

THE IMPACT OF PRICE HIKE OF PETROLUUM MOTOR SPIRIT ON INDIVIDUAL, HOUSEHOLD AND FIRMS IN NIGERIA (1970-2024)

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Abstract: This research looks at the impact examined the impact of PMS on individual, household and firms in Nigeria spanning from (1970-2024). The study utilized survey method was employed and the population of Nigeria was used for the study. The population was estimated at 144.3 million as of 2006 census. With the implementation of Taro Yamane formulae, the population size was reduced to 400 people. Two states and local government areas were selected from each of the four region of Nigeria out of the 400 questionnaires sent out, a total of 291 respondents from the 4 state returned. With a mean criterion of 3.0, the statistical tools of the Statistical Package for the Social Sciences (SPSS) were used to analyse the study's research questions. Findings from the study show that price hike of petroleum motor spirit brings about reduction of disposable income of individual and household, increase in cost of living, decrease in standard of living, increase in the cost of money spent on transportation, retrenchment of staff as a result of decrease in the demand for goods and services, unemployment, poverty, political instability, social unrest and food insecurity. The study gave some recommendations and concluded that price hike of petroleum motor spirit has negative effect on production which serve as a major problem to firms thereby reducing production and spending on goods and services in Nigeria which virtually increase prices of every good and service thereby reducing the purchasing power of individual and household income.

Keywords: Firms; Household; Individual; Nigeria; Petroleum motor spirit

1 INTRODUCTION

In Nigeria, the price of petroleum motor spirit (PMS/fuel) has been on the increasing side since 1970 till date. The Downstream section of the nations' oil sector is facing challenge which has become a serious problem to individuals, household, firms and the entire nation. Records has shown that changes in PMS pump price has been on the rising side since 1970 till date. From 1970 and 1980 the price rose from 3 kobo to 15 kobo, in 1981 it increased from 20 kobo to 70 kobo in 1990, in 1991 it also increased from 70 kobo to N22 in the year 2000. In 2001, it increases from N26 to N97 in 2013, in 2014 it was reduced to N94 and later increase to N165 in 2022, N238 in May 2023, on June 12th 2023, the president of Nigeria Hamed Bola Tinibu removed fuel subsidy which make the price to rise to N580/N688, in Q1 and N770 Q2 2024 the price increase again to N980 and later increase to N1300 in Q3 of same year. In mid-October 2024 Nigerian National Petroleum Company announce the various prices that petroleum motor spirit (PMS) are to be sold at various region of the country of which the least price is N1050 which is been sold at Lagos (South-West region). Although in all region and state in Nigeria, the price of PMS is being sold above the price ceiling reason been that the marketers of PMS bought the product from the government higher than the price the government fixed. In some that, PMS is being sold at N1300, N1350, N1500 etc. The government of Nigeria has been adjusting the price of PMS upwardly with the aim of eliminating fuel consumption subsidy in accordance to the free market system which finally in 2023 it was achieved. Since then, the rise in fuel price has brought about great impact to individuals, household and firms who depend more on fuel for transportation, source of energy and input to power factory machines in their production process. This situation has affected the activities of individuals and household and also the productivity of firms that they find it hard to take care of their rising energy cost.

Mr. Adedayo Toluwase the Managing Director, Sotice Investment Company Limited said several millions of Nigerians would live poorer and suffer more than they had ever done in recent history in 2012. He said, more than ever in the history of the country, more Nigerians will sink further below the poverty line. The prices of goods and services have increased as price of fuel rises at the same time that wages remain stagnant and unemployment remains a nationwide scourge. More than 70 per cent of Nigerians lack the usual or socially acceptable amount of money or material possessions needed to live a happy life. This unfortunate category of Nigerians lacks material comfort and in plain language they live from hand to mouth. This incessant increase in fuel price has effects on individual, household, firms, the economy and government as this capture the interest of the researcher in conducting this study. The study examined the impact of PMS on individual, household and firms in Nigeria spanning from (1970-2024). The study is divided into four sections which include; the introduction, review of literature, methodology, conclusion, recommendations and references.

