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THE EFFECT OF OIL RECEIPTS AND FUEL SUBSIDY PAYMENT ON THE CURRENT ACCOUNT DEFICIT IN NIGERIA AND VENEZUELA

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Abstract

The study assessed the effect of oil receipts and fuel subsidy payment on current account deficit in Nigeria and Venezuela. Data collected were analysed using trend analyses, unit root, cointegration techniques and Autoregressive Distributed Lag (ARDL). The result showed that estimated oil revenue had a negative and significant impact on current account deficit in the short- run in Nigeria $(t_c = -3.42;\ P < 0.05)$ *and Venezuela* $(t_c = -2.97;\ P < 0.05)$. *The estimated oil revenue had a negative and significant impact on current account deficit in the long-run in Nigeria* $(t_c = -3.96;\ P < 0.05)$ *and Venezuela* $(t_c = -3.83;\ P < 0.05)$. *Fuel subsidies also had positive and significant long-run impact on current account gap in Nigeria* $(t_c = 3.40;\ p < 0.05)$ *and Venezuela* $(t_c = 3.58;\ p < 0.05)$. *The study concluded that despite the positive contributions of oil receipts to the current account in the two countries, continues fuel subsidy payment would impose significant fiscal costs and undermine current account position in Venezuela much more than Nigeria.*

Keywords: *oil receipts; fuel subsidy payment; ARDL; current account deficit; Nigeria and Venezuela.*

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Introduction

A prominent feature of oil sector in many oil-producing countries is the existence of fuel subsidies, which is designed to enhance accessibility and affordability to fuel commodities. Government expenditure on fuel subsidies – estimated as the gap between international and domestic prices of fuel is, on average, much higher in member countries of the Organisation Petroleum Exporting Countries (OPEC) than in other countries. Fuel subsidy is responsible for the high demand for petroleum products, it results in higher imports bills and rising deficits in most fuel subsidised economies (Lin & Liu 2011). These subsidies pose strategic challenges that lead to the perpetuation of corrupt regimes and worsening of external balance by encouraging consumptions at rates above those warranted by the opportunity cost of fuels in the global market. Low prices also distort energy allocation preferences while undercutting upstream investment and efficiency incentives which have effect on a country's competitiveness, fiscal and current account balances (Coady,*et al* .2016).

Several studies have attempted to examine fuel subsidy effects in an economy (Clement et al 2013; Parry *et al* 2014; Balke *et al.* 2015; Araar, *et al.* 2015; Vera, 2015). Most of these studies mostly focused on quantifying the value of fuel subsidies (Davis, 2014; Coady *et al* 2016; Commander, *et al* 2015; Coady & Shang, 2015) and examined distributional impacts (Clement *et al* 2003; Verme, *et al.* 2014; Adagunodo & Oladeji 2020). These studies largely ignored the impact of fuel subsidy payment on current account balance. Despite the fact that there are several studies examining the impact of oil price on economic performances (Alhassan & Kilishi, 2016; Iwayemi, & Fowowe, 2010, 2011), a limited amount of literature has linked its impact on current account balance (Chukwu *et. al.* 2011; Araujo *et.al* .2013; Hassan & Zamak 2014; Allegret *et. al.* 2014; Ikudaisi & Olomola 2019). Such studies do not, however, address the impact of domestic energy pricing policy on current account in Nigeria and Venezuela

Nigeria and Venezuela is interesting case study for comparative analysis to examine the impact of oil receipts and fuel subsidy payments on current account balance as they are currently facing fiscal and current account imbalances compounded by sharp and sustained decline in oil receipt and excessive government expenditure on fuel subsidy. These countries are not only rich in oil

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reserves and production but also have the largest subsidy regimes targeting fuel consumption.

