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EFFECTS OF PUMP PRICE OF PETROLEUM INSTABILITY ON CONSUMER PRICE INDEX IN NIGERIA

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Abstract

This study examines effect of pump price of petroleum instability on the consumer price index in Nigeria 1980-2020. Objectives are to; ascertain the significant effect of pump price of Petroleum instability on the Nigerian consumer price index, examine the significant effect of pump price of Petroleum instability shock on the Nigerian consumer price index. The study employed the following advanced econometric techniques; Augmented Dickey-Fuller (ADF), Vector Error Correction Estimates approach, Choleski decomposition and Imposing Short-run Restrictions test, statistical tests & Co-integration test. Based on the above econometric techniques conducted, it was observed that all the variables used became stationary at the first differences at degree of order one (I). There is Co-integration (long run relations) among variables used in the study. It was indicated both bidirectional and direct nature of causality relationship between the variables in the model. Furthermore, the results revealed that; Petroleum instability does significantly effect on the Nigerian consumer price index 1980-2020". Pump price of Petroleum instability does significantly effects shock to the Nigerian consumer price index 1980-2020. The researcher recommends that; Nigeria should have functional local refineries in the country because this will aid the Petroleum availability and as well control prices instable to some extent in Nigeria economy. Nigeria should have the ability to appropriately use the revenue-generated yester-years to develop the infrastructures, which will aid in decreasing the level of inflation. The Nigerian government should create an enabling environment by ensuring security for the growth of our economy.

Keywords: Effect, Pump Price, Petroleum Instability, Consumer Price Index, Nigeria.

Introduction/Background to the Study

Petroleum products are derived from crude oil and they include petrol, diesel, kerosene, natural gas, bitumen etc. Oil was discovered in Nigeria in 1956 at Oloibiri in the present Bayelsa State, after a century of searching (Dharam, 1991).Oil products are used in industries for production of goods and services and they are used domestically for personal consumption in which the greater percentage of it comes from developed countries. However, pump price of petroleum means a price paid by any fuel engine users for petrol.

The persistent instability of pump price of petroleum in the global market has been revealed to adversely affect macroeconomic performance of the Nigerian economy (Mba-Afolabi, 1999; Labys, 2006; Nwosu, 2009; Arinze, 2011; Runl, 2011; Bobai, 2012) owing to the fact that Nigeria is a monoculture economy, which is heavily dependent on crude oil export for its foreign earnings. Before now, the country is the ninth world producer and sixth world exporter of crude oil (Agbaeze, and Abner, 2023)

At present, Nigeria is largely a net importer of fuel and other petroleum products such Petrol (PMS), Kerosene (HHK), Diesel (AGO) and Aviation Kerosene (ATK), (DFID, 2012). The huge demand for these products and inadequate supply has led to successive Governments in Nigeria attempting to subsidize the product for the benefit of its Citizenry. An examination of fuel pump prices in Nigeria shows that since 1978 when oil price was N0.5k per litre under General Obasanjo as Head of State, there has been a gradual increase in petroleum products price. Currently, under President Mohammadu Buhari current regime, the pump price of petrol is N195 per litre (Agbaeze, and Abner, 2023). On the domestic economy, the petroleum sector generates over 90% of the country's foreign exchange earnings, and provides employment in various forms to Nigerians (Central Bank of Nigeria, 2022). In addition, the tremendous growth in oil earnings has influenced significantly Nigeria's international relations, and sometimes the politics of oil has taken centre stage in the nation's history of international relations in the last few decades (NNPC, 2023).

Pump price of petroleum instability has been found to affect production cost of both domestic and foreign firms and since Nigeria is import dependent, an increase in pump price of petroleum makes both the domestic made and imported goods to be very expensive which is in turn transmitted to domestic prices by raising the general price level. From 1990 to 2011, the pump prices of petroleum products were reviewed more than ten times. The adjustment in 2000 under the democratically elected government marked a turning point in the economy as petrol moved up to N195 per liter, diesel to N950 and kerosene to N950 National Bureau of Statics (2023). According to the government, the upward review of domestic prices of petroleum products was necessitated by the high spot market pump price of petroleum and the need for higher margins for the Nigerian National Petroleum Corporation (NNPC) to meet operational and capital costs.

