



# Fuel Subsidy Removal in A 21<sup>st</sup> Century Nigerian Economy

<sup>1</sup>Ogboru, Ishamael, <sup>2</sup> Jacob, Tanko Garba-Paiko & <sup>3</sup>Rivi, Matthew Terry

<sup>1 & 3</sup> Department of Economics, University of Jos, Plateau – Nigeria

<sup>2</sup> Department of Economics, Federal University, Gashua, Yobe – Nigeria

Corresponding Author's; E – mail: ogboru@unijos.edu.ng

#### Abstract

The removal of fuel subsidy in Nigeria has attracted very wide condemnation as well as applause with the acclaimed complete removal of subsidy on all petroleum products, the last being Premium Motor Spirit (PMS) and the inability of the government to put in place a commensurate cushioning measure on the shock and effects on Nigerians. This paper theoretically framed on the general equilibrium theory, specifically, x-rayed the historical path of fuel subsidy, arguments for and against the subsidy removal, daily consumption of fuel (PMS), effects of the subsidy removal, as well as cushioning measures provided by the government for subsidy removal on PMS in Nigeria. Using content analysis, the paper found that the debate against complete removal of subsidy on PMS may not be over soon in Nigeria due mainly to ineptitude of government and leadership maladroitness, citizens' cynicism, increased penury and multidimensional poverty, oil price politics in OPEC and the fact that few Nigerians serving as middlemen in the petroleum industry continue to gobble other Nigerians through corruption in subsidy payments. The paper also found that the effects of the subsidy removal included high and general increases in prices of all goods and services in Nigerian markets, low patronage to PMS Service stations among the motorists, increased records of corrupt tendencies around the country and increased multi-dimensional poverty of citizens. From the findings, the paper concluded that citizens all over the world enjoy forms of subsidy hence, Nigerians must not be exempted. Also revealed is that in the interim, sustainable palliatives be provided to reduce the number of Nigerians that will further fall into multidimensional poverty. The paper recommended dynamic schemes for navigating through the turbulence and returning Nigeria and Nigerians to the path of honour and efficiency. This amongst others included government's ability to exercise its powers in decisively bringing to book the cabals who had over the years fleeced on this subsidy, as they are well known to the authorities. This will serve as deterrent to others.

Key Words: *PMS*, *Subsidy removal*, *Cushioning effects*, *Nigeria*, *Corruption* JEL Classification: R42, R48, H24, N77

#### Contribution to/Originality Knowledge

Paper inter alia critiqued and synthesized the two major camps on subsidy removal, linking fuel subsidy removal to the general equilibrium theory and established the theoretical framework that subsidies must result in balances in general equilibrium in the system. Provided cogent dimension for which government can cushion the effects of subsidy removal

#### 1.0 Introduction

Subsidies reduce the cost of doing business which in turn favour welfare for citizens as such deliberately factored by governments in the areas or sectors considered of economic concern, public interest and on commodities that are of direct benefits to citizens and humanity in general. This followed the postulations of the General Equilibrium Theory which attempts to



explain the need for aggregate balances in the wholistic functioning of an economy especially as it relates to demand, supply and prices. Hence, various countries of the world provide subsidies to citizens in different forms with the aim of maintaining balances and attaining equilibrium for sustained growth in an economy. USA for instance, provides subsidies in almost all agricultural inputs to ensure food security, protect America's farmers that own over 2million farms, cultivating 874 million acres of land that provides 46 million jobs in the United States (Lencucha, Pal, Appau, Thow & Drope, 2020; Farm Bill, 2023). Australia subsidizes clean energy. As at April 2023, Australia's renewable energy subsidies hit a record high with a construction of over 5000MW large scale wind and solar farms and an annual \$5 billion funds channeled into subsidizing renewable energy. On a conservative estimate, every wind turbine company receives in excess of \$500,000 annually for each turbine (ACEC, 2023). In Canada, training and wage subsidies are offered such that the Canada Emergency Wage Subsidy (CEWS) provides savings to employers by providing a subsidy equal to 75% employee wages on the first \$58,700 per employee, up to a maximum of \$847 per week, with no overall maximum for the employer. The Country also makes available 50% or \$10,000 maximum for the cost of first few months on-boarding to eligible new employers in Canada (HR Insider, 2021).

In the United Arab Emirate (UAE), 85% of fuel subsidy is provided for low-income earners. The New Fuel Subsidy Scheme offers a family head a monthly subsidy of 300 litres of fuel while working wives receive 200 litres. Where the wife is not in the working class, the family head receives a monthly subsidy of 400 litres of fuel. The UAE government also bears 75 percent of food price inflation in an attempt at subsidizing food prices to enable the Emirati families attain a decent life (Sebugwaawo, 2022). Brazil has its most significant subsidy in oil and gas production offered in form of tax exempts in the importation and domestic production of machinery and equipment for oil and gas exploration. About 60% of government's total credit goes directly to subsidies on soybeans, corn and cattle farmers (Corcioli, Medina, & Arrais, 2022; Alexandre de Oliveira, 2023).

In Africa, subsidies are also offered which can be explained by the behaviour of supply, demand and prices within the context of the value placed on such products by governments of such countries within the many interacting markets that seek to offer stability and general equilibrium as proved by the general equilibrium theory. In South Africa for instance, subsidies are offered on Coal-Based liquid fuel, integrated residential development, informal settlement upgrading, community residential units and social housing schemes (Gardner & Graham, 2017; Venter, Marais, & Morgan, 2019). Togo subsidizes off-grid solar to extend electricity access to all. It also subsidizes fertilizer to farmers (Reuters, 2019). Nigeria as a nation has over the years subsidized fertilizer, education, foreign exchange, electricity and petroleum products especially Premium Motor Spirit otherwise called PMS or fuel (NESG, 2023). The aim for subsidy on PMS in Nigeria has always been to fend off the general disequilibrium that may occur in the entire Nigerian economy due mainly to changes in the price of such a valued product.



It is however important to note that, world-over where subsidies exist, there were efforts by saboteurs to thwart, divert or mar it with elements of corruption for their private gains. Governments and providers of subsidies have overtime, devised means to curtail and contain the activities of saboteurs and ensure that subsidies are enjoyed by the targeted beneficiaries. Down history lane, series of challenges including corruption, mismanagement and the activities of middle men distorted the subsidy arrangements in Nigeria. More worrisome are the sabotaging activities that have gradually impacted the availability of financial resources for economic growth and the need for true development in the Nigerian economy. These activities of saboteurs have robbed Nigerians and diverted the benefits of subsidies into private pockets. These resulted in gradual calls for a reduction and/or complete removal of the subsidy offered on Premium Motor Spirit. The complete removal of the subsidy by the President of Nigeria on 29th May, 2023 meant removal of subsidy on all petroleum products in Nigeria and led to the call for a comprehensive medium to cushion the effects.

