THE DEREGULATION OF FOREIGN EXCHANGE MARKET AND ITS IMPACT ON THE GROWTH OF THE NIGERIAN ECONOMY

Okosodo, L. A., Ph.D

Department Of Economics
Ambrose Alli University
Ekpoma – Edo State
Nigeria.

Imosili S. A.,

Department Of Economics
Ambrose Alli University
Ekpoma – Edo State
Nigeria.

ABSTRACT

This research work empirically examined the deregulation of foreign exchange market and its impact on the growth of the Nigerian economy. It made use of secondary data which were sourced from different sources. It appraised the objectives of the deregulation of foreign exchange market and the growth of the Nigerian economy. The Ordinary Least Square Method (OLS) was employed in this paper.

The result of this research paper revealed that the deregulation of the foreign exchange market has a direct impact on the growth of the Nigerian economy. Exchange rate management adopted by Nigeria has been effective in solving the problem of inflation in Nigeria. Government should put machinery in place through the Central Bank to monitor the valuation of money to curb the trend of inflation in Nigeria.

Keywords: Equilibrium, Exchange rate, Currency, Over valued, Export, Import, Gold, Interest rate and Inflation.

INTRODUCTION:

All over the world (Nigeria inclusive) foreign exchange has been area of interest to both policy makers and economists. It is an important use in the ability to obtain goods which cannot be produced within the country or which can only be produced at greater expense. It enables nations to sell their domestically produced goods to other countries of the world (Adewuyi, 2002).

The performance of given economy in terms of growth rate of output and per capita income has not only been base on the domestic production and consumption activities but also on foreign exchange. Indeed it has been generally acknowledged that foreign trade is an "engine of growth and development" (Adewuyi, 2002).

International trade plays a vital role in shaping economic and social performance and prospect of countries around the world especially those of developing countries. No country has grown without trade. Since trade is acting as an engine of growth and development therefore trade must lead to steady improvement in human condition by expanding the range of peoples' choice.

Over 40 years of independence, Nigeria's economy has never grown more than 7 percent because of perception of risk and high cost of doing business, private agent keep the bulk of their assets abroad and more that two million Nigerians have migrated to Europe and the United State for reasons best known to them, (Oriemuno, 2007).

Edward (1989) opines that the equilibrium real exchange rate (RER) prevails when given sustainable value for other relevant variables. There is growing agreement in the literature that prolonged and substantial exchange rate misalignment can create severe macro-economic disequilibria and the correction of external balance will require both exchange rate devaluation and demand management policies. The main intuition behind this is that an increase in exchange rate volatility leads to uncertainty which might have a negative impact on trade flows. Balswin, Skudely and Taglioni (2005) found that the effect of exchange rate uncertainty on trade in the European Union (EU) countries is negative, trade increase as volatility falls and get progressively large as volatility approaches zero.

Therefore, the objective of this paper is to examine the deregulation of foreign exchange market and its impact on the growth of the Nigerian economy. This research work is divided into five sections. Section one contains the introduction. Section two dwells on the review of related literature. Section three focuses on the methodology. Section four deals with the discussion of results while section five contains the concluding remarks.

REVIEW OF RELATED LITERATURE:

The review of the related literature in this section is done under the following headings: Rational for foreign exchange market, Causes of foreign exchange market and Types of foreign exchange market

RATIONAL FOR FOREIGN EXCHANGE MARKET:

The fundamental objectives of exchange rate policy in Nigeria are to preserve the value of the domestic currency, maintain a favourable external reserve position and ensure external balance without compromising the need for internal balance and the overall goal of macro-economic stability. In an attempt to achieve optimal level of foreign exchange efficiency, several policy guidelines and requirement were introduced to manage the nation foreign exchange market. Remarkable among the prominent policies emerged in 1986 upward when Nigeria shift to market oriented economy with a view to promoting productive sector and enhance the facilitation of foreign direct investment (FDI) influx into the country.