Statement of the Problem

The challenges in the downstream section of the nations' petroleum sector are a serious worry to economic condition in the country. Experience has shown that adjustment in pump price of Petroleum has been on the increase (upward trend) since 1970. Between 1970 and 1980 it increased 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 addition, it was adjusted upward in the year 2001 from N26 to N120 in 2013, and then N145 from 2015 to 2016 and increase again to N164 in 2017 to 2018, N184 from 2021 to2022 and currently N194in 2023. (Nigerian National Petroleum Corporation (NNPC), 2023). Dike (2022) observed that in the past ten years, Nigeria as a nation has been adjusting the pump price of Petroleum products upwardly with the aim of eliminating fuel consumption subsidy in accordance to the free market system in this current government regime. The rise in pump price of Petroleum could

be of great challenge to firms who depend more on petroleum as an input to power the factory machines in their production process.

However, the effects of instability pump price of Petroleum on the Nigeria's consumer price index has assumed that changes in the pump price of Petroleum are exogenous, determined largely by the actions of United States, Great Britain economy activities as major buyer of Nigerian oil at the international market and OPEC polices. Significantly, historical episodes seem to support this assumption. For instance, pump price of Petroleum approximately tripled in both 1975 – 1980 and 2008-2009 because of OPEC's decision to curtail the supply of oil. This assumption of heterogeneity is critical, because it permits researchers to associate changes in the pump price of Petroleum instability with shocks to each country supply and consumer price index. Researchers can then determine the effects of pump price of Petroleum instability to the supply of oil and its consumer price index simply by looking at the response of the economy to a change inflation rate in the pump price of Petroleum (Bala, 2018).

Importantly, it is worth knowing that Nigeria's consumer price index is obtained from many sources, but derive mainly from the proceeds of crude oil production and sales. Nigeria produces approximately 2,000,000 barrels per day of crude oil in joint venture with some international oil companies, notably Shell, Mobil and Chevron. Out of this, Nigeria sells a predetermined proportion directly, while the joint venture partners sell the rest. The joint venture partners pay Petroleum Profit Tax to the Federal Government through the Federal Board of Inland Revenue.

Review of Related Literature

Conceptual Framework

Jones and Paik (2004) stated that among others, there is an existence of several transmission channels through which price of oil could affect the activities in the economy. Any increase in crude oil price is transferred to the price of PMS (Premium Motor Spirit), consequently consumers and firms experience increase in their energy bill. Generally, any increase in the price of energy results to a decrease in productivity that is transferred to real wages which affects labor employment.

Thus, there exist a link between international oil price and domestic price of petrol in petrol-import dependent countries like Nigeria. Since the cost of crude oil is part of the cost element included in the production of petrol. Petrol exporting countries would factor in the price (cost) at which they bought crude oil at the international market into the price of the refined product (petrol) to be exported. This suggests that any change in international price of oil will affect the international price of petrol and consequently affect the domestic price of petrol for petrol-import dependent countries like Nigeria Jones and Paik (2004).

The link between international and domestic price of petrol can also be observed in the Petroleum Product Price Regulatory Agency (PPPRA) template cost element of 2006, 2007 and 2008, which is anchored on the importation of petrol. This implies that change in international price of petrol will eventually lead to a change in its domestic price. The PPPRA template showed that in December of 2006, 2007 and 2008, the product costs (international price of petrol) measured in dollar per metric ton ($/Mt.) were 552.00, 819.47 and 330.96 respectively

while its expected domestic prices measured in Naira per liter (N/Lit.) in December of the same years above were 68.43, 95.23 and 54.53 respectively, showing a direct relationship between international and domestic price of petrol. This indicates that international price of petrol, which is one of the cost element included in the domestic pricing of petrol as is evidenced in the PPPRA template influences domestic price of petrol Jones and Paik (2004).

Theoretical Framework

(orlu, 2017) stated that petroleum product is mostly used in generators and vehicles to power internal engine combustion to enhance performance and is mostly used as fuel for light road vehicles and gasoline for cooking, powering heavy vehicles and machines in the factories for production, etc. Petroleum pump prices are the amounts charged per liter of petroleum products such as premium motor spirit (PMS), gasoline (AGO), and kerosene (DPK) while the Consumer price index or inflation is the persistent increase in the general price level of goods and services in an economy. To (Orlu, 2017), these price increases could result from an increase in demand for goods and services due to shortages in the supply of production or an increase in input price used as an intermediate to produced goods and services. In some texts, input price is known as cost-push inflation. Inflation occurs because of an increase in the factor of production due to either government policy or labor action.

