

ISSN: 2309 - 9240

*African Journal of Education,  
Science and Technology*



Jan 2016

Vol 3, No.1

## Comparative Assessment of the Pre and Post Subsidy Removal Marketing Performance of Petroleum Products Marketers in Nigeria

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### **Abstract**

*This study compared the marketing performance of petroleum products marketers in Abia and Imo States Nigeria before and after the partial removal of petrol subsidy in Nigeria. 87 service outlets in Aba, Umuahia, Owerri and Okigwe were involved in the study while a sample size of 270 staff of these outlets was studied. The performance indicators that were hypothesized include sales, profitability, competition and fuel availability/scarcity experience. The hypotheses were tested using the SPSS version 21 of the student t-test. Findings revealed among others that the sales, profitability, intensity of competition and fuel availability/scarcity experience of the service stations do not differ significantly between 2011 (subsidy era) and 2012 to date (subsidy removal era). The study recommends among others that marketers should adopt customer-focused marketing strategies in order to ensure improved customer loyalty and that firms should monitor and manage their product availability and above all, their pricing policies and strategies effectively as most customers are becoming price sensitive.*

**Key words:** Subsidy, Petroleum, Marketing.

### **INTRODUCTION**

One of the shocking experiences most Nigerians will never forget in a hurry is the sudden and undemocratic removal of fuel subsidy on January 1<sup>st</sup>, 2012. This exercise which the government boldly announced triggered off demonstrations from every part of the country, leading to complete collapse of economic and business activities for days. According to Ndujihe (2012), an estimated N2trillion was lost as a result of the paralyzed economic activities in the nation during the days of demonstration. Apart from the subsidy issue, other challenges facing the Nigerian petroleum sector as identified by Maina (2011) include pipeline vandalization, corruption, poor petroleum sector infrastructure, scarcity, smuggling and trucking difficulties etc. All these combine to make the “new era” marketing activities in the petroleum sector difficult (Abdulkadir, 2012).

Subsidy as defined by Oxford Advanced Learners Dictionary, (2004) is “money that is paid by a government or an organisation to reduce the costs of services or of producing goods so that their prices can be kept low”. Defining it from the budgetary context, Yemi (2012) sees subsidy as unrecovered costs in the public provision of private goods. Osagie (2012) pointed out that a nation can pursue different kinds of subsidy, such as agricultural subsidy, infrastructural subsidy, export subsidy etc. In Nigeria, fuel subsidy has become a household term as a result of the massive streets protest that greeted its removal by the government in January 2012.

According to the Presidency, as reported by CBN (2012), Nigeria’s actual expenditure on subsidy for 2011 was N1.7 trillion. This figure as observed by Punch Editorial (December 6, 2011) is more than the year’s capital budget. Hence, the federal government felt this amount could be channelled into meaningful productive areas such as infrastructural development, education, health, industrialization, etc rather than pay this amount yearly to very few oil marketers at the detriment of over 160 Million Nigerians, majority of whom are extremely poor, (Iweala, 2012; Arowolo, 2012; Simon and Akpan, 2013). Before the removal of fuel subsidy, a litre of petrol (petroleum motor spirit –PMS) was sold at N65 in major and independent filling stations. With the removal of subsidy a litre of petrol was pegged at N141, but was later reduced to N97 as a result of the nationwide protest. Again, just few weeks before the 2015 election that removed President Goodluck Jonathan from office, the then Petroleum Minister announced the pegging of the new pump price to N87. However, most major and independent marketers nationwide sold as much as ₦170 to N240 per litre of petrol in the early days of the new era petroleum marketing in Nigeria (Simon and Akpan, 2013; Onwe, 2012; Agbola, 2012).

Reviewed literature has shown that petroleum sector reforms have occurred at different times in Nigeria in response to the actualisation of the set goals of the sector and or as a catalyst to economic development. The liberalisation and deregulation of downstream sector of the oil industry was a fundamental reform (Aremu, 2006; Aghalino, 2008). History has equally shown that most of these reforms come with one price increment or the other with its attendant protest or strike actions. These affect business activities, economic well-being of the citizens as well as the growth and developmental status of the nation. With the partial removal of fuel subsidy, the government believes that; healthy competition will be encouraged as demand and supply forces will take centre stage, fuel scarcity will be a thing of the past, long queues in filling stations will be no more, smuggling of petroleum products at the border will be eliminated etc (Tijani, 2011), ownership of private refineries will be encouraged and there will be more employment opportunities (Nwadialo, 2012).

On the contrary, however, Nigerians doubted the sincerity of the government in judiciously using the subsidy fund for the reasons specified. Today in Nigeria, petroleum motor spirit occupies the same position that blood occupies in the life of any living creature. It is so sensitive that any adjustment in its supply (distribution), production, price etc affects other sectors of the economy significantly. An increase in the pump price of a litre of fuel, and particularly petrol, will lead to inflation in the prices of food items, transportation, services etc.

