EFFECT OF EXCHANGE RATE FLUCTUATION ON NIGERIA EXTERNAL TRADE

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Abstract
This study examined the effect of exchange rate fluctuation on Nigeria external trade from 2000 to 2019. Nigeria economy relies so much on imported goods for its survival. There are four refineries in Nigeria but none of them is functional thereby forcing the government to equally import refined oil even when Nigeria is the highest oil producing country in Africa. The penchant for consuming imported goods makes the exchange rate to fluctuate rapidly and uncontrollably in some cases. The study made use of secondary data sourced from central bank of Nigeria statistical bulletin of various issues from 2000 being the year of monetary authority regime of flexible exchange rate to 2019. The correlation and regression analysis of the Ordinary Least Square (OLS) were used to analyze the data. The result shows that the three variables; exchange rate, balance of payment, and inflation rate have significant effect on the Gross Domestic Product (GDP) and external trade of Nigeria; Exchange rate has a negative effect on the GDP because as it increases, the external trade is negatively affected. Therefore, in order to enthron e a favourable exchange rate that would boost the nations GDP, the government is advised to encourage the export promotion strategies in order to maintain a surplus balance of payment on trade.

Keywords: exchange rate, balance of trade, fluctuation, external trade

Introduction
The market determined exchange rate system was introduced in Nigeria via second tier foreign exchange market, thus the naira exchanges rate has exhibited the features of continuous depreciation and instability. The instability and continued depreciation of the naira in the foreign exchange market has resulted in declines in the standard of living of the populace, increased cost of production which also leads to cost push inflation. It has also tended to undermine the international competitiveness of non oil exports and make planning and projections difficult on both micro and macro level of economy. A good number of small and medium scale enterprises
have been strangled out as a result of how dollar/naira exchange rate and so many other problems resulting from fluctuations in exchange rate can be identified. External trade became very popular in the 20th century as a result of mergers, consolidation and formulation of new companies. The development of stock exchanges like New York, London, Tokyo and Frankfurt stock exchanges equally stimulated external trade, (Ndu, 1991). Maintaining a realistic exchange rate for exporters regardless of the trade and foreign rate regime is the first requirement for export development and for sound investment planning and for attracting a meaningful foreign investment into the country. Nigeria is an import oriented country, which made it possible for her currency (Naira) to continue to nose-dive vis a vis American dollar. It is pertinent to note that naira has been devalued severally due to chronic imbalance of external trade with other countries.

With the introduction of Second Tier Foreign Exchange Market (SFEM) in 1986 which gave rise to foreign exchange market and Inter-Bank Foreign exchange (IFEM), the idea of shopping for foreign exchange has been greatly improved. Thus foreign exchange transactions are payment mechanisms operated by commercial and merchant Banks to meet the needs of individual and companies for the purpose of exchange domestic money for foreign currency. The foreign exchange market also determines the exchange rate as well as means by which both exporters and importers can be protected against unexpected fluctuation in exchange rate, (Ayobolo, 1989).

The Federal Government of Nigeria is convinced that the exchange rate of naira will not be fixed instead forces of demand and supply should be allowed to prevail. To improve the value of naira on the external front, Nigeria government can either increase supply or reduce demand for foreign exchange although the monetary authorities intervene from time to time on the side of either demand and supply so as to limit the range within which international currencies exchanges in the market. When such intervention occurs, it implies that the exchange rate is not being allowed to move sufficiently to maintain a continuous balance between normal external payment and receipts.

The thrust of exchange rate policy under the structural adjustment programmes are to discourage inputs, promote agricultural production, encourage local sourcing of raw materials and diversify exports. Many individuals have embarked on local sourcing of raw materials, which they considered impossible before the introduction of structural adjustment programme. Problems arise in this international transaction because of inefficiency in our financial system which introduce “Lag” between the time the importer makes payment to the goods at his bank and time the fund is actually remitted to the exporter. This remittance lag as we call it introduces exchange risk into the transaction. Two hypothese were formulated to guide this study. They are stated in the null form as follows:

H01: There is no significant relationship between exchange rate fluctuation and gross domestic product (GDP) in Nigeria.
Ho2: Exchange rate fluctuation has not significantly affected inflation rate in Nigeria
Conceptual Review
According to Ezu (2012) Exchange rate is the price of a nation’s currency in terms of another currency. It is the required amount of units of a currency that can buy another amount of units of another currency. Powell (1993) defined exchange rate simply as the external price of a currency expressed in terms of an artificial unit such as weighted average of “sample” or “basket of leading trade currencies”. Olukole (1992) saw exchange rate as the numerical expression of the value of the currency of one country at any given time.

