



Research Paper

The Effects of Fuel Subsidy Removal on the Socio-Economic Characteristics of Households in Katsina State

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ABSTRACT

Nigeria is considered as one of Africa's leading oil producers and ever since 70's Nigerian government has been subsidizing petroleum products. In recent times, there has been an increasing call for fuel subsidy reforms globally as policy-makers have expressed concerns regarding the efficacy of such programmes on the common man, as well as its implications for fiscal sustainability. The announcement of total fuel subsidy removal by the Nigerian President led to increase in the pump price as well as price of commodities. The study adopts survey research design and 380 respondents were used as sampled using a self-administered questionnaire and a semi-structure instrument to collect data from the respondents. The study uses Descriptive statistics and chi-square to analyze the data generated. Two hypothesis were tested, The result Shows the value of $\chi^2 = 89.804$, $df = 16$, $p < 0.05$ & $\chi^2 = 84.279$, $df = 16$, $p < 0.05$ which reveal that there is significant effect of subsidy removal on household living standard and household poverty vulnerability respectively. Therefore, Null hypotheses were rejected (H_0) and accept the alternative hypotheses (H_a). Some recommendations were made as to government should ensure that subsidy reinvestment programmes meet the target that were set to achieve through leasing some of the administrative bottleneck that hinder people who are vulnerable to get the scheme and embark on public awareness campaign on the existence of most of the important programme that can significantly relieved most people at the bottom.

Keywords: effect, subsidy removal, socio-economic characteristics, household

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I. Introduction

Nigeria is considered as one of Africa's leading oil producers and ever since 70's Nigerian government has been subsidizing petroleum products. It was introduced as a response to oil shocks in 1973 (Joseph, 2021). Fuel subsidies became institutionalized in 1977, following the promulgation of the Price Control Decree which made it illegal for some products including petrol to be sold above the regulated price. This law was introduced by the General Olusegun Obasanjo regime in order to cushion the effects of the global 'Great Inflation' era of the 1970s, caused by a worldwide increase in energy prices (Joseph, 2021). Between 2006 -2018 Nigeria spent about 10 Trillion Naira on petroleum subsidies. In 2019 and 2020 about 3 trillion Naira was spent on subsidies. It means that Nigeria has spent over \$30 billion on fuel subsidies over the past 16 years or so. In 2018, it spent 722 billion Naira but spent only \$1.5 billion Naira on health. Nigeria's growing fuel subsidy may have contributed to the country's health-financing gap (Stephen, 2021). On the fuel subsidy removal, since Nigeria's transition to civil rule in 1979, there were several attempts to remove subsidies that are unsuccessful. President Shehu Shagari's government from 1979 to 1983 increased the price of petrol in 1982, from 15.3 Kobo a liter to 20 Kobo. This happened without the government making reference to easing subsidies, then in 1986, President Ibrahim Babangida announced a partial removal of oil subsidies, which saw the petrol price rise from 20 Kobo to 39 Kobo per liter (Udibe & Ugwuanyi, 2018). This followed his implementation of the Structural Adjustment Program as set out by the International Monetary Fund (IMF) (Danladi & Peter, 2016). There was a huge uproar against the decision, which reached a crescendo when workers, students, and civil society groups embarked on massive demonstrations across the country which eventually played a big role in his hurried and unprepared exit from power. In 2012 President Goodluck Jonathan parred down fuel subsidies and used the savings to invest in education and infrastructure. But he encountered virulent pushbacks from labor unions, students, and civil

society groups. He was subsequently forced to cut the fuel price by 30%. President Muhammadu Buhari increased the pump price from 87 to 145 in 2016, and finally the announcement of total removal of fuel subsidy on 29th May, 2023 by President Bola Ahmad Tinubu which led to increase of pump price from N189 to N540 per litre which rose to N665 in some filling stations as at 4th November 2023.