Prior to the introduction of structural Adjustment Program (SAP) in 1986, naira (Nigeria Currency) enjoyed appreciation value against US dollar a factor that creates opportunity for rapid economic growth and stability. With the introduction of new economic programme, the country began to suffer unstable exchange rate that cause a high degree of uncertainty in the Nigeria business environment. Domestic investors face enormous risk as no one, no matter how intelligent could predict the likelihood of the foreign exchange market performance. The situation must equally have an effect on importation level of the country.

Nigeria as a developing country striving to develop its industrial base needs to harness its foreign exchange market to enable domestic investors import relevant machineries, equipment and raw materials for the industrial consumption. Considerable size of literature discussed extensively about the effect of exchange rate volatility in relation to imports value, and how overvalued exchange rate affect developmental projects.

Ekanem (2002) asserts that overvalued exchange rate can frustrate development efforts of import dependent economies to a large extent because critical imports needed for infrastructure and other development projects become more expensive. In reality, trade is determined by individual country' ability to export and the ability and desire to import.

Huizingu (1997) propounds that developing countries frequently maintain an overvalued nominal exchange rate resulting in real exchange misalignment. To finance import demand at the overvalued exchange rate, countries have to raise the level of income taxation or they have to resort to monetary finance.

Mallick and Marques (2008) asserted that change in exchange rate can lead to a rise in import prices and the spur overall inflation. Furthermore, the response of local-currency prices of imported product to change in exchange rate may not be one-of-one, as has been in the case of many advanced markets. Interestingly, the study of Baek and Koo (2009) established that both the bilateral exchange rates and income in the United States and its trading partners are found to have significant impacts on US agricultural exports and import.

CAUSES OF FOREIGN EXCHANGE MARKET:

The evaluation of the foreign exchange market in Nigeria could be traced to the established of the Central Bank of Nigeria (CBN) in 1958 and subsequent enactment of the exchange control act of 1962. Prior to this period, foreign exchange earned by the private sector used to be held in balance abroad by commercial banks, which acted as agent for local exporters. Similarly, during the period, Agricultural exports contributed the bulk of foreign exchange receipts. The fact that the Nigerian pound was tied to the British pound sterling at par, with easy convertibility delayed the development of an active foreign exchange market. With the introduction of naira as an official currency of Nigeria, the exchange process commenced. However, the increased export of crude oil in the early 1970s, following the sharp rise in its prices enhanced official foreign exchange receipt.

The foreign exchange market experienced a boom during this period and management of foreign exchange resources became necessary to ensure that shortage did not arise. However, it was until 1982 that comprehensive exchange controls were applied as a result of foreign exchange crisis that set in that year. The increasing demand for foreign exchange at a time when the supply was shrinking encouraged the development of a flourishing parallel market for foreign exchange.

The exchange control system was able to evolve an appropriate mechanism for foreign exchange allocation in consonance with the goal of internal balance. This led to the introduction of the second-tier foreign exchange market (SFEM) in September, 1986. Under SFEM, the determination of the naira exchange rate and allocation of foreign exchange were based on market forces. To enlarge the scope of the foreign exchange market, bureau de change was introduced in 1989 for dealing in privately sourced foreign exchange. Additionally, the federal ministry of finance leads its allocative powers transferred to the CBN (CBN, 2006).

The CBN through selected authorized dealers as market determined exchange rate in addition of bureau de change were once more accorded the status of authorized buyers and sellers of foreign exchange. The foreign exchange market was further liberalized in October 1999 with the introduction of an interbank foreign exchange market. (Abba, 2007).

TYPES OF FOREIGN EXCHANGE MARKET:

Essentially, there are two types of foreign exchange market

1. The spot foreign exchange market
2. The forward foreign exchange market

THE SPOT FOREIGN EXCHANGE MARKET:

According to Obadan (2006) the spot foreign exchange market is the market where currencies are bought and sold for immediate delivery or delivery within a few working days.