Okonkwo (1991) defined exchange rate as “the price of one currency in terms of the other”. To him, exchange rate is the rate at which one currency exchanges for another. This view is corroborated by Usman (1991) when he said that “the exchange rate is the value of a country’s domestic currency in terms of a foreign, currency”. Elumelu (2002) saw exchange rate as any other price that is determined by the forces of demand and supply in a perfectly competitive market and in a world where free international exchange is the rule. Daniels et al (1976) defined exchange rates as the number of units of currency, at which another currency can be bought. It is also defined as the price of the currency in terms of another (CBN 1997).

Adeniran et al (2014) as matter of fact referred exchange rate as the ratio at which a unit of currency of one country is expressed in terms of another currency. According to Jhingan (2004), the exchange rate between the dollar and the pound refers to the number of dollars required to purchase a pound. The rate is normally determined in the foreign exchange market. The foreign exchange market is a market where currencies of different countries are bought and sold. It is a market where the values of local and foreign currencies are determined. As noted by Jhingan (2004), the national currencies of all countries are the stock-in-trade of the foreign exchange market, and as such, it is the largest market to be found around the world which functions in every country. However, these definitions can be translated to mean that exchange rate is the price one pays in his home currency to purchase a certain quantity of the currency of another country. For instance, the rate at which Naira exchange for another country's currency—United States Dollars, British Pound Sterling, etc is the exchange rate. Whichever way, the concern of this study is mainly the price for which Nigerian Naira will exchange with other foreign currencies like Dollar, Pound, sterling etc.

Aliyu (2011) asserted that appreciation of exchange rate results in increased imports and reduced export while depreciation would expand export and discourage import. Also, depreciation of exchange rate tends to cause a shift from foreign goods to domestic goods. Hence, it leads to diversion of income from importing countries to countries and exporting through a shift in terms of trade, and this tends to have impact on the exporting and importing countries’ economic growth.

An exchange rate thus has two components, the domestic currency and a foreign currency, and can be quoted either directly or indirectly. In a direct quotation, the price of a unit of foreign currency is expressed in terms of the domestic currency. In indirect quotation, the price of a unit of domestic currency is expressed in terms of the foreign currency. An exchange rate that does not have the domestic currency as one of the two currency components is known as a cross currency or cross state.
There are three types of exchange rate, viz: nominal exchange rate, real exchange rate and real effective exchange rate while Olisadebe (1991) identified two additional exchange rates namely nominal effective exchange rate and equilibrium exchange rate. Exchange rate can be floating or fixed. While floating exchange rates-in which currency rates are determined by market forces, fixed exchange rate is determined by regulatory authorities and are norm for most major nations; some nations prefer to fix or peg their domestic currencies to a widely accepted currency like the US dollar.

In talking about exchange rate, it is necessary to highlight the different versions of exchange rate, so as to make focus on the term very clear and less ambiguous. In effect therefore, the different versions of exchange rate are here expressed. Usman (1991) identified three different types of exchange rate: viz:

a. Nominal exchange rate;
b. Real exchange rate and
c. Real effective exchange rate

However, Olisadebe (1991) introduced two additional versions of exchange rate. (a) Nominal effective exchange rates and
(b) Equilibrium exchange rate.

In the study therefore, the following five types of exchange rates are discussed:

**Nominal Exchange Rate (NER)**

It is the price of one currency in terms of another. It may be quoted as so many units of domestic currency per units of foreign currency or conversely. In Nigeria, it is quoted as so many units of Naira per unit of a foreign currency (eg US Dollar). In UK; it is quoted as so many units of foreign currency per units of pound sterling. The concept of Nominal exchange rate is important in many respects. It determines the cost of imports and the level of revenue to exporters. It is also used for policy purposes as variable to compensate for movements in differential rate of inflation. According to Mordi and Audu (1991) nominal exchange rate (NER) at which a currency is traded at a given point in time is established at the interplay of demand and supply in the foreign exchange market.