The objective of this paper was to examine subsidy removal on PMS in a 21st century Nigerian economy by evaluating the major arguments for and against the removal of subsidy on PMS and to provide the cogent dimension for which government can comprehensively cushion the effects. However, the major contribution of this study is in its content-analytic revelation of the arguments for and the snapshot categorized effects of government's hasty removal of subsidy on PMS in reaching the *apriori* that subsidy removal created great imbalances to Nigerians and in all sectors of the Nigerian economy. The robust, proactive and dynamic recommended cushioning measures to navigate through the turbulence and return Nigeria to the path of a more vibrant economic growth is also novel. Following this General Introduction as the first section in the structure of this study are four other sections. This included the Review of Related Literature (Section two), Methodology (Section three), the Discussion, Results and Findings (Section four) and the fifth section which summarized, concluded and made recommendations to comprehensively cushion the effects of PMS subsidy removal in Nigeria.

#### 2.0 Review of Related Literature

# 2.1 Conceptual Gleaning

The term Subsidy is derived from the Anglo-Norman French *subsidie* and the Latin *subsidium* primarily interpreted as 'assistance'. Gleaning from the Anglo-Norman French and Latin rendition, subsidy has been widely defined as the sum of money, advantage or aid given by the government to help an industry, institution or business in ensuring that such production entities keep the price of a commodity or service low for citizens (Amadeo, 2022; Lea & Bradbery, 2022). According to the World Trade Organization (2006), subsidy could be a direct or an indirect offer of unfair advantages to production entities which could be deliberately executed through government's cash payments, tax cuts and holidays, assumption of risks and adjustment of procurement policies by government as well as stock purchases that keep a company's stock price higher than the market levels. In a nutshell, and as used in this study, subsidies are simply government's support in kind or cash to specific industry, business or individuals with the sole aim of encouraging lower end-user prices for public needs.



#### 2.2 Theoretical Framework

This paper is theoretically framed on the pro-subsidy Economists' proposition of general equilibrium theory also called Walrasian Theory, first conceived in the work of French Economist Walras (1877, 1954). This theory was made popular with its modern underpinnings by McKenzie (1960, 2009), Arrow (1951) and Debreu (1951). The theory centres on investigating when unique and stable equilibria states are attained and proposes a dynamic process by which general equilibrium might be efficiently reached in an economy called the *tatonnement* or groping process. The *tâtonnement* process is premised on stability of equilibria where prices are announced (perhaps by an "auctioneer") and agents state how much of each good they would like to offer (supply) or purchase (demand). It is assumed that no transactions and no production take place at disequilibrium prices. Instead, prices are lowered for goods with excess demand until equilibrium is reached for transaction and productivity to take place.

Likewise, the modern underpinnings of the theory factors subsidy as the valued price used in the tâtonnement process announced (perhaps by the government), and economic agents state how much of each good they would like to offer (supply) or purchase (demand) at the subsidized rate. It is assumed that no transactions and no production take place at disequilibrium prices (points of imbalances and disarray in the economy). This means, efforts are made at increasing subsidies or providing innovations (in the case of Nigeria; palliatives), for valued goods with high prices and excess supply like PMS. Conversely, subsidies are reduced or completely removed for harmful products with excess demand until transactive and productive balance (i.e general equilibrium) is reached and maintained in the economy. This process thus serves as benchmark of adeptness to divers' sectors, markets and for generic applicability in an economic system.

By implication, the theory as applied in this study holds that subsidies to particular valued industries are vital in supporting businesses and the economy. This means subsidies are justifiable to provide the socially optimal level of goods and services, which will favour economic efficiency, growth and development. The neo-classical models which hold that market failure can be created also propounded that such imbalances can be corrected by subsidizing the good or service being under supplied. Such subsidy would eventually lower the producer's cost of supplying the right proportion of the good or service to market. The theory thus concluded that with the right level of effective subsidization, all other things being equal, then the market failure would be corrected. This means the general equilibrium theory holds that subsidies are necessary for correcting market failures caused by too little production in a specific area as subsidies would theoretically push production back up to optimal levels. Ceteris peribus, the apriori expectations in this paper is that subsidy removal on PMS would generate great imbalances to Nigerians and in all sectors of the Nigerian economy. While returning the subsidy indirectly through well monetized, defined, organized and corruption free palliatives would effectively return the nation to equilibrium in the short-run, implementing the recommendations herein would return the economy to the path of efficiency in the long run.



# 2.3 Empirical Review

A number of related empirical studies have been conducted on subsidy removal and the impacts on the economy. Deploying the Atkinson-Stiglitz theorem, the implications for optimal food subsidies in China was investigated by Hummel & Ziesemer (2023). The study through the built general equilibrium model found that food subsidies raised the relative demand for lowskilled workers, which reduces the skill premium and indirectly redistributed income from high-skilled to low-skilled workers. The results thus suggested that general equilibrium effects rationalize subsidies that generated welfare gains.

In specifically relating to fuel subsidy, Beaton, Clarke, Adeoti and Chete (2016) conducted a detailed analysis of the compensation mechanisms that could be used to mitigate the impact of fuel subsidy removal on weak and vulnerable segments of Nigerian society. The study found that the Buhari administration introduced major reforms that led to upward reviews in prices of petroleum products and left the economy in a disequilibria state, driving domestic prices above official levels in many areas. Actionable recommendations from the study included the introduction of pro-poor policies for the government to invest. Omotosho (2019) in a study on oil price shocks, fuel subsidies and macroeconomic (in)stability, developed and estimated a New-Keynesian DSGE model that accounted for pass-through effect of international oil price into the retail price of fuel. The study found that oil price shocks generate significant and persistent impacts on output, accounting for about 22 percent of its variations up to the fourth year. With fuel subsidies a negative oil price shock contracts aggregate GDP, boosts non-oil GDP, increases headline inflation, and depreciated the exchange rate. However, without fuel subsidies the result indicated that the contractionary effect of a negative oil price shock on aggregate GDP is moderated, headline inflation decreases and exchange rate depreciated more in the short-run. The study recommended that a successful fuel subsidy reform must necessarily encompass the deployment of well-targeted safety nets as well as the evolution of sustainable adjustment mechanisms.

Ozili and Obiora (2023) deployed the discourse methodology to analyze the implications of fuel subsidy removal on the Nigerian economy. The study offered real insights on the microeconomic and macroeconomic implications of the 2023 fuel subsidy removal in Nigeria. It found that subsidy removal would positively 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, 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 included decrease economic growth in the short term, increase inflation, increase poverty, increased fuel smuggling, and loss of jobs in the informal sector. It recommended that government should carefully evaluate the impact of fuel subsidy removal on individuals and businesses and provide economic relief packages for individuals and firms.

Price (2023) in a study on fuel subsidy in Nigeria held that 13 years after diesel was deregulated, kerosene subsidy was removed in 2016, but subsidy on PMS remained and difficult to be removed. The study submitted that subsidy on PMS in Nigeria is ravaged by five



main issues; Unsustainable financial cost of subsidy, Economic distortion, Smuggling, Endemic corruption and Climate Change Commitments. It held that petrol price increases impact inflation and cost of living in the same direction in Nigeria. It recommended increase in minimum wage, increase in the monthly income threshold for PAYE exemption purposes, a guarantee in the provision of foreign exchange to importers of diesel at the official exchange rate using the forex savings from the current fictitious petrol consumption that will be eliminated when subsidy is removed.

