

ANALYSIS OF THE IMPACT OF EXCHANGE RATE ON PRICE LEVEL IN NIGERIA

ABSTRACT

The study focus on Analysis of the Impact of Exchange Rate on Price Level in Nigeria from 1988 to 2016 with variables as Inflation, exchange rate, tariff rate, import and interest rate. The research employed the Ordinary Least Square (OLS) regression method with the pre-test of Augmented Dickey Fuller (ADF) unit root test. The regression result showed a negative and significant relationship between exchange rate and inflation, tariff rate was positive and significant in relationship with inflation. While import was negatively and insignificantly related to inflation, interest rate was having a positive but not significant relationship with inflation. We recommend that moderate or realistic tariff rate be negotiated among trading partners. Also local production of goods for export that will counter the negative impact of import to avoid imported inflation and strict monitoring of the activity of CBN and commercial banks in exchange rate dealing to avoid unnecessary and unproductive use of dollars.

Key Words; Impact, Analysis, Price level, Exchange rate, Tariff, import, interest rate

1.0 Introduction

Price is a vital indicator in the market. It is a strong instrument in economics for the firm as producer, the individuals as potential buyers, the government and the society at large. It is affected by many factors as they relate to factor prices and market related policies of government. The exchange rate has been discovered as one important factor that affects value of currencies of many countries like Nigeria. It is also a price that is of utmost concern to the government because it impacts on the national currency. According to Eze and Dumani (2020), inflation and exchange rate have dual effect on nations' currencies attacking the local value of national

currency and the international value of the national currency at the same time posing serious problem for policymakers.

Obadan (2006) wrote on overview of exchange rate management in Nigeria and stated that the naira exchange rate for \$1 was N.85 in 1985 a year to the introduction of the Second Tier Foreign Exchange Market (SFEM). The exchange rate for the Naira became \$1 to N2.02 in 1986 after SFEM and later rose to N117.30 to \$1 in 1992. The exchange rate has been on the rise up to 2002 and 2004 as reported by Obadan (2006) to be N121.00 to \$1 and N133.5 to \$1 respectively. According to him the naira has depreciated up to about 99.3% between 1985 and 2004 and has appreciated by 1.8% and fairly stable in 2005 as a result of the phenomenal increase in oil price at the international oil market.

The exchange rate serves as a financial tool for measuring the value of goods and services at the international market and its instability has significant influence on domestic consumption through prices of goods and services. Babangida *et al* (2021). There has been the problem of exchange rate volatility (instability of Naira exchange rate with the Dollar) from the late 80s. The major reason could be the mono-cultural nature of Nigerian economy that is solely dependent on crude oil for export and lack of the country's preparedness to diversify its economy to be able to produce other goods for export. As the exchange rate of naira to dollar continues to dwindle it resultant effects on price of imports is inestimable. Nigeria is one of the African countries that are known for massive importation of raw materials and finished goods so, for this reason domestic price is bound to be affected by the instability of exchange rate.

When exchange rate is fairly stable for a reasonable period of time the price of imports will also be fairly stable and this will extend to domestic prices. A stable economy with manageable and acceptable rate of inflation will induce employment, saving ability of workers, private

investment and growth and development. Crude oil was first found in Oloibiri Bayelsa state of Nigeria in 1956 and was first extracted and exported in 1958 (Olisa, 2019). Right from when oil was discovered in large quantity in Nigeria attention has been shifted to oil production leading to neglect of other sectors that have sustained the economy. Agriculture, industrialization and other relevant sectors like education and health have not been given proper attention from government. As a result of this, the nation's non oil exports have drastically reduced with oil export taking the largest share of the total trade. In the third quarter of 2022 the total trade was N6, 343.53 billion and the share of petroleum products exports was N5, 777.36 billion (NBS, 2022). Judging by the statistic above, oil exports takes approximately 91% of the total trade while non oil exports constitute only about 9% of the total value of goods traded at the international market in that quarter of the year (Eindu et al (2020). The massive importation that visited the country from the late 80s is one of the factors that led to the crash of the naira in the foreign exchange market and unfavorable balance of payment in the nation's budget.