Literature Review

Several studies attested to the importance of fuel subsidies on macroeconomic performance. Balke, Plante, & Yücel (2015) applied Dynamic Stochastic General Equilibrium Model (DSGE) to examine the impact of fuel subsidy reform on oil market. Variables such as oil price, fuel subsidy, oil production, oil consumption, investment, household income and exchange rate were considered. The result showed that reform on fuel subsidy improved oil market in oil-exporting countries. However, the study suffers some drawbacks. Firstly, their model is static neglecting the dynamic aspects that influence oil market. Secondly, it is not detailed enough to provide necessary information on the relationship involving oil receipt, fuel subsidies and current account balance.

Fasanya, Adetokunbo & Ajayi (2018) employed Linear and Nonlinear ARDL on Nigeria quarterly data from 1987 to 2015 to examine relationship between oil revenue and current account balance. The study revealed that oil revenue has a significant positive effect on current account balance. Burniaux, Chateau & Sauvage (2011) conducted a study to find out the relationship between fuel subsidy reform and trade performance in developing and industralised countries using a Computable General Equilibrium model (CGE). Variables such as GDP, government revenue, fuel subsidy payment, investment and household income were considered. Their finding indicated that fuel subsidy had little effect on trade deficit.

Adenikinju & Omenka (2013) used Computable General Equilibrium model to analyse macroeconomic effect of removal of petroleum product subsidy in Nigeria. The finding showed that fuel subsidy brought reduction in GDP, government revenue, investment, trade balance and household income by 4.3 percent, 27.2 percent, 2.7 percent, 9.6 percent and 5 percent respectively when there was increase in international price by 60%. Their study concluded that any negative consequences observed on the macro-economy could be addressed with a gradual reduction of fuel subsidy. Besel (2017) employed unit root test, cointegration and causality text to examine relationship between oil price and current account deficit in Turkey. Variables such as import, export, current account, oil revenue, oil export, interest rate, exchange rate, oil price, money supply and current account were considered. His finding indicated that there was long –run relationship between oil price and current account in the observed period.

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Allegret, Couharde, Coulibaly & Mignon (2014) employed panel smooth transition regression (PSTR) model to examine the impact of oil price on current account in oil exporting countries. Variables such as current account, measured as percentage of gross domestic product, money supply ratio to gross domestic product, private sector credit ratio to gross domestic product, market capitalization ratio to gross domestic product, financial saving ratio to gross domestic product, interest rate, exchange rate, oil price and money supply were considered. Their findings indicated that oil price influences current account in oil exporting countries but the influence was non linear depending on financial deepening. Hassan & Zaman (2013) applied ARDL model to examine the causal relationship between oil price, exchange rate and trade balance in Pakistan. Variables such as oil revenue, oil export, exchange rate, oil price, money supply and trade balance were considered. The study concluded that oil price and exchange rate influenced trade.

Theoretical Framework, Model and Estimation Techniques

The issue of fuel subsidy is a fiscal action; an interventionist stance with profound consequences on the responses of the private sector in the domestic economy, the foreign investors as well as imports and current account balance position of the country. The interventionist stance of the government necessarily warrants approaching the subject matter of this study from the angle of the Keynesian paradigm - a school of thought that accords a significant interventionists role of government. The reference, in this case, is government spending to shove up the policy of fuel subsidy and importation. The Keynesian absorption approach provides a robust background and the entry point to capture the relationship between current account balance and fuel subsidy as a fiscal tool. Using national income accounting equation: we have

$$Y = C + I + G + X - M \quad (1)$$

Where Y: National Income I: Private sector investment expenditure (I) C: Private sector consumption expenditure (C) G: Public sector expenditure, consisting of consumption (G) and investment expenditure by government (G_I) X_n = Net Export $(X - M)$. X: Export of goods and factor services M: Import of goods and factor services. By definition $(X - M)$ corresponds to current account

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balance (CAB) when current account is consisting solely of import and export. This equation (1) can be expressed as

$$Y = C_p + I_p + G + X - M \quad (2)$$

Y= Y_F + Y_g

Where Y: National Income I: Private sector investment expenditure (I_p) C: Private sector consumption expenditure (C_p) G: Public sector expenditure, consisting of consumption (G_c) and investment expenditure by government (G_I)