II. Problem statement

In recent times, there has been an increasing call for fuel subsidy reforms globally as policy-makers have expressed concerns regarding the efficacy of such programmes on the common man, as well as its implications for fiscal sustainability (Sdravichet et al., 2014; Coady et al., 2015; Ebeke and Ngouana, 2015; Jakob et al., 2015; Salehi-Isfahani et al., 2015). It has also been argued that, contrary to its good intentions, badly-targeted subsidy programmes have seriously affected the standard of living of the common man thereby worsening the problem of inequality. Usually when subsidy is removed the price of fuel increased, many individuals particularly the households are often at the receiving end as this would result in lowering of living standard, food price increase, decrease in assets and increase in poverty level. However, despite numerous attempts at reform, Nigeria has never successfully removed fuel subsidies, and this is in large part due to strong popular opposition to reform until 29th May, 2023 with the pronouncement of the President Bola Ahmed Tinubu. Subsidies come at a great cost: spending on other development objectives is lower; the distribution of resources to the state governments is reduced; etc. The reality of the scenario is that Nigerians believe that savings from removing fuel subsidies will not be used appropriately because of corruption. Furthermore, the months in the initial aftermath of the subsidy removal will see rising inflationary pressures which could be detrimental to household income considering the slow pace of household income growth since. Several studies have investigated the macroeconomic impacts of oil price shocks on the Nigerian economy. Amongst other effects, it has been shown that oil price shocks generate significant implications for output, prices, exchange rate, government revenues, interest rates and external reserves (Adeniyi et al., 2011; Akinlo, 2012; Akinleye and Ekpo, 2013; Abayomi et al., 2015; Abdulkareem and Abdulhakeem, 2016; Aigheyisi, 2018;). However, only a few attempts have been made at studying the role of fuel subsidies and the macroeconomic implications of its removal on households (Adenikinju, 2009). Even though, most key stakeholders agree that the subsidy regime needs to go as it is clearly economically unsustainable in its current form, this study examines the effects or impact this removal will have on households' socio-economic characteristics in Katsina State.

1. Objectives of the study

The main objective of the study is to assess the impact of fuel subsidy removal on socio-economic characteristics of households in Katsina State. The specific objectives of this empirical research are:

- a. To determine the effects of subsidy removal on households' living standard in Katsina State.
- b. To ascertain the extent to which subsidy removal affects household economic activities in Katsina State.
- c. To examine the effect of fuel subsidy removal on household poverty and vulnerability in Katsina State

2. Research questions

- a. Is there any significant effect of subsidy removal on household's living standard?
- b. To what extent does subsidy removal affects household economic activities in Katsina State?
- c. Is there any significant relationship between fuel subsidy removal and household poverty and vulnerability in Katsina State?

3. Research hypothesis

Hypothesis one

Ho: There is no significant effect of subsidy removal on household living standard.

H₁: There is significant effect of subsidy removal on household living standard.

Hypothesis two:

H₀: there is no relationship between fuel subsidy removal and household poverty vulnerability

H₁: there is relationship between fuel subsidy removal and household poverty vulnerability

III. Literature Review

This research focuses on the conceptualization of certain variables and economic theories of subsidy as a theoretical framework.

Conceptual framework

Oil plays important roles in the Nigerian economy, contributing about a third of the country's gross domestic product (GDP) in the 1980s and 1990s. Although its share of the economy has waned in the subsequent decades

due to declining oil prices and the changing structure of the economy, the oil and gas sector still accounts for about 11.2 per cent of the GDP in the current decade. Also, the contribution of oil to government revenue has remained quite high, increasing from 70.2 per cent during the 1980s to about 80.0 per cent in the last decade. In terms of trade, oil accounts for about 93.1 per cent of exports and 24.4 per cent of imports during the period 2010-2018 (*CBN Journal of Applied Statistics*).

Concept of Subsidy

There is no universally accepted definition of subsidy. Subsidy is used to describe monetary transfer that result from government policies. Although the term “subsidy” is widely used in economics, it is rarely defined. Often it is used as an antonym to a tax, i.e. a government transfer of money to an entity in the re review private sector. This seems, for instance, to be the case in the Oxford Online Dictionary 2 where subsidy is defined as: “...a sum of money granted from public funds to help an industry or business keeps the price of a commodity or service low”.

According to one OECD definition, “A subsidy is a measure that keeps prices for consumers below market levels, or keeps prices for producers above market levels or that reduces costs for both producers and consumers by giving direct or indirect support”. Subsidies can take the form of direct grants or payments to consumers or producers. (OECD, 2016).

