Original Paper

Determinants of Domestic Energy Prices in Nigeria (1980-2020)

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Abstract

The study examined the factors that influence the domestic prices of petroleum using the price of premium motor spirit (PMS) in Nigeria from 1980 to 2020. The study employed Autoregressive Distributed Lag model for the data analysis. The scope of the data used from the analysis of the study ranges from 1980 to 2020. The study found out that there exist a positive relationship between petroleum pump price and inflation and the result is statistically significant at 5% level of significance. The study also discovered that both oil output and import are the prime factors affecting the prices of domestic energy in Nigeria. The study recommended that our refineries should be put in good shape so we can save the cost of having to export to other countries for refining as this contributed to the high cost of selling the product in Nigeria. The study also recommended diversification of the economy in favour of the real sectors as this will help provide more goods for exports thereby improving on the balance of payment.

Keywords: Petroleum, Auto Regressive Distributed Lag, Premium Motor Spirit PMS, Petroleum Pump Price

1. Introduction

Petroleum used to be earliest realized in marketable quantity through Shell-BP at Oloibiri close to Port Harcourt in 1956. By February 1958, manufacturing had reached 6,000 barrels per day; and exporting began. The first export used to be made at this length of 1.8 million barrels to Britain for N176 million. On the eve of the civil warfare in 1967, petroleum manufacturing in Eastern Nigeria had reached 350,000 barrels per day, from one hundred thirty five wells in 15 oilfields; even though, oil prospecting in Nigeria began in 1908 when a German Company, the Nigerian Bitumen Corporation drilled 14 wells in Lagos. After the First World War, the Shell-BP took over the activity in oil exploration in the United States of America and later African Petroleum.

Petroleum merchandise are sub-products of sophisticated crude oil which is used by means of households, manufacturing and manufacturing industries as a ability of power to extend output. It enables the operations of the industrial, manufacturing and households which in flip contributes to enlarge in the output, income, and reduces value of manufacturing and beautify their general of living. The position of petroleum merchandise can't be over emphasized and these has made its charge motion (positive and/or negative) a robust determinant for industrial, manufacturing, and country wide output, thus, the nation's dwelling preferred (Amagoh, Odoh, & Okuh, 2014). Nigeria is one of the nations in the world with numerous strength sources in which the most frequent is hydropower and fossil gasoline (coal, gas, crude oil). Hydropower is the essential electricity supply (national grid) which is predicted to generate strength for industrial, manufacturing and family makes use of in Nigeria (Adenikinju, 2005). But 2 proof has proven that energy provide from the countrywide grid is epileptic, and many Nigerians have resolved to use of petroleum products as alternative to power supply (Odoh, 2014). The motion of petroleum pump charge is growing financial nervousness and panic amongst households in Nigeria. This is due to the fact extend in pump charge of petroleum merchandise has the potential to have an effect on fashionable of dwelling negatively. Continuous expand in home pump charge of petroleum merchandise can lead to enlarge in price of manufacturing and discount in output. Petroleum expenses in the home market have been underneath authorities manipulate in view that 1973 when the

authorities took it over from the non-public oil agencies (Iwayemi, 1993). The fees of petroleum merchandise in Nigeria ought to theoretically be deduced from International Crude oil costs considering that the marginal grant (liters) comes from import, it must consequently replicate import price. In different words, when the marginal unit of consumption is imported, the financial rate ought to be import parity price. However, this has no longer continually been the case for a variety of motives in particular socio-political ones (Iwayemi & Adenikinju, 1996).

Nigeria has been coping with changes in domestic energy prices over the years and this has been affecting the economic growth of the country despite the fact that Nigeria is one of the most endowed country in terms of domestic energy production.

Petroleum has become an important source of revenue to the Nigerian government (both federal and state). The rise and falling of Petroleum price per barrel in the international market has been a major problem and which has also affected the price per liter in the country. Price per liter was increased from 145naira per liter to 212naira per liter in March 2021 which has led to the increase in prices of goods and services in the country. The Government does not seem to worry about the spike in oil price because they cannot control the prices of fuel. Fuel Prices is partly shaped by actual supply and demand and mostly by taxation and dealer commission. Consumers consider fuel too expensive in which lower income motorists cannot afford essential vehicle travel. The economic costs and risks of importing petroleum is high. Per-mile fuel costs and emissions are excessive. This opinion has made it essential to carry out a research to examine the determination of petroleum prices in Nigeria from 1980-2019. The rest of this paper is divided into the literature review, methodology, results and discussion, conclusion and recommendations.