This article seeks to investigate the trend in the naira exchange rate and its impact on price level in Nigeria by considering inflation, exchange rate, tariff rate and interest rate from 1988 to 2016

1.2 Objectives of the Study

The broad objective of the study is to research into the impact of exchange rate on price level in Nigeria while the specific objectives are to; Find out the relationship between exchange rate and price level, Investigate the impact of import on price level in Nigeria, Study the influence of tariff rate on price level, and Show the response of price level to interest rate.

2.0 Literature Review

2.1 Exchange Rate

Foreign exchange is a standard currency of a nation that change hand with the local currencies of other countries approved for payment at the international market. Obadan (2006) said that the exchange rate is an important price that the government picks active interest in and has the real and nominal exchange rate. It could be seen as the price a foreign currency exchange for a unit of local currency or the price a foreign currency sells in exchange for a local currency. He further explained Nominal Exchange Rate (NER) as a concept that measures the relative price of two currencies for instance the naira in relation to dollar while the Real Exchange Rate (RER) measure the relativeness of the price imports and exports tradable at the international market and that of goods and services produced and consumed locally.

CBN (2021) defined foreign exchange as the price of one currency in terms of another currency. It further stated that it is one out of numerous macroeconomic indicators that determines the overall performance all nations of the world. According to Mordi in; it is an important price variable and plays double roles of giving countries the vigor to compete with others nations at the international market and as a major determinant of local prices. Foreign exchange could be expressed directly in terms of price at which the home currency sells for a unit of the foreign currency for example $N925 = \$1$ or indirectly as the price at which the foreign currency exchange with one unit of the local currency for example $\$1 = 0.0011$.

The fixed and floating exchange rates were introduced as measures to create a stable exchange rate. The fixed exchange rate system was introduced in 1994 which has to do with pegging of the naira to a unit of dollar. At that time the naira was pegged at $N22 = \$1$ with foreign exchange earnings domiciled in the Central Bank of Nigeria (CBN). The Autonomous Foreign Exchange Market (AFEM) was reintroduced with a dual exchange rate, this was meant to achieve a stable exchange rate for the naira but the CBN could intervene at its discretion. Obadan in CBN, (2021).

From July 1986 when Structural Adjustment Programme (SAP) was introduced, the Second-tier Foreign Exchange Market was established to manage foreign exchange with the aim of to provide an effective mechanism for allocating foreign exchange to guarantee its stability in the short run and balance of payment equilibrium in the long run. The naira was made to flow and its value was left to be determined by the market force of demand and supply while the CBN established an institutional framework its trading in that market determined environment. Obadan in CBN, (2021).

2.2 The Price Level

The level of Inflation or Deflation is adjudged by the extent of price in an economy. The average of all prices of goods and services collected in a country is manipulated through mathematical calculation by comparing a base year price and current year price to come out with a price index that will determine the level of inflation in the economy. According to Mankiw (2016), the price level is measured by the Consumer Price Index.

Dornbusch et al (2011) defined the price level as the accumulation of past inflation. The present price level is the previous price level adjusted for inflation. Prices may be higher at some certain periods and lower at some other times, the price level is presently a reflection of these past prices in the economy. The price level falls or rises depending on the direction of inflation and it fall and rise when inflation is negative and positive respectively.

Oseni in Eze and Dumni (2020) opined that exchange rate volatility brings about fluctuation in the host country's currency. When the standard currencies like the dollar rise, it affects macroeconomic variables such as manufacturing outputs, price of non-durable goods and services, general consumption, investment and balance of payment. When the exchange rate

continues to rise, the effect on developing countries like Nigeria is enormous. In the first instance, we depend on massive importation of goods and so high exchange rate increase prices within.

Price level is the current prices of all goods and services produced in the country averagely measured considering previous prices in the economy. The price level is not limited to goods and services only but also to the price of security. (https://www.investopedia.com/terms/p/price_level.asp). The price level is an important economic indicator that play vital role both at the home or world market, it influences the purchasing power of consumers for goods and services and also a signal for the suppliers of goods and services. Price levels in the economy means the value of money. That is the purchasing power of money; described by how much can equivalent dollar buy compared to before. In Nigeria the Consumer's Price Index (CPI) is used to measure the price level.