Consequently, two major theories exist as regards the origin of petroleum: a Western theory suggests that its origin is biogenic resulting from biological matter and stored in sedimentary basins while a Russian Ukrainian school proposes that it is a biogenic with the deep origin in the Earth's crust (Regnier, 2007). The first theory implies a finite source of petroleum whereas the second theory suggests an almost unlimited one. Evidence for the organic origin of petroleum seems to be overwhelming since petroleum oil is found in sedimentary rocks, not in igneous rocks which contain cholesterol, porphyries and nitrogen. Hence, the chemical composition of the petroleum is similar to the composition of organic material.

However, as early as in 1877, D.I. Mendeelev, the Russian chemist who proposed the modern version of the periodic table, wrote that the petroleum deposits of the World are likely to be controlled more by tectonics than by the age of sedimentary rock Mendeleev proposed the metal carbide theory. In this model metal carbides deep within the Earth react with water at high temperatures to form acetylene which subsequently condenses to form heavier hydrocarbon (Isaac, 2017). The Fischer–Tropsch process is probably the second well-known example of the possibility of formation of synthetic lubrication oil and synthetic fuel, typically from coal, natural gas, or biomass. The Fischer–Tropsch process involves a series of chemical reactions that produce a variety of hydrocarbons, in particular alkalynes. The carbon cycle, i.e. carbon exchange among the biosphere, atmosphere and other spheres of the Earth, also need to be considered. The volume and rate of carbon exchange is not well defined and it is a matter of continuous debate (Walther & Otto, 2015).

Empirical Literature Review

Babalola, A., & Salau (2020) investigated the impact of petroleum pump price (PPP) on consumer price index (CPI) in Nigeria between 2000 and 2019, in order to have empirical support for or against total removal of subsidy on PPP. Three pump prices: prices of petrol, diesel and kerosene, were used to represent PPP. The economy was sub-divided into four:

manufacturing; transportation; food; and domestic activities. Monthly Data were collected from both the NBS and CBN bulletins of different series. CPI was made the dependent variable and PPP, the independent variable. After the usual stationarity test, CPI was stationary at level while others were stationary at first difference. This informed the study to employ panel pooled mean/ARDL co integration technique, which separated the impact into short and long run periods. Findings in the short run revealed that, the price of petrol had significant direct impact on consumer price in the short run. While these prices had no significant impact in the long run period, the price of kerosene indicated a significant inverse impact on consumer price in the short run but positive in the long-run. Results of cross-section short run coefficient revealed that prices of petrol and diesel had significant positive effect on manufacturing sector of the economy. The study, therefore suggests that, the government should remove subsidy totally on petrol and kerosene prices and reinvest the surplus into the economy, mostly in revamping the refineries. Also, Prices of alternative products to kerosene should remain stable to further reduce domestic use of kerosene in the economy.

Jelilov et al (2020) studied the impact of oil price fluctuation on the monetary instrument (Exchange rate, Inflation, Interest rate) in Nigeria. they explored the frequently used Toda–Yamamoto model (TY) model, by adopting the TY Modified Wald (MWALD) test approach to causality, Forecast Error Variance Decomposition (FEVD) and Impulse Response Functions (IRFs).The study covered the period 1995 to 2018 (monthly basis), and our findings from MWALD test indicated that there is a uni-directional causality of the log of oil price (lnoilpr) to log of the exchange rate (lnexchr) at 10% level of significance, also there is a contemporaneous response of log of consumer price index (lncpi) to log of exchange rate (lnexchr) and log of interest rate (lnintr), and jointly (lnoilpr, lncpi and lnintr) granger cause lncpi. Their empirical analyses shows that oil price is a strong determining factor of exchange rate, cost of borrowing and directly influences inflationary or deflationary tendencies in Nigeria.

Agbaeze and Abner (2018) studied Oil Subsidy Management and Performance of the Nigerian Economy covering 2006 to 2018. The study adopted the ex-post facto research design. Secondary data was sourced from Petroleum Products Pricing Regulatory Agency (PPPRA). Regression statistic was used to test the hypothesis formulated. The result reported that payment of subsidy had positive and significant impact on gross domestic product of Nigeria for the period covered. To them, this may not be unconnected with the use of such funds in productive sectors of the Nigerian economy. However, since government is insisting on the removal, the removal of subsidies should not be done in phases as it has never worked in any country and there is a strong likelihood that it may not work in Nigeria as well.