Y_F = Income accruing to private sector

Y_g= Revenue earned by public sector (R)

If we decompose revenue earned by public sector (R) to oil receipts (Y_o) and non-oil revenue(Y_t), we have national income as summation of private income (Y_p), oil receipts (Y_o) and non-oil receipts (Y_t)

$$Y = Y_p + Y_o + Y_t \quad (3)$$

Public sector consumption expenditure can be separated into expenditure on fuel subsidy (G_{cF}) and expenditure on non-fuel subsidy(G_{cN}). Thus, public sector expenditure is adding up of public sector investment expenditure (G_I), public sector consumption expenditure on fuel subsidy (G_{cF}) and other consumption expenditure by the government(G_{cN}). Thus, the public sector expenditure is as follows:

$$G = G_I + G_{cF} + G_{cN} \quad (4)$$

Substitute equation (3) and (4) in equation (1), we have

$$Y_o + Y_t - G_I - G_{cF} - G_{cN} = -(Y_p - C_p - I_p) + X - M \quad (5)$$

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Expression (5) can rewrite as:

$$Y_o + Y_t - G_l - G_{cF} - G_{cN} + (Y_p - C_p - I_p) = X - M$$

$$X - M = (Y_p - C_p - I_p) - [(G_l + G_{cF} + G_{cN}) - (Y_o + Y_t)] \quad (6)$$

Current account (CAB) $= f(Y_o, Y_t, Y_p, C_p, I_p, G_l, G_{cF}, G_{cN})$

$\frac{\partial CAB}{\partial Y_o} > 0$ This mathematical relationship shows positive relationship between oil receipts and current account balance.

$\frac{\partial CAB}{\partial G_{cF}} < 0$ There is negative relationship between fuel subsidy payment and current account balance.

Equations (5) and (6) are enlightening and useful policy implications can be drawn. There is a clear link between government spending on fuel subsidy which has a large import component which reduces government savings and impact current account balance. The relationship between fuel subsidies and current account balance can further be explained using the information below:

i) Keynesian economists argued that fuel subsidy is an expansionary fiscal tool which increases public consumption as an element of effective domestic demand. The increase in public consumption will have multiplier effect on domestic income which results to increase in importation and current account deficit

ii) The linkage between fuel subsidy and the current account deficit is an automatic result of national income identity

$$(S_g - I) = (T - G) + (X - M) \quad (7)$$

A decrease in public savings (Resulting from a tax cut or an increase in the level of subsidy) implies a decline in national savings. The decrease of the national savings results to disequilibrium between savings and investment $(S \neq I)$ which result to current account imbalances. This implies that:

$$\text{If } S < I \Rightarrow (G > T) \Rightarrow (X < M) \quad (8)$$

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The fuel subsidy regime contributes to a widening current account deficit by artificially suppressing the domestic retail price of fuel, while also contributing to public sector dissaving as shown in equation (6) and hence to overall domestic saving deficit and current account deficit as in equation (7) and expression (8)

Thus, equation (9) form the basis of our ARDL model, and the effect of oil revenue and fuel subsidy payment on current account balances can be expressed as:

$$\Delta CAB_t = \alpha_0 + \sum_{t=1}^{n} \alpha_1 \Delta CAB_{t-t} + \sum_{t=1}^{n} \alpha_2 \Delta DBT_{t-t} + \sum_{t=1}^{n} \alpha_3 \Delta FDI_{t-t} + \sum_{t=1}^{n} \alpha_4 \Delta INT_{t-t} + \sum_{t=1}^{n} \alpha_5 \Delta EXCR_{t-t} + \sum_{t=1}^{n} \alpha_6 \Delta ORV_{t-t} + \sum_{t=1}^{n} \alpha_7 \Delta FSP_{t-t} + \sum_{t=1}^{n} \alpha_8 \Delta DEP_{t-t} + \sum_{t=1}^{n} \alpha_9 \Delta INFR_{t-t} + \beta_1 CAB_{t-1} + \beta_2 DBT_{t-1} + \beta_3 FD\ I_{t-1} + \beta_4 INT_{t-1} + \beta_5 EXCR_{t-1} + \beta_6 ORV_{t-1} + \beta_7 FSP_{t-1} + \beta_8 DEP_{t-1} + \beta_9 I \varepsilon_t \quad (9)$$

