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The role of flexible exchange rate system in the economic development of Nigeria

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ABSTRACT
This paper examines**"the role of flexible exchange rate system in the economic development of Nigeria"**, the argument that fluctuation in exchange rate adversely affects the economic development of Nigeria.The overall objective of the study is to determine empirically the effects of exchange rate fluctuation on the nation'seconomy. The research designed employed in this research was an ex-post factor method, this method was chosen because secondary data is used as no attempt was made to control or manipulate the relevant independent variable. The sampled period of this study is from 2004-2015. The data utilized in this study is sourced through publication of central bank of Nigeria (CBN) i.e. statistic bulletin, online information and economic journals. Simple regression analysis is used for the computation of the quantitative data. Based on the result of the findings, it wasfound that exchange rate has significant effect on the economic growth of Nigeria, also that there is no significant effect of fluctuations on exchange rate on the manufacturing sector. Some recommendation for policies were made based on the findings amongst other is the need to strengthen international trade thereby reducing reliance of one sector or import of input to a reasonable level.

Keywords: flexible, exchange rate, system, economic development.

I. INTRODUCTION

An exchange rate is simply the price of one currency in terms of another currency; the process by which that price is determined depends on the particular exchange rate, mechanism adopted. Floating rate system and the exchange rate is determined directly by market forces and is liable to fluctuate continually, as dictated by changing market conditions.

In floating exchange rate regime, the price of the dollar, like any other market determined price depend on the relevant forces of supply and demand.

After the Bretton wood broke down, the world finally adopted the use of floating foreign exchange the during Jamaica agreement of 1976.

Most-though not all-mainstream economist argued today that the global economic functions best when major economies exchange rate are flexible and market are allowed to positioned up or down with changing economics condition subject to some government-imposed conditions especially when market over shoot this war.

Before World War 1, most countries tied their currency to gold standard, a system suspended during war following a protracted economic decline, the Nigerian exchange rate arrangement have undergone significant change over the past four decades. This has witnessed a shift from a fixed regime in 1960s to a pegged arrangement between 1970s and mid 1980s and floating and before 1986.

The 1970s were generally regarded as an era of oil boom in Nigeria, where oil revenue enhanced economic development. The economy becomes heavily dependent on crude petroleum export as the main source of foreign exchange earnings and government revenue. The large money inflow oil money encouraged large scale importation of both consumer and producer goods so much so that the country became highly import dependent.

The core component of SAP was known initially as second – tier foreign exchange market (SFEM) which was later transformed to the foreign exchange market (FEM) and now Autonomous foreign exchange market (AFEM). Under the deregulation stance of SAP, the determination of naira exchange rate was subjected to market focus. In this connection there had been experimentation when several techniques of conducting the foreign exchange market between 1987 and 1996 to facilitate the achievement of policy objective.

Eventually on March 5, 1992, the policy of complete deregulation of the foreign exchange was announced in response of emergence of large market premium and abuse by many operators.

But it has been proved that the application of devaluation as an adjustment tool in developing economies like Nigeria will not yield desired result because of their economic structure, among other reasons (cooper, 1971: crokett&Nsouli; 1971 Oluremi, 1985 Ashive 1983 Oyejide1989; Ojameruaye 1991; Obadan, 1993.Okocha 2001).

However, the controversy associated with the topical issue has aroused the thinking of Nigeria economics being and researcher is not left out. Therefore, this study seeks to unveil the impact of flexible exchange rate system in the economic development of Nigeria.

II. STATEMENT OF THE PROBLEM

Exchange rate fluctuation may lead to a major decline in output and trade in particular and economy in general if they are unpredictable and erratic. Fluctuation- whether positive or negative is not desirable as it increased risk and thus discourages trades.

An IMF (1984) study cited arguments that exchange rate of variability would also tend to increase macroeconomic phenomena that are undesirable, for example, inflation and protectionism. Despite this assertion and that of others studies, more recent research explained why positive effect could be possible (deGrauwe 1989, Caballero and Carbo, 1989). If from hedge against exchange rate risk one could not expect to find a strong effective on trade. Hedging against risk can be done via future and forward market. Where forward and future market exist the nature of the uncertainty faced by traders is transformed. A forward market represents in effect, a guaranteed forecast of the exchange rate that will prevail at the end of the contract period, which a trader can take advantages of by payment of a small margin around the forward rates.

The implementation of floating exchange rate system as recommended as an international monetary fund (IMF) antidote of Nigerian economic structural imbalance has resulted in exchange rate fluctuations with wide bands and eventually devaluation of naira by more than 65% (Okigbo, 1988). This has no doubt, continued to pose economic and social problem both internally and externally. At the international level, the nation's balance of payment (BOPs) have continued to record deficit (except recent with oil boom) declining foreign exchange inflow with increasing foreign exchange out flow.

