THE IMPLICATION OF NAIRA DEVALUATION TO THE NIGERIA'S ECONOMIC DEVELOPMENT

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Abstract

The fundamental intend of the study is to estimate the implication and relationship between economic development (RGDP) and currency devaluation in Nigeria. The above intent was achieved through a review of related literatures. The central augment of the study based on devaluation and whether its improve or worsen the economic climate as debated over time with varying empirical evidences in developed and developing economies. Data for analysis were extracted from the Central Bank of Nigeria Statistical Bulletin of and publications of the National Bureau of Statistics period of 2003 to 2019. Adopting ordinary least square (OLS) technique since data are not stationary, unit root test was equally employed. The study established that devaluation is not peculiarly Nigerian, however the findings revealed that it does more harm than good as far as Nigeria is concerned since the needed requirement to ensure the nation gain from devaluation are not present in the system. Exchange rate, import, export and interest rates were used as proxies for currency devaluation; while real GDP was used to measure growth. Conclusion is that

devaluation benefits exporting economies. For an economy that is structured like Nigeria's, devaluation will surely complicate the problem at hand, rather than solving it, since it's highly import dependent.

Keywords: Devaluation, exchange rate, import, export, economic imbalance, current account deficit.

Introduction

Economic growth and development globally play host to three core fundamentals of short and long run economic targets for the achievement of a stable and sustainable economic growth, employment generation and a bare minimum inflation rate with a favorable trade position. The achievement of the above economic targets and in ensuring a stable and profitable economy, nations over time adopts monetary and fiscal policies to control aggregate shift in demand curve. Empirical research reveled and established an economic world that has in the earlier period witness economic depressions in 1910 and 1930s herein refer to as the "Great Economic Depression" which negatively impacted on the global economy with a particular effect on domestic currencies thus, propelling the nations to adopt devaluation as the last resort and as a key to economic boost. In contemporary era devaluation has being embrace in line with the traditionalist argument as a key macroeconomic policy in most developing economies. Currency devaluations in relation to changes in value of currencies play host to expansionary and contractionary effects which are strictly based on the structural pattern of the economy, with the International Monetary Fund (IMF) and World Bank clinching to currency devaluation to boost domestic firms with protection against external competition and increase net export (Genye, as cited in Ayen, 2014 p.103).

Nations in conjunction with economic theories and in line with traditionalist argument consensually embrace devaluation as a fiscal policy and as a means of enhancing domestic economies in the long-run through net export to stimulate economic diversification, boost in domestic industries and increase domestic international competitiveness, improve trade balance, employment generation and balance of payment alleviation provided the Marshall-Lernar conditions are satisfied. The Marshall-Lerner condition established that devaluation enhances expansion where the sum of price elasticity of demand for export and the price elasticity of demand for imports is greater than unity (>1) (Acar as cited in Ayen 2014 p.103).

The Nigerian economy is recognized to be a mono-cultural and oil driven with oil contributing 95 percent of foreign earnings, 80 percent to GDP, an above 90 percent of total export valued at \$47.8 billion thus placing Nigeria as the 49th largest exporter and import at \$39.5 billion placing Nigeria as the 53rd largest globally (Observer of Economic Complicity, 2015).

However, Nigeria in modern era is not immune from global economic and financial crisis with Nigeria currently trapped in the web of exchange rate volatility propelling the adoption of devaluation as a feasible way out of the financial and economic quagmire (Akindiyo and Olawole 2015).

Currency devaluation embraces fiscal policy which bothers on calculated cutback in the value of domestic currency to maximize gains in trade (Aiya, 2014). Cooper as cited in Momodu and Akani (2016) currency devaluation is likewise considered a shocking policy undertaken by government, with most government being indisposed to devalue. Devaluation occur due to trade and payment deficit with Thailand, China, Mexico, Czech Republic devaluing strongly, willingly or unwillingly, owing to deficits in trade exceeding 8% of GDP (Momodu and Akani 2016).