Nwaoha et al. (2018) examined the movement of petroleum pump price and standard of living in Nigeria using secondary data from 1981 to 2016. Employing Ordinary Least Squares technique for the analysis, they found out that, the prices of petrol, kerosene and diesel have statistically significant impact on the standard of living, which was proxied with producer price index and inflation rate.

Methodology

Research Design

For this study, Ex Post Facto Research Design fits perfectly. This is because the study attempts to explore cause and affect relationships where cause already exist and cannot be manipulated, but rather to use what already exist and look backwards to explain why. In the study, the economies of Nigeria will be examined with reference to effect of pump price of Petroleum instability on the Nigerian consumer price index.

Method of Data Analysis

The data used for this study depended mainly on secondary sources, using annual time series data from 1980 to 2020. The data were obtained from Central Bank of Nigeria Statistical Bulletin for the period and world bank commodity price index data pink sheet) monthly update, for the period: 1980 to 2020 and Nigerian National Petroleum Corporation (NNPC) Annual Statistical Bulletin of many year.

Model Specification

Model is an abstraction form of reality drawn in such a way to reveal the relevant aspect of the subject under consideration. Therefore, to empirically study this work (i.e. the impact of fall in oil price shock on the Nigerian external reserves), the researcher postulates the following models. Based on the theoretical framework adopted, the econometric model for this study is established as:

$$CPI = F[\Delta PPPt] \quad \ldots 1$$

Where: CPI is the consumer price index, ΔPPP is the constant, denote the slope, is petroleum pump price represent exogenous determinants. The model shows a functional relationship between consumer price index (inflation) and petroleum pump prices through cost-push effect analysis.

Following the theoretical model in equation 1, the petroleum pump price was classified into three: premium motor spirit, gasoline, and kerosene identify as determinants of consumer price index in this study. The functional specification of the model given as:

$$CPI = F(\Delta PPPt\ TOEIt\ FERt\ MS) \quad \ldots 2$$

Where; CPI is consumer price index, ΔPPP mean change in petroleum pump price, TOEI is the total oil exported and import, foreign exchange rate (FER) and MS is the money supply.
Equation2 demonstrates the functional relationship between the consumer price index and other determining variables used. We then considered the estimation of the VEC model. Where β's are the parameters estimated, ΔPPPt TOEIt and MS are regressors coefficients, μ is the error term and t range from one to infinity 1.

$$CPIt = \alpha + \beta 1\Delta PPPt + \beta 2\ TOEIt + \beta 3FERt + \beta 4MS + \mu$$

Empirical Results

Unit Root Test

The results of the Augmented Dickey Fuller (ADF) test is presented in table 4.1a below. A variable is said to be stationary if the computed ADF is greater than the critical ADF at chosen level of significance.

Unit root test for variables in levels

Table 2: *ADF Unit Root Test of Stationary of Time Series Data*

ADF tests at Level				ADF tests at 1st Difference			
Series	**ADF Statistic**	**5% Critical Level**	**p-Values**	**ADF Statistic**	**5% Critical Level**	**p-Values**	**Order of Integration**
CPI	-2.502604	-3.526609	0.3253	-6.643276	-3.529758	0.0000	I(1)
LMS	2.930383	-3.540328	1.0000	-6.485142	-3.536601	0.0000	I(1)
LPPP	-6.269733	-3.526609	0.5478	-2.066974	-3.529758	0.0000	I(1)
LTOE	-2.471219	-3.526609	0.3399	-6.630762	-3.548490	0.0000	I(1)
LFER	-0.837601	-3.529758	0.9530	-4.010338	-4.211868	0.0165	I(1)

NB: I(0) stands for stationary at level while I(1) stands for stationary at first difference.
Source: Researcher's Estimate from Eviews 9.0 (2021)

The Augmented Dickey Fuller (ADF) unit root test presented in table 4.1 indicates that consumer price index; change in petroleum pump price, the total oil exported and import, money supply and foreign exchange rate (FER) respectively were stationary at first difference. The unit root test result of this study further revealed that there exists a no mixed order of integration among the variables employed in the study; such that consumer price index; change in petroleum pump price, the total oil exported and import, money supply and foreign exchange rate (FER) respectively, were integrated at order one.