In *the socio-economics of the 2023 fuel subsidy removal in Nigeria*, Evans, Nwaogwugwu, Vincent, Wale-Awe, Mesagan, and Ojapinwa (2023) found that subsidy removal prompted both the direct and indirect economic, social and environmental effects on the Nigerian society. Though the study held that reallocation of resources from subsidies to healthcare, transport and education sectors would positively impact the Nigerian society; ensuring effective utilization and equitable distribution of these funds could not be guaranteed. Furthermore, the study recommended informed decision-making to overcome the negative short-term impacts, harness long-term gains, and safeguard the vulnerable segments of the population impacted by subsidy removal on PMS.

Similarly, Yunusa, Yakubu, Emeje & Baba (2023) utilized the theory of price elasticity of demand to examine the rationale behind the fuel subsidy removal, the socioeconomic implications of fuel subsidy removal and suggested palliative measures to cushion the effects of fuel subsidy removal in Nigeria. The study pointed at high cost of living, high rate of crime, and increase in poverty level as people and businesses struggle for survival among other socioeconomic implications of fuel subsidy removal in Nigeria. The paper concluded by recommending rural electrification, increase in the minimum wage and food importation/distribution as feasible palliatives to cushion the effects of fuel subsidy removal in Nigeria.

Although these studies are related, it is obvious that the inability of these studies to provide the cogent dimension for which government can comprehensively cushion the effects of subsidy removal; can be likened to a weakness. The recommendations of the studies that did not also envisage the current dimension of complete removal of subsidy in Nigeria are thus, some gaps in literature. It is in the light of the observed weaknesses of these previous studies and existing gaps in literature that this study sought and bridged the gaps by examining fuel subsidy removal in a 21st century Nigerian economy and specifically provided the cogent dimensions for which government can comprehensively cushion the effects and correct the imbalances created to Nigerians and in all sectors of the Nigerian economy.

# 3.0 Methodology

This paper engaged a content analysis while utilizing qualitative and quantitative descriptive research design as put forth by Beach and Rasmus (2016). Secondary data was sourced directly from the National Bureau of Statistics (NBS), Nigerian National Petroleum Cooperation (NNPC), Nigerian Economic Summit Group (NESG) and Daily Asset. The validity, that is the extent to which an instrument measures what it is supposed to measure and performs as it is expected



(Kothari, 2004; Creswell, 2007) was weighed by obtaining the face, knowledge and content performance indexes of fuel subsidy removal and reported evidential impacts on individuals, markets and sectors within the Nigerian economy. The method/procedure of data collection was simply as presented in documented evidences of the News media, government publications and scholarly journals as compiled in the literature review of section two. The data were thus contently analyzed via lucid snapshots, radar, tabular and simple graphical presentations. These details were presented in the discussion, results and findings of section four of this paper covering mainly a 23-year period (2000 to 2023). The justification for this period draws from the title of the study; *fuel subsidy removal in a 21st century Nigerian economy* and coincides with the longest period of uninterruptible democratic reign in Nigeria.

# 4.0 Discussion, Results and Findings

# 4.1 History of Oil Production, Subsidy and its Removal on Petroleum Products in Nigeria

The history of oil production in the country began in 1958 when Shell Petroleum Development Company of Nigeria Limited (SPDC), the pioneer and leader of the petroleum industry in Nigeria produced 5,100 barrels per day from the Oloibiri field in the present Bayelsa State (Udosen, Etok & George, 2010). At the world stage, the country grew to be the largest oil producer in Africa and an important player in the global oil market. Between 2011 and 2021, crude oil production in Nigeria averaged 2.1 million barrels per day, with the maximum output of 2.5 million barrels per day recorded in 2011 and a minimum of 1.6 million barrels per day produced in 2021 (Izuaka, 2022). Although actual figure of daily consumption for fuel in the country remained contentious, the defunct Nigerian Mainstream and Downstream Petroleum Regulatory Authority (NMDPRA) put the figure for daily consumption at 66.8 million litres in 2022 (Izuaka, 2022).

Nigeria has enjoyed subsidy on petroleum products, PMS in particular over the past 50 years. To cushion the effects of fluctuations in global oil prices on Nigerians, the government successfully started a subsidy on petroleum products in the 1970s. It was formally institutionalized in 1977 by a military promulgation of the Price Control Act where petroleum products were included. The target beneficiaries were to be Nigerians and those doing business in Nigeria (FGN, 1977). The formalization was a process where the government sets the price of petrol below the internationally competitive price, keeping the price of petrol artificially low; below the market rate in an attempt at making the product more affordable to Nigerians (Adetayo, 2023). The Nigerian National Petroleum Corporation (NNPC) now Nigerian National Petroleum Company Limited (NNPCL) was responsible for the administration of petroleum product subsidy in Nigeria. It would buy refined petrol from the international market (Europe precisely) at world price and sell at a subsidized or discounted price to local distributors; the burden being borne by Nigerian government (NESG, 2023). This subsidy continued with some economic instability traced to manipulation, corruption and gross permutation by middlemen and government officials to the detriment of the citizens. The result of a content survey of this paper in Table 1, detailed the historic glimpse into subsidy provision and its removal on Petroleum Products in Nigeria in the 21st century Nigerian Economy.



Period	Government's	Major	sidy in Nigeria: 2000 - 2023 Achievement
renou		°	Acmevement
	Desire(s)/Trigger	Event(s)/Targets	
		Remove subsidy such that	A reduction of subsidy on
	Government's	PMS is sold locally at	petroleum products generally and
	planned Complete	same rate with world	on PMS from N20 as in 1999 to
	Removal of subsidy	market price	N22 (2000), N26(2001), N30
	on all petroleum	Nigeria's oil is refined in	(2002), N40(2003), N55(2004),
	products including	Europe and imported back	N60(2005), N65(2006),
2000 - 2011	PMS	to Nigeria at high cost	N70(2007), N65(2008-2011)
		Parliamentary uncovering	
0011 0010	Parliamentary inquiry	of \$6bn fraud by NNPC	NNPC officials sabotaging subside
2011-2012	on petroleum subsidy	Officials	on petroleum products
	~		Unsuccessful; met with massive 2
	Complete removal of		week protest by labour unions,
	subsidy on all	PMS reduce subsidy from	civil society and opposition party
January, 2012	Petroleum product	65 naira to 140 naira/Litre.	leaders
	Complete removal of		Government forced by Nigerians to
	subsidy on all		lower the price and return subsidy
February, 2012	Petroleum product	140 naira to 90 naira/Litre.	on PMS to N90 and later N120.
	Subsidy removal on	Subsidy removal on all	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
0010 0017	all petroleum	petroleum products except	Successfully removed subsidy on
2013 - 2016	products	PMS	all petroleum products except PMS
	Sharp falls in the oil		
	price at international	Attempt to completely	Unsuccessful; government reneged
May 2016	market	remove the PMS subsidy	on its decision. PMS sold at N145
	COVID 19 leading to		
	sharp falls in market	Attempt to completely	Unsuccessful; government reneged
March 2020	oil price and revenue	remove the PMS subsidy	on its promises
0016 1 1	G 1 1	Government spent 11.7	
2016 April	Completely remove	trillion naira (\$26bn) on	Unsuccessful; government accused
2023	fuel subsidy	subsidy	of failed promises
	Government broke to		
2020	service subsidy	Subsidy payment serviced	
2020	payments	via debts	Bad omen for governance
		government owed NNPCL	
January 2022 -	No means to service	N2.8 trillion (\$6bn) for the	
April 2023	subsidy on PMS	petrol subsidy.	Wailing by NNPCL
		The Buhari administration	
	Government confused	left a 77 trillion-naira	Ded ans ender as her National
Mar. 2022	on PMS Subsidy	(\$167bn) debt to local and	Bad precedence by National
May 2023	issues	foreign creditors	Government
	Government to		
	handover subsidy	96 percent of the	fears the government's cash crunc
Mor: 2022	liability to new	government's revenue	could worsen if subsidy payments
May 2023	government	used to service debt	continue
Land Cardon 1	1000/	Labour unions attempted	Eall askaldar and the Cill
June-September	100% removal of	massive protests against	Full subsidy successfully removed
2023	subsidy on PMS	subsidy removal	on PMS; PMS sold at N537 –N57
	Attempts to	TT. 1	Claimed subsidy introduction
	reintroduce subsidy	Unclear events on subsidy	through the backdoor; yet PMS
October 2023	on PMS	reintroduction	sold at N620 –N670