2. Literature Review

The Determinants in the fluctuation of Petroleum prices has been discussed by various specialists with different views. The study looks at past empirical works from research outside Nigeria and research within Nigeria.

A research study carried out by Nwaoha, Onwuka, Ejem, Obiseke and Ogbuewu (2018) stated that in Nigeria, pump price of petroleum products have been adjusted severally by different administrations, and the burden rest more on the citizen. Hence, the study examined the movements of petroleum (PMS, AGO, DPK) pump prices and standard of living in Nigeria from 1981 to 2016. The study made use of secondary data and adopted OLS technique of analysis. The data set were subjected to preliminary test and the ADF result revealed that all the variables were integrated at I(0) indicating a long-run relationship between the independent and independent variables. Economically, none of the explanatory variables confirmed to a priori expectation. Statistically, they stated that both individual and overall results revealed that MOPPMS, MOPAGO and MOPDPK have statistical significant impact on standard of living (PCI and INFL) in Nigeria. Based on the findings, the researchers recommend that government should channel oil trade towards exportation of crude oil and finished petroleum products so as to expand oil revenue base of the economy, zero import expenditure of finished petroleum products, and reduce the domestic pump price of these products.

Another study carried out by Sanni (2014) stated that Nigeria is one of the leading oil producing country in the world, but despite this abundant natural resource, The country still suffers from massive shortage of premium motor spirit (PMS) and distribution to cater for the needs of the numerous users of its ends product. The study investigates the implications of price changes on petroleum products distribution in Gwagwalada for a period of 12 years (2000-2012). Questionnaire was used to collect primary data from ten wards within Gwagwalada Area Council which was used as study area. The statistical package for social sciences (SPSS) was used to analyze the raw data and determined whether to accept or reject a problem item as being a reflection of the thinking of the majority for taking a decision. The results from the study show that, there was a statistically significant effect of price changes of petroleum products distribution in Gwagwalada, that the price changes significantly cause fluctuation to supply and distribution of petroleum products, the price increases of PMS significantly lead to increase in cost of distribution of other commodities including agricultural products and there exists statistical significant relationship between price increase and the development of "Black Market'' and long queues at filling stations across Nigeria. The study recommends that government should strive

to make the product available all times, monitor effectively the distribution channels to avoid disruption of distribution or scarcity, Consistency and efficiency of government pricing policy, the government to encourage more private participation and deregulation of the downstream sector and fight corruption as well as total market concept in the chain of petroleum product supply and distribution.

Another study carried out by Buba, Abdu, Adamu, Jibir and Usman (2017) noted that attainment of universal access to affordable, reliable, sustainable and present day power is one of the dreams for Sustainable Development Goals (SDGs). Existing information and statistic advocate that excessive share of households in much less developed international locations closely be counted on strong fuels for home requirements. Also, current information printed that in Nigeria over 70 percentages of households depend on gas timber for cooking which point out the assignment in advance of coverage makers for making sure get admission to environment friendly sources of strength earlier than 22 the expiration of sustainable improvement goals. In this learn about the empirically examined socio-economic elements that have an impact on households' probability of electricity consumption in Nigeria. In order to obtain their unique objectives, they undertake 2013 demographic fitness survey dataset for Nigeria and multinomial logistic regression used to be carried out in examining the elements affecting households' selection for electricity demand. Evidence from the find out about printed that demographic characteristics, financial status, public focus and social variables are sturdy determinants of households' electricity preference in the us of a and conformed to the propositions of "Energy Ladder Hypothesis". They concluded by means of imparting concluding remarks and policy implications for decision making towards ensuring affordable, sustainable and efficient strength in Nigeria.

Litman (2016) referred to that the paper evaluates policy option for responding to rising gas prices. There is famous guide for insurance policies that reduce gas expenses via subsidies and tax reductions, however such insurance policies damage customers and the economic system universal due to the fact they amplify whole gasoline consumption and car travel, and consequently related prices such as site visitors and parking congestion, infrastructure costs, site visitors crashes, exchange imbalances and air pollution emissions. Fuel charge discount rates are an inefficient way to assist low-income households; different techniques do extra to expand affordability and grant different benefits. Because many transport choices are durable, low gas rate insurance policies are mainly detrimental over the lengthy term. This record identifies responses that maximize whole benefits, which includes mobility administration techniques that extend transport device efficiency, incentives to pick gas environment friendly vehicles, and revenue-neutral tax shifts. With these insurance policies gas expenses can considerably expand except harming customers or the economy, whilst supporting to attain different planning objectives.