Types of Subsidy

Kampungu, Gerson and Feng (2013), identified three types of subsidy as follows:

1. Subsidy that increase revenue; this type of subsidy has to do with subsidy granted to producers to output from production. It is in form of market price support which is used to either maintain income levels as in the case of agricultural sector or ensured desired level of employment in the subsidized sector. This type allows producers to increase their income by increasing the profitable production.
2. Subsidies that lower the cost of production: subsidizing the inputs is one of the ways to lower the producer’s average costs.
3. Subsidies that are not linked to production or input: this has to do with subsidies that are not conditional on production or input levels, direct income support or unconditional lump sum support to an industry. They do not have direct effect on the input or output markets which is why there is little or no upstream or downstream leakages effect, in other words, little or nothing go to the consumers or to the input producers.

Justifications for Removal of Fuel Subsidy in Nigeria

In its efforts to justify total withdrawal of fuel subsidy, the Nigerian government has over the years forwarded, among others, the following major reasons:

1. Unsustainable financial cost of subsidy

According to the World Bank, Nigeria's total revenue in 2000 was USD10.8 billion. By 2010, this amount increased to USD 67.9 billion. Yet the Nigerian government has spent over USD 30 billion on fuel subsidies over the past 18 years. This has had a significant impact on funds available for critical infrastructure and other essential sectors such as education, health, and defense. According to the Debt Management Office, the country’s public debt stock is being increased as the government had to borrow N1trn to finance fuel subsidy in the year 2022. The cost of fuel subsidies far outweighs the benefits to Nigeria according to DMO. In 2022 budget, only N3.5 trillion was allocated to education, healthcare, and infrastructure, while a whopping N4.4 trillion was allocated to finance fuel subsidy. In the past nine years (2014 – 2022), the Nigerian government spent more on fuel subsidy than in defence, education health sectors as depicted in the diagram below:

2. Economic Distortion: According to a report, households in the bottom 40% of the income distribution account for less than 3% of all fuel purchases. Furthermore, it is reported that three-quarters of all fuel sold in Nigeria is consumed by private firms, public transportation services, government agencies, and other businesses. Most vehicles used for carrying large numbers of people (such as *molue*) and goods are diesel powered which is already deregulated. Also, Household Kerosene which is mostly used by the poor is no longer subsidised, meaning that the poor are already to a large extent paying market prices for their fuel. This effectively means that the government is subsidising mostly those who can afford fuel (PMS) at market rates and not the poorest of the poor who need subsidy.

3. Smuggling: Nigeria is bordered by Niger Republic, Cameroon, Chad, and Benin Republic. The porous borders N1trn to finance fuel subsidy in the year 2022. The cost of fuel subsidies far outweighs the benefits to Nigeria according to DMO. In 2022 budget, only N3.5 trillion was allocated to education, healthcare, and infrastructure, while a whopping N4.4 trillion was allocated to finance fuel subsidy. In the past nine years (2014 – 2022) In June 2022, the Managing Director of NNPC Limited, Mr. Mele Kyari, indicated that daily consumption of PMS had increased to over 103 million litres per day and that at least 58 million litres were

being smuggled. This means that smugglers and other neighbouring countries benefit more from fuel subsidy than Nigerians. A report published by Chapel Hill Denham, estimates that 15.64 million litres of petrol are smuggled out of Nigeria daily as the retail price of Nigerian petroleum products on average is 3.7 times cheaper than those of its neighbours, and this has given smugglers undue opportunities for sharp practices. The Nigeria Customs Service also affirmed that PMS was being smuggled out of the country in large quantities after it has been subsidised by the Federal Government, adding that the petroleum product is being diverted to as far as Mali.

4. Investment: Nearly 70 years after the discovery of crude oil in commercial quantity in Nigeria, oil and gas downstream sector is yet to develop to the desired levels, despite the recent enactment of the Petroleum Industry Act (PIA 2021). The downstream sector of the oil and gas industry had the least foreign direct investment compared to the midstream and upstream sectors, and the reason for this is not far-fetched. The current subsidy regime and the legal framework of the downstream sector generally discourages investments. The downstream sector needs full deregulation if it would attract more private investors, and one of the impediments that will need to be removed upon full implementation of the Petroleum Industry Act is fuel subsidy.