According to Martin (2011) price level is viewed from the point of Purchasing Power Parity (PPP) and defined it in terms of the price level index as the ratio of GDP to the exchange rate which he named the reciprocal of this ratio as the real exchange rate, the reason for this is that the GDP used here is already adjusted to inflation. With this explanation, the price level has to do with the present purchasing power of currencies compared to the purchasing power of their equivalence some year back.

2.3 Foreign Exchange and the Price Level: A link

Dornbusch et al (2011) in his explanation of balance of trade affirmed that in order to allow for inflow of capital into the host country, the government should maintain a high interest rate. They went further to say that if domestic price is high it will make the locally produced goods more expensive for foreigners to buy and this will make our goods less competitive at the international market. In the first instance, more foreign currency (e.g dollars) will flow in which might allow

the dollar to crash and Naira appreciating. In the second instance, because of the high domestic prices foreigner will not patronize our goods therefore our export will decline and more foreign goods will be imported, there will be more pressure on dollar as a result of high demands for foreign good over domestic goods and this will cause Naira to depreciate with resultant balance of trade deficit.

Devaluation or depreciation of domestic currency may stimulate economic activity because it is believed that it causes the prices of foreign goods to increase relative to the prices of domestic or home goods. Depreciation means increase in the domestic currency price of foreign exchange. Considering nominal price home and abroad, depreciation increases the relative price of goods imported into the home country and reduces the relative price of export goods from home country whose currency is being devalued (Dornbusch et al, 2011). The reason for devaluation is to boost economic activity in the country whose currency is devalued, when this is done imports reduce due to increase in its relative price and exports rise.

2.4 Theoretical Framework

The foundation of this study is built on the Purchasing Power Parity (PPP) theory. The theory takes cognizance of the difference in price-level behaviours between two nations in a way to ensure constancy in the trade balance. According to Dornbusch et al (2011), “Purchasing power parity of the exchange argues that exchange rate movement primarily reflects differences in inflation rates between countries”. PPP is an apparent explanation of the trend in exchange rate movement mostly when there is large inflation difference between two countries. Expansionary monetary policy leading to increased money stock, if price level movement is induced by change in money supply as may likely be if there is high inflation PPP relationship should be expected to hold in the long run.

$$\text{Given } R = \frac{eP_f}{P}$$

R = real exchange rate

Where e = nominal exchange rate

P_f = foreign price

P = local price

The aim of PPP is to maintain a constant trade balance represented by the right hand side of the equation above.

2.5 Empirical Reviews

Eze and Dumani (2020) studied foreign exchange rate and consumer price change in the Nigerian economy and their study anchored on the purchasing power parity theory. They used time series data covering 1990 to 2018. They adopted the ex-post facto research design and modeled the OLS for data analysis. Their results showed a positive but insignificant relationship between foreign exchange and the level of inflation in Nigeria while interest rate negatively and significantly impact on inflation in Nigeria. They concluded that rising trend in the exchange rate causes a resultant rise in the general price level while increase in the lending interest rate has no positive influence on the general price level in Nigeria. Their study recommended the monetary authority to ensure foreign exchange rate stability to avoid imported inflation and also to maintain a fairly stable and attractive lending interest rate to ensure equilibrium between aggregate demand and supply. The study finally suggested a stable exchange rate for the Naira that gives it appreciable value internally and across the border.

Adekule (2010) did a research on exchange rate and consumer price index (CPI) in Nigeria: a causality approach and his major objective were to ascertain the significant relationships between the official and parallel exchange rates and the consumer price index in the country. He analyzed

data from 1986 to 2007 using correlation technique and causality approach. His variables are consumer price index, official exchange rate, parallel exchange rate and inflation. His results showed a strong and positive relationship between imports and price index than it exists between official and parallel exchange rates and the consumer price index. According to Adekunle, the coefficient between autonomous exchange rate and consumer price index (CPI) is less than significant than the official and the import ratio in the economy showed that imports and price index have causal effect on each other. His study recommended a realistic and more liberalized exchange rate system to check the activity of the parallel market and implementation of policies that will increase output of domestically to reduce importation.