With more than three years already gone into the partial subsidy removal era of petroleum products marketing in Nigeria, it becomes imperative to measure the marketing performance of firms and to also assess the level of customer satisfaction vis- a- vis the subsidy era. This study will take a look at the sales volume and profitability of selected major and independent petroleum marketers in Abia and Imo States between 2011 and 2012-2014 to ascertain whether there has been significant difference in these two performance indicators pre and post subsidy removal era. The trend of fuel availability and competition in the retail outlets will also be examined comparatively for the two periods under review. Again, the nature of customer service in terms of (fair prices, waiting time, customer relationship, service quality- Atmosphere, courtesy, respect etc, and nature of metre) will be measured in a comparative manner. How well have the petroleum products marketers in Imo and Abia States fared in their marketing efforts since the removal of petrol subsidy more than three years ago? In a comparative manner, how is the marketing performance of these marketers pre and post subsidy removal? Again, what is the status of customer service in these service stations since the removal of subsidy; is it better than it was during the subsidy era? What is the trend of competition and product availability/scarcity in the new era? Answers to these questions are the major thrust of this study.

### **Statement of the Problem**

The partial removal of fuel subsidy was embarked upon with the intention that healthy competition that will be in the interest of sellers and buyers will be ushered in. This according to economic analysts will lead to competitive lower prices, even below the official price of N97 or N87, eliminate scarcity, hoarding, smuggling, long-queues, reduce sellers' malpractices such as metre adjustments, improve service delivery level and above all enhance the profitability of operators. However, it is sad enough to hear that the long list of benefits which the federal government claimed would accrue to sellers and buyers are hardly received. In 2011 for instance, Adewole (2012) revealed that the price of a litre of fuel stabilised at N65 across many service stations in the country. Scarcity was almost a thing of the past and the quality of products was mostly of good standard. Waiting time was drastically reduced leading to enhanced customer service level. In the early days of 2012, as a result of the partial removal of petrol subsidy, the story changed. This is because prices, availability, operating hours, procurement processes, customer relationship among others suddenly slopped towards the negative direction in response to the high level of artificial scarcity that followed the sudden removal of petrol subsidy (Onwe, 2012; Aghalino, 2012). The market operated as "the seller's market" where the marketing concept is suppressed, for the first one month in many cities as buyers were seen before the gates of service stations pleading for petroleum products at any cost. In fact, the forces of demand and supply were swallowed by the actions of players in the sector. It is easier today to increase prices for one reason or the other than to reduce it. Customer loyalty has become unstable as customers switch regularly to stations with available products. Adjustment of metres is no longer a serious crime in most service stations especially now that virtually every station strives to sell at the ruling price. Friendly atmosphere, courtesy and respect for customers are yet below expectations in the stations. These have resulted in poor marketing performance and delayed customer service level. Worse still is the fact that the petroleum products marketers have not appreciated the marketing implications of the outcome of their

present attitude to business and customers as well as the impact of the partial fuel subsidy removal on their business operations.

Most players in the sector care little or not about customer retention, customer loyalty, customer word-of-mouth promotion, customer satisfaction, customer relationship, and customer comfort in procurement. Their attention is only on profit maximization at all cost. They tend to be myopic in their marketing efforts, neglecting long lasting business relationships. Little wonder filling stations spring up and collapse rampantly in Nigeria, Abia and Imo States in particular. This represents a drastic negative change in marketing practice in an era marketing concept is expected to be fully operational. Moreover, with a constant negative growth rate in the sector (before GDP rebasing) of -4.51%, -4.54%, -6.91%, and 0.45%, 4.98% for 2006 to 2010 respectively, the sector needs more effective marketing approach in this era, (NBS,2010). The improved level of fuel availability in (2013) and the relatively stable uniform price for petrol were clear indicators that competition in the downstream oil sector had taken a different dimension from what it had been. However, 2014 and 2015 availability and pricing experiences have remained harsh on Nigerians. Sales, profitability, customer loyalty and market share of various service stations are at risk as customers are ready to switch to the providers with better services and quality offerings. These obvious facts have not been given serious consideration by most operators in the sector, hence the continuous use of existing marketing strategies in an era that calls for marketing strategy rethink.

### **Objectives of the Study**

This study sought to:

- (1) Ascertain the extent of improvement in the marketing performance (sales volume and profitability) of petroleum marketers resulting from the partial removal of petrol subsidy.
- (2) Measure the nature of relationship between the partial petrol subsidy removal and enhanced competition in the downstream petroleum sector.
- (3) Compare and contrast the pre and post partial subsidy removal fuel (petrol, kerosene, and diesel) scarcity experience in the service stations.

### **Research Hypotheses**

From the research objectives and questions raised, the following null hypotheses were formulated to guide our decision:

- H<sub>01</sub>:** The partial removal of petrol subsidy has not resulted in significant positive improvement in the marketing performance (sales volume and profitability) of petroleum marketers.
- H<sub>02</sub>:** There is no significant positive difference between the intensity of competition in the downstream petroleum sector resulting from the partial removal of petrol subsidy and what it was during the full subsidy era.
- H<sub>03</sub>:** there is no significant positive difference between the present level of fuel scarcity experience in the service stations and what it was before the partial removal of petrol subsidy.