The ARDL model testing procedure starts with conducting the bound test, which states the null hypothesis of zero cointegration, that is:

$$\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = 0$$
$$\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7 \neq \beta_8 \neq \beta_9 \neq 0$$

The statistic underlying the procedure is the F-statistic which is used to test the significance of lagged levels of the variables, in order to establish the existence of cointegration. The summary of the measurements of variables and sources of data can be found in Table 1.

Empirical Results and Discussion

The controversy surrounding intervening stance of government in the energy market through fuel subsidy has received serious attention in the recent times. These payments on subsidizing fuel not only affect fiscal deficit but also have implication on current account deficit. From the aforementioned, this subdivision is scrutinized through econometric findings.

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Table 1. The Measurements of Variables and Sources of Data

Variables	**Measurements**	**Sources**
Oil Receipts (ORV)	Oil revenue as a percentage of GDP	World Development Indicator(WDI)
Fuel Subsidy Payment (FSP)	Fuel Subsidy Payment as a percentage of GDP	Own estimate from IEA, US EIA,CIA World Fact Book, GIZ and IADB
Debt (DBT)	Public debt as percentage of GDP	WDI
Current Account (CAB)	Current account as a percentage of GDP	WDI
Exchange Rate (EXCH)	Exchange rate between the home country and $US	WDI
Foreign Direct Investment(FDI)	Foreign Direct Investment (Net inflow as %GDP)	WDI
Interest Rate (INT)	Interest rate (Lending Rate)	WDI
Inflation Rate (INFR)	Inflation Rate	WDI
Dependency Ratio	Population (65+)/Population (30-64)	UN population

Note: IAE: International Energy Agency, IADB: Inter-American Development Bank, US EIA: United State Energy Information, GIZ: German Agency for International Cooperation

Source: Author's compilation

Unit Root Tests

Tables 2a and 2b show that the null hypothesis cannot be rejected for the level series of some variables in the two countries. However, the null hypothesis can be rejected for the first difference of all the series at a 5 per cent level of significance for the two countries. It was observed that while variables like fuel subsidy payments, oil receipts, and current account balance were not stationary at level in Nigeria using ADF approach, these variables were stationary at level in Venezuela. It was also observed that null hypothesis of unit root could not be rejected at level for fiscal balance in the two countries using ADF approach. The Phillip Peron (PP) result shows that the null hypothesis at level can be rejected for oil receipts and fuel subsidy payment in Nigeria and Venezuela. It implies these series are stationary at level in the two countries using Phillip Peron (PP) approach The

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stationarity property of variables under consideration in Nigeria and Venezuela are mixture of I(1) and I(0), hence the ARDL technique is appropriate for estimation for the two countries.

Table 2a. ADF and PP Unit Root for Nigeria

	ADF				PP			
	Levels	First Difference	Critical Value	Remark	Levels	First Difference	Critical value	Remark
CAB	-1.204	-3.992**	2.877	I(1)	-1.212	-6.299**	2.957	I(1)
DEP	-2.475	-7.047**	2.877	I(1)	-1.177	-2.803**	2.957	I(1)
FDI	-1.968	-3.675**	2.877	I(1)	-3.612**		2.957	I(0)
EXR	-1.694	-4.354**	2.877	I(1)	-2.74	-6.820**	2.957	I(1)
FSP	-3.746**		2.877	I(0)	-3.541**		2.957	I(0)
INFL	-2.181	-4.428**	2.877	I(1)	-1.924	-5.815**	2.957	I(1)
INTR	-2.967**		2.877	I(0)	-1.369	-6.804**	2.957	I(1)
OILR	-1.520	-3.544**	2.877	I(1)	-4.008**		2.957	I(0)
DBT	-3.689**		2.977	I(0)	-1.031	-4.029**	2.957	I(1)