**Real Exchange Rate (RER)**

Real exchange rate, according to Olisadebe (1995), is the ratio of price of tradable to the price of non-tradable. It is employed in measuring a country’s price competitiveness. It is defined as the normal exchange rate deflated by the index of relative inflation rates.

**Real Effective Exchange Rate (REER)**

The real effective exchange rate is a trade-weighted average of real exchange rate between one country and its trading partners. The weight reflects the proportion of trading with a country’s trading partner. It could be import or export based or a combination of the two.

**Nominal Effective Exchange Rate (NEER)**

This is the weighted average of nominal exchange rates between one country and its trading partners. For policy makers, exchange rate policy in practice requires the adjustment of the
nominal rate to achieve “Real Effective Exchange Rate” equilibrium. While this is possible in the short run, it is debatable if the long-run equilibrium value of the real exchange rate can be properly targeted given the fact that the long-run equilibrium value may not be stable.

**Equilibrium Exchange Rate (EER)**
All exchange rate adjustment (ERA) is adopted to achieve certain macro or microeconomic objectives. These include the achievement of balance of payment viability, the maintenance of internal balance and promotion of efficiency in resource allocation. In this premise, equilibrium exchange rate may be defined as that rate which promotes the achievement of external balance in a manner consistent with the other targets of economic policy (Olisadebe; 1991). In this sense, equilibrium exchange rate is synonymous with appropriate or realistic rate. This however should be distinguished from the nominal rate, which clears the foreign exchange market at the auction session.

**Fixed or Pegged Exchange Rate**
The fixed exchange rate is a phenomenon which occurs when the rate of a currency against other currencies is fixed. Under fixed exchange rates, all exchange transactions take place at an exchange rate that is determined by the monetary authorities. According to Adetifa, (2005) this connotes that the exchange rate of a currency to other currencies is stable. This allows for an increase in reserve of the country if there is a favourable balance of trade. International trade is encouraged because prices of goods are more predictable and long term capital flows in an orderly manner can be encouraged.

Exchange rate management in Nigeria has been quite challenging owing to the myriads of problems. This explains why Usman (1993) said that the areas of failure in exchange rate policy have been accentuated by two considerations; one “micro” and the other “macro”. The micro consideration has to do with the structure and institutional setting of the foreign exchange market itself. In spite the reforms in the foreign exchange market, the regulators of the foreign exchange market (CBN) have had to contend with some operators that were fast trying to outguess them and exploit the lope-holes in the markets arrangement to their personal advantage. How one recalls the alleged cases of multiple bids submitted by foreign exchange applicants and/or their banks, some shady deals under the autonomous markets round tripping by operators accessing funds through official market and reselling them on the parallel market.

All these added to the fact that the implications of some of the measures were not exhaustively considered. This left the CBN in a situation where it was merely reacting to the situations apparently always a few step behind those that were busy trying to abuse and exploit the system to their advantage. The second problem is that of government conduct of macroeconomic policy itself. There have been always inconsistency and lack of continuity of policy. Government intervention through the monetary and fiscal policies has influenced the exchange rate a lot. Experience has shown that there was undue emphasis on achieving monetary restraint without a commensurate emphasis on fiscal restraints. For instance, in the first two years of Structural Adjustment Programme (SAP), 1986 and 1987, the government adopted a fairly enhanced and consistent approach to both monetary and fiscal policies. Usman (1993) says that from the
beginning of 1988 government became obsessed with demonstrating short-term nature of SAP and began to remove the steps in fiscal restraint. This saw the federal governments’ budget deficit rise from N12 billion in 1988 to N15 billion in 1991.

Essentially, what is required is a realistic approach that is mindful of the strength and structural weakness that are inherent in the economy but still anchored on a deregulated framework and continual reformation. In the bank, the notes (Pounds, shillings etc) deposited in the bank could be converted back into gold (Awake, 2005). Within its subterranean vault, it safeguards the country’s gold reserve. This made gold widely acceptable both in the country and other countries as a means of exchange. Under the regime of gold standard, the value of one country’s currency relative to another was determined in weights of gold (Ounce), making it a means of exchange.