### **Scope of the Study**

The subject scope of this study covered marketing management with emphasis on marketing performance measurement, competition and customer service management. The geographical scope of the study was Abia and Imo States with specific attention to Aba, Umuahia, Owerri, Okigwe and Orlu. The coverage scope was made up of randomly selected major, independent and NNPC mega outlets operating within these five towns; (Aba, Umuahia, Owerri, Okigwe and Orlu). The study covered two periods. That is, 2011 representing the subsidy era, also known as the pre-subsidy removal era and 2012 to date representing the partial subsidy removal era, also known as post subsidy era. Primary data used were gathered from randomly selected managers of the chosen outlets. Questionnaire was used.

## **REVIEW OF RELATED LITERATURE**

### **Historical Background of Nigerian Petroleum Industry and Fuel (Petrol) Price Increases**

Many authors have traced the origin of petroleum in Nigeria. Among the numerous authorities who have documented the history of oil exploration, production, distribution and exportation in Nigeria are Okpara (2006), Hassan, Ebele and Rapheal (2006), Aghalino (2005), Abdulkadir (2012), Ndujihe (2012), Aremu (2006), and Tijani (2011). From the NNPC Statistical Bulletin (2012), it is recorded that oil was discovered in Nigeria in 1956 at Oloibiri in the Niger Delta, now Bayelsa state, after half a century of exploration. This discovery was made by Shel-BP. Nigeria joined the league of oil producers in 1958 when

its first oil field came on stream producing 5,100 barrels per day (bpd) (NNPC Statistical Bulletin, 2012). After 1960, exploration rights in onshore and offshore areas adjoining the Niger Delta were extended to other foreign operations.

Nigeria joined the Organisation of Petroleum Exporting Countries (OPEC) in 1971 and established the Nigerian National Petroleum Corporation in 1977, a state owned and controlled company which is a major planner in both the up-stream and downstream sectors. By the late sixties and early seventies Nigeria had reached production level of over 2 million barrels of crude oil per day. This figure was, however, disrupted in the eighties as a result of economic slump. In 2004, the production level was 2.5 million bpd. It was 2.2 billion bpd in 2010 and 2011, 2.8 billion bpd in 2012. Petroleum production and exportation play dominant role in Nigeria's economy and account for about 90% of gross earnings, 41% of GDP and 88% of federally collectable revenues, (Ikem, 1990; Forest 1993). As at 2000, US Energy Report (2011) shows that oil and gas exports in Nigeria accounted for more than 98% of export earnings, 83% of federal government revenue as well as more than 14% of GDP. With about 22 to 35.3 billion barrels proven oil reserves, Nigeria is the tenth most petroleum rich nation (US Energy Information Administration, 2007). Nigeria's petroleum is classified as mostly "light" and "sweet" as the oil is largely free of sulphur. With a total of 159 oil fields and 1481 wells, Nigeria remains the largest producer of "sweet" oil in OPEC, (Ministry of Petroleum Resources, 2012). The petroleum products consumption history in Nigeria as shown by Aghanino (2012), Onwe (2012) and National Bureau of Statistic (2011), shows that PMS is the most purchased in Nigeria. With a total of 6,353,518 barrels for 2010, petroleum motor spirit (PMS) remains the dominant product in view of 668,548 and 879368 barrels for household kerosene (HHK) and gas oil/ diesel, (NBS 2010).

The sensitive position occupied by petrol in the economic activities of Nigerians explains why strike actions and destruction of property and loss of lives follow any attempt by the government to increase the price of PMS unlike other products such as HHK and gas. The table below shows the history and timeline of fuel price increases in Nigeria by various administrators.

**Table1: Fuel (petrol) price increases in nigeria**

S/N	Year	Administrator	Existing Price (N)	New Price (N)	Actual Increment (N)	Percentage Increment
1	1973	Gowon	6K	8.45K	2.45K	40.83
2	1976	Mutala	8.45K	9K	0.55K	6.5
3	1978	Obasanjo	9K	15.3K	6.30K	70.00
4	1982	Shagari	15.3K	20K	4.70K	30.72
5	1986	Babangida	20K	39.5K	19.5K	97.50
6	1988	"	39.5K	42K	2.5K	6.33
7	1989	"	42K	60K	18K	42.86
8	1991	"	60K	70K	10K	16.67
9	1993	Shonikan	70K	N5	N4.30	614.29
10.	1993	Abacha	N5	N3.25K	-N1.75	-35.00
11	1994	"	N3.25K	N15	N11.75	361.54
12	1994	"	N15	N11	-N4.00	-26.67
13	1998	Abubakar	N11	N25	N14.00	127.27
14	1999	"	N25	N20.00	-N5.00	-20.00
15	2000	Obasanjo	N20	N30	N10.00	50.00
16	2000	"	N30	N22	-N8.00	-10.00
17	2002	"	N22	N26	N4	18.18
18	2003	"	N26	N42	N16	61.54
19	2004	"	N42	N50	N8	19.05
20	2004	"	N50	N65	N15	30.00
21	2007	"	N65	N75	N10	15.38
22	2007	Yaradua	N75	N65	N10	-15.38
23	2012	Jonathan	N65	N141	N76	116.92
24	2012	"	N141	N97	-N44	31.21
25	2015	"	N97	N87	N10	10.31

**Source:** Communiqué by South- South Elders & Leaders Published in *Vanguard January 9, (2012)*.

It should be noted that the liberalization, deregulation and subsidy removal policies at one time or the other caused and still cause marketers to sell above the N97 ruling price.

