Challenges of Fuel Subsidy Removal on the Nigerian Economy: A Study of Gombe State

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Abstract

he study examines the Implications of Fuel Subsidy Removal on the Nigerian Economy. A Study of Gombe State using traditional economic theory as theoretical framework. While adopting survey design, questionnaires were used as an instrument for the collection of data. The study revealed that, it has increased inflation by 50% and decreased economic welfare. In turn, this resulted in inflation and a decline in consumer purchasing power. Furthermore, the results showed that the citizens of Gombe state have a bad opinion of the subsidies that were eliminated. In addition, the elimination of the fuel subsidies raised transportation fares by 35%. They no longer have greater commercial opportunities as a result of the elimination of gasoline subsidies. The study conclude that the elimination of gasoline subsidies has no beneficial effects on Nigeria's economy, government should remove subsidies in a sincere manner, or else the public will be willing to reject any programs, no matter how beneficial, that are planned. Before drafting or implementing any policies, the government should also ensure that the relevant parties have been consulted, particularly when the policies directly affect people, both in rural and urban areas

Keywords: Fuel Subsidy, Palliative, Subsidy Removal, Inflation, Economy.

Introduction

Fuel subsidies are a topic of discussion around the world due to their large number, impact on national budgetary health, and welfare of citizens. The International Energy Agency estimates that the worldwide fossil fuel subsidy will reach \$1 trillion in 2022, up from \$325 billion in 2018. This sum is greater than the total government revenue of developing nations and substantially more than the expected \$204 billion in value of worldwide aid in 2022. This has prompted proposals for the elimination of the worldwide fossil fuel subsidy in order to redirect the saved money toward helping the underprivileged and defenseless who require aid in developing nations (Couharde & Mouhoud, 2020; Ozili & Ozen, 2023).

Fuel subsidies were initially implemented in Nigeria in the 1970s in reaction to the 1973 oil price shock. In 1986, fuel subsidies were taken away in part. The fuel subsidies have been in effect ever since. The government abruptly stopped

providing fuel subsidies in 2012. Largescale demonstrations followed the withdrawal, with the goal of forcing the government to bring back the fuel subsidy that it had cut. In response to the widespread demonstrations, the government subsequently restored fuel subsidies in 2012. Nigeria's fuel subsidy payments have increased dramatically since then. Fuel subsidies totaled ? 4 trillion (US\$6.088 billion) in 2022, or 23 percent of the ? 17.126 trillion (US\$25.87 billion) government budget for that year. Nigeria was unable to continue providing fuel subsidies as a result, and in June 2023 the government declared that the fuel subsidy will end (Ozili & Obiora, 2023).

The idea that the fossil fuel subsidy is a sort of help since it lowers the cost of gasoline for the underprivileged makes the removal of the subsidy controversial. Notwithstanding this persuasive argument, a substantial body of research demonstrates the detrimental effects of fuel subsidies, which include rising air pollution and

greenhouse gas emissions (Holmes et al., 2020), traffic jams and premature deaths (McCulloch, Moerenhout & Yang, 2021), lost tax revenue (Holmes et al., 2020), and a rise in wealth disparity (McCulloch, Moerenhout and Yang, 2021). Politicians in many nations, however, are hesitant to eliminate fuel subsidies and enact reforms related to them because doing so might result in a sharp rise in the price of fuel or electricity, which would be difficult for low-income and impoverished citizens to afford. It might also spark widespread unrest and raise the possibility of a revolution or the overthrow of the current government.

Recent research in Nigerian literature demonstrates that gasoline subsidies have conflicting effects. While some studies point out the advantages of fuel subsidies and urge greater openness in their management, others draw attention to their drawbacks and push for their elimination. According to Omitogun et al. (2021), the economy of Nigeria may emit less carbon dioxide if fuel subsidies are eliminated. Similarly, Adekunle & Oseni (2021) contend that even though it would result in increased energy prices, the removal of fuel subsidies could slow the development in carbon emissions through channels with low energy use. Nanda et al. (2020) argue in favor of eliminating fuel subsidies, arguing that the money raised by doing so could give the government more funds to respond to the COVID-19 crisis immediately and to reinvest in more productive areas of spending for long-term resilience and recovery from the virus (Ozili & Arun, 2023).