According to Paul and Lindert (2000), the spot foreign exchange market is a market for immediate delivery. It serves as a clearing function, permitting payment to be made between entities who want to hold or use different currencies. The exchange rate used in the spot foreign exchange market is called spot exchange rate.

According to Jhingan (2004), the spot exchange market is the market where the delivery of foreign

exchange has to be made "on the spot" usually within two days of the transaction. The exchange rate at which the transaction takes place is called the "spot rate" the spot exchange rate is determined by immediate market demand and supply for foreign exchange.

THE FORWARD FOREIGN EXCHANGE MARKET:

According to Obadan (2006), the forward exchange market is the market where foreign exchange or foreign currencies are bought and sold for delivery at a future date and at the exchange rate agreed upon today. The essence of the forward foreign exchange rate market is in two-fold.

a) To avoid changes in exchange rate risk from frequent changes in the exchange rate.
b) To enable businessmen to cover their exchange rate risk that may arise in the course of international trade. The rate, which prevails in the forward exchange market is known as forward rate or forward foreign exchange rate and it is determined by the interaction of market forces of demand and supply.

According to Pugel and Lindert (2000) the forward exchange market is the market for future delivery at a price that is agreed to now. The exchange rate used in the forward exchange market is called the forward exchange rate. The forward exchange market is particularly convenient for large customers typically cooperations that are viewed by their banks as acceptable credit risks for larger transaction involving international trade in goods and services.

A forward exchange contract is an agreement to exchange one currency for another on some data in the future at a price set now (the forward exchange rate).

Jhingan (2007) opines that the forward exchange market is the market where foreign exchange is bought and sold for delivery at a future date at an agreed rate today. The rate at which forward exchange contract is agreed upon is called the "forward rate" the usual forward exchange contract and rate are for 1 (one) month, 3 (three) months, 6 (six) months, 9 (nine) months and 1 (one) year. The forward exchange rate is determined by the market forces of demand and supply for foreign exchange to be delivered at some future time. If the forward rate for say, 3 (three) months is greater than the spot rate, less of foreign currency is exchange for a unit of the domestic currency and it is called 3 month. "Forward premium" forward premium and discount are expressed as percentage of the spot rate per year.

RESEARCH METHODOLOGY:

THEORETICAL FRAMEWORK:

This research is stated under the purchasing power parity theory which attempt to explain the equilibrium values of the exchange rate in terms of price differentials between two currencies. This theory of foreign exchange rate was formulated by John Wheatley of Gustar Cassel after the breakdown of the gold standard in 1916. According to this theory, the equilibrium rate of exchange of two inconvertible currencies is statistically determined by the ratio of their purchasing power.

There are two variants to this theory.

The absolute and the relative versions.

The absolute versions states that the equilibrium between domestic and foreign currencies is equal to the ratio of domestic to foreign price while the relative version postulate that changes in the equilibrium exchange rate reflect changes in the domestic and foreign price.

SOURCES OF DATA:

The data used for this research work were obtained mainly from secondary sources. This includes Central bank of Nigeria annual reviews (CBN), National Bureau of Statistics (NBS),Journals of Economics, Nigeria Stock Exchange (NSE), Security and Exchange Commission and Text-books and other relevant documents.

RESEARCH METHODOLOGY:

The research method employed in this study is the ordinary least square (OLS) analysis. This technique is adopted because it is unbiased; it is fairly simple to understand when compared with some other econometrics techniques for analyzing data.

MODEL SPECIFICATION:

The research made use of the following models specified below.