At the home front, inflation has continued in galloping and geometric progression, interest rate is increasing is a disturbing proportion where by discourage investment, unemployment has been growing at a disturbing rate with its attendant socialimplication, GDP. Output had been decreasing and domestic prices are more than erratic and more disturbing is government adjustment policies, Consequently the future growth international trade transactions, living standard of the people and the general economic service are in serious question.

III. OBJECTIVE OF THE STUDY

The overall objective of the study is to determine empirically the effects of exchange rate fluctuation on the nation's economy. Specifically, the study intends to accomplish the following:

i. To ascertain the influence of flexible exchange rate on the performance of the economy.
ii. To estimate the nature of relationship between exchange rate, volatility and general export.
iii. To determine the specific economic problem that may be associated with the devaluation of the nation's currency.

RESEARCH QUESTIONS

Given the above stated objectives, the following pertinent questions are therefore considered relevant for the study.

1. How has the prevailing exchange rate instability affected the performance of Nigerian economy?
2. To what extent has exchange rate instability affected total export in Nigeria?
3. What is the influence of Nigerian currency devaluation on the nation's macroeconomic indicator?

HYPOTHESIS

Hypothesis 1

H0: Exchange rate instability has no significant impact on the economic growth (GDP).

H1: Exchange rate has significant impact on the economic growth (GDP).

Hypothesis 2

H0: There is no significant positive correlation between rate of inflation and economic growth.

H1: There is significant positive correlation between rate of inflation and economic growth.

SIGNIFICANCE OF THE STUDY

Evidently, exchange rate instability is one of the economic problems that have continued to dominate national discourse in recent time.Therefore, the study will be of immense importance to government and policy makers alike especially in their effort to fashion out sound and effective exchange rate administration. Sound policy in exchange rate administration, will no doubt, improve international trade through exportation of goods and services etc. The net effect being a favourable balance of payment.Closely linked to this, is to improve standard living for the citizens. Hence, the importance of this study can never be overemphasized.

IV. LITERATURE REVIEW

Introduction

Since the implementation of financial liberalization policies, most developing countries have been exposed to large exchange rate fluctuations. This situation has attracted the attention of economists and various researches has been focused on the effects of exchange rate fluctuation on trade flows (Cho andCorriston2002, Soleymani andChua2014, Karemeraetal.2015, Wong 2017). Previous studies dealing with the effects of exchange rate fluctuation on economic growth have often yielded mixed results. This is explained at least by two reasons. First, the effects of exchange rate fluctuation on the dynamics of growth are contradictory. On the one hand, exchange rate fluctuation may be considered as a shock absorber and seems to be more appropriate for countries with frequent real shocks; on the other hand, fluctuation may be associated with higher macroeconomic volatility in terms of international trade, investment, and economic growth. Second, the relationship between exchange rates and economic growth also depends on other control variables such as financial development (Aghionetal.2009,Ndambendia and Al- Hayky 2011), and exchange rate regime (Jha 2003).

Theempirical investigation is based on a sample of 45 developing countries during the period 1985~2015, carried out by (Achouak,B.etal (2018) "Finds that First, nominal and real exchange rate volatilities have negative and statistically significant effects on economic growth. Second, the effects of volatility are negative in countries with flexible exchange rate regimes, whereas they are not significant in countries with fixed regimes. In economies with flexible exchange rate regimes, exchange volatility is relatively high. Economic operators acting in such a macroeconomic environment might fear from the uncertainty related to the evolution of future exchange rates and prefer to postpone their trade and investment operations, which may be harmful for economic growth. In countries with fixed exchange rates,uncertainty of exchange rate evolution is relatively limited and, consequently ,these fluctuations have no impact ton their economic performance."

THEORETICAL FRAMEWORK

It was argued that the degree of openness of exchange influence the level and rate of economic growth, thus countries that are more open to international trade will tend to grow more rapidly because they have developed a greater ability to absorb technological advance and take advantage of large market. To this extent the exchange rate, regime influences the volume of international trade which could bring positive effect on the growth of the economy. The types of exchange rate regime which a country adopts influence the economic growth. Borrow et' al (1995).

To Corden (2002) every country has wide array of exchange rate regimes to choose from depending on the desired agree of flexibility of the exchange rate regime and nature of stock faced by the economic. He said that the good of an exchange rate regime optimization of output stabilization where shock are predominantly, external such as terms of trade shocks, necessitating in relative prices. Then flexibility in the exchange rate is most desirable because it's the real exchange rate. However, where the shocks are mainly domestically induced through growth in monetary aggregate a flexible exchange would not be an ideal policy. Here a proffered option would be fixed exchange rate regime as money supply becomes an endogenous variable under a fixed exchange rate regime and triggers of an auto metric adjustment mechanism that adjust to the shocks in money demand with minimal impact on growth (celasun:2003) rate regime is an important determinant of the performance of Nigerian economy.