#### **T** 11 4 . .... . . . •••• ..... . . . . . \_ . . . . .

Sources: NBS (Various Years). Premium Motor Spirit (Petrol) Price Watch. Abuja.

NNPC (Various Years). NNPC Annual Performance Review.

NEITI (2018). Review of three years of NNPC's financial and operations reports.

Adetayo, Ope (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs

Daily Asset (October 9, 2023). Tinubu Brings Back Petrol Subsidy Backdoor.

NESG (2023). Understanding What Subsidy Programmes Entail.



Table 1 summarized in a compact form the economic turbulences traced to subsidy and its removal in Nigeria. It revealed that the cost of maintaining the subsidy on petroleum products continued to increase over the years and became unbearable and burdensome to government. Attempts at completely removing the subsidies by different administrations though succeeded for other petroleum products; that of PMS was largely protested against over the years by Nigerians. PMS thus, became the only subsidized petroleum product in Nigeria between 2015 and May 29, 2023 as all other petroleum products such as Kerosene and Diesel had had their subsidies fully removed. Via a diplomatic acceptance speech, PMS subsidy was completely removed on 29th May, 2023 by the Tinubu Administration. This increased the pump price from the official N197/litre to between N480 and N570/litre (Adetayo, 2023). The prices continued to be reviewed upwards to between N630 and N700 per litre. Government paid N169.4 billion as subsidy in August 2023 to reduce the degree of fluctuation in PMS prices (Daily Asset, October 9, 2023).

#### 4.2 Arguments/ Reasons for Subsidy Removal on PMS in Nigeria

Subsidy on petroleum products was never created in a vacuum as it had the spirit and intent hence, it was meant to fulfill its role in the life of Nigerians and those doing business in Nigeria. This paper found in a content-wise filter, from available literature that 16 major reasons or arguments have been advanced for the complete removal of subsidy on fuel/PMS in Nigeria. Figure 1 succinctly encapsulated these.



#### ..... Reasons for Subsidy Removal on PMS

#### Figure 1: Reasons/Arguments Advanced for Subsidy Removal on PMS in Nigeria

Sources: Daily Asset (October 9, 2023). Tinubu Brings Back Petrol Subsidy Backdoor. NESG (2023). Understanding What Subsidy Programmes Entail. <u>Abayomi (28 June, 2023). Consequences of fuel subsidy removal on nigeria's bot.</u> Adetayo, Ope (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs.



It is obvious from Figure 1 that, although Nigerians are meant to be the main beneficiaries of fuel subsidies, the findings revealed that the situation is different in recent times. The government has provided concrete evidence that subsidized refined petroleum products are shipped to Nigeria's neighboring countries at the expense of Nigeria's hard-earned incomes. This means Nigerians and those doing business in Nigeria are not the only beneficiaries of subsidies on PMS.

Other strong reasons found from available reviewed literature (Garba-Paiko, 2022; Adetayo, 2023; Abayomi, 2023; NESG, 2023; Daily Asset, 2023) for the complete removal of subsidy on petroleum product and revealed in Figure 1 included the continuous trade deficits of Nigeria. In November 2022 alone, Nigeria recorded a deficit trade of over \$20 million due mainly to the low crude oil export receipts and occasioned by the inability of the country to meet its supply quota at the international market coupled with the lack of refineries to produce for domestic consumption. Thus, the government added that the need to grow and increase local production capacity by building local refineries through the private sector that may not want to invest amid subsidies; is another reason for the removal of subsidy. Though Dangote Refinery is over 70% built and commissioned as world's largest single-train refinery, intended to boost PMS production and reducing Nigeria's dependence on imports and price of PMS may only be in the long run.

The high levels of corruption, permutation, manipulation and mismanagement of resources meant for fuel subsidy have been found by this paper as favouring a few sets of Nigerians who serve as middlemen, marketers and their cohorts otherwise called the oil cabals in Nigeria. These groups are said to connive with government officials and foreigners to illicitly smuggle subsidized refined petroleum products meant for Nigerians to other neigbouring countries and create artificial scarcity at any level of provocation. They even connive to inflate subsidy amounts declared, all for their private gains. Government believes that complete removal of subsidy will surely block and end their evil schemes.

#### 4.3 Reasons/Arguments Against complete removal of Subsidy on PMS

Though it has been argued that subsidy is fraud and non-existent, Nigerians have on the other hand argued that government should do its work of not only providing, but also guarding and diligently sustaining subsidies. To do this, advocates believe that rather than the continuous reduction and desire to completely remove subsidy and imposition of misery on citizens, the Nigerian government should as a matter of urgency use the proceeds already generated from export of crude over the decades to build and maintain refineries. Nigerians believe this can be easily attained by any serious government within a very short period by first recovery. Secondly, the cabals and marketers responsible for the fraudulent deals of subsidy are well known to government. It is therefore incumbent on government to fully deploy machinery at its disposal to deal with these culprits of fraud and corruption to serve as deterrent to others in Nigeria. A snapshot of findings in this paper from available literature on Nigerians' stance against subsidy removal is provided in Figure 2.