Ologundudu and Abioro (2018) cited that there have been a lot of theories that explain the impact of petroleum price increase on the business and economic growth of a country, mainly Nigeria which has been one of the predominant oil producing international locations in the World. In the previous years, oil has grown to be greater risky and has grown worse in the current Nigeria and this has affected stability of payments, oil change and income from oil. This paper empirically examined the have an impact on of fee expand on monetary increase in Nigeria between the years 1985 – 2015 the use of normal least rectangular (OLS), linear more than one regression mannequin evaluation in assessing 5 key macroeconomic variables. The information have been extracted from Central Bank of Nigeria (CBN) statistical bulletin whilst the average evaluation indicates that oil rate make bigger has a relationship with Gross Domestic Product (GDP) and each of them have substantial have an effect on every other. The consequences similarly exhibit that oil output, monetary openness of oil, oil import and oil export has fine relationship with GDP and hence the have an effect on oil income is negatively associated to actual Gross Domestic product.

Adeniran (2016) cited that an expand or limit in crude oil fee can each be ache and reap to the Nigerian's financial system simultaneously, this is due to the fact a sturdy hyperlink between the country's budgetary operations and the happenings in the global oil market exists. Therefore, this lookup employed the constrained vector auto regression (VAR) technique, to empirically check out into the influence of oil charge volatility on Nigeria's financial system from 1981 to 2014. Both the

Augmented Dickey Fuller and Philip Perron unit root test, published that all the variables regarded in the learn about are non-stationary at levels, however done stationary after estimating their first difference. Furthermore, majority of the variables had been discovered to have lengthy run relationships, justifying the want to estimate the mannequin via the vector error correction model. The short run coefficient deduced from the VECM published that oil price shock considerably influences revenue boom in the short run. Also, both the impulse response feature and variance decomposition consequences established the Dutch sickness syndrome related with Nigeria economy, actual GDP negatively replied to oil price shock in all the durations no matter the high quality response of actual authorities expenditure to oil shock in most period.

Roland (2017) investigated the impact of Premium Motor Spirit (PMS) Price on the growth of Nigerian economy as well as the effect of gross domestic investment (GDI), labor employment (LEMP) and lending interest rate (LIR) between 1970 and 2013 on economic growth of Nigeria. The study focused on PMS pricing due to government foot dragging on the deregulation of PMS Price in Nigeria. For this study, secondary data were obtained from Statistical fact sheets of National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN) publications. Using the Error Correction Mechanism approach, the study reveals that increase in PMS Price had a negative significant impact on the Nigerian economy (Real GDP) at 5% level of significance. This indicates that 1% rise in PMS price of one year lag leads to 0.7% decrease in Real GDP. That is, increase in energy (PMS) price will negatively impact on the production of the firms, individuals (household) or Government Institutions, which will consequently lead to a fall in real GDP.

2.1 Gaps in the Literature

After thorough review of the works of different researchers, it was observed that they did not take observation of the main determinant of price of petroleum which is the Natural factors such as geographical location resource endowment which tend to greatly influence the prices of petroleum products in Nigeria and Secondly, the Human factors which comprises of the demand and supply factors. These among other are the gaps this research will fill.

3. Methodology

This empirical investigation focus on the determinants of petroleum products prices in Nigeria over the periods 1980 to 2019. Based on the empirical study on the changes in domestic energy prices in Nigeria by Nwaoha, Onwuka, Ejem, Obiseke and Ogbuewu (2018), we specify our empirical model thus:

$$PMS_t = \beta_0 + \beta_1 OILI_t + \beta_2 OILO_t + \beta_3 INF_t + \beta_4 EXC_t + \mu_i \tag{1}$$

Where;

PMS = price of petrol (Premiunm Motor Spirit), EXC = Exchange rate, OILI = Oil Import, OILO = Oil Output, INFL = Inflation Rate.

ß1, ß2, ß3, ß4, ß5 are parameters to be estimated. ß0 = Constant, μi. = error term

Sources of Variables

The data adopted in this study which are secondary data, are sourced from the Central Bank of Nigeria Bulletin and World Bank databank.

Estimating Techniques

In order to facilitate the estimation of the time series data generated for the study, the Autoregressive Distributed Lag method for multiple regressions was employed. This method of analysis is employed because some of the variables are stationary at level and some of them are stationary at first difference. The ARDL has been used in a wide range of economic relationship with fairly satisfactory result. The general purpose of multiple regressions is to learn more about the relationship between several independent variables and a dependent or criterion variable. Also, Pre-estimation test such as the unit root tests using Augmented Dickey Fuller and Philips Perron were carried out. The need for unit root is due the choice of time series analysis. The pre-test for possible unit roots in the series is carried out in order to avoid spurious regression results.