Table 3: Co-integration Test

Series: CPI MS PPP TOE FER
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.787557	111.1100	69.81889	0.0000
At most 1 *	0.423125	50.69576	47.85613	0.0264
At most 2	0.349737	29.24069	29.79707	0.0579
At most 3	0.221010	12.45595	15.49471	0.1363
At most 4	0.067258	2.715443	3.841466	0.0994

Source: Researcher's Estimate from Eview 9.0 (2021).

The trace statistic and critical value were used to determine whether co-integrated variables exist. As we observed from the trace statistics, in absolute values, the results show that there exists co-integrationship among the variables. For more detailed, here only two variables were indicated in the cointegrating eqn(s) at the 0.05 level. These two variables cointegrating value are CPI and MS. Since their trace statistic were greater than the 5% critical value (i.e. CPI [111.1100 > 69.81889] and MS [50.69576 > 47.85613] respectively, we reject the null hypothesis of no co-integration among the variables. The test result shows the existence of long-run equilibrium relationship among the variables; we therefore, applied Vector Error Correct Model for the estimation.

Table 4: Vector Error Correction Estimates

Vector Error Correction Estimates
Date: 09/11/21 Time: 17:23
Sample (adjusted): 1983 2020
Included observations: 38 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
CPI(-1)	1.000000
MS(-1)	-0.006795 (0.00073) [-9.30957]
PPP(-1)	0.381475 (0.14888) [2.56230]
TOE(-1)	-2.98E-08 (1.5E-08) [-1.92753]
FER(-1)	-0.054817 (0.06033) [-0.90868]
C	-10.13569

Error Correction:	D(CPI)	D(MS)	D(PPP)	D(TOE)	D(FER)
CointEq1	-0.068597 (0.16262) [-0.42183]	-62.14480 (15.7576) [-3.94380]	0.418947 (0.19785) [2.11747]	1759094. (1163518) [1.51188]	-0.464835 (0.19010) [-2.44523]
D(CPI(-1))	-0.016838 (0.25704) [-0.06551]	37.23252 (24.9078) [1.49481]	-0.569207 (0.31274) [-1.82004]	-2264249. (1839159) [-1.23113]	0.651821 (0.30049) [2.16922]

D(CPI(-2))	-0.094094	42.37486	0.491421	428117.0	0.506345
	(0.23250)	(22.5298)	(0.28288)	(1663568)	(0.27180)
	[-0.40470]	[1.88084]	[-1.73718]	[0.25735]	[1.86295]
MS(-1)	0.000985	0.713314	-0.004764	13058.15	0.001649
	(0.00207)	(0.20799)	(0.00258)	(16362.1)	(0.00268)
	[0.47595]	[3.42961]	[-1.84680]	[0.79807]	[0.61529]
MS(-2)	-0.001663	-0.609871	0.004605	-22058.41	0.001054
	(0.00230)	(0.23106)	(0.00287)	(18177.0)	(0.00298)
	[-0.72313]	[-2.63950]	[1.60693]	[-1.21354]	[0.35411]
PPP(-1)	-0.178840	-9.139568	0.754437	-820412.0	-0.412643
	(0.15030)	(15.0989)	(0.18728)	(1187817)	(0.19458)
	[-1.18986]	[-0.60531]	[4.02831]	[-0.69069]	[-2.12071]
PPP(-2)	0.180210	-46.60148	-0.156074	296408.2	0.018928
	(0.16050)	(16.1232)	(0.19999)	(1268393)	(0.20778)
	[1.12281]	[-2.89035]	[-0.78041]	[0.23369]	[0.09110]
TOE(-1)	1.96E-08	-2.75E-06	5.92E-09	0.874641	-1.35E-08
	(2.2E-08)	(2.2E-06)	(2.8E-08)	(0.17562)	(2.9E-08)
	[0.88223]	[-1.23035]	[0.21370]	[4.98039]	[-0.46791]
TOE(-2)	-7.35E-09	4.20E-06	-1.30E-08	-0.076259	5.16E-08
	(2.2E-08)	(2.2E-06)	(2.7E-08)	(0.17314)	(2.8E-08)
	[-0.33539]	[1.90884]	[-0.47712]	[-0.44044]	[1.82090]
FER(-1)	0.054485	2.463494	0.058043	646888.1	0.918330
	(0.14445)	(14.5109)	(0.17999)	(1141556)	(0.18700)
	[0.37719]	[0.16977]	[0.32248]	[0.56667]	[4.91086]
FER(-2)	0.049587	4.983432	0.116244	18966.41	-0.054055
	(0.15402)	(15.4727)	(0.19192)	(1217223)	(0.19939)
	[0.32194]	[0.32208]	[0.60569]	[0.01558]	[-0.27109]
C	-3.415823	2122.569	-13.43533	-58006647	19.06677
	(6.06756)	(587.952)	(7.38235)	(4.3E+07)	(7.09301)
	[0.56296]	[3.61011]	[-1.81993]	[-1.33614]	[2.68811]
R-squared	0.843962	0.993722	0.856574	0.790472	0.978890
Adj. R-squared	0.795537	0.991774	0.812062	0.725446	0.972339
Sum sq. resides	3093.247	31215488	4802.633	1.93E+17	5184.007