Oriawote and Eshenake (2012) wrote on real exchange rate and inflation: an empirical analysis of the Nigerian experience. The data for the study covered 1970 to 2010 and the OLS was used to analyze it with the co-integration as major tool. The econometric model includes; real effective exchange rate, consumer price index, import, and money supply. The result of co-integration showed a long run relationship between inflation and exchange rate and error model was satisfactory as a support to the long run relationship. The result also showed that both domestic and imported inflation caused the exchange rate to appreciate and persistence volatility between the rate of inflation and real exchange rate. Oriawote and Eshenake recommended that inflation targeting should not be the only option to stabilize the real exchange rate but to formulate policies that will ensure increased production of export goods to surmount imports to avoid imported inflation.

Bakare (2014) researched into exchange rate volatility, devaluation and price level dynamics in Nigeria. He analyzed time series data from 1984 to 2013 using OLS with the necessary pretest of unit root. He involved the exchange rate, real GDP, inflation, and money supply. The results

showed a significant and negative relationship between exchange rate volatility, general price level and devaluation in Nigeria. According to Bakare, the past value of the exchange rate volatility could be used to predict the present behavior of general price level and the value of naira in Nigeria going by the results of analysis. The study concluded that exchange rate volatility cause devaluation of currency and is responsible for inflation in Nigeria.

Omosewaru and Taofeek (2008) investigated exchange rate variation and inflation in Nigeria. They collected secondary data covering 1970 to 2007 and use the OLS for data analysis with co-integration to find out the long-run relationship among the variables. The variables used are inflation, exchange rate, money supply, government expenditure, and oil revenue. The results showed that inflation rate, exchange rate, oil revenue, government spending and money supply are co-integrated while inflation and exchange rate showed no long term relationship but short term relationship. The study concluded there is short-run relationship between inflation and exchange rate and recommended appropriate policy to manage the exchange rate so that it volatility would not cause inflation despite they do not move together in the long-run.

Nwokoye et al (2023) studied the effect of exchange rate on domestic price level in Nigeria from 2015 to 2023. Their econometric model involves domestic consumer price, nominal exchange rate, import price index, international crude oil price and real GDP. They used the OLS regression with emphasis on the autoregressive distributive lag (ARDL) as tool of analysis. Their results showed a significant and positive connection between nominal exchange rate and consumer price inflation in Nigeria and import also impacted significantly on consumer price inflation and recommended that government at all level should encourage and support innovative ideas of business firms and individuals by supporting local production to substitute imports.

Aabdulhamid et al (2022) carried out a research on inflation and exchange rate in Nigeria. They used time series data spanning from 1980 to 2021 and OLS regression with emphasis on Granger causality and co-integration test. They chose the variables inflation, exchange rate, import and GDP. The findings revealed that inflation, exchange rate, import and GDP are co-integrated while exchange rate is found to impact positively and significantly on inflation. The study recommended a tight monetary policy to reduce volatility of exchange rate in order to achieve stability in both exchange rate and in the domestic price.

Bada et al (2016) conducted a research on exchange rate pass-through in Nigeria covering 1995 to 2015. They used the nominal effective exchange rate, US price index, crude oil price and real GDP. They employed the OLS regression using Johansen co-integration test and error correction model as major tools of analysis. The study found out that the exchange pass-through into Nigeria's CPI's inflation is complete. The impact on import was higher than on consumer price meaning that the pass through effect decline along the pricing chain. They recommended appropriate monetary policies by the CBN that could help maintain a stable exchange rate in order to ensure a stable price.

2.6: The Gap

This research selected variables that are real indicators to the stability of Nigeria's economy as they affect both international and domestic trade. When we discuss the issue of exchange rate, we are talking of foreign currencies especially the dollar and the naira. Since we study the impact on the price level in the country it is not necessary to use the dollar exchange as was done by Bada et al (2016). Also, looking through the empirical reviews it was discovered that some control variables such as GDP and other variables not connected with foreign transactions or

have no link with price level or inflation as incorporated in the work of Bada et al (2016), Nwokoye et al (2023) and Abdulhamid et al (2022).