Also, the post–estimation diagnostic tests are also conducted to ensure the goodness of fit of the model. These tests examine the serial correlation and normality associated with the selected model. Among the tests are the stability test, normality, and autocorrelation and heteroscedasticity tests.

4. Results and Discussions

This chapter covers trend and data analysis, interpretation and discussion of the research findings in order to achieve the objectives of the study. The unit root test result is presented and interpreted first.

Table 1. Unit Root Analysis

Augmented Dickey Full (ADF) Test

Variables	AT LEVEL			AT DIFFERENCE		
	t-statistics	Prob.Value	Status	t-statistics	Prob.Value	Status
PMS				-6.765785**	0.0459	I(1)
LOILI	-5.37676**	0.0005	I(0)			
LOILO				-5.309488	0.0008	I(1)
INF				-5.576222	0.0006	I(1)
EXC	-4.445635	0.0062	I(0)			

Source: Authors' Computation 2021, Using E-views 10.

The outcome of the ADF unit root test above indicated that PMS, LOILO and INF are stationary at first difference since their probability value are less than 0.05 after the first differencing, which implies that they are integrated of order 1 i.e., I(1). However, LOILI and EXC are stationary at level, which implies that they are integrated of order 0 i.e., I(0).

The next step is the cointegration test which is done through the ARDL bound test. The results are presented in Table 2.

Table 2. ARDL Bound Test

Significant Level	F-statistics	Lower Bound I(0)	Upper Bound I(1)
5%	1.737637	2.56	3.49
1%		3.29	4.37

From the Table 2 above, the hypothesis that there is no long run relationship Premium Motor Spirit (PMS), Oil Import (LOILI), Oil Output (LOILO), Inflation (INF)and Exchange rate (EXC) because the F-statistics is lower than the lower bound 2.39 and the higher bound 3.38. Hence, the long run relationship among the variables are described from the estimated ARDL multiple regression model presented in Table 3.

Table 3. ARDL Long Run Multiple Regression Results

Variable	Coefficient	Std.Error	t-Statistics	Prob
LOILI	3.555590	5.885801	0.604096	0.0405
LOILO	-2.222959	6.282876	-0.353812	0.0260
INF	-0.028538	0.123565	-0.230958	0.0492

EXC	0.048652	0.058722	0.828509	0.4141
CointEq(-1)*	-0.118253	0.033823	-3.496194	0.0015
R ²	0.967911			
Adjusted R ²	0.962379			
S.E. of Regression	10.82770			
Sum Squared Resid	3399.934			
Log likelihood	-129.7457			
F-statistic	174.9495			
Prob(F-statistic)	0.000000			
Durbin-Watson stat	2.250834			

Source: Authors Computation using E-views 10, 2021

In the long run, it can be observed that Oil import has a significant and positive relationship to determine energy prices in Nigeria. A 1% increase in oil import will lead to 3.55 increased in energy prices. This is in accordance with a priori expectation. Hence, to discourage increase in energy prices, importation of oil needs to be discouraged.

Oil output on the other hand has a significant and negative relationship in determining domestic energy prices. This indicates that a 1% increase in oil output will decrease domestic energy prices by 2.22 in the short run. Hence, to reduce the prices of domestic energy, oil output is needed to be encouraged.

Inflation and exchange rate has no significant relationship in determining domestic energy prices as observed in the figure above. The short run error correction term, ECM from the ARDL model estimate is negative as expected with a value of -0.118253and is statistically significant. Thus, the gap between long run equilibrium value and the actual value of the dependent variable is corrected with speed of adjustment equal to 11% (percent) annually.

The coefficient of determination (R ₃ shows that the explanatory variables employed in the study explains approximately 96.79% of total variation in the economic growth. This indicates that the variables used in the model are appropriate and suitable for the analysis.

Post estimation tests

In order to provide further validation for the estimated regression results, some post estimation tests are analyzed and their results are presented as follows.

Table 4. Breusch-Godfrey Serial Correlation LM Test

F-statistic	1.230510	Prob. F(2,27)	0.3080
Obs*R-squared	2.923718	Prob. Chi-Square(2)	0.2318

Source: Authors Computation using E-views 10, 2021

The serial correlation test result obtained shows that the null hypothesis of a serial correlation is rejected and the corresponding probability values of the F-statistics are statistically insignificant at 5% level. Thus, there is a conclusion that there is no serial correlation among the variables under consideration.