S.E. equation	10.32781	1037.495	12.86888	81618758	13.37007
F-statistic	17.42808	510.0643	19.24382	12.15623	149.4179
Log likelihood	-140.6202	-320.3994	-149.1991	-760.0466	-150.6892
Akaike AIC	7.724112	16.94356	8.164055	39.48957	8.240470
Schwarz SC	8.150667	17.37012	8.590610	39.91613	8.667024
Mean dependent	66.48518	7915.261	39.56436	6.52E+08	78.57011
S.D. dependent	22.84025	11439.19	29.68475	1.56E+08	80.38917

Determinant reside covariance (dof adj.)	1.54E+28
Determinant reside covariance	3.51E+27
Log likelihood	-1513.466
Akaike information criterion	80.17776
Schwarz criterion	82.31053

Source: *Researcher's Estimate from Eview 9.0 (2021).*

The above table 4.3 presented the estimation on the effect of pump price of Petroleum instability on the consumer price index in Nigeria. Econometrically, it regression of petroleum pump price (PPP), the total oil exported and import (TOE), money supply (MS) and foreign exchange rate (FER) on the dependent variable consumer price index (CPI). The table is divided into two; the upper side of the table represents the short run estimate equation without error correction value while the lower parts of the table represent the long run estimate equation with error correction estimation value.

Discussion of Findings

This study examined the effect of pump price of Petroleum instability on the Nigerian consumer price index 1980 to 2020 period. Based on the results of the previous chapter, the researcher identified the following findings in line with the objectives.

1 The unit root test results tested showed that the variables were not stationary at level form. Whereas these variables respectively became stationary at first difference at 5%, level of significance, which means integrated of order (1) with application of Augmented Dickey-Fuller test (ADF).
2 Null hypothesis of no co-integration among the variables is rejected since there indicated cointegrating eqn(s) at the 0.05 level. The test result shows the existence of long-run equilibrium relationship among the variables.
3 We have observed that impulse response functions we employed produce the time path of the dependent variables in the VEM, shocks from all the explanatory variables, proved that the system of equations is stable, while the shocks from all the explanatory variables declined to zero. We then conclude that the short-run values of the variables in question converge to the long-run equilibrium values.
4 VEC Residual LM test reported no presence of autocorrelation/ serial correlation in all the models used. In the same view, VEC Residual Heteroscedeasticity shows that there is no presence of homocedasticity in all the models used.
5 It was indicated both bidirectional and direct nature of causality relationship between the variables in the model.

Summary of Findings

The results rejected the null hypotheses of this study and accepted the alternative hypotheses of the study. This implies as follows; (1) Petroleum instability does significantly effect on the Nigerian consumer price index 1980 to 2020". (2) Pump price of Petroleum instability does significantly effect shock to the Nigerian consumer price index 1980 to 2020.

Conclusion and the Recommendations

The study investigated the effect of pump price of Petroleum instability on the Nigerian consumer price index 1980 to 2020 period. Generally, we observed that the explanatory variables namely; [PPP, MS, TOE, and FER] within the period under review.

Consequently, based on the results obtained and interpreted in section four, the null hypotheses, which states that; "pump price of Petroleum instability does significantly effect on the Nigerian consumer price index 1980 to 2020". (2) Pump price of Petroleum instability does significantly effect shock to the Nigerian consumer price index 1980 to 2020.

The study recommended the following;

1 Nigeria should have functional local refineries in the country. Because this will end the Petroleum availability and as well control prices instable to some extent in Nigeria.
2 Nigeria should have the ability to appropriately used the revenue-generated yester-years to develop the infrastructures, which will lead to decreasing the level of inflation.

The Nigerian government should create an enabling environment by ensuring security for the growth of our economy.

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