist the reform if they believe the government is corrupt (Kyle, 2018).

Other international studies have also analysed the effect of fuel subsidy removal. Harring et al. (2023) analysed cross-country attitudes towards fossil fuel subsidy removal and found that the public would have positive attitudes towards subsidy removal if there were optimal use of the saved fiscal revenues. In Malaysia, Chatri (2014) assessed the economy-wide effect of gas subsidy removal in the power sector and found that gas subsidy reduction led to increase in the price of electricity followed by a decline in demand for electricity by other economic sectors and a decrease in gross domestic product. Antimiani et al. (2023) showed that fossil fuels are still highly subsidised in EU countries, and there are deliberations to remove fossil fuel subsidies and reuse the revenues to foster the technological transition to a sustainable and decarbonised EU economy. Sampedro et al. (2017) also argued that fossil fuel subsidy is a barrier to tackling climate change in the EU because it diverts investment away from clean energy sources, and fossil fuel subsidies amounted to US\$233 billion in 2014 which is four times the amount of

subsidies allocated to promote renewable energy. However, they showed that fuel subsidy removal would give rise to only a small reduction in CO₂ because people would switch from fuel to coal and gas. Nowag et al. (2021) suggest the use of state aid to phase out fossil fuel subsidies in the EU. Erickson et al. (2017) showed that the removal of tax incentives and other fossil fuel support policies could hasten the attainment of the G20 climate commitments. Lin and Li (2012) examined the case of China and showed that fuel subsidy removal would generate negative externalities in China but would generate positive externalities to other world regions without subsidy removal. In a related study, Ouyang, and Lin (2014) showed that the economic benefits of renewable energy subsidies were lower than the economic benefits of fossil fuel subsidies in China.

3. Macroeconomic implications of fuel subsidy removal

3.1. The positive macroeconomic implications

3.1.1. The saved funds from fuel subsidy removal would be channelled to develop critical public infrastructure

A positive macroeconomic implication of the removal of fuel subsidy in Nigeria is that the funds that would have been used for fuel subsidy payment could be channelled to the development of critical public infrastructure in Nigeria. There is a consensus among academic economists that the funds used for subsidy payments can be channelled to public infrastructure spending (Bazilian and Onyeji, 2012; Majekodunmi, 2013). Prior to the removal of fuel subsidy, Nigeria did not have sufficient money to fund the development of critical public infrastructure (see figure 1). The lack of sufficient funds led the government to incur huge debts to finance the budget. However, with the removal of fuel subsidy in 2023, the government could use these funds and channel them appropriately for the purpose of developing critical public infrastructure in Nigeria. This outcome can only occur if the government is transparent, honest and is held to account, to ensure that the saved funds from fuel subsidy removal are channelled to the development of critical public infrastructure.

3.1.2. Financial resources are freed up for the development of other sectors

Other studies suggest that the savings from fuel subsidy removal could be channelled for the development of other sectors of the economy (Gidigbi and Bello, 2020; Ogunode, Ahmed and Olugbenga, 2023). In addition to developing Nigeria's critical public infrastructure, the removal of fuel subsidy can free up financial resources for the development of other sectors that require significant government intervention and funding. The funds that would have been used for fuel subsidy payment could be channelled to sectors such as agriculture, healthcare, tourism, education and to fund the implementation of the Student Loan Act. Prior to the removal of fuel subsidy, many sectors of the economy did not perform optimally due to weak private sector investment and an abysmal level of public expenditure into those sectors due to insufficient government revenue as shown in figure 1. With the removal of fuel subsidy, it is hoped that the Federal Government would channel the freed-up resources into other sectors that need government funding.

Figure 1. Nigeria Government Revenues

Data source: Central Bank of Nigeria

3.1.3. Fuel subsidy removal will reduce the budget deficit and could generate a budget surplus in the near future

Another positive macroeconomic implication of the removal of fuel subsidy is that the funds would be used to fund the current budget deficit. Existing studies show that fuel subsidy contributes to Nigeria's rising fiscal deficit and call for the need to remove fuel subsidy (Harun et al, 2018; Adagunodo, 2022). Historically, Nigeria has had a budget deficit in the last 10 years. Figure 2 shows that Nigeria's budget to GDP ratio has remained in negative territory for over a decade. More recently, the petrol subsidy was billed to consume ₦4 trillion in 2022 and a

whooping ₦17 trillion in 2023 (see figure 3), meanwhile the approved 2023 budget was only ₦21.83 trillion. This implies that the fuel subsidy would consume about 77% of the budget which already puts Nigeria in a chronic budget deficit and would drive Nigeria towards bankruptcy. In addition to that, 90% of Nigeria's revenue is used to service its external debt which further complicated Nigeria's financial situation during the fuel subsidy regime. The recent removal of fuel subsidy is indeed a positive development for Nigeria's finances because it would reduce Nigeria's current budget deficit as the ₦17 trillion would be used to augment the national budget. And over time, Nigeria could have a budget surplus.