### **Fuel subsidy in Nigeria: An Overview**

Authorities in the field of economics, political science and marketing have given various but related explanations on the meaning of subsidy. According to Todare and Smith (2009), a subsidy is an assistance paid to a business or economic sector mainly by the government to prevent the decline of such institution. To Yemi (2012), subsidy from the budgetary context can be seen as unrecovered costs in the public provision of private goods. Bakare (2012) also asserts that to subsidize is to sell a product below the cost of production. Oxford Advanced learners' Dictionary (2004) defined subsidy as "Money that is paid by a government or an organization to reduce the costs of services or of producing goods so that their prices can be kept low". Borrowing this dictionary definition and dovetailing it to Nigeria's perspective on fuel, we define *Fuel Subsidy as money paid by the government to major, upstream marketers to reduce the costs of producing and importing petroleum products so that their prices can be kept low for local purchasers.*

Prior to the subsidy removal, the pump price of fuel was N65 (\$ 0.40) per litre compared to the actual cost of about N139 per litre (OGJ, 2012). According to the United Nations Report (2012), fuel subsidy cost the Nigerian government N1.2b annually which is equivalent to 2.6% of the country's GDP. On January 1, 2012, the Nigerian government announced the removal of the federal government fuel subsidy and complete deregulation of the downstream sector on the grounds that it (subsidy) caused market distortions, encumbered investment in the downstream sector, encouraged economic inequalities and created a nebulous channel for fraud. However, the total removal of subsidy on fuel was reversed after some days of protest by the citizens. The government restored a partial subsidy, requiring consumers at the pump to pay N97 (\$0.60) per litre of petrol as opposed to the initial N141 per litre. According to PFC Energy (2012), the government overestimated fuel subsidy savings and underestimated subsidy arrears' claims in 2012. Meanwhile International Monetary Fund as reported by Gbola and Odideson, (2013) has advised the Nigerian government to embark on full fuel subsidy removal. This is in sharp contrast to the opinions and the wishes of over 62% of Nigerians as shown by the CLEEN Foundation survey outcome (2012) who would want fuel subsidy to be restored and retained. It should be noted that a nation-wide consultation and discussion on fuel subsidy removal was still going on when the Petroleum Products Pricing and Regulatory Agency (PPPRA) announced the outright removal of fuel subsidy, (Onwe, 2012).

As observed by Simon and Akpan (2012) protagonists argued that fuel subsidy removal was a step in the right direction and in the interest of Nigerians. They maintained that it will eliminate incentives for corruption and excess profiteering by an unpatriotic cabal in the petroleum sub sector, minimize borrowing and save money for investment in job creation, power, transport infrastructure etc, eliminate capital flight and build the nation's foreign reserves, trigger private sector investment in a deregulated downstream petroleum sector and enthrone efficiency and development of productive sectors. The antagonists as noted by Agbola (2012) insist that the total amount to be generated and the sharing formula have not been revealed clearly by the government. They also maintain that fuel subsidy removal will lead to automatic increases in the pump price of fuel, lead to hyper inflation on goods and services as cost of production will increase. Also, Odutola (2012), and Maina (2011) Identified some negative effects of subsidy removal as: increase in cost of production, increase in unemployment, increase in cost of service provision, increase in cost of transportation, increase in cost of living, increase in corruption.

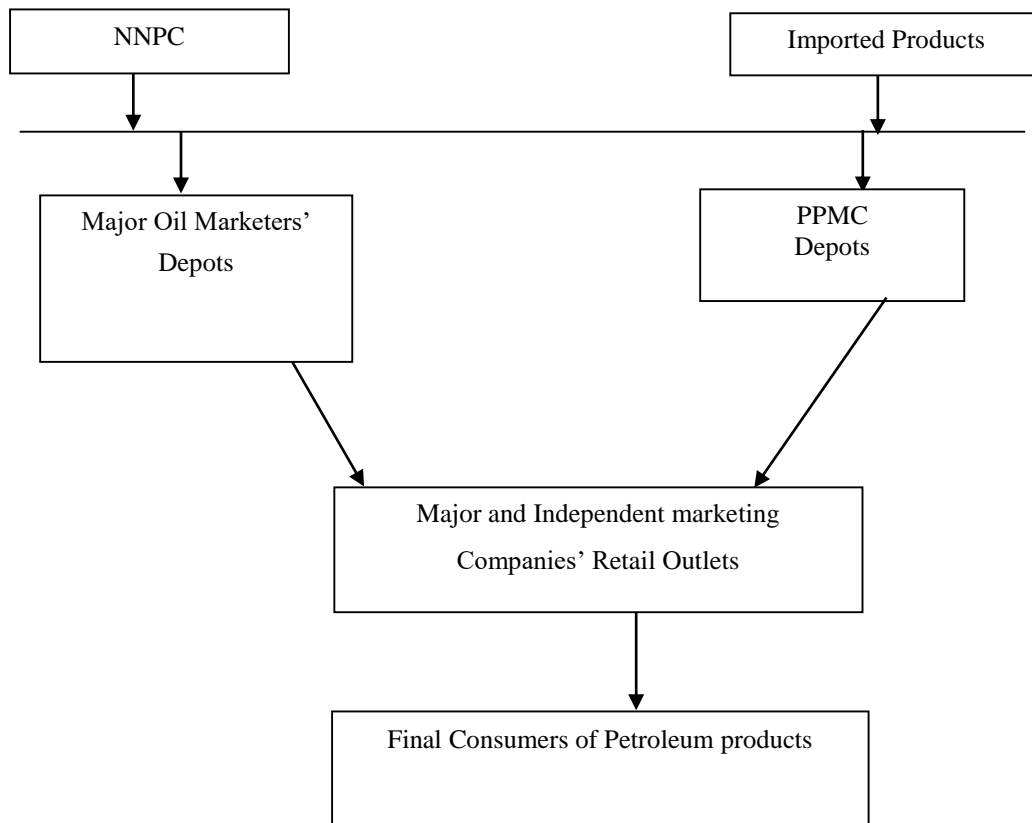
**Table 2:** OPEC and non- OPEC countries and their petrol prices per litre and minimum wages