However, after 1945 ushered in the US dollar as the standard by which external values of other currencies were measured; following the fell of England pound sterling. Powel (1993) adduced that in recent years, US dollar has become much less stable, and consequently, the US currency has become less useful as a fulcrum or standard against which to measure the value of other currencies. For instance, in United Kingdom, the sterling index has replaced the dollar as the official measure of exchange rate. It however, noted that the sterling index does not measure external value of the pounds against a particular currency. Instead, it is the trade weighted average of the pounds exchange rate against about 16 leading currencies calculated to reflect the importance of each currency in international trade. In Nigeria before 1971, the parities of the Naira vis-à-vis the pound sterling and US dollar were determined using the gold contents of the Naira, the pound sterling and the US dollar. The contents of the Naira were divided respectively by the gold contents of the pound sterling and US dollar in order to derive the value of the Naira in terms of pound sterling and dollar. After the Gold content of the local currency had been reduced from 2.48824 to 1.21414 grams of fine gold following the change of the Nigeria pound to Naira in 1973, fixed exchange rates were established for both pound sterling and dollar at £0.583 and US $ 1.5200 respectively to N1.00.

**Theoretical Review**

The earliest and leading theoretical foundation for the choice of exchange rate regimes rests on the optimal currency area (OCA) theory, developed by Mundell (1961) and McKinnon (1963). This literature focuses on trade, and stabilization of the business cycle. It is based on concepts of the symmetry of shocks, the degree of openness, and labour market mobility. According to the theory, a fixed exchange rate regime can increase trade and output growth by reducing exchange rate uncertainty and thus the cost of hedging, and also encourage investment by lowering currency premium from interest rates.

However, on the other hand it can also reduce trade and output growth by stopping, delaying or slowing the necessary relative price adjustment process. In the same vein, Hossain (2002) agreed that exchange rate helps to connect the price systems of two different countries by making it possible for international trade and also effects on the volume of imports and exports, as well as country’s balance of payments position. Rogoffs and Reinhartl (2004) also opined that developing countries are relatively better off in the choice of flexible exchange rate regimes.
Later theories focused on financial market stabilization of speculative financial behaviour as it relates particularly to emerging economies. According to the theory, a fixed regime can increase trade and output growth by providing a nominal anchor and the often needed credibility for monetary policy by avoiding competitive depreciation, and enhancing the development of financial markets. (See Barro and Gordon (1983), Calvo and Vegh (2004), Edwards and Savastano (2000) Eichengreen et al (1999), and Frankel (2003) among others).

However, the theory also suggests that a fixed exchange can also delay the necessary relative price adjustments and often lead to speculative attacks. Therefore, many developing and emerging economies suffer from a fear of floating, in the words of Calvo and Reinhart (2002), but their fixed regimes also often end in crashes when there is a sudden stop of foreign investment (Calvo, 2003) and capital flight follows, as was evident in the East Asian and Latin American crises and some sub-Saharan African countries.

Not surprisingly, there is little theoretical consensus on this question of regime choice anti subsequent economic growth in the development economics literature as well. While the role of a nominal anchor is often emphasized, factors ranging from market depth (or the lack of it), political economy, institutions and so on often lead to inclusive suggestions as to which exchange rate regime is appropriate for a developing country (Frankel et al), Montiel (2003), Montiel and Ostry (1991)). The literature in development economics acknowledges the importance of the effects of the level of development to the relationship between regime and growth. Berg et al (2002).

**Empirical Review**
First, Diaz-Alejandro (1965) examined the impacts of exchange rate fluctuation on some macroeconomic variables in Argentina for the period 1955-61. He observed that devaluation was contractionary for Argentina because it induces a shift in income distribution towards savers, which in turn depresses consumption and real absorption. He equally observed that current account improved because of the fall in absorption relative to output.

Cooper (1971) also reviewed twenty-four exchange rate fluctuation experiences involving nineteen different developing countries during the period 1959-66. The study showed that the fluctuation improved the trade balance of the country but that the economic activity often decreased in addition to an increase in inflation in the short term. In a similar study, Gylfason and Schmidt (1983) also constructed a log-linear macro model of an open economy for a sample of ten countries, using different estimates of the key parameters of the model. Their results showed that fluctuation of exchange rate was expansionary in eight out of ten countries investigated. Fluctuation was found to be contractionary in two countries (the United Kingdom and Brazil). The main feature of the studies reviewed above is that they were based on simulation analyses. Edwards (1989) regressed the real GDP on nominal and real exchange rates, government spending, the terms of trade, and measures of money growth. He found that movement in exchange rate tended to reduce the output in the short term even where other factors remained constant. His results for the long-term effect of a real exchange rate were more mixed; but as a whole it was suggested that the initial contractionary effect was not reversed subsequently. In the
same way, Agénor (1995) using a sample of twenty-three developing countries, regressed output growth on contemporaneous and Jagged levels of the real exchange rate and on deviations of actual changes from expected ones in the real exchange rate, government spending, the money supply, and foreign income. The results showed that surprises in real exchange rate depreciation actually boosted output growth, but that depreciations of the level of the real exchange rate exerted a contractionary effect.