5. Climate Change Commitments: At the COP26 which was held in Glasgow, Scotland in 2021, the President of Nigeria, Muhammadu Buhari signed the Climate Pact thus committing Nigeria to achieving net zero emissions by 2060. A week after the conference, President Buhari signed the Climate Change Bill into law demonstrating the country's commitment to truly achieve net zero carbon emissions. It is a contradiction for a country to subsidise consumption of fossil fuel while at the same time seeking to reduce the country's carbon footprint. Rather than subsidising fossil fuel, the country should encourage green and renewable energy.

Theoretical Framework

1. Economic Theory of Subsidies:

A subsidy for a good or service changes its price, and therefore changes the amount of consumption. Subsidies may be introduced to correct some market failure – for instance, if there are positive spillovers to research and development which mean that those agents performing the research do not accrue all of the benefits, then they will produce a suboptimal amount of research; a subsidy can incentivize them to do more research such that the socially efficient amount occurs. Whilst subsidies can be appropriate and useful, economists are concerned with inefficient subsidies, which cause situations where “price does not correspond to the overall cost to society of producing or consuming a little more or less of the good or service” (Fischer and Toman, 2000, p.2) In other words, prices do not equal marginal cost, so efficient resource allocation is not achieved. Inefficient subsidies are therefore an issue worth dealing with since their elimination can make society as a whole better off. Even if a subsidy policy is introduced with benevolent aims, they are seldom the most efficient policy tool. McKenzie and Mintz (2011) point out that one possible problem is waste, which arises when subsidies do not alter behaviour as expected or they incentivize activities that would have happened anyway. Another damaging impact of subsidies is that they can distort the allocation of resources by redirecting activity towards subsidised areas and away from alternatives. As McKenzie and Mintz (2011) put it, you can end up with “activities because the subsidy is available rather than investing solely on the basis of economic criteria”.

2. Political Theories of subsidy

Political theories offer insights into how government decisions on subsidy removal are influenced by power dynamics and public opinion. The Public Choice Theory argues that political actors aim to maximize their interests, leading to policies that may not always align with the public's welfare (Obasi et al., 2017). This theory can explain the rivalry between citizens' interests and government decisions in both the 2012 and 2023 cases of subsidy removal in Nigeria.

3. Social Theories of Subsidy

Social theories illuminate the societal repercussions of subsidy removal. The Theory of Social Conflict explains how societal groups with differing interests may engage in conflict when policies threaten their well-being (Apeloko & Olajide, 2012). The Theory provides a lens through which an analysis of the tensions and clashes that arise when policies like subsidy removal have differential impacts on various societal groups can be carried out. It underscores the importance of considering not only the economic implications of such policies but also their social and distributional effects. By understanding these dynamics, policymakers can anticipate and address potential conflicts, striving for policy solutions that are more equitable and socially acceptable.

IV. Methodology

The study used descriptive survey and research design as an ex-post factor research design, interview and focus discussion to draw out data from respondents. The population of this study includes all Households in Katsina State. A total of 380 respondents were selected by the use of simple random sampling. A simple random sample is a randomly selected subset of a population. In this sampling method, each member of the

population has an exactly equal chance of being selected. This method is the most straightforward of all the probability sampling methods, since it only involves a single random selection and requires little advance knowledge about the population. Because it uses randomization, any research performed on this sample should have high internal and external validity (Thomas 2020). The study select a representative without bias from the accessible population to ensures that each member of the target population have an equal and independent chance of being included in the sample.

The sample of the population drawn through the sample techniques designed by Scott M. Smith with the use of a Confidence interval of 95%, standard deviation, Z-score, and margin of error. The Z-score of +1.96, standard deviation 5, and margin of error (confidence interval) of +/-5%. Descriptive statistics and chi-square used to analyze the data generated.

V. Result

Table1: Respondent’s view on Socio-demographic information

SN	Items	Category	Number	Percentage (%)
1	Gender	Male	277	72.9
		Female	103	27.1
		Total	380	100.0
2	Marital Status	Single	118	31.1
		Married	209	55.0
		Divorced	31	8.2
		Widow	22	5.7
		Total	380	100.0
3	Age	18-25 years	52	13.7
		26-35 years	117	30.8
		36-45 years	142	37.4
		46-55 years	59	15.5
		56 years & above	10	2.6
		Total	380	100.0
4	Educational Qualification	Informal	64	16.8
		PSLC	86	22.6
		SSCE	88	23.2
		ND/NCE	78	20.6
		BSC/HND	64	16.8
		Total	380	100.0
5	Occupation	Civil servant	110	30.3
		Farmer	79	21.8
		Business	122	33.6
		Artisan	52	14.3
		Total	380	100.0
6	Household size	1-5	259	68.2
		6-10	89	23.4
		11 above	42	11.1
		Total	380	100.0
7	Monthly income	<₦20,000	76	20.0
		₦20,000-₦100,000	225	59.2
		₦100,000 Above	79	20.86