Figure 2. Budget deficit to GDP ratio

Data source: Central Bank of Nigeria (CBN)

Figure 3. Fuel subsidy amount in the budget

Data source: CBN & NNPC

3.1.4. Reduced government borrowing

There have been debates about the adverse effect of fuel subsidy payments on government borrowing (Okongwu and Imoisi, 2022). Since the start of the fuel subsidy regime, the Nigerian government has been borrowing, and the borrowing worsened during the 2016 recession and the 2020 COVID-19 pandemic (Ozili, 2022). Recently, in 2022, the government constantly borrowed from the Central Bank of Nigeria (CBN) through the ways and means provision for debt repayment and subsidy payment. The government had no choice but to increase borrowing from the Central bank. The government owed the Central Bank ₦22.7 trillion which was recently securitized by the FG with the approval of the national assembly in 2023. The recent removal of fuel subsidy implies that government borrowing from the Central Bank would stop, as the saved funds from fuel subsidy removal will become available for the government to use to meet its public expenditures.

3.1.5. Increase in employment

Another positive macroeconomic implication of the fuel subsidy removal is that it would create jobs. The total deregulation of the downstream sector will allow more companies to import fuel at competitive rates (Olujobi, 2021). These companies will hire workers, thereby creating jobs. Also, the reinvigoration of domestic refineries in Nigeria will lead to job creation. Furthermore, when the Dangote refinery starts producing, it could create more than 10,000 direct jobs in Lagos alone and over 30,000 indirect jobs across Nigeria, thereby increasing the level of employment.

3.1.6. Strengthen the exchange rate or reduce pressure on the exchange rate

Following the removal of fuel subsidy, the government should allow domestic refineries to produce more crude oil and other petroleum products. This will reduce the importation of petroleum products and increase the exportation of locally produced petroleum products (Akinola, 2018). This, in turn, will conserve foreign exchange from imported petrol and increase foreign exchange accretion from exported petrol. The foreign exchange accretion will boost foreign exchange supply in the foreign exchange market and strengthen the Naira against the U.S. Dollar. This, in turn, will lead to the appreciation of the Naira and an improved exchange rate. For example, the Dangote Refinery which has a refining capacity of 650,000 barrels per day, can meet Nigeria's domestic demand for refined petroleum products, reduce petrol importation and generate a surplus for export. As a result, the government could save billions of dollars spent on petroleum imports, and such savings could be used to ease the pressure on the exchange rate and improve trade balances.

3.1.7. Reduce Nigeria's dependence on imported petrol

If the removal of fuel subsidy is followed by the reinvigoration of Nigeria's domestic refineries, it could incentivize domestic refineries to produce more petroleum products and reduce Nigeria's dependence on imported fuel (Akinola, 2018). Consider the newly created Dangote Refinery. It has a massive refining capacity of 650,000 barrels per day, which is sufficient to meet Nigeria's domestic demand for refined petroleum products, generate a surplus for export, and reduce petrol importation significantly. In addition to the Dangote Refinery, other local

refineries with their differing refining capacity levels will further enhance Nigeria's refining capabilities and Nigeria's dependence on imported petrol.

3.1.8. Low carbon emission through fuel subsidy removal

The presence of fuel subsidy in the last decade encouraged fossil fuel-based economic activities that increase air pollution and carbon emission in Nigeria. The CO₂ damage in Nigeria, which is partly attributed to fuel subsidy, rose from US\$1.5bn in 1998 to US\$5.23bn in 2021 (see figure 4 below). The removal of fuel subsidy in Nigeria would support ongoing climate change mitigation efforts and reduce Nigeria's contribution to global greenhouse gas emissions by 2030. Fuel subsidy removal in Nigeria would also decrease both the demand and supply of fossil fuels, thereby reducing carbon emission in Nigeria (Omitogun et al, 2021).