S/N	Country	Dollar	Fuel Price/Litre N	Minimum Wage N
1	Venezuela	0.023	3.61	95.639
2	Kuwait	0.22	34.54	161,461
3	Suadi Arabia	0.16	25.12	99.237
4	Iran	0.63	102.05	86,583
5	Qatar	0.22	34.54	101,250
6	UAE	0.49	70.18	103,112
7	Algeria	0.41	63.55	55,937
8	Libya	0.17	26.69	23,813
9	Iraq	0.38	59.66	25,813
10	Nigeria	0.87	141 to 97	18,000
<b>Non OPEC</b>				
1	USA	1.00	157.00	197,296
2	UK	2.13	334.41	295,644
3	OMAN	0.31	48.67	91,583

Source: The Nation (2012) Monday January 6, pp 40.

**Petroleum Products Distribution in Nigeria**

The distribution (place) of petroleum products in Nigeria can be explained using the diagram below:

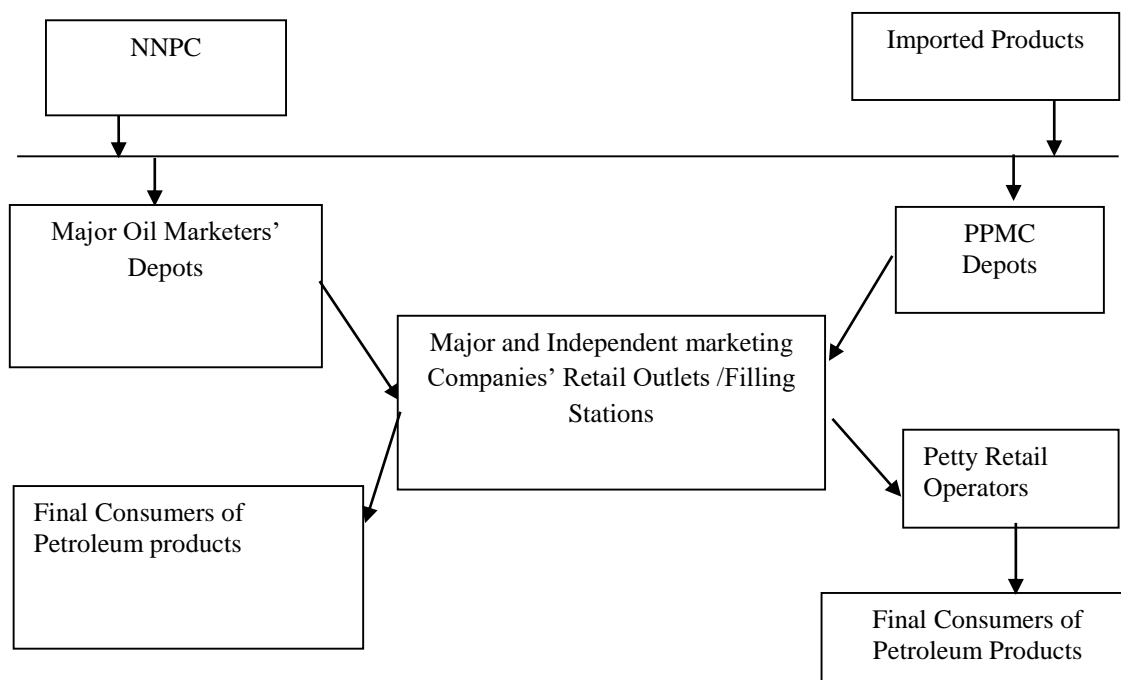


**Figure 1:** Physical flow of petroleum products in Nigeria

Source: NNPC/PPMC Bulletin 2010.