(Field survey, 2024)

The table1 provides the personal information of the respondents, categorized into different variables. The table provides a breakdown of personal information of 380 respondents in a study on the effect of subsidy removal on socio-economic characteristics of household in Katsina. The results showed that majority of the respondents are male, accounting for 72.9% of the total respondents, while females make up 27.1% of the total. The majority of the respondents are married (55.0%), followed by singles (31.1%). The number of respondents who are divorced (8.2%) or widowed (5.7%) is lower. The majority of the respondents are in the age range of 36-45 years (37.4%), followed by 26-35 years (30.8%). The age groups 18-25 years, 46-55 years, and 56 years & above constitute 13.7%, 15.5%, and 2.6% of the total respondents, respectively.

The largest group of respondents have SSCE qualifications (23.2%), followed closely by ND/NCE (20.6%) and PSLC (22.6%). A smaller percentage hold BSC/HND qualifications (16.8%), while the smallest percentage of respondents have an informal education (16.8%).

The study's sample comprises predominantly male respondents, with a significant number of married individuals. The age distribution skews towards the middle age groups, particularly those between 26 and 45 years old. Regarding educational qualifications, SSCE holders are the most represented in the sample. These demographic insights are crucial for understanding the characteristics of the respondents involved in the study on the impact of subsidy removal on socio-economic characteristics of household in Katsina.

RESEARCH QUESTION 1: Is there any significant effect of subsidy removal on household's living standard?

Table 2: respondents view whether there is any significant effect of subsidy removal on household living standard

SN	Items	Agree (%)	Undecided (%)	Disagree (%)	Mean	SDev
1	Decrease in overall living standard	336 (88.4)	09 (2.4)	35 (9.2)	4.05	0.764
2	Decrease in health facilities	330 (86.8)	09 (2.4)	41 (10.8)	4.18	0.880
3	Decrease in qualitative education	312 (82.1)	09 (2.4)	59 (15.5)	4.08	0.855
4	Decrease in obtaining basic necessities of live	330 (86.8)	25 (6.6)	25 (6.6)	3.99	1.003
5	Decrease in per capita income	298 (78.4)	21 (5.5)	61 (16.1)	3.93	1.069
	Increase in stress/anxiety	1606 (84.6)	73 (3.8)	221 (11.6)	4.05	0.914
6	Increase in price of utilities	338 (88.9)	24 (6.3)	18 (4.8)	4.09	1.000
7	Increase in transportation cost	299 (78.7)	30 (7.9)	51 (13.4)	3.93	1.100
8	Increase in debt	273 (71.8)	34 (8.9)	73 (19.3)	3.77	1.207

(Field survey, 2024)

The table 2 reports the results of a study investigating the effects of effect of subsidy removal on household's living standard in Katsina. The study reveals that the majority of respondents (88.4%) agreed that there was a decrease in overall living standard of household. Similarly, 86.8% of respondents agreed that there was a decrease in health facilities, and 82.1% agreed that there was a decrease in qualitative education. The study also found that 86.8% of respondents agreed that there was a decrease in obtaining basic necessities of live, and 78.4% of respondents agreed that per capita income decreased. The study also found that 88.9% of respondents agreed that there was an increase in obtaining price of utilities, and 78.7% of respondents agreed that per transportation cost increased. The study also reveals that majority of respondents (71.8%) agree with the increase in debt among the household.

The results of the study indicate that the subsidy removal had a significant negative impact on the socio-economic characteristics of household in Katsina.

RESEARCH QUESTION 2: To what extent does subsidy removal affects household economic activities in Katsina State?