Figure 4. Carbon dioxide damage in Nigeria from 1998 to 2021

Source: World Development Indicators (World Bank)

3.2. Negative macroeconomic implications

3.2.1. Decrease in economic growth in the short-term

One negative macroeconomic implication of the removal of fuel subsidy is that the rate of economic growth could decrease (Houeland, 2020). The fuel subsidy removal would lead to increase in price of essential goods and services. As a result, there would be fewer disposable income in the hands of individuals and small businesses due to rising prices, stagnant wages, and a fixed national minimum wage. This will lead to a reduction in consumption expenditure and would act as a drag on aggregate demand. The reduction in consumption would translate

to weak consumer demand for the goods and services produced by firms. This, in turn, could decrease economic output and gross domestic product, and slow the rate of economic growth.

3.2.2. High inflation and reduced purchasing power

Another negative macroeconomic implication of the removal of fuel subsidy is that the inflation rate would increase (Mohammed, Ahmed and Adedeji, 2020). The removal of fuel subsidy led to a rise in the price of petrol from a subsidized price of ₦190 in May 2023 to an unsubsidized price of ₦537 in June 2023 and ₦617 in July 2023 in Abuja. Meanwhile, the price of petrol could rise above ₦600 in the far North such as in Borno State due to high transportation cost. The implication is that the price of most consumer and industrial goods, which are produced or transported with petrol, will increase sharply. The cost of bread will increase, and the cost of local transportation will also increase, making it expensive to afford for poor individuals and low-income earners. The effect will also be felt by both the rich and the poor, but as always, the poor will suffer the most, through a significant reduction in their purchasing power. The inflation effect could be further worsened by the late rollout of palliatives by the Federal Government to support the poor and households who are affected by the rise in the price of essential goods and services immediately after fuel subsidy removal.

4. Microeconomic implications

4.1. Positive microeconomic implications

4.1.1. There will be market-determined pricing

One positive microeconomic implication of the removal of fuel subsidy is that price of petrol, or Premium Motor Spirit (PMS) will be determined by the forces of demand and supply (Su et al, 2020), rather than being determined by government regulation or through subsidy. This will prevent the under-pricing of petrol and would curb corruption arising from inflating the

quantity of imported PMS under the fuel subsidy regime. The removal of fuel subsidy will also lead to accurate pricing that reflects actual conditions in the international market for crude oil.

4.1.2. It will curb systemic corruption associated with fuel subsidy payments

Another positive microeconomic implication of the removal of fuel subsidy is that the removal of fuel subsidy could bring an end to corruption in fuel subsidy payments. There is the perception that the fuel subsidy is a ploy to continue to siphon Nigeria's hard earned foreign exchange into private accounts abroad (Itumo and Onyejiuba, 2019; Sheyin, 2018). Recent data show that the international price of oil crude has not gone up substantially, but Nigeria's crude oil output has risen, and generated around two million barrels per day. Yet, Nigeria's external reserves have continuously been reported declining. What could have been responsible for this? It is plain corruption. For example, an oil marketer imports only fifteen metric tons of petrol and will go to the Petroleum Products Pricing Regulatory Agency (PPPRA) in Abuja to report that he imported seventy-five metric tons of petrol. The importers will collude with some officials of the PPPRA so that they will get their own share of the inflated sixty metric tons. This has been the major corruption that has been taking place during the fuel subsidy regime. But with the removal of fuel subsidy, this type of corruption will stop completely. Now, the importers will only get paid for the actual petrol they import into the country.

4.1.3. Increased competition

Another positive microeconomic implication of the removal of fuel subsidy is that the removal of fuel subsidy will usher in a market-determined price and could, over time, result in reduced product prices due to healthy competition (Bagirov and Mateus, 2019). The total deregulation of the oil sector will foster market competition, and lead to enhanced efficiency in the downstream sector. The deregulation also allows for flexible pricing mechanisms that are driven solely by market forces. The removal of fuel subsidy will allow new entrants and investors to enter the downstream sector and would aid competition and eliminate the

monopoly of the Nigerian National Petroleum Corporation (NNPC) in the importation of petrol into Nigeria. When competition comes in, the market will determine the price of petrol and there would be a downward fall in the price of petrol as competition becomes intense.

4.1.4. Revitalise domestic refineries to work

Another positive microeconomic implication of the removal of fuel subsidy is that it could lead to the reinvigoration of the domestic refineries. Nigeria's domestic refineries have been in a bad state since the fuel subsidy regime started (Okongwu and Imoisi, 2022). The presence of subsidy has not led to the revitalization of domestic refineries due to endemic corruption associated with fuel subsidy. Following the removal of fuel subsidy, if the government introduce reforms to revive Nigeria's domestic refineries, such reforms could revive domestic oil producing firms and increase domestic production of crude oil in Nigeria.