Nigeria experiences her first currency devaluation at 10% in 1973 in response to U.S. devaluation of the same year with foreign exchange reserves growth at 773.5% in 1974. According to International Monetary Fund report 2015 (IMF) nations can devalue their currency to correct "elementary disequilibrium" in trade and balance of payments.

Aiya, (2014) currency devaluation became known during the 1986 Structural Adjustment Programme of Babangida-led Administration in Nigeria calculated to achieve a pragmatic exchange rate for the naira that was over-valued and to correct economic and trade imbalances. Decades after the SAP, Nigeria still play host to economic and trade imbalances.

Todaro (1982) augured that "the implication of devaluation is unhealthy for economic development since valued currency equally worsens trade and balance of payment. Aguiar, as cited in Momodu and Akani (2016) argued that devaluation leads to increase in export competitiveness which makes export goods less expensive and import more expensive, with less domestic consumption thus encouraging production and exportation to boost output growth. Momodu and Akani (2016) the monetarists argued the non-existence of devaluation effect on real variables in the long run with the view that exchange rate devaluation affects real balance in the short run without any effect on real variables on long run, based on the Purchasing Power Parity (PPP) assumption, which states that increase in exchange rate on the short run leads to increase in output

and balance of payments while devaluation effect in the long run neutralize increase in output and favorable balance of payment via rise in prices.

The above arguments are controversial in nature and thus propel further empirical investigations on the implication of currency devaluation on the development of the Nigerian economy.

STATEMENT OF THE PROBLEM

Nigeria in the face of vast human and natural resources is still operating a mono-culture economy with oil contributing 95 percent of foreign earnings, 80 percent to GDP, an above 90 percent of total export valued at \$47.8 billion and import at \$39.5 billion. The over dependency on import goods has endlessly increase over decades now, thus causing foreign exchange market uncertainty thus increasing demand for foreign exchange with unstable supply. The impact over time has being more negative than the positive impact projected by devaluation of naira. The financial and economic crisis due to corona virus pandemic has negatively affected foreign exchange market thus creating room for currency devaluation which few economist embrace as head way to economic recovery by the Monetary policy Committee (MPC) of the Central Bank of Nigeria in last third quarter of 2020.

The fundamental question and problem still remain is the Nigerian investment and business climate favorable to boost locally produce goods and magnetize foreign earnings in the face of devaluation? Since exchange rate has an inverse correlation with Real Gross Domestic Product, thus increase in exchange rate decrease GDP and decrease in exchange rate increases Real Gross Domestic Product. Then what is the implication of devaluation to the growth of the Nigerian economy?

CURRENCY DEVALUATION

Momosu and Akani (2016) affirmed currency devaluation to be an endogenous factor affecting economic performance globally where requires factors to aid achieved it positive benefits are not available in a nation. Yilkal, (2014) perceives devaluation as a deliberate reduction in the value of currency in a particular nation in relation to other currencies of nations partaking international trade within the framework of fixed exchange rate.

Okaro (2017) currency devaluation is habitually triggered when there is deficit in trade balance and balance of payment (BOP/BOT) with the 2020 naira devaluation in Nigeria associated to shocks springing out from the declining oil price and external economic and financial shocks.

Farhi, Gopinath and Itskhoki (2012) classify currency devaluation as a fiscal policy in relation to money supply adjustment to boost declining domestic economy.

Akindiya and Olawole (2015) observed that African nation's has a predisposition for the fact that devaluation is an instrument employed by the International Monetary Fund (IMF) and World Bank for fiscal equalization and stability of an economy that is declining financial and economically. Aiya as cited in Akindiya and Olawole (2015), currency devaluation embraces popularity in Nigeria during the Babangida led administration in 1986 giving birth to the structural adjustment programme designed to achieve a pragmatic exchange rate with Nigeria play host to her first devalued currency at 10% in 1973 in relation to the U. S. devaluation of the same year.

Todaro 1982 as cited in Akindiyo and Olawole (2015) a nation's currency is devalued when there is a strict depreciation as to the official rate at which its Central Bank is prepared to exchange the local currency increases. Campbell, 2004 as cited in Akindiyo and Olawole (2015) currency devaluation is a deliberate downward adjustment in the official exchange rate established by a government against specified standard or another currency to boost its development.

