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Analysis of the Effect of Fuel Subsidy Removal on Selected Food Prices in Port Harcourt, Rivers State Nigeria (2001-2012)

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Abstract

This research was conducted to analyse the effect of fuel subsidy removal on selected food prices in Port Harcourt (2001-2012) the food items considered were rice, yam, garri, beef and fish. The study objectives were to examine the impact of subsidy removal on prices of rice, garri, yam, beef and fish, examine the price of different food items before and after subsidy and to examine if subsidy removal causes inflation. Secondary data were used. Five simple regression equations were built with fuel subsidy as independent variables (X_1) while rice (Y_1), yam (Y_2) beef (Y_4), garri (Y_3) and fish (Y_5) were the dependent variable. The study showed that from 1966 to 2012, Nigeria had removed subsidy 24 times in 58 years, and that the prices of most food items increased astronomically from 2001 to 2012 especially beef and fish due to fuel subsidy. The coefficient of determination (R^2) showed that there was a significant relationship between food prices and fuel subsidy. The study concluded that removal of fuel subsidy has affected food prices. It was recommended that the policy of removal of subsidy be implemented gradually to avoid further increase in price of food items.

1.1 INTRODUCTION

The Federal Government of Nigeria in its efforts to deregulate the downstream oil sector completely decided to remove fuel subsidy on January 1st 2012, under the leadership of President Goodluck Jonathan. This was made real when the president of Nigeria decided not to make provision for subsidy payment in the 2012 appropriation bill – The budget. The president came up with a strong argument that the sum of 3.4 billion naira spent in subsidizing fuel went into fraudulent hands (Gyoh, 2012). The sum of 1.4 trillion Naira spent annually in subsidizing fuel, had slowed down economic growth. It was against this back drop that the government through the instrumentality of the petroleum product price regulatory agency (PPPRA) announced the removal of fuel subsidy by 32 naira thereby moving the previous price of fuel from 65 naira to 97 naira per litre. This singular act brought about massive protest across Nigeria by labour unions and civil society groups to speak against this policy. The protest was anchored on the premise that cost of everything including food items will go up. But in all this, the government including the Nigeria chamber of commerce and industry insisted that full implementation of the subsidy policy will bring enormous benefits to the economy of Nigeria (Osagie, 2012) Government also insisted that subsidy removal will eliminate fuel smuggling across Nigeria boarder thereby eliminating scarcity in Nigeria. Although, in-spite of these benefits, the federal government was not unaware of the hardship that would accompany subsidy removal policy and as such promised some palliative measures to reduce the hardship.

1.2 Problem Statement

Gasoline, premium motor spirit (PMS) or fuel as it is normally called in Nigeria is the second most used product after food in Nigeria. Whenever the price of fuel goes up, the price of everything goes up. This is because transport cost for providing essential services goes up and it creates multiplier effect in the economy, the ripples are felt even up to the rural areas. No part of the economy functions in isolation, every part of the economy depends on the other for services,. The movement of agricultural product from one place to another depends on the transport subsector, the tagging of price of agric transport cost; Removal of subsidy means increase in transport cost. It is on this premise that this research is carried out to examine the effect of fuel subsidy removal on prices of food items in Port Harcourt, Nigeria.

1.3 Objectives of the Study

The general objective of this study is to analyse the effect of fuel subsidy removal on selected food items in Port Harcourt (2001-2012) while the specific objectives were to;

(1) examine the impact of subsidy removal on selected food items such as garri, rice, beef, yam, fish

(2) examine the prices of different food items before and after the subsidy

(3) To examine if the subsidy removal has actually caused inflation with regards to pump price of fuel