4.2. Negative microeconomic implications

4.2.1. Increase in poverty and vulnerability

A negative microeconomic implication of the removal of fuel subsidy is that it will increase poverty in the short term (Raji, 2018). It will lead to immediate pain and hunger for families. At the individual level, the removal of fuel subsidy, and without any palliatives, could lead to fewer disposable income, fewer food in the land, fewer medicine for sick people, and inability to afford basic education in several parts of the country especially in the Northern region of Nigeria. More families will go hungry, more children will cry in hunger and more parents will cry at their children's despair. The poor and middle-class consumers will witness a fall in their purchasing power, and small businesses will find their profit margins squeezed because they will face higher costs and reduced sales volumes. And if they attempt to pass on the cost to consumers, consumers might refuse to buy or they will reduce the quantity purchased, thereby leading to low business patronage. Furthermore, the fuel subsidy removal could affect poor vulnerable groups disproportionately if there are no economic safety nets or social assistance programmes that can alleviate the economic hardship caused by the fuel subsidy removal.

4.2.2. Social unrest and protest

Another negative microeconomic implication of the removal of fuel subsidy is that it could lead to protests and social unrest (Houeland, 2020). The rise in the price of petroleum products could trigger protests. If the prices continue to go up, poor households will be pushed to the wall and will be left with no option but to engage in protest and social unrest to get the government to reverse the fuel subsidy removal.

4.2.3. Rise in fuel smuggling

Another negative microeconomic implication of the removal of fuel subsidy is the potential for fuel smuggling. The increase in the price of petrol following the removal of fuel subsidy may increase the smuggling of cheaper fuel into Nigeria from neighbouring countries, as opposed to the case when people smuggled Nigeria's cheap fuel to Niger Republic when the fuel subsidy was still in place (Idrisu, 2020). With the removal of fuel subsidy, there is likely to be an increase in the smuggling of cheaper fuel to the rural areas in Nigeria as many people in the rural areas cannot afford to buy fuel at the cost of ₦537.

4.2.4. Rise in crime

Another negative microeconomic implication of the removal of fuel subsidy is the potential for crime to increase (Shagali and Yusuf, 2022). The increase in the price of petrol following the removal of fuel subsidy might lead to other forms of crime such as theft of petrol from refinery warehouses, people's cars, residential houses and from people's electric generator. The crime rate could worsen as more Nigerians struggle to make ends meet.

4.2.5. Increase in the prices of petroleum products

The removal of fuel subsidy has led to the rise in the prices of petroleum products. This has led to low demand for petrol, and a reduction in the quantity of petrol purchased. The declining demand will narrow the profit of small businesses that rely on petrol. Everyone will feel the effect, but as always, the poor will suffer the most. Although there is the argument that the fuel subsidy removal in 2023 will bring competition among petrol marketers and the competition would drive prices downwards, this expectation is purely academic, and is unlikely to occur in the near future, because the price of crude oil in the international market will largely determine the prices of petroleum products in Nigeria. The implication is that the current soaring prices of petroleum will remain this way for a long time (Raji, 2018).

4.2.6. Loss of job in the informal sector

The removal of fuel subsidy will lead to job loss in the informal sector that rely mostly on PMS or petrol (Houeland, 2022). The formal sector uses mostly diesel for their activities while the informal sector relies mostly on petrol. The rise in petrol prices would lead to the shutdown of small businesses that cannot afford the rising cost of petrol and whose profit margins have been completely eroded by fuel subsidy removal in the formal sector.

5. Other implications

5.1. Environmental implication of fuel subsidy removal

Given the global push for climate change mitigation, the recent removal of fuel subsidy can help to mitigate climate change in Nigeria. On the positive side, the fuel subsidy removal presents an opportunity for environmentalists to advocate for a transition to clean energy, increased investment in renewable energy sources and the formulation of policies to stimulate the green economy. Nigeria needs a comprehensive strategy to ensure that the fuel subsidy removal

benefits the environment. However, fuel subsidy removal may create some environmental challenges if higher fuel prices discourage individuals from utilising private vehicles and lead to a shift to public transportation vehicles that release substantial amounts of pollutants into the environment than private cars. Such pollutants will harm air quality and public health. Furthermore, the public transportation infrastructure in Nigeria is inefficient and there are no sustainable alternatives. Therefore, the Nigerian government should ensure that a part of the saved funds from fuel subsidy removal is used to upgrade the public transportation infrastructure and to support the use of public transport vehicles that contribute little to climate change in order to protect the environment.