This diagram failed to show the position of petroleum products sellers “*Petty Retail Operators*” who are erroneously called the “Black Market Operators”. During periods of fuel scarcity as experienced in the subsidy removal early days, and during festive periods as well as evening hours, these marketers

operate without restrictions. Though several attempts had been made by the government to stop the trading of fuel through this channel, these operators have continued to exist. Many authors view these operators from the economic, legal and political standpoints, thereby labelling the market, such names as subterranean, hidden, gray, shadow, informal, parallel, clandestine, illegal etc. However, as a result of the observed marketing relevance of these operators in the distribution of petroleum products, especially petrol and kerosene in the rural areas where filling stations hardly exist and during the off business hours for the stations, the researcher advocates for recognition of these sellers in the chain of distribution of petroleum products in Nigeria. In order sectors of the economy such as hospitality, telecommunications, transportation and so on, petty operators equally exist. In real Nigerian experience, petroleum products distribution channels can appear thus:



Source: Researchers' View (2015)

### Marketing Implications of Fuel Subsidy Removal to Petroleum Products Marketers

The removal of petro subsidy in Nigeria ushered in a new era of petroleum products marketing in the country. An era in which all marketers will be seen as almost equal, thereby leveraging competition as no marketer gets any amount of subsidy from the government. Hence, the forces of demand and supply will be at the forefront. This, if not interrupted by the corrupt, collusive tendencies of oil marketers in the country will open more doors for new entrants into the industry. Supporting this assertion is Akanmu (2004) who maintains that the deregulation of industries normally results in entry into the industry of firms or investors who hitherto could not do so. Therefore, the new nature of competition occasioned by deregulation and fuel subsidy removal makes it imperative for petroleum products marketers to design clear positioning strategies for themselves. This will demand restructuring of existing marketing strategies, re-designing customer service strategies and maintaining periodic marketing performance measurement. With subsidy removal and deregulation, customer loyalty will be hard to maintain as customers can switch to any operator that has better services. Roe (2003) disclosed that there is need to maintain good relationship with customers already acquired. Ogbuji (2012) also assert that in any path of deregulation, the focus of marketing has to be moved from the transaction to the customer relationship. This is a task every oil marketer (major or independent) must strive to actualize.

**Product strategy:** For an optimal marketing performance in this new era of petroleum products marketing in Nigeria, a review of organization's (marketers') existing product related strategies is necessary. With increased competition and new entrants as well as government's plan to license private operators of refineries, product availability will be enhanced. Good supplier relationship is inevitable for the independent marketers, while the majors will need to overhaul their logistics activities (infrastructure and



management). The quality of the products sold deserves strict attention to avoid alteration of set quality standards. Also, the quantity of products dispensed by the meters should be monitored to avoid meter adjustments that will serve as competitive disadvantage.

**Pricing strategy:** With improvement in product availability and quantity, customers will become price sensitive in the purchase of petroleum products, especially fuel. The federal government hopes that competition will make the price of fuel to come below N97. Marketers should be careful with price increases as they can affect sales volume and profitability adversely especially if other competitors sell at cheaper rates.

**Place and Promotion:** Location strategies, hours of operation, nature of operating environment (space), and the safety measures in place are place factors that customers will consider while choosing an outlet to buy from. Marketers will therefore need effective and efficient distribution strategies in order to avoid stock outs. There is also the need to disseminate relevant and timely information to current and prospective customers as well as the general public concerning availability of products, their prices, other services available that will enhance customer satisfaction. This may require informal and formal advertisement, sales promotion and good public relations where legally permitted.

### RESEARCH METHODOLOGY

A survey was conducted using managers and senior staff of randomly selected petroleum products marketers in Abia and Imo states. Structured questionnaire was administered on the selected respondents. According to the PPPRA (2009) census result, Abia and Imo states have a total of 820 retail outlets representing 102 majors and 718 independents respectively. The sampling methods adopted in this study were the **Quota** and **Convenience** sampling approaches. These according to Ezejelue, Ogwo and Nkamnebe (2008), Anyanwu (2003) and Alugbuo (2005) are forms of non-probability sampling technique. To arrive at the appropriate number of respondents to be surveyed, the Roasoft sample size calculator which is one of the online improvements on the Yaro Yemane (1968) formula was used and the total retail outlets in the two states adopted as the population. A 5% Margin of error was used, with a confidence level of 95%, population size of 820 and response distribution rate of 50% (confidence interval of 5). Thus, a sample size of 270 respondents (rounded up) was derived. However, the researcher considered only the staff and managers of stations located in the towns and those that have been in existence before 2011. The three stated hypotheses were tested using the *SPSS paired samples t test of difference at 0.05 level* of significance.

**Decision Rule:** *Reject* the null hypotheses if calculated t value is greater than the critical value of t at the appropriate degree of freedom and where the p-value (sig-2 tailed) is less *than 0.05*. Otherwise, *Accept*.

### RESULTS and DISCUSSION

In this section, collected data will be analyzed and interpreted for easy and fast comprehension.

**Table 3:** Distribution and Retrieval of Instrument

Towns	Number Of Outlets	Copies Issued	Copies Retrieved	Copies Lost	Copies Used	Percentage Used
Aba	36	113	109	4	109	41.60
Umuahia	18	54	54	0	54	20.61
Owerri	23	69	69	0	69	3.44
Orlu	3	12	9	3	9	3.44
Okigwe	7	22	21	1	21	8.02
<b>Total</b>	<b>87</b>	<b>270</b>	<b>262</b>	<b>8</b>	<b>262</b>	<b>100.00</b>

Table 3 shows that a total of 87 retail outlets were involved in the study. Of the 270 copies of the questionnaire issued, 262 (97%) were retrieved while 8 (3%) were lost. All the retrieved copies were found useful. The researcher recorded 96% retrieval rate in Aba, 100%, 100%, 75% and 95% respectively for Umuahia, Owerri, Orlu and Okigwe.