# Government & Leadership Maladroitness

Government can and should build and maintain refineries

Government unable to recover all stolen funds and deal with culprits of corruption

Grossly failed leadership in Nigeria

Nigeria has weak institutions which allow corruption to flourish

# Citizens' Cynicism

Government cannot be trusted in Nigeria

It is the only subsidy package that can trickle down to poor Nigerians

Government will not account for, be transparent with nor show integrity with financial

proceeds from subsidy removal

**Increased Penury and Multidimensional poverty** 

It will load to more impourighment for citizens

**OPEC will remain a Cartel** s the costs of almost every good and service in Nigeria

With OPEC, there cannot be fall in the pump pricing at the local market if subsidy

# Few Nigerians gobbling others

Corruption in subsidy payments to oil marketers

Nigeria has a bloated cost of governance

Few in government are living large at the expense of majority of citizens that bear

the higher cost of living.

#### Figure 2: Arguments against complete removal of Subsidy on PMS

 Sources: Daily Asset (October 9, 2023). Tinubu Brings Back Petrol Subsidy Backdoor. NESG (2023). Understanding What Subsidy Programmes Entail.
<u>Abayomi (28 June, 2023). Consequences of fuel subsidy removal on nigeria's bot.</u> Adetayo, Ope (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs.

The 16-factor literature content advanced, are surmised into 5 points and capsuled in



Figure 2. This revealed to a large extent that, Nigerians have taken all government promises with a pinch of salt; arguing that government cannot be trusted given its antecedent of failed promises and leadership especially as it relates to the welfare of the common people. The argument added that with OPEC as a strong cartel in petroleum product pricing in the world, it will be difficult to have significant fall in the pump pricing at the local market at any time in Nigeria because full subsidy removal would entail completely opening the sector to the vagaries of market forces. Hence, citizens believe the subsidy removal, though may be good as claimed by the government side, it is felt that the government of president Tinubu was not only too hasty in removing the subsidy, but could not also hastily deploy its arsenals in other direction in resolving the financial crunch in the economy. Citizens thus believe the government wants to just take more from the citizens through complete subsidy removal on petroleum products.

The arguments against complete removal of subsidy on PMS also revealed that government should recover all stolen funds and deal with culprits/those indicted with corruption and other sharp practices. Government should not house and provide safe havens for thieves and culprits of PMS subsidy misappropriation, yet desirous of siphoning hard-earned financial resources from poor citizens that are already neck-deep in multidimensional levels of poverty. The snapshot provided the views of citizens that are not against subsidy removal; but that government can and should use proceeds recovered from corruption to build and maintain refineries. Instead of removing subsidy on PMS that will lead to more impoverishment of citizens; since it is the only subsidy package that can trickle down to poor Nigerians, it is also argued that Nigeria has weak institutions which allow corruption to flourish, so government will not account for, be transparent with nor show integrity with financial proceeds from subsidy removal. Another line of argument is that the retail cost of PMS determines the costs of almost every good and service in Nigeria hence, removing subsidy would and had always increased the inflationary trend in the country. This is particularly so, since government has not been able to control corruption in subsidy payments to oil marketers and has a lack of fiscal transparency with a bloated cost of governance; the few citizens in government should not continue to be living large at the expense of majority of people that bear the higher cost of living.

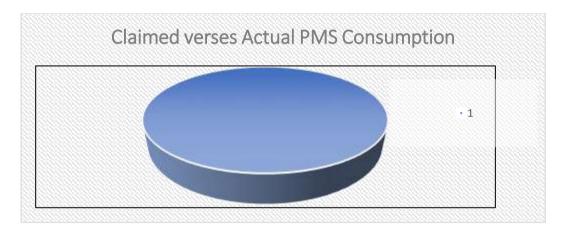
#### 4.4 Daily Consumption of PMS in Nigeria before and after full Subsidy Removal

#### (Claimed Verses Actual)

Increases in daily consumption of subsidized petroleum continued astronomically in the midst of low crude production with a resultant effect on low government revenues from the oil sector. Up until 29th May 2023, there was the claim that about 66 to 70 million litres of PMS was consumed daily in Nigeria. This however dropped sharply to only 40 million litres within the first week of total removal of subsidy (Adetayo, 2023). This is thus evident that Nigerians consumed less than the claimed amount in PMS subsidy. The government also claimed that highly subsidized fuel makes Nigerians reckless or wasteful in their fuel consumption. Thus, the removal reduces some wastes from demand-side. Government however failed to note that the sharp drop or fall in quantity of PMS consumed in the country was also largely occasioned by the



high price of fuel (PMS) which has resulted in many Nigerians and other nationals parking their cars/vehicles, and have now resorted to either trekking or commuting by public transportation. Others who buy PMS have also resorted to purchasing very little quantity way far less than they did before the removal of fuel subsidy. This was substantiated by more than 100% increases in petroleum product prices around Nigeria's neighboring countries within same period which was an indication of reduced cheap supply; likely from Nigeria's already paid products which were been smuggled by middlemen for resell in such countries. These have all narrowed the price differences, thus serving as a disincentive for smuggling. According to Abayomi (2023), the current differences of petroleum product prices across boarder countries to Nigeria is just between N150 – N200. Figure 3 is the recorded difference in the daily consumption.



# Figure 3: Claimed Verses Actual Daily Consumption of PMS in Nigeria before & after full Subsidy Removal

Source: Adetayo, (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs. Izuaka. (2022, September 10). NMDPRA gives new figure of daily petrol consumption NNPC (Various Years). NNPC Annual Performance Review.

At a glimpse, Figure 3 revealed about 40 million litres as the actual daily consumption capacity of Nigeria as against the acclaimed daily consumption of between 66 to 70 million litres of subsidized PMS in Nigeria. The difference of 24 to 30 million litres was partly consumed in corruption by the middlemen and government officials that connive to cheat Nigerians and the fall in consumption of PMS by buyers due to high pump price. This revealed in a sense, the quantum of estimated sums shared among middlemen engaged in fraudulent petroleum activities in Nigeria. Available statistics revealed that between 2005 and 2022, a period of 17 years, over N15 trillion which world have otherwise been invested in critical infrastructures was paid off in subsidy which did not benefit Nigerians, but was enjoyed by the cabal and served the petrol needs of foreign neigbours. Up from N310 billion in 2015, the NESG (2023) revealed that fuel subsidy payments were estimated at N2.74 trillion in 2022 alone representing a quantum leap of over 780 percent.



#### 4.5 Effects of Fuel (PMS) Subsidy Removal

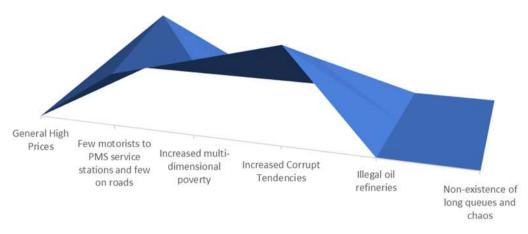


Figure 4: Effects of Subsidy Removal PMS in Nigeria

**Source:** <u>Abayomi Odewale (28 June, 2023)</u>. <u>Consequences of fuel subsidy removal on nigeria's balance of trade.</u>

Adetayo, Ope (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs. Ozili & Obiora, (2023). Implications of Fuel Subsidy Removal on Nigerian Economy Price, (May, 2023). Fuel subsidy in Nigeria - issues, challenges and the way forward.