5.2. Social and cultural implications

The fuel subsidy removal also has social and cultural implications. Historically, Nigerian households have a culture of coping with pain, and this is evident in the little number of protests that have taken place in the last 10 years. Therefore, it is expected that Nigerian households would cope with the adverse price effect of the fuel subsidy removal, and their coping culture could manifest through the immediate change in consumption and spending behaviour. It can lead to a reduction in transportation expenses as many people will avoid unnecessary movements and travels. Households will avoid impulse purchases as a coping strategy, while some will avoid luxury purchases and unnecessary social gatherings that require the spending of money. These cultural practices and societal norms could influence people's reactions to the policy change.

5.3. Economic diversification and development opportunities

The removal of fuel subsidy and the associated rise in petrol should stimulate discussions about how the funds saved from fuel subsidy removal, can be strategically allocated to promote sectors with high growth and job creation potentials, such as renewable energy, technology, agriculture, and manufacturing. Furthermore, certain sectors of the Nigerian economy require little government policy support. Little policy support from the government would position such sectors for high growth e.g., the entertainment, sport betting, financial services, and tourism. These are the sectors which the government needs to focus on for economic diversification,

while other sectors that require huge government support should be supported with enabling government policies and investment from the private sector.

5.4. Other socioeconomic impact

The removal of fuel subsidies might impact different regions in Nigeria. Certain regions would be more vulnerable to the negative consequences of fuel subsidy removal than other regions. The differential regional impact is due to inequality in regional development in the country, as some regions are more developed and have a low poverty rate compared to other regions with an extreme poverty rate. Therefore, policymakers should consider how regional disparities or inequalities may affect the policies designed to cushion the effect of fuel subsidy removal across all regions in Nigeria. Also, political economy and governance challenges could arise when oligopolists (i.e., the few major marketers) emerge and control the supply or importation of petrol in their favour. The selling price of the oligopolists may be influenced by vested interests. There could also be political dynamics, and other challenges that could affect the success of the fuel subsidy removal regime.

6. Conclusion

This paper presents a discussion about the implications of the 2023 fuel subsidy removal in Nigeria with a focus on the macroeconomic and microeconomic implications. The paper uses discourse analysis methodology and offers some insight into the implications of fuel subsidy removal in Nigeria. Fuel subsidy removal has been a highly debated topic in Nigeria, with many economists and analysts calling for its removal, while others think fuel subsidy should remain until a more affordable alternative source of energy is available. Despite these differing views, the fuel subsidy removal has some positive macroeconomic implications such as helping to free

up financial resources for the development of other sectors of the economy so that the government can increase spending on education, healthcare, and infrastructure development. The removal of fuel subsidy could also incentivize domestic refineries to produce more petroleum products, reduce Nigeria's dependence on imported fuel and increase employment. The financial resources saved from fuel subsidy removal can also be channelled to the development of critical public infrastructure, reducing the budget deficit, and generating a budget surplus in the near future, reducing government borrowing and reducing pressure on the exchange rate. In contrast, fuel subsidy removal in Nigeria has some negative macroeconomic implications which includes decreasing economic growth and increasing inflation. Fuel subsidy removal also has some positive microeconomic implications which includes the introduction of market-determined pricing mechanisms, curbing corruption associated with fuel subsidy payments, increasing competition, and reinvigorating domestic refineries. In contrast, fuel subsidy removal in Nigeria has some negative microeconomic implications which includes increase in poverty, social unrest, and protest, rise in fuel smuggling, rise in crime, increase in the prices of petroleum products and loss of job in the informal sector.

The conclusion from the discussion in this paper is that the government should carefully consider the impact of removing fuel subsidy on citizens and provide palliatives and other welfare-enhancing initiatives to cushion the effect on individuals, households, and firms. The government could consider increasing the national wage, increasing the salary of civil servants, and introducing monetary palliatives to help the poor cope with the effect of fuel subsidy removal. Other social protection measures and social safety nets, such as unemployment benefits and cash transfers, can be adopted too. The government may also need to dialogue with labour unions to find a middle ground solution that meets the government's need and the needs of the people. It is also important to introduce economic reforms that lead to a more inclusive society. In the end, the success of the fuel subsidy removal will depend on how the government uses the saved funds from the removal of fuel subsidy and what they have achieved with it.

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