Table 3 Respondents view on the extent to which subsidy removal affects household economic activities in Katsina State

SN	Items	Agree (%)	Undecided (%)	Disagree (%)	Mean	SDev
9	Decrease in household ability to invest in business or enterprise	338 (88.9)	24 (6.3)	18 (4.8)	4.09	1.000
10	Decrease in household savings	299 (78.7)	30 (7.9)	51 (13.4)	3.93	1.100
11	Decrease in household ability to procure asset	273 (71.8)	34 (8.9)	73 (19.3)	3.77	1.207
12	Decrease in household ability to create new jobs	289 (76.1)	30 (7.9)	61 (16.2)	3.97	1.126
13	Declined in economic productivity	279 (73.4)	30 (7.9)	71 (18.7)	3.84	1.166
14	Decrease in capital investment	1478 (77.8)	148 (7.8)	274 (14.4)	3.92	1.120
15	Household access to market has been impacted	308 (81.1)	27 (7.1)	45 (11.8)	3.87	0.989
16	Household ability to maintain current business size has been impacted	300 (78.9)	30 (7.9)	50 (13.2)	3.91	1.071

(Field survey, 2024)

The results of Research Question 2, which aimed to investigate the extent to which subsidy removal affects household economic activities of household in Katsina State, are presented in Table 3. The table shows the percentage of respondents who agreed, were undecided, and disagreed with statements related to the extent of subsidy removal effects on household economic activities. The results indicate that the majority of respondents agreed that there were decrease in household ability to invest in business (88.9%). Additionally, a significant proportion of respondents agreed that there was a decrease in household savings (78.7%). The table also shows that the majority of respondents agreed that there was decrease in household ability to procure asset

(71.8%). Similarly, there was decrease in household ability to create new jobs (76.1%). Furthermore, the results indicate that declined in economic productivity as one of the extent to which subsidy removal affect household economic activities (73.4%). The results also indicate that the majority of respondents agreed that there was decrease in capital investment (77.8%). Additionally, a significant proportion of respondents agreed that Household access to market has been impacted (81.1%). The table also shows that the majority of respondents agreed that Household ability to maintain current business size has been impacted (78.9%).

The cumulative aggregate of the table shows that 77.8% of respondents agreed with the statements, while 7.8% were undecided, and 14.4% disagreed. Overall, the majority of respondents (77.8%) agree with the negative impact of subsidy removal on household economic activities.

RESEARCH QUESTION 3: Is there any significant relationship between fuel subsidy removal and household poverty and vulnerability in Katsina State?

Table 4 respondents view on whether there is any significant relationship between fuel subsidy removal and household poverty and vulnerability in Katsina State

SN	Items	Agree (%)	Undecided (%)	Disagree (%)	Mean	SDev
17	More vulnerable to economic shocks	206 (54.2)	18 (4.7)	156 (41.1)	3.59	1.146
18	High risk of falling into poverty	229 (60.3)	41 (10.8)	110 (28.9)	3.51	1.257
19	Social protection programme reduced the impact	228 (60.0)	43 (11.3)	109 (28.7)	3.47	1.278
20	Received government support to cope with the vulnerability	170 (44.7)	52 (13.7)	158 (41.6)	3.19	1.221
21	Reduction of food consumption deal with effect	204 (53.7)	33 (8.7)	143 (37.6)	3.33	1.147
22	Housing condition has deteriorated	201 (52.9)	24 (6.3)	155 (40.8)	3.49	1.244
23	Reduce access to social services	171 (45.0)	45 (11.8)	164 (43.2)	3.21	1.217
24	More vulnerable to indebtedness	187 (49.2)	42 (11.1)	151 (39.7)	3.34	1.327

(Field survey, 2024)

The study found that there is significant relationship between fuel subsidy removal and household poverty and vulnerability as presented in table 4 The majority of respondents agreed that household are more vulnerable to economic shocks (66.3%), and that there is high risk of falling into poverty (60.3%). Additionally, a significant proportion of respondents agreed that Social protection programme reduced the impact (60.0%). The study also found that there household received government support to cope with the vulnerability (44.7%), with only 54.2% of respondents agreeing that reduction of food consumption deal with effect. This is further supported by the fact that (52.9%) of respondents agreed that housing condition has deteriorated it was also revealed respondents (45.0%) agreed that there is reduction in access to social services and (49.2%) agreed that household are more vulnerable to indebtedness..

4. Hypotheses Testing

The hypothesis were tested at level of significance of 0.05:

Hypothesis one:

H₀: There is no significant effect of subsidy removal on household living standard.

H₁: There is significant effect of subsidy removal on household living standard.