Figure 4 shows that removal of subsidy on PMS resulted in high prices of PMS as well as general price increases in transportation fares leading to general increases in prices of all goods and services in markets in Nigeria. Few patronages by motorists to PMS Service stations and few vehicles on the Nigerian roads leading to gross reduction in demand for PMS in the country. Non-existence of long queues and chaos in PMS service stations. Illegal oil refineries and increased multi-dimensional poverty are among other effects revealed in available literature (Adetayo, 2023; NESG, 2023).

It is thus obvious from the discussions, results and findings of this study that government's hasty removal of subsidy on PMS in Nigeria created great imbalances to the Nigerian economy. This is in consonance with the General Equilibrium Theory. Here the process by which general equilibrium is to be efficiently reached in an economy called the *tatonnement* or groping process is not attained in Nigeria. The *tâtonnement* process premised on stability of equilibria is not reached. As the assumption holds, there seems to be disequilibrium prices with the removal of subsidy on PMS, leading to points of imbalances and disarray in the economy. By implication, the theory as applied in this study holds that subsidies to fuel prices are vital in supporting businesses and the economy. This means subsidies on PMS are justifiable to provide the socially optimal level of goods and services, which will favour economic efficiency, growth and development in Nigeria.

However, as the theory holds, such imbalances can be corrected by subsidizing the good or service in question. *Ceteris peribus*, the *apriori* expectations in this paper is that subsidy removal on PMS would generate great imbalances to Nigerians and in all sectors of the Nigerian economy. While returning the subsidy indirectly through well monetized, defined, organized and corruption-free palliatives would effectively return the nation to equilibrium in



the short-run and implementing the recommendations herein would return the economy to the path of efficiency in the long run. This calls for cushioning measures for Nigerians

# 4.6 Cushioning Measures provided by Government for effects of Subsidy Removal on PMS in Nigeria

Findings from the studied content (Ozili & Obiora, 2023; Adetayo, 2023; NESG, 2023) revealed that many Nigerians believed the government had no initial plans of cushioning the pains of complete removal of fuel subsidy on citizens. That it was only after the removal of the subsidy and the general outcry nationwide that the government started permutations and adopting haphazard approaches along the lines of either salary gifts of N25,000 which was later adjusted to N35,000 due to the threatened NLC and TUC strikes, giving welfare awards to workers, making transfers of N8,000 to the weak of society or buying buses, creating alternative path through the use of Compressed Natural Gas (CNG) for use by motorists, etc. The shabby way and manner which government handled this showed their complete unpreparedness in augmenting this shocks. This presented the government as really directionless in its approach towards a sustainable palliative to truly cushion the myriads of effects of subsidy removal.

Though an afterthought and through a mobilization to hold the nation to a halt by labour unions, the government was forced to provide unthought-through palliatives in an attempt to cushion the effects of subsidy removal on PMS. This included the payment of N185, 000, 000,000 (N5billion per state and the FCT) for purchases of grains and food stuff to be shared among Nigerians. Both the release and modus for sharing as well as the actual sharing of the palliatives were enmeshed in corruption. Available records indicated that over 95% of households did not benefit from the said palliative. On the other hand, state governments offered to add the sum of N10, 000 to payroll staff.

Subsequently, the Federal government granted a wage award of N35, 000 to all Federal Government workers for a period pending when a new minimum wage is signed into law. The Federal government also suspended the collection of Value Added Tax (VAT) on Diesel for a six-month period to reduce cost of transportation especially of goods across long distances. A N100 billion was voted for the provision of high-capacity Compressed Natural Gas (CNG) buses for mass transits in Nigeria. Provision was also made for of 55,000 CNG conversion kits to kick start auto-gas conversion programme with a state-of-the-art CNG stations in Nigeria. The federal government also committed to the payment of N25, 000 to 15 million Nigerian households including vulnerable pensioners.

Even at that, overwhelming majority of citizens did not benefit from the implementation of any of the memorandum on palliative nor had the promises in the presidential broadcast meant to address the challenges posed by subsidy removal. This did not result in ameliorating their pains and sufferings despite the over 80 trillion of naira government claimed it harvested from the subsidy removal in two (2) months. More worrisome was that the monies shared by the three tiers of government since July 2023 at the Federation Account Allocation Committee (FAAC) had no significant effect on citizens.



#### 5.0 Summary, Conclusion and Recommendations on The Need to Cushion the Effects

#### 5.1 Summary

This paper examined the removal of fuel subsidy in Nigeria which past administrations in Nigeria tried to remove but were stiffly resisted by mass protests and strikes. The latest in the series was that of May 29, 2023 when President Tinubu declared that '... subsidy is gone.' It was a tremendous shock for Nigerians who had gone through very hard and unpleasant 8years during the tenure of the immediate past administration of President Buhari and were expecting succor and relief with the swearing in of the new administration.

Theoretically predicated on the general equilibrium theory, the study undertook a historical path, evaluated the arguments for and against fuel subsidy removal, daily consumption of (claimed Vs Actual), effects of the removal of subsidy, as well as cushioning measures provided by government for subsidy removal on PMS in Nigeria. The government side and advocates strongly argued that complete removal of subsidy would resolve the challenges of trade deficits, high levels of corruption and mismanagement by middlemen and block all the openings for manipulation by marketers which would in the long run lead to fall in prices of petroleum products and consequently, an improved welfare for Nigerians. It also held that the complete removal of subsidy would afford the government more financial resources to invest into critical infrastructure and sectors of the economy such as roads, housing, education, health, power and the building of refineries to boost local production. Government surmised that, with complete removal of subsidy on PMS, Nigeria can save N7 trillion annually from sells of fuel domestically and would thus re-channel proceeds of subsidy removal into sectors and economic ventures that will lead to better welfare for citizens and the country at large.

On the other hand, the ineptitude of government and leadership maladroitness, citizens' cynicism, increased penury and multidimensional poverty, the oil price politics in OPEC that is and will continue to be a cartel, and the fact that few Nigerians serving as middlemen in the petroleum industry continue to gobble other Nigerians through corruption in subsidy payments; the debate against complete removal of subsidy on PMS is far from being over in Nigeria. It has been suggested that government should use the resources at its disposal to among others, build local refineries, end fuel import dependency so as to achieve a favourable balance of trade and stop inflating subsidy amounts declared. Nigerians have taken all government promises with a pinch of salt; arguing that government cannot be trusted given its antecedent of failed promises and leadership especially as it relates to the welfare of the common people. Salaries and allowances of political office holders in Nigeria should be slashed down to the equivalent of their counterparts in the civil and public service. This will enhance their salaries and allowances not being proportionally out of place with what is obtainable in the country and also from being the highest in the world while other workers in Nigeria live on peanuts.

Despite the continuing debate, government hastily removed the subsidy on PMS without providing a sustainable palliative to cushion the effects. The effects of the removal include, but not limited to high and general increase in prices of all goods and services in Nigerian markets,



low patronage of PMS Service stations among the motorists, increased records of corrupt tendencies around the country and increased multi-dimensional poverty of citizens.