3.0 Model Specification and Method

The data for this research are annual time series, covering 1988 to 2022 which were sourced from microtrends website and Federal Bureau of Statistics (FBS). The model for the study is the Dynamic Ordinary Least Square (DOLS). The model was adopted from Yusuf *et al* (2020) and modified to suit this research. The choice of the DOLS is due to its ability to take care of auto-correlation, multicollinearity, endogeneity and feedback error that may give a bias result from OLS. The model is given as;

$$INF = f(EXR, IMP, TRR, INTR) \text{----- (1)}$$

By introducing one lag and lead, the model is given in explicit form as;

$$INF = \beta_0 + \beta_1 EXR + \beta_2 IMP + \beta_3 TRR + \beta_4 INTR + \sum \Delta \beta_1 EXR_{t+1} + \sum \Delta \beta_1 EXR_{t-1} + \sum \Delta \beta_2 IMP_{t+1} + \sum \Delta \beta_2 IMP_{t-1} + \sum \Delta \beta_3 TRR_{t+1} + \sum \Delta \beta_3 TRR_{t-1} + \sum \Delta \beta_4 INTR_{t+1} + \sum \Delta \beta_4 INTR_{t-1} + E \text{---}$$

----- (2)

Where;

INF = inflation

EXR= exchange rate

IMP = import

TRR = tariff rate

INTR = interest rate

β_0 = is the constant

$\beta_1 - \beta_4$ are the parameters of estimation

E = error term

3.1 Variable justification

Exchange rate (EXR) as the price of one currency in terms of another has a close link with inflation. The volatility of exchange rate which causes the standard currency (I.e dollar) to appreciate makes the domestic currency's purchasing power to depreciate especially when the country is import dependent like Nigeria.

Import also has direct link to inflation as it could be imported when prices of imported goods are high due to rising exchange rate. Nigeria is presently facing this problem because of exchange rate volatility. Price of foreign goods brought to the country continues to rise, for example, the price of phones have sky rocketed since 2016.

Tariff rate is another variable that can cause the price level to rise. Despite the fact that the trading countries charge a common tariff, if it is kept high relative to output growth could cause inflation. Tariff is a form of tax which could affect firms and even the consumers. Finally, interest rate is one indicator that can influence capital flow across borders. If the domestic interest rate is high, it attracts foreign capital which means more investment and more output, this will bring the price down. On the other hand, if the lending interest rate is high, business will be discouraged to borrow for investment which could lead to decreased output.

3.2 Result and Discussion

Table 1: Dickey Fuller Unit Root test at 1st difference with Trend and Intercept

Variable	ADF test statistic	est critical value@5%	Order of integration
INF	-6.0358	-3.5485	I(0)
EXR	-6.8059	-3.6449	I(1)
TRR	-4.1442	-3.6449	I(1)
IMP	-4.7141	-3.6763	I(1)

Source: Author's computation 2023

Table 1 is the result of Dickey Fuller unit root test. Looking through the ADF test values and the 5 percent critical values for all variables we could see that the absolute values of the first are greater than the absolute values of the later. The first variable INF was stationery at level while EXR, TRR and IMP are stationery at first difference.

Table 2: DOLS Regression Output

variable	coefficient	Std. Error	t-Statistic	Prob.
C	-25.3115	0.7551	-1.5056	0.1664
EXR	-0.6817	0.9417	-0.7239	0.4875
TRR	-0.5413	0.4581	-1.1815	0.2677
IMP	1.5850	1.6999	0.9324	0.3755
INTR	9.3136	5.0049	1.8609	0.4385

R-Square = 0.7072, F-statistic = 5.6387, Prob. Of F-statistic = 0.0265, DW statistic = 2.7753

Source: Author's computation, 2023

Table 2 shows the output of Dynamic Ordinary Least Square (DOLS) regression using manual method. EXR have a negative but not significant relationship with INF. This negative sign means that they do not move in the same direction. It implies that as exchange rate rises, inflation falls. This result is not consistent with any of the reviewed studies. The results of the works Eze and Dumani (2020), Adekule (2010) and Nwokoye et al showed positive and significant relationship between exchange rate and consumer price index contrary to the results of this study in that respect, this might be due to the difference in variables, method and year of coverage. TRR showed a negative and not significant relationship with INF meaning that they move in opposite direction. INF rises when TRR falls, this means that as tariff rate moves up, inflation reduces.