Another study by Mireille (2007) argues that overvaluation of exchange rates have constituted a major setback in the recovery process of Nigeria and Benin Republic. In addition, the author suggests that exchange rate accompanied with well-targeted measures alongside an upward adjustment in the domestic price of tradable goods, could restore exchange rate equilibrium and improve economic performance. In a related study, Aliyu et al (2009) examined exchange rate pass-through in Nigeria for the period 1986 to 2007. Quarterly series was employed and a vector Error Correction Model estimation was used in the estimation process. The author found that exchange rate pass-through in Nigeria during the period under consideration was low and declined along the price chain, which partly overturns the conventional wisdom in the literature that exchange rate pass-through is always considerably higher in developing countries than developed countries. The authors conclude that in the long run, it would likely increase and monetary policy should be designed to accommodate the effect.

**Methodology**
The type of research design used in this study is ex-post facto research design which is the type of research involving events that have already taken place and for which data already exists, and the researcher is merely involved in data gathering. The aim of a research design is to ensure that the overall strategy chosen to integrate the different components of the study address the research problem as unambiguously as possible. It is a kind of format which the researcher uses in order to systematically apply a scientific method in the investigation of problems (Onwumere, 2009). It compares two or more groups of variables with similar backgrounds that are exposed to different conditions as a result of their natural histories (Lammers & Badia, 2005). The correlation and regression analysis of the ordinary least square (OLS) were used to analyze the data. The data were computed using Statistical Package for Social Sciences (SPSS) version 20.

Data used are sourced from the Central Bank of Nigeria Statistical Bulletin of various issues 1986 being the year the monetary authority shifted from fixed exchange rate regime to flexible exchange rate regime to 2019. The models used in this study are estimated using annual Nigeria data on some macro-economic indicators, which includes: Gross Domestic Products (GDP); Exchange Rate (EXR) and Inflation Rate (IFR) for the period 1986 - 2019. The correlation and linear regression analysis of the Ordinary least square (OLS) are the estimation technique that is being employed in this study to determine the effect of the Exchange rate fluctuation on Nigerian economic growth proxy by Gross Domestic Product (GDP). The method of analyses applied in this research work is linear regression analysis and the Pearson correlation. Regression analysis as a statistical tool helps to predict on the extent f the relationship between the two variables, while the Pearson correlation shows the relationship between the two variables.
Model Specification
Model which specifies that economic growth (GDP) is significantly influenced by the Exchange Rate. Interest Rate and Rate of Inflation is formulated as follows;

\[ \text{GOP} = f(\text{EXR}, \text{IFR}) \]

GDP = Gross Domestic Product
EXR = Exchange Rate
INF = Inflation Rate
f = Function

Decision Rule: We will be testing the hypothesis at 0.05 level of significant from the regression results, we will test the hypothesis in order to decide whether to accept the alternative hypothesis or reject the null hypothesis. i.e. if prob. (sig) < 0.05, we accept the alternative hypothesis or, if prob. (sig.) > 0.05, we reject the null hypothesis.

Presentation of Data
The table below shows the Gross domestic product (G.D.P.), inflation rate, exchange rate and balance of payment rate of Nigeria economy, it covered the period of 2000 to 2019 with the aim of evaluating the impact of exchange rate fluctuation on the Nigeria economy.

Table 4.1: Statistical data on G.D.P., inflation, balance of payment and exchange rate of Nigeria from 2000 to 2019.