Akindiyo and Olawole (2015) recognize three key traditional approaches to currency devaluation as follows: the elasticity approach, the absorption approach and the monetary approach.

The elasticity approach embraces devaluation as an instrument upon which a country's balance of trade can be improved on the satisfaction of Marshall-Lerner condition.

The absorption approach established that, without elasticity trade balance can improve if and only if there is geometric increase in (GDP) than domestic spending.

The monetary approach to the exchange rate, devaluation or depreciation decreases the real supply of money, resulting in an excess demand for money.

Nigerian economy in relation to World Bank indices report 2003-2015 ranked the economy as one of the most unstable in the world with the key defy embracing macroeconomic instability motivated basically by external terms of trade shocks, monoculture pattern of the economy with over 95 percent of earnings from oil with Bonny light crude oil price averaging at \$94/barrel with the monthly average oil price between 2010 and end of 2014 at \$104.4/barrel.

Regardless of the positive premium gains arising from the benchmark oil price of \$79, \$77.5 and \$65 in 2013, 2014 and 2015 respectively, Nigeria external reserves declined precipitously from \$53.6 billion in 2008 to current \$30.9 billion in March 2015 (CBN, 2015). The declining trend

established in external reserves echo the current concern of the CBN to devaluate in order to defend the economy in the face of the dwindling reserves and economic and financial activities.

Determinants of devaluation (Naira) in Nigeria

Currency devaluation globally is a product of decline in domestic currency in relation to major currencies of the world with its impact on the domestic economy depending on factors like:

- a) **Competitive Advantage:** lost in competitive value of export goods in relation to fixed exchange rate, devaluation can be beneficial to boot its international competitive advantage and economic growth.
- b) **The business cycle:** In recession, devaluation boosts growth without propelling inflation, while, in boom, devaluation propel inflation in the economy. The state of the international economy matters as it control domestic economy along with macroeconomic variables.
- c) Elasticity of demand for exports and imports: Currency devaluation in relation to increase in current account is achievable only on the long run since demand is inelastic in the short run. A fall in the price of exports leads to only a small increase in quantity where demand is price inelastic. Therefore, the value of exports may actually fall with devaluation impact felt only at the long run, since demand is inelastic in the short run, thus over time demand may become more price elastic with a superior effect.
- d) **Capital Flight:** Capital flight is equally embrace as a factor since foreign investors run introverted of currencies in emerging markets exposed to oil price turbulence.
- e) **Inflation:** Inflation rate effect depends on factors such as; Spare capacity in the economy. Devaluation in recession is doubtful to propel inflation with import prices not only a determinant of inflation, increase in wage equally affect inflation.

FOUNDATION FOR DEVALUATION (NAIRA)

Currency devaluation has being adopted by nations globally to achieve positive economic and financial objectives with why nations like Nigeria embrace devaluation:

- i. **Boost Exports:** currency devaluation is embraced to aid increase in export and domestic goods competitive strength in the international community. Domestic devaluation makes export cheaper for the other countries thus increasing the nation's net export strength.
- ii. **Promoting Domestic Industries:** devaluation globally decreases import and reduces domestic demand for imported goods and in turn boosts and protects domestic industries.

iii. Improved Current Account and Balance of Payment Position: deficit in balance of payment propel the adoption of devaluation policy to correct deficit in balance of payment. Improvement in current account and Balance of Payments depends upon the Marshall Lerner condition and the elasticity of demand for exports and imports.

Abolaji (2014) devaluation boosts local industries via increase in import prices. But this is not the case in Nigeria because of high dependency on imports goods, with Nigeria importing virtually everything.

From another observation in 2014, a weak domestic currency could equally trigger inflation, according to DenjaYaqub, from the Nigeria Labour Congress (NLC), adding: "People will have to pay more for goods and services."