**Table 4:** Respondents' perception of subsidy removal

Options	Frequency	Percentage
Favourable	69	26.34
Unfavourable	181	69.08
Indifferent	18	6.87
<b>Total</b>	<b>262</b>	<b>100.00</b>

Table 4 shows that 69 (26%), 18 (7%) and 181 (69%) were favourably, indifferently and unfavourably disposed to the partial petrol subsidy removal. This shows that more than two –third of the sampled population of petroleum products workers see subsidy removal as unacceptable.

**Table 5:** Analysis of Responses on Key Performance Indicators

Indicators		G1	M1	S1	N1	Worse	Mean	SD	t
<b>1. Sales and Profit</b>									
a. Revenue:	Before	66	40	102	44	10			
	After	131	80	36	7	8			
b. Net profit:	Before	73	92	53	35	9			
	After	39	40	81	50	52			
<b>Total:</b>	<b>Before</b>	<b>139</b>	<b>132</b>	<b>155</b>	<b>79</b>	<b>19</b>	<b>104.8</b>	<b>55.81</b>	<b>4.9</b>
	<b>After</b>	<b>170</b>	<b>120</b>	<b>117</b>	<b>57</b>	<b>60</b>	<b>104.8</b>	<b>47.23</b>	<b>4.96</b>
<b>2. Competition</b>									
a. Pricing strategy:	Before	43	62	92	46	15			
	After	141	55	62	0	0			
b. Product quality:	Before	57	53	102	39	11			
	After	156	84	20	0	0			
c. Customer Service:	Before	28	43	79	80	32			
	After	77	54	111	17	3			
d. Operating hours:	Before	13	32	31	60	126			
	After	113	64	85	0	0			
e. Customer Loyalty:	Before	96	92	71	3	0			
	After	52	43	26	49	92			
f. Meter Standard:	Before	60	37	68	30	77			
	After	121	64	70	7	0			
<b>Total:</b>	<b>Before</b>	<b>297</b>	<b>319</b>	<b>443</b>	<b>258</b>	<b>261</b>	<b>315.6</b>	<b>75.64</b>	<b>9.3</b>
	<b>After</b>	<b>660</b>	<b>364</b>	<b>374</b>	<b>73</b>	<b>95</b>	<b>313.2</b>	<b>240.7</b>	<b>2.91</b>
<b>6</b>									
<b>3. Scarcity:</b>									
a. Steady supply:	Before	101	61	100	0	0			
	After	153	86	23	0	103			
b. Strike Actions:	Before	0	0	104	82	76			
	After	0	0	72	66	0			
c. Fuel Availability:	Before	133	71	58	0	0			
	After	114	68	64	16	0			
d. Waiting Time:	Before	45	40	38	56	83			
	After	95	48	112	7	0			
<b>Total:</b>	<b>Before</b>	<b>279</b>	<b>172</b>	<b>300</b>	<b>138</b>	<b>159</b>	<b>209.6</b>	<b>74.31</b>	<b>6.31</b>
	<b>After</b>	<b>362</b>	<b>202</b>	<b>271</b>	<b>89</b>	<b>103</b>	<b>205.4</b>	<b>114.9</b>	<b>3.99</b>
<b>7</b>									

**Test of Hypothesis One:**

To test the hypothesis, the portion of table 5 which analyzes respondents' rating of the sales and profitability trends before and after the partial subsidy removal was used.

**Result:** The SPSS output shows that  $t=0.000$ ,  $df=4$  and p-value (sig 2 tailed) = **1.000**. Also, at  $df= 4$ , the value of t at 0.05 level of significance and 2 tailed is **2.8**.

**Interpretation:** This means that the  $t$  cal is less than  $t$  cri ( $0.000 \leq 2.8$ ) and the  $p$ -value (sig 2 tailed) is greater than 0.05 ( $1.000 \geq 0.05$ ).

**Decision:** Since  $t$  cal (0.000) is less than  $t$  cri (2.8) at  $df=4$  and  $p$ -value (sig 2 tailed) = 1.000 is greater than 0.05, we therefore reject the alternative hypotheses and **accept the null hypotheses**. This implies that the partial removal of petrol subsidy has not resulted in significant positive improvement (difference) in the sales volume and profitability of petroleum products marketers. The managers' responses show that 36% of the firms witnessed between 10-29% increment in sales while 25% of the stations witnessed between 1-4% increment in profit with more than 38% sustaining loss or breaking even.

### Test of Hypothesis Two

To test this hypothesis, the portion of table 5 which analyzes the trend of competition before and after the partial subsidy removal was used.

**Result:** The SPSS output shows that  $t=0.020$ ,  $df=4$  and  $p$ -value (sig 2 tailed)= **0.985**. Also, at  $df = 4$ , the value of  $t$  at 0.05 level of significance and 2 tailed is **2.8**.

**Interpretation:** This means that  $t$  cal is less than  $t$  cri ( $0.020 \leq 2.8$ ) and the  $p$ -value (sig 2 tailed) is greater than 0.05 ( $0.985 \geq 0.05$ ).