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Domestic Product (₦ M)</th>
<th>Inflation (₦M)</th>
<th>Balance of Payment</th>
<th>Exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>5.52</td>
<td>6.9</td>
<td>145.28</td>
<td>85.98</td>
</tr>
<tr>
<td>2001</td>
<td>6.67</td>
<td>18.9</td>
<td>148.33</td>
<td>99.00</td>
</tr>
<tr>
<td>2002</td>
<td>14.60</td>
<td>12.9</td>
<td>149.48</td>
<td>109.00</td>
</tr>
<tr>
<td>2003</td>
<td>9.50</td>
<td>14.0</td>
<td>150.00</td>
<td>114.00</td>
</tr>
<tr>
<td>2004</td>
<td>10.44</td>
<td>15.0</td>
<td>151.30</td>
<td>127.00</td>
</tr>
<tr>
<td>2005</td>
<td>7.01</td>
<td>17.9</td>
<td>152.18</td>
<td>132.00</td>
</tr>
<tr>
<td>2006</td>
<td>6.73</td>
<td>8.2</td>
<td>152.28</td>
<td>125.50</td>
</tr>
<tr>
<td>2007</td>
<td>7.32</td>
<td>5.4</td>
<td>153.33</td>
<td>120.00</td>
</tr>
<tr>
<td>2008</td>
<td>7.20</td>
<td>11.6</td>
<td>154.40</td>
<td>115.50</td>
</tr>
<tr>
<td>2009</td>
<td>8.35</td>
<td>11.5</td>
<td>155.15</td>
<td>145.00</td>
</tr>
<tr>
<td>2010</td>
<td>7.98</td>
<td>13.7</td>
<td>156.20</td>
<td>148.21</td>
</tr>
<tr>
<td>2011</td>
<td>7.36</td>
<td>10.8</td>
<td>157.27</td>
<td>151.05</td>
</tr>
<tr>
<td>2012</td>
<td>4.21</td>
<td>12.2</td>
<td>157.33</td>
<td>155.09</td>
</tr>
<tr>
<td>2013</td>
<td>5.49</td>
<td>8.5</td>
<td>158.26</td>
<td>153.21</td>
</tr>
<tr>
<td>2014</td>
<td>6.22</td>
<td>8.1</td>
<td>159.68</td>
<td>170.00</td>
</tr>
<tr>
<td>2015</td>
<td>2.79</td>
<td>9.0</td>
<td>170.00</td>
<td>199.00</td>
</tr>
<tr>
<td>2016</td>
<td>1.51</td>
<td>15.7</td>
<td>171.10</td>
<td>365.00</td>
</tr>
<tr>
<td>2017</td>
<td>3.40</td>
<td>12.5</td>
<td>182.71</td>
<td>305.00</td>
</tr>
<tr>
<td>2018</td>
<td>1.45</td>
<td>13.0</td>
<td>186.9</td>
<td>305.00</td>
</tr>
<tr>
<td>2019</td>
<td>4.12</td>
<td>12.5</td>
<td>191.6</td>
<td>365.00</td>
</tr>
</tbody>
</table>
Data Analysis
The data was analyzed using Pearson correlation and regression of ordinary least square. Regression analysis as a statistical tool helps to predict on the extent of the relationship between the two variables. The SPSS output 23 (Statistical Package for Social Science) Software is applied for the data analysis.

Table 4.2: Coefficient variable in exchange rate model

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>1</td>
<td>-1038.284</td>
<td>245.206</td>
<td>-2.161</td>
<td>-4.234</td>
<td>.001</td>
<td>-1568.019</td>
</tr>
<tr>
<td></td>
<td>-2.161</td>
<td>3.440</td>
<td>-.102</td>
<td>-.628</td>
<td>.541</td>
<td>-9.593</td>
</tr>
<tr>
<td></td>
<td>3.582</td>
<td>1.996</td>
<td>.220</td>
<td>1.795</td>
<td>.096</td>
<td>-.730</td>
</tr>
<tr>
<td></td>
<td>7.460</td>
<td>1.470</td>
<td>.820</td>
<td>5.075</td>
<td>.000</td>
<td>4.284</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Exchange rate

Table 4.2 above shows an intercept of -1034.284, which shows that Nigeria economy, will experience a 1034.284 decrease when all other variables are held constant. The estimate coefficients which are -2.161 (Gross Domestic Product) shows that a unit change in Gross domestic Product will cause a 2.161 decrease in Exchange Rate; 3.582 (Inflation) shows that a unit change in inflation will cause a 3.582 increase in Exchange Rate, and 7.460 (Balance of payment) shows that a unit change in Balance of payment will cause a 7.460 increase in Exchange rate. The correlation results shows that Gross domestic product and Balance of payment had a negative effect on economic growth. Inflation rate have inverse effect on economic growth and it's not significant.