Implication of Currency Devaluation on Nigerian Economy

Currency devaluating globally is an end product of monetary decision to improve the nations near collapse economy, improve balance of trade and payment positions and boost economic activities. In a monoculture economy like Nigeria where vast percentage of goods and service are imported, the devaluation implication will cause exports to become less expensive, making it more competitive on the global market which in turn means imports more expensive thus protecting domestic industries and encourages domestic consumption where economic and investment climate are favorable.

Currency devaluation is an attractive option for nations in recession like Nigeria, devaluation with its positive results also embraces negative consequences as such making imports more expensive, domestic industries are protected thereby making them become less efficient and effective without the pressure of competition, business parameters in Nigeria are likely to be adversely affected with increase in rate of inflation, thus reducing the purchasing power of the populace along high unemployment rate. Exports increase in relation to imports increases aggregate demand, which thus leads to inflation. Devaluation condenses the price domestic output of a nation and boost export volume. The 2016 cum first and second quarter of 2017 decision to devalue the Naira, according to CBN governor, Godwin Emefiele, was to cut down negative speculations in the foreign exchange (forex) market, predominantly by the banks owing to undue pressure on the naira and excess liquidity in the banking system in real terms expression, devaluation sum up at 8.38% of the Naira.

To cut down negative speculations in the foreign exchange (forex) market, the naira ought to be devalued thus moving the mid-point of the official window of the (forex) market by 100 basis points from 12 percent to 13 percent, with the key goal of tightening monetary policy framework to allow a degree of flexibility in exchange rate, curtail speculative activities and foreign reserves depletion. Devaluation signal CBN commitment to its operational sovereignty to foreign investors, the superior concern is that the highly expected economic may be far away, considering the far-reaching negative implications of currency devaluation, playing host to increased cost of production, with a lower profit margins for companies and higher cost of commodities, especially imported. The above will inevitably affect the general wellbeing of the populace.

METHODOLOGY

Research Design

The study will adopt ex-post-facto (descriptive) research design, employing already existing quantitative data from 2003-2019 annual time series data of (16) years period published by the central bank of Nigeria on relevant variables. The variables involved are not manipulated by the researcher (Onwumere, as cited in Alexander 2019). Another justification for the research design is the desire to employ secondary data for the test of hypothesis formulated.

Nature and Sources of Data

Annual secondary data of published variables are employ, as collected from the central Bank of Nigeria - Statistical bulletin (various issues) from 1999-2016. The key unit of measurement for all variables employ is naira. However, the study embraces a systematic time series economic approach of testing whether the nature of time series data employ are stationary or non-stationary avoid spurious result before adopting any econometric technique for analysis of any kind.

Sampling Techniques

The sampling technique adopted in this research is the non-probability sampling method it is the convenience sampling method, based upon the convenience of the researcher. The estimation sample is from 1999-2015, a total of 16 annually observations.

Model Specification

Model specification involves the determination of the dependent and explanatory variables based on specified theoretical sign and size of the parameters. The study is largely quantitative and roots its source on existing studies and methodologies. A model is a simplified view of reality deigned to enable a researcher describe the essence and inter relationship within the system or phenomenon

it depicts Onwumere, as cited in Alexander, (2019). The analytical procedures adopted to test the hypotheses are discussed below and these include:

Ordinary Least Square

In order to facilitate the estimation of the time series data extracted for the study, the ordinary least square method of multiple regressions model shall be employed. The model justification is based on the fact that the regression model involves more than a single independent variable (Onwumere, as cited in Alexander, 2019).

This method of analysis is employed because it possesses the properties of best, linear, unbiased estimator (BLUE), which are consistent and sufficient, the following symbols will be used to denote the respective variables.

The equation for multiple linear regressions is given as follows:

Where; Y= dependent variable,

b₀= Intercept term,

b₁, b₂ --- b_n= Regression coefficients to be determined,

 X_1 , X_2 --- X_n = set of explanatory variables.

Model specification

The study adopted four currency devaluation and economic growth and development variables.