#### 5.2 Conclusion

Utilizing content analysis as a qualitative/descriptive tool, this paper found that although the debate continues amid the shocking removal of subsidy on PMS without a sustainable cushioning measure for its effects; it is only when a sustainable cushioning is provided at all levels to citizens and those doing business in Nigeria that normalcy will return to Nigeria. Ceteris peribus, the apriori expectation of this paper, that subsidy removal on PMS would generate great imbalances to Nigerians and in all sectors of the Nigerian economy was reached. The paper is thus in agreement with the neoclassical theory which holds that returning subsidy indirectly through palliatives would effectively return the nation to equilibrium in the shortrun, and implementing the recommendations herein would return the economy to the path of efficiency in the long run. In this light, the study thus concluded that, citizens all over the world enjoy forms of subsidy hence, Nigerians must not be exempted. The findings of the paper revealed that the present form of palliatives and the nature of handling, falls short of expectations and would only further dehumanize and humiliates the people. It has no capacity of moving Nigerians from their present multidimensional poverty and penury levels. Nigeria requires very robust, proactive and dynamic schemes for navigating through the turbulence and returning Nigeria and Nigerians to the path of honour.

#### 5.3 Recommendations

Cushioning the effects of Subsidy Removal on Nigerians is a veritable measure for all reasonable persons at this juncture of Nigeria's life. This is in agreement with the theoretical framework that subsidies must results in balances of general equilibrium in the system. Palliatives in its present form is far from reality in handling or mitigating the excruciating economic burdens the government has placed on citizens. Sustained monetary palliatives should be released in an accountable, transparent and timely manner to households through their personal bank accounts. This should be taken with all the seriousness it deserves by governments at all levels. Monies like the N185 billion (N5 billion per state and FCT) shared is frowned at and should not be the order of the day as it will sure not wholly reach the target - the masses. Still in the short run, all debts government owes its workers like members of Academic Staff Union of Universities (ASUU), and other sister unions in the universities, promotion arrears and other allowances be paid immediately. Government must stop its permutations and uncoordinated moves along the lines of either offering salary gifts, giving welfare awards to workers or making transfer payments. To sustainably cushion the effects of subsidy removal on PMS, a new negotiated salary package of not less than 200% be increased for workers throughout Nigeria as a new minimum wage and this should be granted in a dynamic and systematic manner that will not trigger inflation beyond its current rate, but raise and bring the economy to a new general equilibrium level. Through indirect means, tax breaks should still be granted on all petroleum products, but with deliberate monitoring and policing so it can reach the intended end-users.



Nigeria can borrow a leaf from the United Arab Emirate (UAE), by granting that all NNPCL service stations in the country should be only subsidy receiving points (and not selling points) where digitally registered working family heads (male or female) through the use of coupons receive 300litres of PMS monthly. Such stations must have fuel 24 hours/7days and no form of sells must be carried out there, except collection which will also be systemic in a block-chain design. The path of listening to the citizens through their elected labour leaders and implementing suggestions offered should be toured. The use of government machinery, mainly the court to harass and prevent workers and Nigerians from reacting to the pains caused by the removal of subsidy should be abhorred because these will only lead to further disequilibrium in the economy. Here, the sudden inferno at the NLC president's house, the assaults on labour leaders and the court ruling that NLC should not embark on legal and peaceful strikes should be discontinued forthwith for equilibrium to be attained in the society.

Subsidy removal should have best been through a gradual phasing-out approach as supported by the Nigerian Economic Summit Group (NESG, 2023), but since it was abruptly executed, government should forthwith, favour the existence of strong institutions which will control corruption by Preventing, Detecting and Responding in such a way that freed financial resources would not be re-stolen but invested in human capital development and economic growth. Freed financial resources from subsidy removal should be ploughed into sustaining power supply, improving rail and other means of transport to reduce the costs citizens bear on transportation. Government should systematically reduce cost of governance, drastically reduce the salaries and allowances of political office holders and reduce the wastes in government. This can also be done as Ogboru (2020) asserted by ensuring that members of the National Assembly serve in their respective capacities on part -time basis while they keep their regular jobs in the civil or public service and only go to their respective chambers where there are issues to be handled and afterwards return to their jobs or businesses if they had one before their election. By so doing, they will only be paid sitting allowance. It is only when local refineries are built that Nigeria can meet up with the domestic demand for refined products. This way, a favourable balances (equilibrium) in all markets and sectors will not only be envisaged, but be experienced since Nigeria as a country will thereafter, be an exporter of both crude and refined petroleum products without any import payments for domestic consumption. This will improve the general equilibrium level in Nigeria. Finally, and equally important, State governors must be faithful as stewards that must give account someday; here on earth or in the hereafter. Not significant impact has been felt in many states despite the over three months' allocations they received through FAAC and another 5 billion released for palliatives. Biting the humble pie and willingly serving the people at the lower levels of government would not only prove responsibility on the part of state governments in the face of subsidy removal on petroleum products in Nigeria, but visibly make them to be seen cushioning the effects on their people.

#### REFERENCES

Abayomi O. (28 June, 2023). Consequences of fuel subsidy removal on Nigeria's balance of trade. VanguardNews. Available at <u>https://www.vanguardngr.com/2023/06/consequen</u> <u>ces-of-fuel-subsidy-removal-on-nigerias-balance-of-trade/</u>



- Adetayo, O. (31 May, 2023). Nigeria fuel subsidy cut and spiralling costs: What to know. Aljazeera News. Available at <u>https://www.aljazeera.com/news/2023/5/31/nigeria-fuel-subsidy-cut-spiralling-costs-all-you-need-to-know</u>.
- ACEC (2023). Australia's big clean energy build hits record highs: Clean Energy Australia Report. Australia: Australian Clean Energy. Released 18th April, 2023 and available at https://www.cleanenergycouncil.org.au/news/australias-big-clean-energy-build-hitsrecord-highs-clean-energy-australia-report
- Alexandre de Oliveira, C. (May 9, 2023). Brazil spent BRL 118.2 billion on fossil fuel subsidies in 2021. Brazil News Brief and Action Alert<u>https://www.climates</u> <u>corecard.org/2023/05/</u>brazil-spent-brl-118-2-billion-on-fossil-fuel-subsidies-in-2021/
- Amadeo, K. (2022). What Are Government Subsidies? The Balance. Available at <u>https://www.thebalancemoney.com/government-subsidies-definition-farm-oil-export-etc 3305788#citatio</u>
- Arrow, K. (1951). 'An Extension of the Basic Theorems of Classical Welfare Economics'
- Beach, D. & Rasmus, B. P. (2016). Selecting appropriate cases when tracing causal mechanis ms. *Sage Journals*, (47) 4, 837-871.
- Beaton, C., Clarke, K. Adeoti, J., Chete, L., (2016). Compensation Mechanisms for Fuel Subsidy Removal in Nigeria
- Creswell, J. (2007). *Research design: qualitative and quantitative approaches*. Thousand Oaks, CA: Sage
- Corcioli, G., Medina, G. & Arrais, C. A. (2022). Missing the Target: Brazil's Agricultural Policy Indirectly Subsidizes Foreign Investments to the Detriment of Smallholder Farmers and Local Agribusiness. Food System, Sec. Land, Livelihoods and Food Security 5(2021). Available at https://doi.org/10.3389/fsufs.2021.796845
- Daily Asset (October 9, 2023). Tinubu Brings Back Petrol Subsidy Backdoor, PENGASSAN Alleges. Daily Asset Newspaper. Available at dailyasset.ng/tinubu
- Debreu, G. (1951). 'The Coefficient of Resource Utilization'
- Evans, O., Nwaogwugwu, I., Vincent, O., Wale-Awe, O., Mesagan, E., & Ojapinwa, T. (2023). The socio-economics of the 2023 fuel subsidy removal in Nigeria. *BizEcons Quarterly*, 17, 12-32.
- Farm Bill (2023). Protecting America's Food and Farmers. Available at https://farmbillforamericasfamilies.com/
- FGN (1977). The Price Control Act. Lagos: Federal Government of Nigeria.
- Garba-Paiko, J. T. (2022). Corruption Control, Human capital development and economic growth in Nigeria. A PhD thesis, School of Post Graduate School, University of Jos, Nigeria