Aizenman (1994) has argued that exchange rate regime can influence economic growth through their effect on the rate of physical capital accumulation.

However Nnanna (2003) is of the view that although the flexible exchange rate system has a number of advantage including output stabilization that should ordinarily endure it over the fixed exchange rate regime, exchange rate pegs are rather common amongst small open economy because of the pass through effects of exchange rates movement into domestic prices, issues boring on credibility and the associated risk of unfledged foreign currency liabilities given incessant

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exchange rate volatility. The thinness of foreign exchange markets in the developing countries makes the likelihood of excessive volatility eminent while the shallowness of the financial Market.

Hence Alaba(2003) has noted thus; "the controversy especially for developing countries is whether exchange rate is actually as beneficial as mostly claimed."

He further posits that when viewed quantitively an analysis of the relationship between exchange rate and macro-economic indicators suggests that operating exchange rate regime is an important determinant of the performance of Nigeria economy

V. METHODOLOGY

The designed employed in this research was an expost-factor method, this method was used because secondary data was used and no effort is to manipulate the independent variable. The independent variables are Exchange rate, and inflation and the GDP are the dependent or explained variable. Multiple regression analysis was adopted based on the classical linear model, otherwise known as ordinary least square (OLS). The choice of this technic is based not only on computational simplicity but also as a result of optimal property such as linearity, unbiasedness, minimum variance, zero mean value of random term, etc. (Gujarati,2004)

DATA PRESENTATION

In this section, we present the data used in estimating our models as developed and explained in chapter three. The data sources are mainly from the central bank of Nigeria (CBN).

The table 4.1 present the data for exchanges rate and their corresponding data on gross domestic product (GDP), interest rate and rate of inflation. All the data sets cover the period, 2004-2015.

Table 4.1

Year	Exchange rate	GDP Growth rate	Interest rate	Rate of Inflation
2004	133.50	10.5	19.18	15.00
2005	131.66	5.393	17.95	17.86
2006	128.65	6.211	16.90	8.22
2007	134.05	6.972	16.94	5.42
2008	132.37	5.9846	15.48	11.58
2009	132.60	6.96	18.36	12.54
2010	148.68	7.161	17.59	13.72
2011	146.20	7.356	16.02	10.80
2012	150.20	6.322	12.00	12.20
2013	156.00	7.161	12.00	10.67
2014	168.33	6.90	13.00	9.00
2015	232.40	6.56	14.00	9.01

Source: CBN Bulletin and Nigeria economic Indicator

Table 4.2 Descriptive Statistics

	Mean	Std. Deviation	N
GDP_Growthrate	7.00151	1.308688	12
Exchangerate	142.0218	12.72970	12
Interestrate	15.9473	2.54846	12
Rate of inflation	11.5464	3.38136	12

Source: spss result (2018)

Descriptive Statistic

From the table above, we see that GDP, growth rate, has a mean of 7.00151 ad standard deviation of 1.308688; also, the mean figure of exchange rate has a mean of 142.0218 and standard deviation of 12. 72970.

This shows that GDP growth rate and exchange rate has a positive factor on the role of flexible exchange rate system in the economic development of Nigeria compare to interest rate and rate of inflation that have lower figure and are shown by the mean of 15.9473 and 11.5464 respectively while their standard deviation for interest rate and rate of inflation is 2.54846 and 3.38136 respectively. It can be said that from the calculation above, it shows that interest rate and rate of inflation has the lest factor that will influence the role of flexible exchange rate system in the economic development of Nigeria. Level of significance is 5%.

Table 4.3Correlations

	GDP_growth rate	Exchange rate	Interest rate	Rate of inflation
Pearson Correlation GDP growth rate	1.000	042	.301	.094
Exchange rate	.042	1.000	-.743	-.171
Interest rate	.301	-.743	1.000	.335
Rate of inflation	.094	-.171	.335	1.000
Sig. (1-tailed) GDP_growth rate		.452	.184	.391
Exchange rate	.452		.004	.307
Interest rate	.184	.004		.157
Rate of inflation	.391	.307	.157	
GDP_growth rate	11	11	11	11
Exchange rate	11	11	11	11
Interest rate	11	11	11	11
Rate of inflation	11	11	11	11

Source: spss result (2018)

Correlation of Analysis

Base on the correlation table, the GDP growth rate has positive correlation with the entire variable. Likewise, the exchange rate has positive correlation with GDP, growth rate, exchange rate, and negative correlation with interest rate and rate of inflation of 1% level of significance. More so, interest rate has positive and significant correlation with GDP and rate of inflation, but negative correlation with exchange rate.