These variables include Real Gross Domestic Product (RGDP), external debts (EXDET), Private Domestic Investments (PDI), Inflation rate (INFR) and foreign exchange rate (EXCR).

The preference of these variables is stuck in the overall goal of the researcher. The study adapted the empirical model used by Dani (2008).

The model was used to examine the impact of naira devaluation and economic growth in Nigeria and it is specified as:

Model 1: RGDP =
$$f(EXCR)$$
(i);
RGDP = $\beta_0 + \beta_1 EXCR + \mu_t$(2)

To capture the impact of naira devaluation on economic growth in Nigeria, the essential variables are fitted in on the LRM and log-transformed to ensure linearity and it appears thus:

$$\begin{aligned} LOGRGDP_t &= \beta_0 + \beta 1 LOGEXCR_t + \beta 2 LOGPDI_t + \beta 3 LOGINFR_t + \beta 3 LOGEXDET_t + \\ u_t......eq \ II \end{aligned}$$

Where:

(RGDP) = Real Gross Domestic Product

(EXDET) = External debts

(PDI) = Private Domestic Investments

(INFR) = Inflation rate

(EXCR) = Foreign exchange rate

B1, β 2, = coefficients of the parameter estimates or the slopes

 $\beta 0$ = Intercept of the regression equation

t = Time Series

Techniques of Analysis

As stated, data will be analyzed using statistical tools of Regression Model, for the purpose of prediction where the independent variable is used to obtain a better prediction of dependent variable (Ozo, Odo, Ani and Ugwu, 2007 p. 34). We will analyze each variable separately within the scope under review and also in aggregate.

Diagnostic Framework

Diagnostic tests will be conducted on the regression model to certify that the key assumptions underlying the Classical Linear Regression Model (CLRM) are not disrupted.

These tests include:

White's Hetereoskedasticity Test,

Ramsey Regression Error Specification Test (RESET),

Breusch Godfrey Serial Correlation Tests,

Durbin Watson Test and

The Cumulative Sum of Squares (CUSUM) recursive estimates tests/graph.

Decision Rule:

- i. If the P-value is less than its chosen critical value of significant reject the null hypotheses
- ii. If the ADF value is more negative than its critical at the chosen levelof significant reject the null hypotheses

The critical values include

1% = -3.435299, 5% = -2.863613 and 10% = -2.567923

In the event of I (0) and I (1) or combination of the both order of integration, Autoregressive Distributed Lag (ARDL) cointegration technique will be preferable and, robust when there is a single long run relationship between the underlying variables in a small sample size.

The long run relationship of the underlying variables is detected through the F-statistic (Wald test), thus agreeing with the unit root test assumption.

A simple ADL model

$$yt = m + \alpha 1yt - 1 + \beta 0xt + \beta 1xt - 1 + ut$$
,

where ytand xtare stationary variables, and utis a white noise.

The T-Test

The test is carried out to ascertain whether the individual variables are statistical significant or not in determine investment, in this context analysis of variance (ANOVA) will be employ to test the variables relevant to the study, since we have more than two variables.

The F-Test

This is used to test the overall statically significant of the variable in the regression plane. It is employ to test whether or not there is a significant impact between the dependent variable and the independent variables.

Econometric criteria Evaluation:

Normality

This test is carried out to check whether the error term follows normal distributions. The normality adopted in the JargueBera (JB) statistic, which follows the Chi-Square distribution while skewiness and kurtosis will be used to observed the normality distribution.

Autocorrelation

Will be used to test for the presence of serial auto- correlation, that is, the serial dependence of successive error terms in the regression, Auto – correlation indicates an important part of the variation of the dependent variable that has not been explained. The problems of Auto- correlation are usually dictated by Durbin- Watson (DW statistic).