Table 5. Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.642541	Prob. F(5,29)	0.6692
Obs*R-squared	3.490692	Prob. Chi-Square(5)	0.6248

Source: Authors Computation using E-views 10, 2021

From the result, the probability of Chi-Square (5) is 0.6248 and this is greater than 0.05 at 5% significant level and therefore, the null hypothesis is accepted. This implies and therefore confirm the absence of heteroscedasticity in the model. That is the error terms are homoscedastic i.e., they have constant variance in repeated sampling.
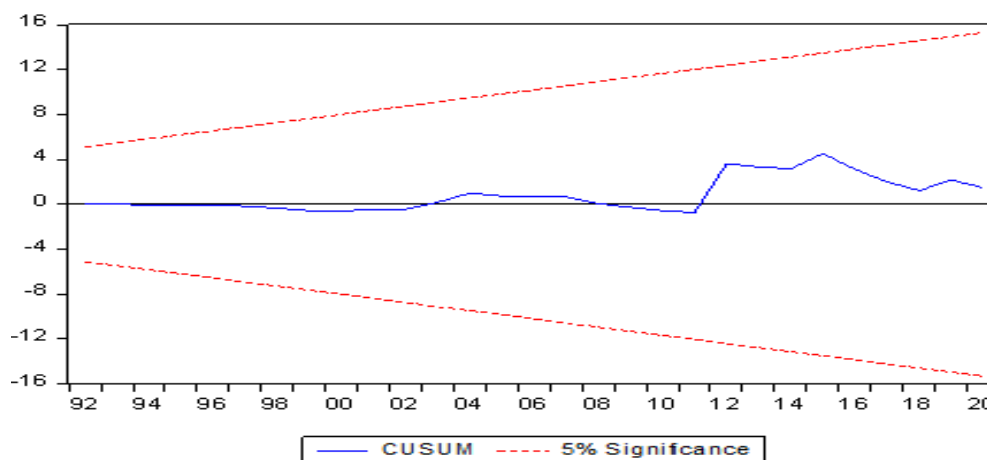
Stability test

Figure 1. CUSUM Square Test

The Cumulative Sum of Recursive Residual (CUSUM) as seen in figure 1 reveals that the residuals are within the 95% confidence interval which implies that the estimated model has its residuals to be very stable.

5. Conclusions and Recommendations

The objective of the study is to determine the trend of domestic energy prices and to analyze the determinants of domestic energy prices from the year 1980 – 2020. The theories adopted in the study are the theory of demand and supply, capital replacement theory and exhaustible resource theory. Independent variables that were needed for the analysis are Oil Output, Oil Import, Inflation Rate, Exchange Rate while the dependent variable is Premium Motor Spirit (PMS) which was the proxy for domestic energy. The estimating technique that was adopted in the thesis is Auto Regressive Distributed Lag (ARDL), since the variables were stationary at level and at first difference. The data were sourced from CBN statistical bulletin and World Bank databank.

The result of the analysis showed that there is a negative relationship between Oil output and domestic energy prices while there is a positive relationship between oil import and domestic energy prices.

Using the Auto Regressive Distributed Lag, it was observed that there was only a short run relationship between the dependent and independent variables, hence only the short run dynamic model was analyzed. From the result, it was observed that Oil Output has a negative and significant relationship in determining domestic energy prices in Nigeria. This indicates that an increase in oil output will lead to a decrease in domestic energy prices. Hence, the government of Nigeria needs to increase oil output in their objective to reduce the prices of domestic energy. Oil import was observed to have a significant and positive relationship with domestic energy prices in Nigeria, this is in line with a priori as

importation of oil has huge tendency to increase the price of domestic energy. Inflation and exchange rate were observed not to have a significant effect on exchange rate in the short run.

6. Recommendations

In line with the findings of the study, the followings are recommended;

1. Since the prices of petroleum product has chain effect on the prices of other goods and services in the country. Government should continue to subsidize their prices by so doing it will stabilizes prices of other goods and services and this will go a long way in reducing the rate of inflation in Nigeria. This will not only save us the cost of exporting the product in the first instance but also create more employment opportunities at home.

2. Government should make sure that the existing refineries are functioning at full capacity and also build new ones; by so doing the existing refineries can meet Nigerians internal petroleum products needs and some excess for export and strategic reserve of product demand. This can be made possible when the nation refineries Turn-Around-Maintenance are consolidated with transparency and accountability.