Sources: Authors Compilation (2021) , Note: ** Significant at 5%

Table 3a and b presents the result of ARDL co-integration test. The Table 3a shows that Pesaran F-statistic of 6.602666 for testing the joint hypothesis that no long run relationship exist between the variables under discussion is observed to be much more than the 5 per cent upper bound of the critical value (3.79) of Pesaran table. That is 6.602666 > 3.79. Hence, there is enough evidence to reject the claim that no co-integration exist, so we can say there is co-integration among the variables such as current account balance (CAB), oil receipt (OIR), exchange rate (EXCR), interest rate (INT), inflation rate (INF), fuel subsidy payment (FSP), debt (DBT) and dependency(DEP) for the period under study in Nigeria. Also, Table 3b also revealed long-run cointegration relationship among these variables in Venezuela.

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Table 2b. Unit Root test for Venezuela

	ADF (3)				PP (3)			
	Levels	First Difference	Critical value (5%)	Remark	Levels	First Difference	Critical Value (5%)	Remark
CAB	-3.800**		2.877	I(0)	-1.208	-3.735**	2.957	I(1)
DEP	-1.042	-4.553**	2.877	I(1)	-1.249	-4.579**	2.957	I(1)
FDI	-2.597	-6.410**	2.877	I(1)	-1.527	-6.751**	2.957	I(1)
FSP	-3.047**		2.877	I(0)	-3.054**		2.957	I(0)
DEBT	-1.624	-6.048**	2.877	I(1)	-1.655	-9.888**	2.957	I(1)
INTR	-1.012	-6.123**	2.877	I(1)	-1.012	-6.125**	2.957	I(1)
OILR	-4.376**		2.877	I(0)	-4.391**		2.957	I(0)
EXCR	1.049	3.101**	2.877	I(1)	1.436	-5.311**	2.957	I(1)

Sources: Author Compilation (2021) , ** Significant at 5%

Table 3a. ARDL Co-integration Test (Nigeria)

Pesaran F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
Pesaran F-statistic	6.602666	10%	2.26	3.35
		5%	2.62	3.79
		2.5%	2.96	4.18
		1%	3.41	4.68

Source: Author (2021)

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Table 3b ARDL Co-integration Test (Venezuela)

Pesaran F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
Pesaran F-statistic	4.90731	10%	2.07	3.35
		5%	2.42	3.79
		2.5%	2.96	4.18
		1%	3.41	4.68

Source: Author (2021)

Table 4 presents the long-run coefficients for the estimated equation using ARDL approach. The estimated oil revenue has a negative and significant impact on current account deficit in the long-run $(t_c = -3.96;\ P < 0.05)$ in Nigeria.

The result reveals that a unit increase in oil revenue reduces current account gap by 0.8966 units in the long run. Also, the estimated coefficient of oil revenue has a negative and significant impact on current account deficit in the long-run $(t_c = -3.83;\ P < 0.05)$ in Venezuela. The Venezuelan result indicates that a unit increase in oil receipts reduces current account deficits by 0.4180 in long run. This result validates the theoretical position that there is an inverse relationship between oil receipts and current account deficits.