2 LITERATURE REVIEW

Gatawa & Zakari [1] examines the effect of petroleum merchandise charge adjustments on family welfare in Zaria city of Kaduna state. Respondents groups have been stratified decided on primarily based totally on their geographical locations. Descriptive data and inferential data gear have been hired and use for statistics evaluation. Descriptive data become used to examine socio monetary traits of family head and to decide the charge adjustments of petroleum merchandise on families. at the same time as inferential statistical gear have been hired to mainly display how charge adjustments of petroleum merchandise have an effect on the family thru growth in expenses of petroleum merchandise which reasons lower in call for the goods, and now have multiplier impact on items and services. On the alternative hand, lower in expenses of petroleum merchandise additionally growth the call for the goods in Zaria city. To executed this objective, non-parametric chi-rectangular check become hired. The outcomes display that, the 3 petroleum merchandise this is, petrol (PMS), gasoline (LPG) and kerosene (DPK) have an effect on family welfare. This indicated that growth with inside the petroleum merchandise charge adjustments reason lower in call for of the goods, at the same time as however the lower of the petroleum merchandise expenses reasons growth in call for the goods which become in conformity with this study. The study additionally recommends, authorities must decontrol the downstream petroleum quarter to permit for growth participation and competition with the intention to instead bring about lowering expenses of petroleum merchandise Moreover, emphasis on opportunity reasserts of electricity along with gasoline, solar, wind and hydraulic reasserts must positioned into consideration. Government must enlarge intake potential impact with the intention to translate to multiplied call for various purchaser excellent and therefore multiplied income and profitability of some of Nigerians.

Stephen [2] observed the effect of gasoline charge growth at the Nigerian economic system. The study observed the effect of Fuel charge growth at the Nigerian economic system (Whether poor or positive). The study followed a survey studies layout technique to assess the extent of impact the gasoline charge growth has at the Nigeria economic system. The populace of the have a take an observe is made from Civil Servants -CS, marketplace guys and women-MMW and body of workers with inside the personal sectors SPS involved with petrol and gasoline affairs. A pattern length of a hundred and twenty people become decided on at random. It became disbursed as follows: Civil Servants (18), marketplace guys and women (55) and body of workers with inside the personal sectors (47). A pre-test become carried out and final results yield " r "= 0.ninety two indicating an excessive diploma of consistency and reliability. The tool become 8- time period survey questionnaire with a - five Likert scale reaction alternatives of Very Relevant (VR), Relevant (R), No Effect (NE) Irrelevant (I), and Very Irrelevant (VI). The questionnaire become dependent in keeping with the studies objectives. The Pearson product second correlation coefficient become used to verify formulated hypotheses. Finding found out that there's a giant courting among the latest will increase in gasoline expenses and monetary boom in Nigeria. It became additionally determined that the Nigeria economic system isn't growing due to the impact of gasoline charge hike on buying strength and sooner or later the locating confirmed that there's giant courting among growth in pump charge of petroleum and meals security. The paper consequently encouraged that Government must hold gasoline subsidy at the same time as expediting the development of the 3 proposed refineries; Fuel subsidy must be eliminated as quickly as those new refineries are commissioned; the proposed rehabilitation of the present refineries must be expedited; Government must vigorously pursue the revitalization of the railways. If handiest Nigerians had opportunity to avenue transport, all this noise approximately gasoline subsidy elimination might now no longer were there and Private agencies must be endorsed to begin constructing refineries now with the guarantee that subsidy might be eliminated earlier than they begin production.

Umar and Umar [3] Using the Household Expenditure Survey of 2010, measured the direct welfare effect of better gasoline expenses on distinct socio -monetary companies in Nigeria. The evaluation is completed with the aid of using segregating families into three distinct profits companies and the welfare effect because of subsidy reduce is measured. The outcomes display that the discount in welfare because of better charge is greater for the centre 40% in comparison to the pinnacle and the lowest 20%. This is because of the reality that the centre profits organization has a bigger finances percentage on gasoline. Fuel subsidies are observed to be high priced in protective terrible families because of considerable leakage of advantages to better profits organization however the welfare loss for the decrease profits organization because of subsidy reduce is relatively better because of the smaller length in their profits.

Gyoh [4] has argued that a growth of such importance with inside the cutting-edge Nigerian monetary context is without doubt inadvertently or intentionally conceived to take cash far from the wallet of all Nigerian profits earners, with over 70% of Nigerians who stay on under N360 per day. In reality, all and sundry on this class will come to be with over 50% of each day profits, which is set N155 in line with day, necessarily committed to move costs, at the same time as the household is anticipated to cater for own circle of relatives feeding, health, schooling and different social expenses. Looking on the above literature, not one of them have a take to observe approximately the impact of PMS on individual, household and firms in Nigeria. Base in this gap, the researches have a tendency to perform this research to look at the impact examined the impact of PMS on individual, household and firms in Nigeria spanning from (1970-2024).

3 THEORETICAL LITERATURE

Sociological theory may be used to rationalize market changes with respect to oil prices. Structural functionalism and Marxism offer rival explanations for the marked increase in fuel costs. The structural functionalist position would offer that though increasing costs may be inconvenient for many consumers, and disastrous for a few, ultimately the shift is functional for society at large. If gasoline prices don't rise to compensate for lower supply and higher demand, many gasoline companies, refiners, refiners and fuel distributors could be in trouble. Even if they did not go bankrupt, if any

single firm in the fuel industry failed to keep up with the market price of fuel it would suffer from lower profit margins and may have to lay off workers to compensate, increasing unemployment. In the long run fossil fuels cannot last forever. As the earth's population and technology increase demand for fuel will continue to rise while supplies will continually be diminished. Increasing fuel costs have already prompted several firms, and governments, to look at the possibility of creating or expanding other sources of energy (such as hydro-electric, wind, and solar energy). Though it may take time and financially strain many consumers, increasing fuel costs may help spur technological advances that help humanity make the necessary move from finite, diminishing fossil fuels towards energy sources that are more permanent and reliable.