Table 4.3: Analysis of Diagnostic Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.900&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.810</td>
<td>.766</td>
<td>30.19929</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Balance of payment, Inflation, Gross domestic Product

The R<sup>2</sup> (coefficient of multiple determination) lies between 0 and 1, that is 0 < R<sup>2</sup> < 1. The higher the R<sup>2</sup>, the better the "goodness of fit" of the regression plane to the sample observation while the closer the R<sup>2</sup> to zero, the "worst the fit". The multiple regressions predicted Exchange Rate from Gross Domestic Product, Inflation and Balance of payment. In the model of the regression
results, the $R^2$ obtained is 0.810 this implies that 81.0% of the exchange rate fluctuation is explained by the changes in the independent variables. From the secondary data the variables that were analyzed; Exchange rate, Balance of payment, Inflation, and Gross domestic product, showed a significance relationship between Exchange rate and the independent variables. $F$-ratio $(3, 13) = 18.414; p < 0.05$.

**Test of Hypotheses**

In order to determine the effect of macroeconomic variables on the Nigeria economy, we carried out a multiple regression which showed the relationships between the dependent and independent variables. The hypotheses were tested at 95% confidence intervals. Hypothesis offers more than a mere declarative statement suggesting an answer to a question. Research hypothesis is a proposition stated in testable form to predict particular relationship between two or more variables. Hypothesis once formulated must be tested statistically to develop evidence for or against a proposition.

**Restatement of Hypotheses**

**Hypothesis 1**

$H_0$: Gross Domestic Product has no significant effect on the Nigeria economic growth.

$H_1$: Gross Domestic Product has significant effect on the Nigeria economic growth

According to the Decision Rule stated above, Gross Domestic product is not significant at 0.541 which is greater than 0.05 significant level. Therefore, we accept the null hypothesis stating that Gross Domestic Product has no significant effect on the Nigeria economic growth and reject the alternative hypothesis.

**Hypothesis 2**

Going by the specified model, Inflation rate is expected to have effect on economic growth in Nigeria. To determine if the effect is significant or not, hypothesis was formulated and tested at 0.05 or 5% level of significance.

**Restatement of Hypothesis**

$H_0$: Inflation rate has no significant effect on the Nigeria economic growth.

$H_1$: Inflation rate has significant effect on the Nigeria economic growth

Based on the Decision Rule stated above, Inflation rate is not significant at 0.096 which is greater than 0.05 significant level. Therefore, we accept the null hypothesis stating that Inflation rate has no significant effect on the Nigeria economic growth and reject the alternative hypothesis.

**Summary of Findings**

Firstly, the exchange rate fluctuation has a significant relationship with the Gross domestic product for the period under investigation. Secondly, the exchange rate fluctuation has no significant influence on Nigeria inflation for the period under investigation.
Conclusion
Exchange rate is an important macro-economic variable that if not well managed will influence adversely other macro-economic variable. This research work investigated the impact of exchange rate fluctuation on the Nigerian external trade and concluded that the level of output production by the sector can influence exchange rate fluctuation, that exchange rate fluctuation has not affected inflation position of Nigeria economy for the period under investigation and also is that exchange rate fluctuation affects Nigeria balance of payment position of Nigeria economy for the period under review.

Recommendations
Having examined the effect of exchange rate fluctuation on Nigeria external trade as well as its adverse impact on the economy, the researcher come up with the following recommendations with regards to encouraging export, promotion through financial support to exporters. The government should try to determine the process of reducing problem of delayed repatriation of export proceeds. Also government should employ drastic measure on prompt production of documents establishing that the exporters deposited foreign exchange earnings from export proceeds on domestic domiciliary account. Government should create incentive such as loans, subsidy, grants etc. to small scales industries, thereby encouraging them to produce domestic goods which will help to boost export and also encourage the export promotion strategies in other to maintain a surplus balance of payment. Strict exchange control rate policy should be made or adopted in order to help in determination of appropriate exchange rate value that will go a long way to strengthen the naira.

REFERENCES


Marc Aubon and Michele Ruta (2011). The relationship between exchange rates and international trade: a review of economic literature" World Trade Organization (WTO)