Table 5: Chi-square results of effect of currency redesign and swap on financial performance of small scale businesses

Item	N	Chi-square	Df	p-value	Alpha	Decision
effect of subsidy removal on household living standard	380	89.804	16	0.000	0.05	Reject H ₀

(Field survey, 2024)

The chi-square test results presented in Table 5 show a significant effect of subsidy removal on the household living standard (p-value = 0.000, alpha = 0.05). The chi-square test result indicates that there is a significant effect of subsidy removal on the household living standard ($\chi^2 = 89.804$, df = 16, p < 0.05). Therefore, Null hypothesis was rejected (H₀) and accept the alternative hypothesis (H₁).

Hypothesis two:

H₀: there is no relationship between fuel subsidy removal and household poverty vulnerability

H₁: there is relationship between fuel subsidy removal and household poverty vulnerability

Table 6: Chi-square results of relationship between currency redesign and swap on customer satisfaction

Item	N	Chi-square	Df	p-value	Alpha	Decision
Relationship between fuel subsidy removal and household poverty vulnerability	380	84.279	16	0.000	0.05	Reject H ₀

(Field survey, 2024)

The chi-square test results presented in Table 6 indicate a significant relationship between fuel subsidy removal and household poverty vulnerability (p-value = 0.000, alpha = 0.05). The chi-square test result indicates that there is a significant relationship between fuel subsidy removal and household poverty vulnerability ($\chi^2 = 84.279$, df = 16, $p < 0.05$). Therefore, we reject the null hypothesis (H₀) and accept the alternative hypothesis (H₁). Therefore, the null hypothesis that there is no relationship between fuel subsidy removal and household poverty vulnerability is rejected. The alternative hypothesis that there is a relationship between fuel subsidy removal and household poverty vulnerability is accepted.

VI. Conclusion

The results of the study indicate that the first finding showed that the subsidy removal had a significant negative impact on the socio-economic characteristics of house in Katsina. This impact stemmed from challenges such as decrease in asset, savings, income and overall general well-being. This finding shows that subsidy removal has affected socio-economic characteristics of the household in Katsina State and impacted them negatively, which ultimately reflected in their livelihoods. The study also concluded that some of the socioeconomic characteristics of the respondents captured in the questionnaire influence the level of their income and result indicates that there is a significant relationship between fuel subsidy removal and household poverty vulnerability as well as household living standard. It was concluded that hardship, increase in price of goods and services as well high cost of living among others inflicted as a result of subsidy removal have effect on the lives and property of the study area.

VII. Research implications

This research makes contribution to the existing literature by focusing on the impact of subsidy removal on low income earners. The existing literature has made several attempts at studying the effect of oil price shock on the economic growth of many countries. Even on the Nigerian economy there is a large body of literature on the relationship between oil price shocks and economic growth. However, while those studies focus their attentions on the effect of increase in petroleum prices as a result of subsidy withdrawal due to the deregulation of the downstream oil sector on the economic growth of Nigeria, this study is on the effect of subsidy removal on low income earners who were directly affected by such policy. This is significant because Nigeria is oil producing developing country and domestic increase in petroleum prices squeezes money out of the people.

VIII. Policy/Methodology recommendation

The data used, the methodology, results and conclusions of this study should serve as a basis for future research on the effect of subsidy removal on the economic growth of Nigeria. However one of the limitations of this research is that, the results obtained and conclusions made may not be applied in other countries, because the data used is on socioeconomic characteristics that may differ in other countries.

IX. Recommendations

In the light of the above findings, the following recommendations were made:

1. The government should ensure that subsidy reinvestment programmes meet the target that were set to achieve through leasing some of the administrative bottleneck that hinder people who are vulnerable to get the scheme.
2. Government should embark on public awareness campaign on the existence of most of the important programme that can significantly relieved most people at the bottom.
3. Government must put in place an effective regulatory framework to protect the citizens from exploitation by petroleum marketers. Therefore, the Petroleum Product Pricing Regulatory Agency (PPPRA) must be urgently reorganized. The ordinary Nigerian must be protected and money aimed at ameliorating the lives of the poor must be protected.
4. Incentives should be made available in the form of scholarship in order to improve their knowledge/skills so as to sustain their means of livelihoods.
5. Government should embark on critical infrastructural development such as roads, hospitals, power electrification project and invest heavily on education

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