2.0 LITERATURE REVIEW

Fuel subsidy is payment made by the federal government to assist her citizens consume fuel at lower cost. When the cost is higher they can decide not to make payments. When this happens then it is called "subsidy removal" Subsidy may be made not only to consumers but also to producers. It may be in form of price guarantee to make the producers produce more food. subsidy is often common, where it is given to producer of food to reduce food insecurity (FAO, 2012) There are so many different way to classify subsidy, labour subsidy, infrastructural subsidy, export subsidy, consumption subsidy, (Yemi, 2012). Much as subsidy is an economic necessity, who benefit from it? Is it the citizen or the government? This question is necessary because government continue to have more money at the expense of the citizens when there is subsidy removal, but if there is no subsidy removal, the citizen's benefit. Government removal of subsidy is always hung on the premise that it will use the money realize to provide infrastructures. This has never been achieved. This culminated to the formation of Subsidy Reinvestment Programme (SURE-P) to manage the funds accrued from the subsidy removal (Alwell, 2012) Despite the (SURE-P) intervention the people still did not see any benefit of subsidy removal. The cost of the fuel subsidy continues to expose the citizens to untold hard-ship due to rising cost of fuel as well as transportation which indirectly affect food prices. A survey showed that from 2012, the prices of fruits such as oranges, pineapples, banana, apples have risen. Cost of frozen chicken, vegetable oil and other food items sky-rocketed, this survey was done within the first month of subsidy removal (Harambe, 2012).

3.0 Methodology

3.1 Study Area

Port Harcourt is the capital of Rivers State, Nigeria. The name Port Harcourt was named after viscount Harcourt who was the British Secretary of State for Colonies. Port Harcourt is a city of so many multi-national oil companies such as Shell, Agip, Chevron, Elf, Nigeria Liquefied Natural Gas (NLNG). Port Harcourt lies in the Niger delta region of Nigeria; it has a population of 2.7 million people. Apart from oil exploration, other activities in the city include large scale manufacturing, construction, tourism and hospitality, mining and fishing etc.

3.2 Sample Size and Sampling Method

The study was based on a time frame of 11 years. (2001-2012) data on the annual average market prices of food items were collected from Agricultural Development Programme (ADP). Food prices of five staples such as rice, garri, beef, fish and bread were purposively sampled so as to choose food items commonly consumed by the populace.

3.3 Sources and method of data collection

The data for this research were mainly secondary. Data were collected from the River State Agricultural Development Programme (ADP) – a government Agency that carries out research, prices of five staple food items were collected from the agency

3.4 Method of data Analysis

The data for this research were anlysed using tables, percentage, simple regression analysis using carefully built models, with fuel subsidy as independent variable and food items such as rice, yam, garri, beef, fish as dependent variables. Five simple regression models were built as follows;

$Y_1 = f(x_1)+u$ - - - - equal 1

Y_2 = $f(x_1)+u$ - - - - equal 2

Y_3 = $f(x_1)+u$ - - - - equal 3

Y_4 = $f(x_1)+u$ - - - - equal 4

Y_5 = $f(x_1)+u$ - - - - equal 5

Where Y_1 = Rice

Y_2= Yam

Y_3= Garri

Y_4= Beef

Y_5 = Fish

U = Stochastic variable

4.0 Results and Discussion

Table 4.1 Price per litre of PMS and percentage increase since 1966

Date	Price of PMS (k & N)	Percentage increase
Jan 1966	8 kobo	73
Oct 1978	15 kobo	31
April 20 1982	20 kobo	97
March 31, 1986	39 kobo	6
April 10 1988	42 kobo	43
Jan, 1989	60k	43
March, 6 1991	70	16
Nov. 8, 1993	N5.00	61
Nov. 22 1993	N3.23	61 reduction
Oct. 2 1994	N15,00	361
Oct. 4 1994	N11	-
Dec. 20 1998	N25	127
Jan. 6 1991	N20	
Jan 1 2000	N30	-
June 8, 2000	N25	-
June, 13, 2000	N22.00	18.2
Jan. 1 2002	N26	
June, 20 2003	N40	35.0
Sept. 2004	N48	16.6
April 11, 2005	N52	18.2
May 28, 2005	N75	30.6
June 25, 2007	N70	
Jan 15, 2009	N65	
Jan 1 2012	141	53.9
Jan 16, 2012	97	32.9

Source: Field Survey 2012

Table 4.1 shows the pump price per litre of petroleum motor spirit (PMS) from 1960 to 2012. The table shows that the pump price of fuel (PMS) had continued to rise from 8 kobo in 1966 to N97 in 2012. The table revealed that since the restoration of democracy in 1999 to 2012, they have removed subsidy 12 times (13yrs). The military junta increased fuel price 12 times. This means that from 1966 to 2012 Nigeria has removed subsidy 24 times in 58 years. 1993 and 1994 had the greatest percentage increases of 614 and 361% respectively