Among the empirical literature, none included tariff as a variable. IMP is positively and insignificantly related with INF. They move in the same direction at an insignificant rate. This result is in agreement with the finding of Oriawote and Eshenke (2012), the only difference is that the relationship in this study is insignificant. Lastly, INTR is positively and insignificantly connected to INF. They move in the same direction but the relationship is not significant. This outcome is similar to the result of Adekule (2010) but, the work of Adekule indicate a positive and significant relationship between import and inflation in Nigeria, but this research discovered a positive but not significant relationship between the two variables.

The value of the R-square 0.7072 is high indicating that about 70% of the change in the price level is accounted for by the explanatory variables. The F-statistic of 5.6387 which is significant at the probability of 0.0265 is an indication that the model is well fit and the right model for the study.

Table 3: Breusch-Godfrey Serial Correlation LM test

F-statistic	2.8582	Prob. F(2,7)	0.1238
Obs*R-squared	11.6878	Prob. Chi-square(2)	0.2930

Source: Authors computation, 2023

Table 3 is the output of one of the error tests for the model. The serial correlation showed the observed R-squared value to be 11.6878 with probability value of 0.2930. The probability value is greater than 5% which led to the rejection of null hypothesis that the residuals are serially correlated and accept the alternative that the residuals are not serially correlated.

Table 4: Breusch-Pagan-Godfrey Heteroskedasticity test

F-statistic	1.1939	Prob. F(16,9)	0.4065
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Obs*R-squared	17.6736	Prob. Chi-square(16)	0.3434
Scaled Explained SS	3.4949	Prob. Chi-square(16)	0.9995

Source: Author's computation, 2023

The heteroskedasticity test in table four showed in the row of the observed R-square value of 17.6736, that it is not significant with a chi-square probability value of 0.3434 which is more than 5%. For this reason we reject the null hypothesis that heteroskedasticity exist in the residual and accept the alternative that there is no heteroskedasticity among the residuals.

Table 5: Jarque-Bera Normality Test

Jarque-Bera Statistic	2.3236
Prob.	0.3129

Source: Author's computation 2023

Table 5 shows the output of Jarque-Bera normality test. The jarque-Bera statistic 2.3236 is having a probability of 0.3129 which is greater than 5%. Therefore we reject the null hypothesis that the residuals are not normally distributed and accept the alternative that the residuals are normally distributed.

4.0: Conclusions

IMP and INTR are the variables that positively affect INF. The coefficients of import and interest rate have positive sign which showed that they positively but not significant in their impact on inflation or price level in Nigeria. So, the study conclude that these two variables are the ones that influence price level in the country since they move in the same direction.

The coefficients of EXR and TRR are negative and not significant, implying that they contribute to INF in the opposite direction, this means that they do not move in the same direction.

Therefore, the study concludes that they do not contribute positively to the rising prices within the periods covered in this study.

The model for this study was considered fit with R-square equals 0.7872. This was backed by the various error correction tests such as serial correlation, heteroskedasticity and normality test.

4.1: Recommendations

Despite exchange rate was shown not to cause price level to rise when it rises, tariff rate is one of the foreign trade indicators that impacted negatively and insignificantly on inflation in Nigeria. The nation in the community of trading partners should advocate for a more realistic and fairly low tariff to caution against future impact of tariff on the price level.

The government should keep lending interest rate moderate or very low to encourage investment. Despite import is seen as not positively impacting on the price level, local production of export goods should be encouraged to balance imports to avoid future imported inflation.

The exchange rate might not positively impact on the price level at present but in the long run it may. So, exchange rate policy of the CBN should focus on the activity of CBN itself and those of the commercial banks. Foreign currencies should be strictly sold to importers and exporters and those going for studies abroad and not for politicians who want to go for leisure and medical checkup abroad. This will go a long way in keeping the exchange rate checked and stable.