Marxism, by contrast, might offer that there is something more sinister at hand. As fuel costs increase, the lower classes will face a far greater strain than the upper classes. Not just gasoline, but home heating and electricity will become increasingly difficult for lower classes to afford exacerbating the situation for those already at risk for poverty. Nation-state governments must be able to help lower classes cope with this strain or risk increasing political instability. Should the gap between the rich and the poor become too great and the lower classes unable to afford the high price of fuel; social unrest may flare up. Many consumers may blame the fuel corporations for the price increase (whether or not it is actually their fault) and think they are being manipulated so the corporations can enrich themselves and thus further cement their position as full-fledged members of the ruling class. These two theories have been applied to this research in this analysis to gain an understanding of how increase in the price of petroleum motor spirit affect individual, household and firms in Nigeria spanning from 1970-2024.

4 METHODOLOGY

the study adopts survey research design to examine the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria (1970-2024). Primary and secondary data were employed in the study. The population for this study consists of entire population of Nigeria. Its total population was estimated at 144.3 million as of 2006 census making it one of the largest states in Africa. With the use of Taro Yamane [5] the population size was reduce to 400. The research instrument adopt for this study is a self-structured questionnaire titled the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria (P.H.P.M.S.I.H.F). It enabled the researchers obtained relevant data for the research. Descriptive statistical tools of: tables, percentages, averages and more were used for data presentation. On the other hand, 5 Linkert scale with the use of Mean and Standard Deviation in Statistical Package for Social Science (SPSS) were used in analysing the three research questions. The research questions were analysed using a mean criterion of 3.0 for the research questions, an aggregate mean below 3.0 means the respondents disagree with the stated research question while an aggregate mean of 3.0 and above means the respondents agree with the stated research questions. The questionnaire was designed to elicit information from the respondents, and to suit the need and purpose of the study. The questionnaire was designed in two (2) sections. The first section looked at demographic data of the respondents such as; gender, age, occupation and academic qualification and the second section analyse the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria. The questionnaire adopted a 5-point Likert scale of Strongly agreed (SA), Agreed (A), Undecided (U), Strongly Disagreed (SD), and Disagreed (D). The instrument is made up of a total of 19 items. Purposive sampling techniques were adopted for the study. For the purpose of clarity, two (2) state were selected from each of the four (4) region [North (Abuja & Kaduna State), South (Rivers & Delta State), East (Anambra & Enugu State) and West (Lagos & Oyo State)] that made Nigeria.

5 DATA PRESENTATION

The data was presented based on the research objectives. Primary and secondary data were reviewed and questionnaire was distributed based on region, state, local government area, specific demographic characteristics such as age, gender, status and all other demographic variables are calculated using percentages.

Table 1 Regional, State and LGA Distributions of the Questionnaires

Region	No. of State in Region	Names of State Selected	Names of Selected L.G.A in State Selected	No. of Questionnaires Distributed and No. Returned
North	18	Abuja	Bwari	50/38
		Kaduna	Kaduna	50/32
South	6	Rivers	Port Harcourt	50/41
		Delta	Oshimili South	50/37
East	5	Anambra	Akwa	50/34
		Enugu	Enugu South	50/40
West	7	Lagos	Ikeja	50/38
		Oyo	Ibadan	50/31
				400/291

Source: authors compilation (2024)

Table 2 Respondents Socio-Demographic Characteristics

Socio-Demographic Characteristics	Frequency	Percentage
Gender		
Male	163	56.0
Female	128	44.0
Total	291	100
Status		
Individual/Single	84	28.9
Household/Married	115	39.5
Firms	92	31.6
Total	291	100
Age Range		
20-30 years	65	22.3
31-40 years	80	27.5
41-50 years	56	19.2
51 years and above	90	30.9
Total	291	100
Highest Educational Qualification		
FSLC/WAEC	92	31.6
NCE/ND	86	29.5
HND/BSC	73	25.1
MSC/PHD	40	13.8
Total	291	100
Total	291	100

Source: Authors Survey, 2024.

In Table 1 and 2, we can see the details of the regional, state and LGA distribution of the population. The population was distributed equally (100) among the 4 regions and 50 to each of the selected state. Among the 291 respondents, the majority of household/married men accounted for 39.5% of the total. The gender distribution is 128 females (44.0% of the total) and 163 males (56.0% of the total). In terms of age, most respondents are over 51 years of age; Similarly, when asked about their educational status, the highest respondents have FSLC/WAEC (31.6%) and the lowest respondents have MSC/PHD.