The federal government's elimination of gasoline subsidies has resulted in higher pricing for commodities and transportation, which is being lamented by residents of Gombe State, especially small business owners. The study's primary contribution to the expanding body of knowledge on the removal of fuel subsidies and their effects on Nigeria's economy is its significance. As a result, this work is important and timely. The lack of understanding in this field is lessened by a thorough examination of this

occurrence. Furthermore, the proposals and ideas made in this study contribute to the development of Nigeria's economy.

Theoretical Framework

The study's foundation is the traditional economic theory of regulated monopolies, where subsidies are seen as distorting supply and demand dynamics. According to the theory of regulated monopolies, there is a transmission loss when subsidies go from producers (or marketers) to consumers. Specifically, roughly half of the subsidies go to the few actors in the industry who have licenses and their agents (Joskow&Tirole, 2005). The subsidy dissipates at every stage of the value chain before being transferred to the customer in the end. A "dead weight" loss of any subsidy in which no one gains is one example of this dissipation. The seven main marketers that the NNPC uses are Mobil, NNPC Retail, Oando, Conoil, Total, AP, and MRS Oil. In essence, half of the industry's subsidies are captured by this block.

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Application of the theory

The accumulation of capital and the reinvested earnings from specialization, the division of labor, and the pursuit of comparative advantage are the two main drivers of economic growth, according to

the classical growth theory. Countries transitioning from monarchical to self-regulatory capitalistic democracies were assisted by classical economic theory. The Wealth of Nations, published by Adam Smith in 1776, summarizes some of the key advancements in classical economics. Classical economics concentrated on theories that explained value, price, supply, demand, and distribution. Eventually, more modern theories like Keynesian economics—which advocated for greater government intervention—replaced classical economics.

Research Methodology

Research Design

This study used cross-sectional descriptive survey design. The study was mainly descriptive in nature, because of its heavy reliance on description, interpretation of the various views and ideas of the respondents. It was cross-sectional since the data was collected from the informers once at a time. This was considered appropriate because it engenders careful description and explanation of factual and detailed information about the opinion of the respondents on Challenges of Fuel Subsidy Removal on the Nigerian Economy: A Study of Gombe State.

Method of Data Collection

The methods of data collection for this study were grouped into two, namely; the primary and secondary data collection. The both source of data (for instance, primary and secondary sources) were extensively used for the purpose of drawing an empirical conclusion for proper analysis of the study so as to come up with objective findings.

i. Primary Data

The primary data for this study were obtained through the distribution of questionnaires with five-point Likert scale and data from direct responses to interviews which were designed for selected public and civil service workers; teachers, university students, staff of universities and

private business owner, NYSC Corp members and other citizens in Gombe state. The essence of this exercise is to enable the researcher obtain more detailed, reliable and up-to-date information on the topic of under study from the aforementioned respondents.

ii. Secondary Data

The main sources of the secondary data for this study were obtained through the review of relevant literature or use of materials from text books, website pages, articles, publications and journals and also through relevant official administrative documents of Gombe state government.

iii. Personal Observation

The researcher also adopted personal observation were the study was conducted to retrieve administered questionnaire. The researcher adopted the systemic observation when he visited the study areas to assess the effects of fuel subsidy removal.

Study Area

This study is carried out in Gombe State. Gen. Sani Abacha's military government split off the former Bauchi State to form the new state of Gombe on October 1, 1996. Akko, Balanga, Billiri, Dukku, Funakaye, Gombe, Kaltungo, Kwami, Nafada, Shongom, and YamaltuDeba were the eleven Local Government Areas that made up the new State. Because of its location in the savannah, the State is known as a Jewel in the Savannah. It is home to multiple ethnic groups and is divided into the two separate administrative regions of Gombe South and Gombe North.

Gombe State is located in the country's northeastern geopolitical zone. It lies between longitudes 80 45 and 110 45 East and latitudes 90 30 and 120 30 North. The State's borders are shared by Adamawa, Bauchi, Borno, Taraba, Yobe, and all the other states in the zone. Its entire land area is approximately 20,265 square kilometers. The State's geography is flat and simple in the south, but it is mountainous and undulating in the north. The Gongola River flows across the State, providing water to

the majority of its northern and northeastern regions before draining into the Benue River near Numan. In 2016, Musa and Alkassim.