Table 4.2 annual average market prices per kg of in Port Harcourt (2001-2012)

	Price (N)	Rice	Yam	Garri	Beef	Fish
2001	25	76.08	87.00	69.16	206.91	232.66
2004	48	105.79	85.29	72.66	318.75	281.87
2005	75	127.70	120.25	91.90	536.21	305.99
2006	75	164.50	170.10	96.60	791.66	376.66
2007	70	173.45	185.36	111.83	826.79	478.00
2008	70	192.50	292.00	123.50	877.00	1088.27
2009	65	192.33	300.00	98.50	481.00	456.00
2010	65	190.61	250.48	121.52	482.46	428.52
2011	65	170.61	138.49	126.79	958.08	994.20
2012	97	210.50	350.50	68.80	1250.00	1400.00

Source: ADP Rivers State (20001-2012)

Table 4.2Shows the relationship between fuel price and Annual market prices per kg of selected food items in Port Harcourt, 2001-2012.

Table 4.2 above shows the relationship between fuel pump price and annual market price per kg of different food items. The table revealed that from 2005 to 2008 when the pump price of petrol was fairly stable, most food prices were also fairly stable, though, there were little increases in the price of food items. From 2009 to 2012, there was astronomical rise in price of most food items, such as beef and fish. In 2011 a kilogram of rice was N138 when the subsidy of fuel was removed it rose to N350 per kg, fish also increase from N994 per kg to N1400 per kg. When the price of fuel was reduced from N70 to N65 in 2008 to 2009, the price of beef and fish were drastically reduced by halve, showing that prices of food items move in the same direction with the price of fuel.

Table 4.3 percentage increase in market price of selected food item 2001-2012

Year	Rice	Yam	Garri	Beef	Fish
2001-2004	28.0%	-2.0%	4.8%	35.1%	17.4%
2004-2005	17.1%	29.1%	20.9%	40.5%	7.8%
2005-2006	22.4%	29.3%	4.9%	32.3%	18.7%
2006-2007	5.1%	8.2%	13.6%	4.2%	21.2%
2007-2008	9.8%	36.5%	9.4%	5.7%	56.1%
2008-2009	-0.08%	2.6%	-25.4%	-82.3%	-138.6%
2009-2010	-0.9%	-19.7	18.2%	3.0%	-6.4%
2010-2011	-11.3%	-80.9%	4.2%	49.6%	56.8%
2011-2012	18.9%	60.5%	-82.2%	23.3%	28.9%

Source: Field Survey 2012

From table 4.3 above, it was observed that the increase in the price of fuel (subsidy removal) from 2001-2004 affected all the food items, except yam that had -2. % reduction in price. conversely, from 20008-2009, there was a drastic reduction in prices of food item, except for yam that had 2.6% increase. During this period there was no subsidy removal, rather the price of fuel was reviewed downward. This also goes to show that prices of food items move in the same direction with price of fuel because it impacted on transportation.

Regression Results

$Y_1 = 1.993 + 0.898x_1$

$*R^2 = 0.807$

$Y_2 = 3.692 + 0.762x_1$

$*R^2 = 0.581$

$Y_3 = 0.283 + 0.398x_1$

$*R^2 = 0.761$

$Y_4 = 14.338 + 0.873x_1$

$*R^2 = 0.708$

$Y_5 = 14.639 + 0.708x_1$

The regression results showed that all the model were significant. Meaning that the variation in the independent variables were explained by the independent variable (fuel subsidy) up to 70% and 80%.respectively This also showed that there was significant relationship between oil subsidy removal and price of food items in Port Harcourt, Rivers State.

Conclusion

Removal of fuel subsidy is an indirect way of increasing fuel price. This study established that fuel subsidy removal has effect on food prices. Increase in fuel price also increase prices of food items.

Recommendation.

The study recommended that removal of fuel subsidy policy should not be implemented in stages to prevent a hike in the prices of food items

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