6 DATA ANALYSIS

In order to determine the appropriateness of the research questions, the data of this study are presented and analysed below using standard deviation and SPSS software.

6.1 Research Question

What are the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria?

Table 3 Respondents' views on the Impact of Price Hike of Petroleum Motor Spirit on Individual, Household and Firms in Nigeria

S/N	Factors	Mean	Standard Deviation	Decision
1	Price increase of PMS brings about reduction of disposable income of individual and household.	4.2	4.1	Agreed
2	It reduces the purchasing power of individual and household.	3.5	3.3	Agreed
3	Inability to purchase basic necessity of life.	4.3	4.1	Agreed
4	Reduction in the quality of life of individual and household.	3.6	3.4	Agreed
5	Increase in cost of living.	4.0	3.6	Agreed
6	Decrease in individual and household standard of living.	4.4	4.0	Agreed
7	It lead to increase in the cost of money spent on transportation.	4.1	3.7	Agreed
8	It reduce the consumption level of individual and household.	3.5	3.7	Agreed
9	Increase in house rent.	3.8	3.4	Agreed
10	Decrease in individual and household demand for goods and services produced by firm.	4.8	4.3	Agreed
11	Increase in the price of food stuff and other consumer goods.	4.8	4.2	Agreed
12	Increase in fees paid by individual and household for themselves and children/wards.	4.4	4.0	Agreed
13	PMS price increase lead to increase in firm's cost of transportation of goods produce.	3.4	3.3	Agreed
14	It lead to increase in cost of production.	3.3	3.2	Agreed
15	Increase in money spent on powering production plant.	3.6	4.0	Agreed
16	Decrease/reduction in firm's profit.	4.3	4.1	Agreed
17	Retrenchment of staff as a result of decrease in the demand for goods and services.	4.1	3.7	Agreed

18	It leads to unemployment.	3.9	3.6	Agreed
19	Poverty.	4.0	3.6	Agreed
20	Reduction in competition.	4.8	4.2	Agreed
21	Political instability.	3.6	3.4	Agreed
22	Social unrest.	3.5	3.7	Agreed
23	Increase in food insecurity.	3.8	3.4	Agreed
Aggregate Mean		4.1	3.6	Agreed

Source: Authors survey, 2024.

See data in Table 3, 1-23. The table aims to discuss the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria. As shown in the table above, the aggregate mean for this research is above the aggregate mean of 3.0. Additionally, based on all responses, the standard deviation is 3.6 and the total mean is 4.1. According to the findings, anonymous respondents agreed that price hike of petroleum motor spirit have negative impact on individual, household and firms in Nigeria.

6.2 Discussion of Findings

Responses to the research questions revealed the impact of price hike of petroleum motor spirit on individual, household and firms in Nigeria. As illustrated in item 1-23, table 3 all of the respondents anonymously agreed that price hike of petroleum motor spirit has negative impact on individual, household and firms in Nigeria. The response shows that price hike of petroleum motor spirit brings about reduction of disposable income of individual and household, reduces the purchasing power of individual and household, reduction in the quality of life of individual and household, increase in cost of living, decrease in individual and household standard of living, increase in the cost of money spent on transportation, increase in house rent, decrease in individual and household demand for goods and services produced by firm, increase in the price of food stuff and other consumer goods, increase in firm's cost of transportation of goods produce, increase in cost of production, increase in money spent on powering production plant, decrease/reduction in firm's profit, retrenchment of staff as a result of decrease in the demand for goods and services, unemployment, poverty, reduction in competition, political instability, social unrest and food insecurity which is in line with the findings of Gatawal & Zakari, Stephen, Umar and Umar, Gyoh[1-4].

7 CONCLUSION

The study concluded that the effects of price hike of petroleum motor spirit have a negative effect on production which serve as a major problem to firms', because spending more on the importation of petroleum product will generally reduce production and spending on goods and services in Nigeria which virtually increase prices of every good and service thereby reducing the purchasing power of individual and household income.

7.1 Recommendation

The following are recommended for policy makers and government of Nigeria to:

- i. executes the proposed rehabilitation of the existing refineries.
- ii. reinstate fuel subsidy while expediting the construction of the more refineries.
- iii. remove fuel subsidy as soon as these new refineries are commissioned.
- iv. construct alternative source of transportation such as railways that will link all states.
- v. private companies should be encouraged to build refineries as this will lead to competition that will bring about price fall.
- vi. legislate against the cabal and unauthorized dealership in the sale and distribution of petroleum products to reduce the hazards of extortion, unwarranted fire incidence leading to economic and life loss during periods of fuel scarcity and fuel price hike.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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