Population of the study

The population in this study comprises of

Table 1 Population of the Study

public and civil service workers; teachers, university students, staff of universities and private business owner, NYSC Corp members and other citizens in the area. The population of the study can be illustrated in the table below;

S/N	Target populations	Number of people to be interviewed
1	Teachers	40
2	University Students	40
3	Staffs of Universities	40
4	NYSC Corp members	40
5	NNPC Filing stations	40

Source: Field Survey, 2023

Sampling Techniques/ Sample size

Two hundred (200) respondents out of the entire population were used as the sample size of this study. They were selected using cluster (or area) sampling procedure, whereby the State is divided into the three (3) constitutionally recognized senatorial zones of Gombe Central, Southern Gombe and Northern respectively, and one (1) local government was selected from each of the zones using random sampling. The local governments where systematically selected, so as to reflect Urban settlements (Gombe North), (Zone 1) Semi-urban settlements (Gombe Central) (Zone 2) and Rural settlements (Gombe South) (Zone 3) respectively, and seventy (70, 70, 60) questionnaires were administered in each local government (using stratified random sampling), among community heads, women leaders, town union Presidents, youth leaders and local government staff. This sample size was selected using the simple random sampling method and amounted to two hundred (200) questionnaires that were administered in the course of this study. In this process, adequate care was taken in administering the questionnaires in order to ensure that the opinions of those sampled adequately represent the target population.

This sample size for this study therefore relied on the following formula as stated in

the work of Nachimias (1996).

$$SS = Z^{2}[P(1-P)]$$

SS = sample size

Z = level of significance (1.96) at 95% confidence intervals

P = the estimated proportion of the factor to be $stu\frac{died}{50\% \text{ or } 0.5}$

D =sampling error that can be tolerated (0.05%)

Therefore:

$$1.96^{2}[0.5(1-0.5)]$$

$$0.05^{2}$$

SS = 200.16.

Approximate sample size=200.

Validity of the Instrument

Any research project's ability to collect valid and trustworthy data is critical to its success. The instruments underwent content validity measurement, which includes face validity and predictive validity, in order to successfully assure the validity of the instruments utilized for this investigation.

Therefore, the internal consistency approach was successfully used to guarantee that the instruments are trustworthy inferences and conclusions. Finally, the external criterion method was

used to ensure that the research has high validity. This was accomplished by determining the accuracy of the results obtained from a specific instrument by comparing them to both the research obtained from questionnaires and existing knowledge. The aforementioned techniques were meticulously implemented to guarantee the study's high degree of validity and reliability.

Method of Data Analysis

Since multi-data gathering instruments were used in the course of this research, it then implied that different types of statistical tools would be used, so as to ensure accurate analysis of the data collected. Therefore, the data collected from the respondents was analyzed using statistical tables. With these tables, it was easy to see the opinion of respondents at a simple glance and conclusions were easily drawn among them. Simple percentages and chi-square were also used to analyze the data generated from the study.

Data presentation and Analysis

In carrying out the research, a total of two hundred questionnaires were sent out to the respondents. The two hundred (200) questionnaires that were answered are found useful and relevant in the study and this constitutes 100% return of the entire questionnaires presented.

After a thorough and carefully reading, doing a computerized statistical analysis of my finding, the following was revealed, it is shown in a frequency table for the reader to understand also in line with this study therefore, data gathered and collected during the study shall be analyzed and interpreted using tabular form and percentages and frequencies. Hence the various questions asked and their respective responses are itemized below:

Demographic Information of the Respondent(s)

Any study's conclusions should take the respondents' socioeconomic status into consideration. These characteristics play a role in determining and shaping the pattern of responses to study questions. These characteristics include the respondent's gender, age, marital status, religion strata, occupations, and qualifications, to name a few.

Table 1: Gender Characteristics of the respondents

Gender	Frequency	Percentage
Male	148	74%
Female	52	26%
Total	200	100%

Sources: field survey, 2023

The Table 1 above showed that in the analysis of sex, 74% of the respondents were male and 26% were female. This

showed that majority of the respondents who participated in survey in the study area were male.

Table 2: Age distribution of the respondents

Age	Frequency	Percentage
18-25yrs	34	17%
26-32yrs	66	33%
33-40yrs	54	27%
41 and above	46	23%
Total	200	100%

Source: field survey, 2023

The age distribution showed that most respondents (33%) were between ages 26 and 32 years. There were 17% of the respondents who were aged between 18 and 25 years. Also, 27% of the respondents were between the ages 33 and 40 years, while

23% of the respondents were aged 41 years and above. The inference that could be drawn from the findings is that most people who participated in this survey were under the age of 32 years.