- Gardner, D. & Graham, N. (October, 2017). Analysis of the Human Settlement Programme and the Subsidy Instruments. World Bank – City Support Programme: Housing Input Paper to Urbanization Review. South African Urbanisation Review. Paper-6-WB-CSP-UR-Housing-Input-Draft-David-Gardner-1. Available at <u>https://housingfinanceafrica.org/app/</u>uploads/2021/10/Paper-6-WB-CSP-UR-Housing-Input-Draft-David-Gardner-1.pdf
- HRInsider (2021). Canada Emergency Wage Subsidy (CEWS) canada-emergency-wagesubsidy (CEWS). https://hrinsider.ca/canada-emergency-wage-subsidy-cews/
- Hummel, A. J. & Ziesemer, V. (2023). Food subsidies in general equilibrium. Journal of Public Economics, 222 (June 2023), 104882. https://doi.org/10.1016/j.jpubeco.2023.0
- Izuaka. (2022, September 10). NMDPRA gives new figure of daily petrol consumption in Nigeria. https://www.premiumtimesng.com. Retrieved from <u>https://www.premiumtimesng.com</u>
- Kothari, C. (2004). *Research methodology: methods and techniques (2nd edition)*. New Delhi-India: New age international publishers.
- Lea, D. & Bradbery, J. ed. (2022). Oxford Advanced Learner's Dictionary 10th edition. Oxford: Oxford University Press.
- Lencucha, R., Pal, N. E., Appau, A., Thow, A. and Drope, J. (2020). "Government Policy and Agricultural Production: A Scoping Review to Inform Research and Policy on Healthy Agricultural Commodities." *Globalization and health*. <u>https://www.ncbi.nlm.nih.gov/</u> <u>pmc/articles/PMC6971899/</u>
- McKenzie, Lionel (1960), "Matrices with dominant diagonals and economic theory", in Arrow, Kenneth J.; Karlin, Samuel; Suppes, Patrick (eds.), Mathematical models in the social sciences, 1959: Proceedings of the first Stanford symposium, Stanford mathematical studies in the social sciences, IV, Stanford, California: Stanford University Press, pp. 47– 62, ISBN 9780804700214
- McKenzie, Lionel W. (2009). Equilibrium, Trade, and Growth: Selected Papers of Lionel W. McKenzie. MIT Press. ISBN 978-0-262-13501-6
- NBS (Various Years). Premium Motor Spirit (Petrol) Price Watch. Abuja: National Bureau of Statistics Available at https://nigerianstat.gov.ng/elibrary/read/1241242
- NEITI (2018). Review of three years of NNPC's financial and operations reports. NEITI Occasional Paper Series. Abuja: Nigerian Extractive Industries Transparency Initiatives. Issue 3, June 2018 <u>https://neiti.gov.ng/cms/wp-content/uploads/2021/08/ NEITI-OPS3-</u> Review-of-Three-Years-of-NNPCs-Financial-and-Operations-Reports-June-25-2018.pdf
- NNPC (Various Years). NNPC Annual Performance Review. Available at <u>https://www.nnpcgroup.com/insights/nnpc-limited-disclosures</u>
- NESG (2023). Understanding What Subsidy Programmes Entail. Available at https://nesgroup .org/blog/Understanding-What-Subsidy-Programmes-Entail



- Ogboru, I. (2020). Transitioning to a Restorative Economy: Oil and Restorative Economy (1) in The Nigeria Green Papers. Nigeria Reboot. Nigeria Reboot (CrisistoKairos). Impact Empire Ltd, Kaduna. P66.
- Omotosho, B. S (2019). Oil Price Shocks, Fuel Subsidies and Macroeconomic (In)stability in Nigeria. *CBN Journal of Applied Statistics*, 10(2),1-38. Available at <u>https://www.cbn.gov.ng/out/2020/</u>std/1%20-%2038\_a416\_omotosho.pdf
- Ozili, P. K. & Obiora, K. (2023). Implications of Fuel Subsidy Removal on the Nigerian Economy Public Policy's Role in Achieving Sustainable Development Goals, 2023, 1-
- Price, W. (May, 2023). Fuel subsidy in Nigeria issues, challenges and the way forward. <u>https://www.pwc.com/ng/en/assets/pdf/fuel-subsidy-in-nigeria-issues-challenges-and-the-way-forward.pdf</u>
- Reuters (March 1, 2019). Togo subsidizes off-grid solar to extend electricity access to all. Reuters Breaking City News. https://www.reuters.com/article/togo-solar-idUKL5N20 O4AJ
- Sebugwaawo, I. (August 8, 2022). Inflation in UAE: Government disburses allowances to 47,300 low-income Emirati families. New social support programme includes food, electricity, water, and fuel subsidies. Khaleej Times
- Udosen, C., Etok, A. I., & George, I. (2010). Fifty years of oil exploration in Nigeria: the paradox of plenty. *Global Journal of Social Sciences*, 8(2), 37-47. <u>https://doi.org/10.4314/gjss</u>.v8i2.51579
- Venter, A., Marais, L. & Morgan, H. (2019). Informal Settlement Upgrading in South Africa: A Preliminary Regenerative Perspective. Sustainability11(9), 2685; https://doi.org /10.3390/
- Walras, Marie-Esprit-Léon (1877). Éléments d'économie politique pure. Irwin
- Walras, Marie-Esprit-Léon (1954). Elements of Pure Economics. Irwin. ISBN 978-0-678-06028- 5. Scroll to chapter-preview links.
- World Trade Organization (2006). "World Trade Report 2006 II. B.: Defining Subsidies," 47-51.
- Yunusa, E., Yakubu, Y., Emeje, Y. A. & Baba, Y. (2023). Fuel subsidy removal and poverty in Nigeria: a literature review. *International Journal of Applied Management Science* 04(09), 14-27. DOI:10.5281/zenodo.8409907