This result also corroborates the findings of Fasanya *et al.* (2018), Eberechukwu & Maxwell (2012) which revealed that oil receipt has positive and significant impact on the current account balance in Nigeria. The Venezuelan result is consistent with the findings of Reza (1989) which revealed that oil revenue is the major determinant of macroeconomic variables including external balance in

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Venezuela. This result is consistent with theoretical proposition that an oil exporting economy is expected to experience a positive current account balance during positive oil cycles as pointed out by Arezki & Hasanov (2013). This finding also agrees with that of Chukwu, *et al.* (2011), Hassan & Zaman (2013) that revealed that oil contribute positively to current account balance. This result explains the fact that oil has dominated the structure of export revenues in Nigeria and Venezuela for decades. The external sector dependence on oil in Nigeria and Venezuela is demonstrated in the share of oil exports in total exports which has remained high since oil boom of early 1970s.

Table 4 Long –run result

	MODEL A (Nigeria)			MODEL B(Venezuela)		
Dep Variable	**Current Account deficit**					
Variables	Coefficient	t. statistics	Prob	Coefficient	t. statistics	Prob
OILR	-0.8966	-3.9621	0.0011	-0.4180	-3.834	0.0009
FSP	0.7556	3.4015	0.0019	0.3011	2.0931	0.0192
EXCR	-0.1740	-1.5211	0.1081	-0.3104	1.6910	0.0781
INTR	0.2863	0.6878	0.4871	-0.4931	-2.724	0.0251
DBT	0.6197	2.8000	0.0126	0.3103	2.5618	0.0331
INFR	0.1494	0.8232	0.3810	-0.0918	1.6870	0.1017
FDI	-0.8133	1.1265	0.5331	-0.7312	-1.5662	0.1306
DEP	0.7210	2.5651	0.0086	0.1060	0.1149	0.6132
Constant	0.8371	2.7811	0.0401	1.9104	2.7883	0.0382

Source: Author's compilation

Fuel subsidy has positive and significant impact on current account deficit in the long run ($t_c = 3.40;\ P < 0.05$) in Nigeria. A unit increase in fuel subsidy payment increases fiscal deficit by 0.7556 in the long run in Nigeria. Correspondingly to what was obtained in Nigeria, fuel subsidy payment has positive and significant impact on current account deficit in the long run ($t_c = 3.58;\ P < 0.05$) in Venezuela. A unit increase in fuel subsidy payment

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increases current account deficit by 0.3011 in the long run in Venezuela. This finding is in line with theoretical postulation that there is positive relationship between fuel subsidy payments and current account deficit. The long-run results in Nigeria is supported Adenikinju & Omenka (2013)'s finding that fuel subsidy payments were linked with poor macroeconomic performance including current account balance. This is not surprising because higher government expenditure on fuel will likely have adverse effect on current account. This result agrees with the theoretical position that fuel subsidy drains government revenue, affect the value of the currency and create exchange rate crisis, resulting in worsening current account deficits. The implication of Nigeria's result is that the impact of fuel subsidy payment on current account in Nigeria is not a short-term phenomenon but a long-term phenomenon.

Table 5 shows that the estimated oil revenue has a negative and significant impact on current account deficit in the short- run in Nigeria ($t_c = -3.42;\ P < 0.05$) and Venezuela ($t_c = -2.97;\ P < 0.05$). This confirmed that oil receipts and fuel subsidy payments have implications on current account in Nigeria and Venezuela. This result corroborates the findings of Uneze & Ekor (2012) only in the short run. Interestingly, this result shows that while oil revenue has an impact on current account balance in the short-run, their impact is stronger in the long-run.