Table 3: Marital status

Marital status	Frequency	Percentage
Married	95	47.5%
Single	65	32.5%
Widowed	40	20%
Total	200	100%

Sources: field survey, 2023

Table 3 showed the marital status of the respondents where 47.5% were married,

while there were individuals who were single (32.5%) and widowed (20%).

Table 4: Religion strata

Religion	Frequency	Percentage
Islam	110	55%
Christian	75	37.5%
Traditional Africa Religion	15	7.5%
Total	200	100%

Sources: field survey, 2023

The religious affiliations of the respondents showed that most respondents (55%) were Muslims. Other religions available in the study area were African traditional religion (7.5%), and Christianity (37.5%). This

further suggests that in Gombe there are multiplicities of religions as people had freedom to associate with their desired religions.

Table 5 Occupation of the respondents

Occupations	Frequency	Percentage	
Student	66	33%	
Civil servant	54	27%	
Business	80	40%	
Total	200	100%	

Source: field survey 2023

Tables 5 showed that, majority of the respondents (40%) were business men and women; 33% of the respondents were students; and 27% of the respondents were civil servants. The majority of the

respondents in the study area were business men and women belong to either Petroleum filling stations or small and medium scale enterprisers.

Table 6 Qualification of the respondents

Qualification	Frequency	Percentage
Primary Education	34	17%
Secondary Education	79	39.5%
Diploma/NCE	37	18.5%
Degree and above	39	19.5%
None of the above	11	5.5%
Total	200	100%

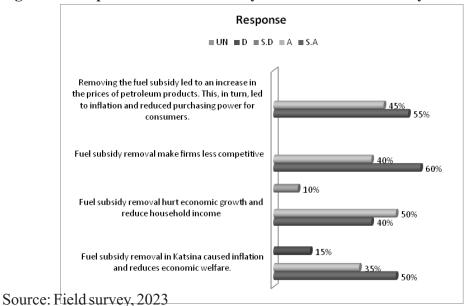
Sources: field survey, 2023

Table 6 showed that, on the educational qualifications of the respondents, the majority of the respondents (39.5%) had secondary education, while 5.5% had no formal education. 17% had primary education and 18.5% had Diploma/NCE. Also, 19.5% of the respondents had Degree and above qualifications in the study area. It may be stated on this basis that most respondents were educated and with different academic qualifications. This may

be significant in sustaining the life span of their daily activities.

- 2. The Implication of fuel subsidy removal to the economy of Nigeria
- 2.1 Research Question 1: What is the implication of fuel subsidy removal to the economy of Gombe State?

Fig. 1: The implication of fuel subsidy removal to the economy of Gombe State



Key 1. S A = strongly agree A = A gree S D = s

Key 1:S.A= strongly agree, **A**= Agree, **S.D**= strongly disagree, **D**= Disagree, and **UN** = undecided Figure 1 above shows the distribution of respondents based on their opinions towards the implication of fuel subsidy removal to the economy of Gombe State.

The majority of the respondents (50%) strongly agreed that fuel subsidy removal in Gombe caused inflation and reduces economic welfare; 35% of the respondents also agreed with the above statement; while 15% of the respondents disagreed. The

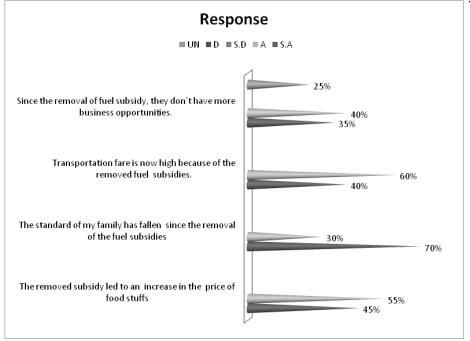
figure also reveals that, majority of the respondents (50%) agreed that fuel subsidy removal hurts economic growth and reduce households income; 40% of the respondents also strongly agreed; while 10% of the respondents were undecided.

The majority of the respondents (60%) strongly agreed that fuel subsidy removal make firms less competitive; 40% of the respondents also agreed with the above statement. Also, majority of the respondents (55%) strongly agreed that removing the fuel subsidy removal led to an increase in price of petroleum products. This in turns,

led to inflation and reduced purchasing power for consumers; 45% of the respondents also agreed with the statement.

2.2 Research Question 2: How do the Gombe people perceive the removal of fuel subsidy on their daily living?

Fig 2: How do the Gombe people perceive the removal of fuel subsidy on their daily living?