It is given mathematically as:-

$$DW = \underbrace{\sum (\text{et (et -1)2})}_{\text{(et)2}}$$

Where: DW = Durbin Watson

 Σ = Summation of

et = Present Period errors

et-1 = Pervious Period Errors

Table 3.1 The Decision Rule is thus

NULL HYPOTHESIS	DECISION	IF
No positive autocorrelation	Reject	0 <d<d1< td=""></d<d1<>
NO positive autocorrelation	No decision	d1 <d<du< td=""></d<du<>
NO negative autocorrelation	Reject	4-d1 <d<4< td=""></d<4<>
NO negative autocorrelation	NO decision	4d1 <d<4-d1< td=""></d<4-d1<>
NO positive or negative autocorrelation	Do not reject	Du <d<4-du< td=""></d<4-du<>

Where: d1 Lower limit, du =upper limit

Multicollinearity Test

This test is used to check their linear collinearity among the explanatory variables between pairs of regressors, using correlation matrix table.

Heteroscedasticety Test

This test will be conducted ascertain whether the error term (ui) in the regression model have a common or constant variance. The white hetenoscedasticity test (with no cross term) will be adopted. This test is used to ascertain whether the estimated model is correctly specified or not. The Ramsey-Reset test is adopted.

Conclusion

Empirical and theoretical research over time has established that there is no contradiction to the impact of devaluation in boosting economic growth in developing and developed economies and in solving various economic challenges. By implication it is hard to consider or embrace devaluation in Nigeria, since its adoption and implementation has always left the economic and investment climateworse-off since the needed requirements to ensure its impactful benefits are not adequately provided in Nigeria. The argument of this research paper is that rather than Nigeria embracing devaluation as last resort in the event of economic and financial imbalances, government at all levels ought to review other possible solution to improve the economic and financial position of the nation.

Recommendations

In the light of the above the following are recommendations made so that economic relief can be sought.

- a) Economic Diversification with reference to agricultural sector to ensure and attain security of food while engaging Nigerians in productive ventures.
- b) Real sector reformation to boost the manufacturing sector and its production competitiveness at the international market.
- c) Gas and oil reformation and over dependency reduction to developed other sectors of the economy such as the service sector.
- d) Fiscal and monetary policies ought to be reviewed in relation to the changing economic and financial climate in Nigeria.
- e) Provision of adequate economic and financial infrastructures to boost the export and drive favorable economic and financial activities.
- f) Small scale industries ought to be encouraged via soft loans since they are self-sustaining and proficient in generating supplementary jobs for the unemployed.

While not claiming that the above recommendations are exhaustive, some feat will be achieved if given the necessary attention.

References

- Abolaji O. Nigerian Naira Devaluation Leads to Fear about the ecnomy Published by APF 00:03 BST 27 November 2014. Retrieved from http://www.pmnewsnigeria.com/2014.
- Adekoya, O. M. & Fagbohun, A. (2016). Currency Devaluation and Manufacturing Output Growth in Nigeria. Journal of Economics and Sustainable Development, 6(7), 207-218.

- Acharya, S., 2010. Potential impacts of the devaluation of Nepalese currency: A general equilibrium approach. Economic Systems, 34(4), pp.413-436.
- AOgundipe, Ojeaga and Ogundipe (2013) Estimating the Long Run Effects of Exchange Rate Devaluation on the Trade Balance of Nigeria. European Scientific Journal September 2013 edition vol.9, No.25 ISSN: 1857 7881 (Print) e ISSN 1857-7431.
- Aiya, F. (2014). People's Perception of the Impact of Currency Devaluation on the Performance of Poverty Alleviation Programmes in Nigeria, Developing Country Studies IISTE, 4, (10), 7-16.
- Akindiyo, and Olawole, (2015) Devaluation of Nigerian Naira: Bane Or Panacea?. Review of Public Administration and Management Vol. 4, No. 8, December 2015 ISSN: 2315-7844 Website: www.arabianjbmr.com/RPAM_index.php.
- Ankara (2015) Devaluation and its impact on Ethiopian Economy. Hacettepe University Graduate School of Social Sciences Faculty of Economics and Administrative Science Department of Economics Master's Thesis.
- Ayen, Y.W., (2014) The effect of currency devaluation on output: The case of Ethiopian economy, Journal of Economics and International Finance,
- Campbell R. Advantages and Disadvantages of Devaluation.International Economic Journal, 2004.
- Central Bank of Nigeria (2016). Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- Farhi, E., Gopinath, G., & Itskhoki, O. (2012). Fiscal Devaluations. Research Review, (18), 40-43.
- Kenneth,J.(2016). Devaluation of the Nigeria and its effect on the Nigeria economy guardian editorial board retrieval from www.flationes.com/time.com/2016/20 on devaluation of Naira.htm/?m=1
- Momodu, A.A. &Akani, F.N. (2016).Impact of Currency Devaluation on Economic Growth of Nigeria.International Journal of Arts and Humanities, 5(11), 151-163.
- Narayan, P.K. & Narayan, S., 2007. Is devaluation expansionary or contractionary? Empirical evidence from Fiji. Applied Economics, 39(20), pp.2589-2598.
- GenyeTirsit (2011, September 30). Currency Devaluation and Economic Growth The case of Ethiopia.Stockholmsuniversitet EC9901 Master Thesis, 30hp Department of Economics Stockholm University.