References

- Abdulhaamid, J. Musa, I. and Sanusi, R. (2022). Inflation and Exchange Rate in Nigeria. *Confluence Journal of Economics and Allied Sciences (CJEAS)*, Vol. 5(2).
- Adekunle, A K. (2010). Exchange Rate and Consumer Price Index in Nigeria: A Causality Approach. *Journal of Emerging Trend in Economics and Management Sciences (JETEMS)*, Vol. 1(2).

- Babangida, J S., Aliyu, R S. and Yusuf, I M. (2022). Relationship between Real Exchange Rate and Consumption in Nigeria: A Nonlinear Approach. *CBN Journal of Applied Statistics, Vol. 12(2)*
- Bakare, A S. (2014). Exchange Rate Volatility, Devaluation and Price level. *Global Journal of Commerce and Management Perspective, Vol. 3(5)*
- Bada, A S., Olufemi, A I., Inuwa, A T., Peters, I., Bawa, S., Anigwe, J O. and Udoko, C O. (2016). Exchange Rate Pass-Through to Inflation in Nigeria. *Central Bank Journal of Applied Statistics, Vol. 7(1)*.
- CBN (2021). Exchange Rate Management in Nigeria. *Central Bank of Nigeria's Publication: Understanding Monetary Policy Series 8, 2021*.
- Dornbusch, R., Fisher, S. and Startz, R. (2011). Macroeconomics Eleventh Edition. *Mc. Graw-Hill International Business Company, New York*.
- Eze, G P. and Dumani, M. (2020). Foreign Exchange Rate and Consumer Price Changes in the Nigerian Economy. *Saudi Journal of Economics and Finance, South Middle East Publishers, Dubai. DOI: 10.36348/sjef.2020.v04i02.001*.
- Ezindu, O N., Onwuka, I N., Okoli U V. and Udeze, R C. (2020). Impact of International Trade on Nigerian Economic Growth: Evidence from Oil Terms of Trade. *International Journal of Economics and Financial Management, Vol. 5(2)*.
- Martin, R. (2011). Price Level and Economic Growth: Making Sense of Revisions to Data on Real Income. 6th Technical Advisory Group Meeting October 3-4, 2011. *International Comparism Programme. Development Research Group World Bank, 1818 H Street NW, Washington DC*.
- Mankiw, G.N.(2016), 'Principle of Economics', *The Dryden Press, Harcourt Brace College Publishers, New York*.
- Nwokoye, M O., Okoye, M I., Nwokocha, A F., Eze, C C., Onwuka, I N., Okechukwu, S C. and Ekwughu, J C. (2023). Effect of Exchange Rate on Domestic Price Level in Nigeria. *Asian Research Journal of Art and Social Sciences, Vol. 21(3)*.
- Obadan, M I. (2006). Overview of Exchange Rate Management in Nigeria from 1986 – 2006. *The Bulletin, A CBN Publication July – September, 2006*.
- Omosewlu, O. and Taofeek, S S. (2008). Exchange Rate Variation and Inflation in Nigeria (1970-2007). School of Technology and Society, University of Scovde,
- Oriavwote, V E. and Eshenake, S J. (2012). Real Exchange Rate and Inflation: An Empirical Assessment of the Nigerian Experience. *Mediterranean Journal of Social Sciences, Vol. 3(3)*.

Yusuf, L O., Nichom, H., Osuji, P., &Udeorah, S A F. (2020). Impact of International Trade on the Growth of Nigerian Economy. *International Journal of Research and Innovation in Social Sciences (IJRISS) Vol. IV(VII)*.

<https://pubdocs.worldbank.org/inflation->

<chaphttps://thedocs.worldbank.org/en/doc/461221541081214468->

0050022018/original/InflationChapter5.pdfhttps://www.investopedia.com/terms/p/price_level.as

p

<https://www.investopedia.com/terms/p/price/level.aspl>

<https://www.macrotrends.net/countries/NGA/nigeria>

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