Source: Field survey, 2023

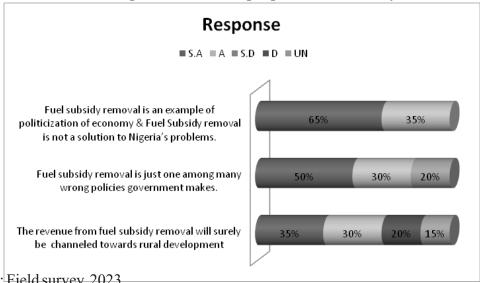
Key 1:S.A= strongly agree, **A**=Agree, **S.D**= strongly disagree, **D**= Disagree, and **UN** = undecided Figure 2 reveals the distribution of respondents on their opinions towards how Gombe people perceive the removal of fuel subsidy on their daily living?

The majority of the respondents (55%) agreed that, the removed subsidy led to an increase in the price of food stuffs; 45% of the respondents also strongly agreed with the above statement. The figure also indicates that, majority of the respondents (70%) strongly agreed that the standard of their family has fallen since the removal of the fuel subsidies; 30% of the respondents also agreed with the statement.

The majority of the respondents (60%)

agreed that transportation fare is now high because of the removed fuel subsidies; 40% of the respondents also strongly agreed with the above statement. Another group of respondents (40%) agreed that since the removal of fuel subsidy they don't have more business opportunities; 35% of the respondents also strongly agreed with the statement; while 25% of the respondents were undecided.

Fig 3: What are the Perceptions of Gombe people on fuel subsidy?



Source: Field survey, 2023

Key 1:S.A= strongly agree, **A**= Agree, **S.D**= strongly disagree, **D**= Disagree, and **UN** = undecided

Figure 3 shows that, majority of the respondents (35%) strongly agreed that the revenue from fuel subsidy removal will surely be channeled towards rural development; 30% of the respondents also agreed with the above statement; while 20% disagreed; and 15% of the respondents were undecided.

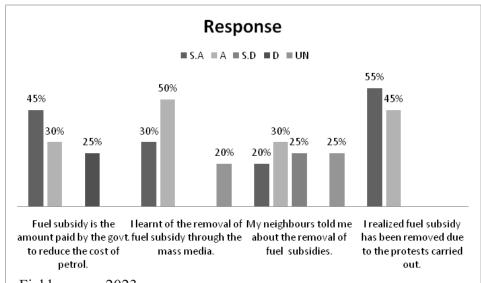
Another group of respondents (50%) fuel subsidy removal is just one among many wrong policies government makes; 30% of the respondents also agreed; while

20% of the respondents were undecided.

The figure also reveals that, the majority of the respondents (65%) strongly agreed that fuel subsidy removal is an example of politicization of economy & fuel subsidy removal is not a solution to Nigerians' problems; 35% of the respondents also agreed with the statement.

2.3 Research Question 3: What are the Perception of Gombe people on fuel subsidy removal?

Fig 4: Is the rural populace of Gombe aware of fuel subsidy removal and what are their sources of awareness?



Source: Field survey, 2023

Figure 4 above reveals that, majority of the respondents (45%) in the study area strongly agreed that fuel subsidy is the amount paid by the government to reduce the cost of petrol; 30% of the respondents also agreed with the statement; while 25% of the respondents disagreed. Another group of respondents (50%) agreed that they learnt about the removal of fuel subsidy through the mass media; 30% of the respondents also strongly agreed with the statement; while 20% of the respondents were undecided. Majority of the respondents (30%) agreed that their neighbors told them about the removal of fuel subsidies; 20% of the respondents also strongly agreed; while 25% of the respondents disagreed; another 25% of the respondents were undecided. Majority of the respondents (55%) strongly agreed that they realized that fuel subsidy has been removed due to protests carried out; 45% of the respondents also agreed with the statement.