Unlike that of Nigeria, fuel subsidy payment has short run impacts on current account gap in Venezuela ($t_c = 2.503;\ P < 0.05$). This can be attributed to the fact that fuel subsidy is financed through seigniorage in Venezuela which creates exchange rate crisis, resulting in the worsening of the current account deficits. This finding is as a result of escalating demand for imported refined petroleum products as against more directly productive investment that would have helped to sustain a steadier and longer-term economic growth. This pattern of expenditure on imported refined petroleum products in Venezuela drains foreign reserve from massive inflow of oil export earnings which has negative impact on current account balance. The increasing concentration of population in cities has resulted in an increased demand for petroleum products consumption as petroleum products is a required input into various activities such as manufacturing, transportation, construction and other service sector activities. One of the major concerns regarding the use of energy in Nigeria and Venezuela is dependent on conventional

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forms of energies such as petroleum products and while there has been abysmal success in tapping renewable energy, it is expected that the vast majority of increased energy demand is going to be met with subsidized fossil fuels. This has significant implications not only for the emission of carbon dioxide and consequential environmental degradation, but also implications for generating a huge petroleum products import bill and producing imbalances in current account positions. The estimated error correction term (ECT) is well signed and statistically significant, which implies that deviation from the long –run is restored by 59 and 41 percent in Model A and Model B respectively.

Table 5 Short-run Result

Dep Variable	Nigeria			Venezuela		
	Current Account					
D(CAB(-1)	-0.3577	-3.7801	0.0015	-0.0077	-0.5767	0.5717
D(OILR)	-0.5201	-3.4207	0.0372	-0.4096	-2.9710	0.0240
D(OILR(-1)	-0.0860	-6.4084	0.0000	-0.2012	-3.2436	0.0048
D(FSP)	0.1891	1.1457	0.1721	0.2827	2.1659	0.0529
D(FSP(-1))	0.0057	1.4626	0.1618	0.0643	0.5482	0.5991
D(DBT)	0.1042	2.5894	0.0472	0.0903	3.7361	0.0018
D(DBT(-1)	0.0645	1.5931	0.1703	-0.0718	-2.9712	0.0076
D(EXCR)	0.0183	0.0226	0.3104	0.0392	3.0714	0.0016
D(FDI)	0.2911	2.8815	0.0429	0.0216	0.1103	0.2719
D(INTR)	0.2018	2.5721	0.0370	-0.1091	0.0155	0.1820
D(INFR)	0.0522	1.5290	0.2813	-0.0322	-1.9101	0.0621
D(DEP)	0.2781	0.3421	0.3171	-0.3744	2.1011	0.0472
ECT_{t-1}	-0.5931	0.1055	0.5017	-0.4101	2.1544	0.0381
R. squared	0.874			0.7901		
F. Stat (Prob)	4.190(0.0000)			3.891(0.000)		

Source: Author's compilation

Diagnostic tests were conducted in order to ensure reliability and validity of the empirical result. The diagnostic test was conducted for serial correlation, functional form, normality and heteroskedasticity. The statistical properties of the model as indicated by the diagnostic probability value in Table 6 show that the model is consistent, efficient and feasible for forecast and policy making.

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Table 6 Diagnostic Result

	Nigeria	Venezuela
Serial Corr(Prob)	1.6256(0.2148)	1.1650(0.6120)
Functional form(Prob)	1.4498(0.1058)	1.7109(0.2187)
Normality (Prob)	3.1274(0.2093)	2.8301(0.4821)
Heteroscedasticity (Prob)	0.9151(0.4977)	1.0385(0.1841)

Source: Author's compilation

Conclusion

The appraisal study of current account balance in Nigeria and Venezuela in the period 1980-2018 showed that current accounts in the two countries were largely more in surplus than deficit, accounted for by large oil receipts. Oil receipts had a negative and significant effect in Nigeria (t_c=-3.96, $p < 0.05$) and Venezuela (t_c=-3.83, $p < 0.05$). With regard to fuel subsidies payments, the impact on current account deficit was positive and statistically significant in the long run in Nigeria (t_c=3.40, $p < 0.05$) and Venezuela (t_c=3.58, $p < 0.05$). The study concluded that the issue of current account balance was not unconnected with oil receipts and fuel subsidies payment in Nigeria and Venezuela. However, despite the positive contributions of oil receipts to the current account in the two countries, continues fuel subsidy payment would impose significant fiscal costs and undermine current account position in Venezuela much more than Nigeria.

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