- Ratha, A., 2010. Does Devaluation work for India? Economics Bulletin, 30(1), pp.247-264.
- The Sun. (2015). IMF urges Nigeria to devalue Naira to boost FDI. Nigeria: The Sun. Retrieved from http://sunnewsonline.com/new/imf-urges-nigeria-to-devalue-naira-to-boost-fdi/
- Seentanah, B. &Rojid, S., 2011. Analysing the Sources of Economic Growth in Africa Using Growth a Accounting and a Panel VAR approach. The Journal of Developing Areas, 44(2), pp.367-390.
- Soukiazis, E., Cerqueira, P. A., & Antunes, M. (2013). Growth rates constrained by internal and external imbalances and the role of relative prices: empirical evidence from Portugal. Journal of Post Keynesian Economics, 36(2), 275-298. doi:10.2753/PKE0160-3477360205
- Siddig, K. H. (2012). The Controversy of Exchange Rate Devaluation in Sudan: An Economywide General Equilibrium Assessment. African Development Review, 24(3), 245-254. Retrieved from doi:10.1111/j.1467-8268.2012.00320.x.
- Teru and Mohammed (2017) Naira devaluation: Impact and implication on the Nigerian economy (1970-2014). International Journal of Commerce and Management Research ISSN: 2455-1627, Impact Factor: RJIF 5.22 www.managejournal.com Volume 3; Issue 8; September 2017; Page No. 168-169.
- Lencho, D., (2013). The Effect Of Exchange Rate Movement On Trade Balance In Ethiopia, Tokyo University.
- Petrović, P. and Gligorić, M., (2010). Exchange Rate and Trade Balance: J-curve Effect, University of Belgrade.
- Pllaha, A., (2013). The "J-curve" effect in bilateral Trade: The impact of currency depreciation on Trade balances between Albania and its main Trading partners, Bank of Albania.
- Kogid, M., Asid, R., Lily, J., Mulok, D., &Loganathan, N. (2012). The Effect of Exchange Rates on Economic Growth: Empirical Testing on Nominal Versus Real. IUP Journal Of Financial Economics, 10(1), 7-17.
- Rapetti, M., Skott, P., &Razmi, A. (2012). The real exchange rate and economic growth: are developing countries different?. International Review Of Applied Economics, 26(6), 735-753. doi:10.1080/02692171.2012.686483.

- Okaro, C. S., (2017). Currency Devaluation and Nigerian Economic Growth (2000-2015). Social Development NG-Journal of Social Development, VOL. 6, No. 1, February 2017 Journal homepage: www.arabianjbmr.com/NGJSD_index.php
- Momodu, A.A. &Akani, F.N. (2016).Impact of Currency Devaluation on Economic Growth of Nigeria.International Journal of Arts and Humanities, 5(11), 151-163.
- Walter, E.(2015 0ct19). Effect of naira devaluation on the Nigeria construction industry sapient vendors ltd: retrieved from sapient vendors.com/naira- devaluation and Nigeria construction industry