Discussion of the Major Findings

According to the study's findings, the elimination of fuel subsidies in Gombe state has raised prices for petroleum products, hurt economic growth and decreased household income, and made businesses less competitive. It has also increased inflation and decreased economic welfare. In turn, this resulted in inflation and a decline in consumer purchasing power. Furthermore, the results showed that the citizens of Gombe have a bad opinion of the subsidies that were eliminated. These results align with a 2003 UNEP study that contends that mixed results have been observed internationally when subsidies on necessities are removed; in particular, this has been known to trigger social unrest and, in extreme cases, lead to civil unrest and street riots. Additionally, the elimination of fuel subsidies has increased the cost of food and transportation, which is felt more by the rural population. The UNEP (2003) concurs with these conclusions, stating that transportation will be most affected by rising fuel prices. In a similar vein, Osei-Kwasi et al. (2012) pointed out that the

elimination of subsidies will result in pressure on inflation. Similarly, the results demonstrated that the rural population believed the government did not care about them and did not need their approval before enacting policies as a result of the removal of gasoline subsidies. In addition, they criticize the administration and assert that the elimination of subsidies is in no manner a means to address Nigeria's issues. This result supports the argument made by George et al. (2012) that the country has only witnessed a decline in the level of living and the impoverishment of the Nigerian people.

Conclusion

This study examined how the withdrawal of fuel subsidies affected rural residents' perceptions of governance. It has demonstrated that even rural residents are aware of the government's decision to remove fuel subsidies and maintain that this is not the way to solve Nigeria's issues. It has been demonstrated that, despite their resistance, rural residents' living situations are negatively impacted by the policy. It follows that rural residents have a poor opinion of governance, which is detrimental to Nigeria's political advancement.

Recommendations

The study therefore recommended that government should:

- i. Implement the subsidy removal policy in a sincere manner, as otherwise, the public will be willing to reject even the government's good intentions.
- ii. In addition, before drafting or implementing any policies, the government should ensure proper and sufficient consultation, particularly for those that would directly affect the populace, including both urban and rural residents.
- iii. In order to establish a compromise that satisfies both the demands of the people and the government, the administration may also need to speak with labor unions.

- iv. Implementing economic reforms that result in a more inclusive society is also crucial.
- v. In the end, the government's use of the money saved by eliminating the gasoline subsidy and the results of that usage will determine whether or not the removal of fuel subsidies is successful.

References

- Akerlof, G. A., & Yellen, J. L. (Eds.). (1986). *Efficiency wage models of the labor market*. Cambridge University Press.
- Bárány, A., & Grigonytė, D. (2015). Measuring fossil fuel subsidies. *ECFIN Economic Brief, 40*(40), 1-13.
- Baumol, W. J. (1968). Entrepreneurship in economic theory. *The American economic review*, 58(2), 64-71.
- Canlorbe, G. (2016). Say's Law, between Classical, Keynesian and Austrian Interpretations: Conversation with Dr. Steve Kates Conducted by GrégoireCanlorbe. *Man and the Economy*, 3(2), 267-297.
- Chinedu Uzochukwu Onyeizugbe and Ebele Mary Onwuka (2012). Fuel Subsidy Removal as an Imperative for Enhancing Business Development in Nigeria. *VSRD International Journal of Business & Mngt. Research* Vol. 2 (9), 2012.
- Couharde, C., & Mouhoud, S. (2020). Fossil fuel subsidies, income inequality, and poverty: Evidence from developing countries. *Journal of Economic Surveys*, *34*(5), 981-1006.
- Ering, S. O., &Akpan, F. U. (2012). The politics of fuel subsidy, populist resistance and its socio-economic implications for Nigeria. *Global Journal of Human Social Science*, 12(7), 12-20.
- Erumebor, W. (2023). Nigeria in 2023: Bridging the productivity gap and building economic resilience.
- George, G., McGahan, A. M., &Prabhu, J. (2012). Innovation for inclusive growth: Towards a theoretical framework and a research agenda.

- Journal of management studies, 49(4), 661-683.
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., ...&Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547-560.
- Hutt, W. H. (1974). *Rehabilitation of Say's Law, A.* Ludwig von Mises Institute.
- Hill, T. P. (1977). On goods and services. *Review of income and wealth, 23*(4), 315-338.
- Israel, G. D. (1992). Sampling the evidence of extension program impact.
 Gainesville, FL: University of Florida
 Cooperative Extension Service,
 Institute of Food and Agriculture
 Sciences, EDIS.
- Jaffe, A. B., Newell, R. G., & Stavins, R. N. (2005). A tale of two market failures: Technology and environmental policy. *Ecological economics*, 54(2-3), 164-174.
- Jolliet, O., Müller-Wenk, R., Bare, J., Brent, A., Goedkoop, M., Heijungs, R., ... &Weidema, B. (2004). The LCIA midpoint-damage framework of the UNEP/SETAC life cycle initiative. *The International Journal of Life Cycle Assessment*, 9, 394-404.
- Joskow, P., & Tirole, J. (2005). Merchant transmission investment. *The Journal of industrial economics*, 53(2), 233-264.
- Kimberlin, C. L., &Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American journal of health-system pharmacy*, 65(23).
- Kouri, P. J. (2019). The exchange rate and the balance of payments in the short run and in the long run: A monetary approach. In *Flexible Exchange Rates/h* (pp. 148-172). Routledge.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labour.
- McCulloch, N. E. I. L., Moerenhout, T., & Yang, J. (2021). Building a social