**Decision:** Since  $t$  cal (0.020) is less than  $t$  cri (2.8) at  $df=4$  and  $p$ -value (sig 2 tailed) 0.985 is greater than 0.05, we therefore reject the alternative hypotheses and **accept the null hypothesis**. This implies that there is no significant positive difference between the intensity of competition in the downstream petroleum sector resulting from the partial removal of petrol subsidy and what it was during the full subsidy era.

### Test of Hypothesis Three

To test this hypothesis, the portion of table 5 which analyzes the trend of fuel scarcity/availability between 2011 and 2012 was used.

**Result:** The SPSS output shows that  $t=0.000$ ,  $df=4$  and  $p$ -value (sig.2 tailed) = **1.000**. Also, at  $df = 4$ , the value of  $t$  at 0.05 level of significance and 2 tailed = **2.8**.

**Interpretation:** This means that the  $t$  cal is less than  $t$  cri ( $0.000 \leq 2.8$ ) and the  $p$ -value (sig 2 tailed) is greater than 0.05 ( $1.000 \geq 0.5$ ).

**Decision:** Since  $t$  cal (0.000) is less than  $t$  cri (2.8) at  $df= 4$  and  $p$ -value (sig 2 tailed) = 1.000 is greater than 0.05, we therefore reject the alternative hypothesis and **accept the null hypothesis**. This implies that there is no significant positive difference between the present level of fuel scarcity experience in the service stations and what it was before the partial removal of petrol subsidy

### Summary of Findings

Based on the analysis of data collected, the following major findings were made:

1. The study reveals that sales and profitability performance of the downstream petroleum products marketers measured using (sales revenue and net profit) do not differ significantly between 2011 and 2012 to date. This is against the belief of many Nigerians that oil marketers will make abnormal profit given the increase in price of fuel (petrol, kerosene, diesel etc).
2. We equally observed that there is no significant positive difference between the intensity of competition in the downstream petroleum sector resulting from the partial removal of petrol subsidy and what it was during the fuel subsidy era. This implies that the forces of demand and supply have not been fully allowed to dictate the prices of fuel. This finding is contrary to the assertions of {(Iweala 2012); Onwe (2012); Sanusi (2011); Ogwo and Onuoha (2013); Ebi (2012); Gyoh (2012)} who argued that subsidy removal will lead to improved price competition in the petroleum sector as forces of demand and supply will be allowed to influence marketing activities. It is however, in line with the belief of Bakare (2012); Odutola (2012); and Ugulah (2012) who explained that marketing malpractices would not give the forces of demand and supply the opportunity to dictate prices of fuel (kerosene, petrol, diesel etc). However, the data analyzed revealed that marketers are now competing using non-price strategies such standard metre, extended operating hours, product quality management, effective stock management, quick service delivery, seasonal promos, staff training and appearance and enhanced customer services.
3. The study also shows that there is no significant difference in the fuel scarcity/availability experience of the service stations between 2011 and 2012 to date. This means that the partial removal of petrol subsidy has not influenced the scarcity or availability of fuel (petrol, kerosene, and diesel) from what it was during the full subsidy era (2011). This finding is contrary to the assertions of IMF (2012); Iweala (2012); Iluyemi (2012); and Umutemi (2012) who believe that fuel subsidy removal will serve as lasting solution to incessant fuel scarcity in the country. This

finding also contradicts the assertions of Haramble (2012); ENT (2012) and Agbakwuru (2012) who believe that subsidy removal will lead to high level of fuel scarcity. From the firms' records, average stock-out days per month were 3 and 2 respectively for 2011 and 2012. But since mid 2014, stock out level for most major marketers is almost 20 days per month.

4. Finally, it was observed that 69% and 59% of the respondents are unfavourably disposed towards the partial removal of petrol subsidy and would want it to be completely restored respectively. This is in line with the findings of CLEEN Foundation (2013) and Premium Times (2013) who disclosed that 62% and majority of Nigerians would want fuel subsidy to continue.

### RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. To remain relevant in the present downstream oil sector marketing environment in Nigeria, operators are advised to ensure the adoption of **customer-focused** marketing strategies in the areas of product quality, supplier relationship, customer service and relationship, metre standard, pricing strategy, effective marketing communications, operating hours extension etc. These will improve customer loyalty, sales and profitability.
2. Marketers are encouraged to **monitor their pricing policies** and strategies effectively as customers are becoming price sensitive. Steady monitoring of the industry price movement is important so as not to price self out of market, especially for kerosene and diesel.
3. The government, marketers as well as customers should **recognize the place of petty retail petroleum products marketers** (Black market) as they play relevant economic role in the distribution of fuel in Nigeria. The petty traders are equally encouraged to adopt marketing strategies that recognize their size and unique characteristics. In choice of location (place), operating periods and pricing policies, customer-focused approaches and the mindset of expansion of operation should be considered.
4. To achieve the level of expected price related competition in the industry, the new government of President Mohammad Buhari should try and **make all the refineries operational**. When diesel, kerosene, petrol etc are available in large quantity, marketers will be forced to allow the forces of demand and supply to dictate price. The government should also guide against collusive tendencies in the oil sector that are not in the interest of the consuming public.
5. The government should also **reduce the cost and bureaucratic procedures that delay the licensing of private refinery operators** in the country. This will improve availability and competition.

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