3. Government should introduce a very strong and strict policy that will severely deal with citizens who smuggle, hoard, and create artificial scarcity and black marketers of petroleum products so as to make abnormal profit to the detriment of the whole country.

4. Government should always carry along Labor Union, Trade Union and Private sector before it increase the prices of petroleum product because of it critical nature to cost of production and the welfare of people in the country so as to avoid unnecessary crises.

5. To control the fluctuation in the Nigerian exchange rate, there is a need for more investment in the agricultural sector or better still the Nigerian economy should diversify. This will definitely promote export thereby improving on our balance of payment.

References

Adeniran, A. O. (2016). The Impact of Oil Price Volatility on Nigeria Economy. *A Research Thesis*.

Akalpler, E., & Nuhu. (2018). The Impact of Oil Price Instability on Economic growth: Evidence from Nigeria. *Business, Economics and Management Research Journal-BEMAREJ*, *1*.

Aminu, S. A. (2018). The Rising Prices of Premium Motor Spirit and Widening Poverty of Gap in Nigeria. *Proceedings of 2013 International Conference on Poverty Alleviation Income Redistribution and Rural Development in Developing Countries*.

Andreas, B., Cuaresma, J. C., & Keppe, C. (2016). Determinants of Crude Oil Prices: Supply, Demand, Cartel or Speculation? *Monetary Policy and the Economy Q4/09*.

Buba, A., Abdu, M., Adamu, I., Jibir, A., & Usman, Y. I. (2017). *Socio-Economic Determinants of Households Fuel Consumption in Nigeria* (Vol. 5).

Ederington, H. L., Fernado, C., Lee, K. T., & Lin, S. C. (2007). Factors Influencing Oil Prices: A Survey of the Current State Knowledge in the Context of the 2007-08 Oil Price Volatility. *Independent Statistics and Analysis*.

Eregha, P. B., Mesagan, E. P., & Olawale, O. O. (2015). Petroleum Products Prices and Inflationary Dynamics in Nigeria. *The Empirical Econometrics and Quantitative Economics Letters*, *4*(4).

Forgha, N. G., Sama, M. C., & Achuo. (2015). Petroleum Product Price Fluctuations Economic Growth in Cameroon. *Asian Online Journal Publishing Group*.

Francis, D. B. (2012). Analysis of the relationship between Petroleum Prices and Inflation in Nigeria. *International Journal of Business and Commerce*, *1*(12).

Gbadebo, Odularu, O., & Okonkwo, C. (2009). Does Energy Consumption Contribute to Economic Performance? Empirical evidence from Nigeria. *Journal of Economics and International Finance*, *1*(2).

Gyari, M., Amarfio, E. M., & Marfo, S. A. (2017) Determinants of Global Pricing of Crude Oil- A Theoretical Review. *International Journal of Petroleum and Petrochemical Engineering (IJPPE)*, *3*.

Isyaka, M. S. (2014). The Implication of Price Changes on Petroleum Products Distribution in Gwagwalada Abuja, Nigeria. *Journal of Energy Technologies and Policy*, *4*(7).

Litman, T. (2011). Appropriate Response to Rising Fuel Prices. *Victoria Transport Policy Institute*.

Mojeed, M., & Abioro, M. A. (2018). Petroleum Pump Price Increase and Business Environment; The Nigerian Economy Standpoint. *IOSR Journal of Business and Management (IOSR-JBM)*.

Ndaliman, H., & Anwalu, M. (2014). Petroleum and the Nigeria Economy (1999-2007): Between NEO-Colonialism and Domestic Collaborators. *Journal of Offshore Structure and Technology*, *1*.

Nwahowa, Onwuka, Ejem, Obiseke, & Ogbuewu. (2018). Movements of petroleum pump prices and standard of living; Evidence from Nigeria. *International journal of social sciences and management research*, *4*(8).

Oyeyemi, A. M. (2013). The Growth Implications of Oil Price Shock in Nigeria. *Journal of Emerging Trend in Economics and Management Sciences (JETEMS)*.

Saari, M. Y., Dietzenbacher, E., & Los, B. (2016). The Impacts of Petroleum Price Fluctuations on Income Distributions across Ethnic Groups in Malaysia. *Ecological Economics*.

Taimur, B., Amine, M., David, C., & Joseph, N. (2007). Domestic Petroleum Product Prices and Subsidies: Recent Developments and Reform Strategies. *International Monetary Fund WP/07/71*.