- contract? Understanding tax morale in Nigeria. *The Journal of Development Studies*, 57(2), 226-243.
- Musa, S. A., &Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Nanda, R., Liu, M. C., Yau, C., Shatsky, R., Pusztai, L., Wallace, A., ... &Esserman, L. J. (2020). Effect of pembrolizumab plus neoadjuvant chemotherapy on pathologic complete response in women with early-stage breast cancer: an analysis of the ongoing phase 2 adaptively randomized I-SPY2 trial. JAMA oncology, 6(5), 676-684.
- Nwachukwu, Darlington & Dr. Tumba, Monday (2023). Examining the Ripple Effects of Petroleum Subsidy Removal on Consumer Buying Behavior in Nigeria. *International Journal of Advanced Academic and Educational Research* ISSN: 2360-9909, Volume 13, Issue 7, (June, 2023) pages 40–51.
- Osei-Kwasi, M. Obodai, E., Barnor, J. S., Ashun, M., Arthur-Quarm, J., &Odoom, J. K., (2012). Human Enteroviruses isolated during acute flaccid paralysis surveillance in Ghana: implications for the post eradication era. *Pan African Medical Journal*, 12(1).
- Omitogun, A. A., Fagbohun, B. J., Bamisaiye, O. A., Ayoola, F. J., &Adeoti, B. (2021). Identifying geochemical anomalies and spatial distribution of gold and associated elements in the Zuru Schist Belt, northwest Nigeria. *Arabian Journal of Geosciences*, 14, 1-20.
- Omotosho, T. F., Oladele, I. O., & Adediran, A. A. (2020). Polymer-based composites: an indispensable material for present and future applications. *International Journal of Polymer Science*, 2020, 1-12.
- Ozili, P. K., & Obiora, K. (2023). Implications of fuel subsidy removal

- on the Nigerian economy. In *Public Policy's Role in Achieving Sustainable Development Goals* (pp. 115-130). IGI Global.
- Ozili, P. K., &Ozen, E. (2023). Global energy crisis: impact on the global economy. *The Impact of Climate Change and Sustainability Standards on the Insurance Market*, 439-454.
- Ozili, P. K., & Arun, T. (2023). Spillover of COVID-19: impact on the Global Economy. In *Managing inflation and supply chain disruptions in the global economy* (pp. 41-61). IGI Global.
- Parry, I., Black, M. S., & Vernon, N. (2021). Still not getting energy prices right: A global and country update of fossil fuel subsidies. International Monetary Fund.
- Peterson K. Ozili and Kingsley Obiora (2023). Implications of fuel subsidy removal on the Nigerian economy. Published version available at: https://doi.org/10.4018/978-1-6684-8903-1.ch007. Published in Book: "Public Policy's Role in Achieving Sustainable Development Goals", IGI Global.
- Smith, A. (1869). An Inquiry into the Nature and Causes of the Wealth of Nations, volume 1 (Vol. 1). Oxford: Clarendon Press.
- Stiglitz, J. E. (1987). Learning to learn, localized learning and technological progress. *Economic policy and technological performance*, 125-153.
- Suberu, O. J., Ajala, O. A., Akande, M. O., & Olure-Bank, A. (2015). Diversification of the Nigerian economy towards a sustainable growth and economic development. International journal of Economics, finance and Management sciences, 3(2), 107-114.
- Umeji, G., &Eleanya, E. (2021). Assessing the Impact of Fuel Subsidy Removal in Nigeria on the Poor in the COVID-19 Era. SERBD-International Journal of Multidisciplinary Sciences.
- Victoria U. Obasi, Esther C. Ezenkwa, Doris O. Onwa, and David M.E.

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Nwogbaga (2017). The Political Economy of Fuel Subsidy Removal in Nigeria. *African Journal of Politics* and Administrative Studies, Vol. 10,

1; March, 2017. Department of Political Science, Ebonyi State University, Abakaliki.