Conclusively, rate of inflation has positive and significant relationship with GDP growth rate, interest rate but negative correlation with exchange rate. Therefore, the flexible change rate has negative relationship with GDP.

Table 4.4 Model Summary[13]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.500[a]	.250	-.071	1.354217	.250	.780

Source: spss result (2018)

Model Summary

The result from table 4.4 above reveals that the model f ratio stood at 0.78 and the p – value is 0.54 that is p value is greater than the level of significance this indicate that the model has insignificant ability with exchange rate. The table also show that the mode has 0.25R^2which indicate that the GDP growth rate variable combined together account for 25% of the dependent variable.

Table 4.5Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-7.801	10.483		-.744	.481
Exchange rateinterest rate	.062 .394	.051 .264	.602 .768	1.222 1.491	.261 .180
Rateofinflation	-.023	.135	-.059	-.170	.870

Source: spss (2018)

Co-efficient

From the table 4.5 above the exchange rate has positive significant co-efficient with GDP with the beta factor of 0.602 with p-value of 1.22. This significant level of less than 0.05. Also interest rate has positive significant relationship with GDP with beta factor of 0.768 with p- value of 1.941 with significant level of 0.05.

Conclusively, rate of inflation has negative and insignificant relationship with the Gross domestic product with beta factor of -0.59 and p-value of -1.70 with significant level> than 0.05.

TEST OF HYPOTHESIS

Hypothesis 1

H_0: Exchange rate instability has no significant impact on the Gross domestic product.

H_1: Exchange rate instability has significant impact on Gross domestic product.

Base on table of correlation it reveals that exchange rate has positive and significant relationship with the GDP, also the co-efficient table reveals that exchange rate has positive and significant co-efficient with GDP.

Base on this, the H0 is rejected and the H1 is accepted which state that exchange rate instability has significant impact on the gross domestic product (G.D.P).

Hypothesis 2:

H_0: There is no significant relationship between rate of inflation and economic growth.

H_1: There is significant relationship between rate of inflation and economic growth

Base on table of correlation the result reveals that inflation; rate has positive and significant relationship with economic growth. Also, the co-efficient table reveals that rate of inflation has negative relationship and insignificant relationship with GDP.

Base of this the **H_0**is accepted and the**H_1** rejected which state that these is no significant relationship between GDP and inflation rate.

DISCUSSION OF RESULT

The result of the foregoing report has been quite revealing.

Exchange rate instability has significant impact on Gross domestic product. Base on table of correlation it reveals that exchange rate has positive and significant relationship with the GDP also the co-efficient table reveals that exchange rate has positive and significant co-efficient with GDP base on this the **H_0** is rejected and the **H_1** is accepted which state that exchange rate instability has significant impact on the gross domestic product (G.D.P).

There is no significant relationship between rate of inflation and economic growth.

Base on table of correlation the result reveals that inflation rate has positive and significant relationship with economic growth. Also, the co-efficient table reveals that rate of inflation has negative relationship and significant relationship with GDP.

This stated that there is no significant relationship between GDP and inflation rate.

VI. CONCLUSION

Based on the empirical analysis of secondary data, the following conclusions were drawn from my findings.

Flexible exchange rate has a strong significant relationship with gross domestic product which indicate that exchange instability has a significant impact on the gross domestic product.

Exchange rate has shown a strong and positive correlation which thus suggests that exchange rate administration encourages export of goods and services, hence cumulating in favourable balance of payments.

Flexible exchange rate i.e fluctuating exchange rate has a strong impact on economic growth because under this, exchange rate market is unpredictable, thus leading to economic instability.

POLICY IMPLICATIONS AND RECOMMENDATIONS

The result of the hypothesis brought to limelight some policy implications and recommendations.

The research recommended that government should try and make the economy investment friendly, by putting in place political stability, security of lives and good economic climate to draw home foreign investors to boost the nation productivity. This will reduce capital flight plaguing the country.

1. Non-transparency in our business dealings has been identified as the bane of economic development and this can equally be linked to a seeming mismatch between high exchange rate and economic development.This study therefore recommends greater effort at ensuring transparency in all business practices.
2. Another recommendation made was that government should maintain and properly enforce the ban on importation of goods having local substitute. Such an action would enhance the productivity of the manufacturing industries in Nigeria.
3. Government should increase an external reserve that was supposed to dampen the inflationary effect in the economy.

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