MODEL 1:

EXR = F(INF, IMP, INT)
EXR = a_0+a_1INF+a_2IMP+a_3INT+U
Where = EXR = Exchange rate
INF = Inflation rate
EXP = Export
IMP = Import
INT = Interest rate
U = Error term
a_1, a_2, a_3 = slope of the regression

MODEL 2:

GDP = F(INF, IMP, INT)
GDP = a_0+a_1INF,a_2IMP+a_3INT+U
Where GDP = Gross domestic product
INF = Inflation rate
EXP = Export
IMP = Import
INT = Interest rate
U = Error term
a_1 a_2 a_3 = slope of the regression

DATE PRESENTATION:

SOME DETERMINANTS OF EXCHANGE RATE:

Year	EXCR	GDP	IMP	INF	INT
1990	8.008900	267550.0	45717.90	7.5	18.5
1991	9.880500	312139.7	89488.20	12.7	14.5
1992	19.38900	532613.8	143151.2	44.8	17.5
1993	21.88610	683869.8	165629.4	57.2	26
1994	21.88610	89986.2	162788.8	57	13.5
1995	21.88610	1933212	755127.7	72.8	13.5
1996	21.88610	2702719	562626.6	29.3	13.5
1997	21.88610	2801973	845716.6	10.7	13.5
1998	21.88610	2708431	837418.7	7.9	14.31
1999	94.49800	3194015	862515.7	6.6	18
2000	102.4773	4582127	985022.4	6.9	13.5
2001	111.6000	4725086	1358180.3	18.9	14.31
2002	126.5553	6912381	1512695.3	12.9	19
2003	129.7886	8487032	2080235.3	14	15.75
2004	132.8552	1411067	1987045.3	15	15
2005	130.8392	14572239	2800856.3	17	13
2006	128.283	18564595	3153669.2	8.2	12.25
2007	124.276	20657318	3984888.4	5.4	8.75
2008	117.7243	24296330	5248455.3	11.6	9.75
2009	149. 355	24126770	5022162.6	12.6	6.0
2010	129. 3	22057728	4352293.9	9.4	9.19

Source: Central Bank of Nigeria (CBN) Statistical Bulletin (various issues).

DATA ANALYSIS:

The data presented above covered the period between 1990 – 2010. The variables employed in this work include Exchange Rate (EXCR), Gross Domestic Product (GDP), Import Rate (IMP), Inflation Rate (INF) and interest Rate (INT).

From the table above, exchange rate (EXCR) as clearly seen increased persistently in value during the period under review. Exchange rate stood at 8.009 in 1990 and it maintains a steady increase of 8.009 to 21.886 in 1990 and 1994 respectively. This shows that the value of the naira was consistently depreciating thereby bringing about unfavourable Gross Domestic Product in Nigeria.

The official value of exchange rate in Nigeria stood at 102.48 in 2000 and rose to 130.84 in 2005 finishing at a decline rate of 129.3 in 2010.

Gross Domestic Product (GDP) in Nigeria as shown in the table above is characterized with fluctuation and it stood at 26755.0 at the beginning of our investigation but later rose to 6838678 and 899863.2 from 1993 and 1994 respectively. There after, Gross Domestic Product (GDP) experienced a sharp decline of 1933212 in 1995 and it steadily rose to 6912381 in 2002. It maintains a steady increase of 6912381 in 2002 and 24712670 in 2009 respectively and had a sharp decline of 22057728 in 2010.

From the table, the rate of inflation (INF) stood at 7.5% in 1990, this was not for long as it witnessed an increase of 12.7% in 1991, 44.8% in 1992 and 57.2% in 1993. This constant increase as recorded in the rate of inflation is as a result of scarcely devaluation of the Nigeria Naira and high dependency on importation.

Interest Rate (INT) and level of importation in Nigeria from 1990 to 2010 showed an unpredictable trend. Starting in 1990, the level of goods importation stood at 45717.9 with the rate of interest being 18.5% and declined to 14.31% in 1998 with an increased level of importation of 837418.7. Further more interest rate declined to 6% and 12.4% in 2009 and 2010 respectively while importation level stood at 5022163 and 43252294 in 2009 and 2010 respectively.

PRESENTATION OF RESULT:

MODEL ONE

EXCR = F (IMP, INF, INT)

$EXCR = a_0 + a_1 IMP + a_2 INF + a_3 INT + U.$

EXCR = - 9.328364 + 2.9831 IMP – 0.62131 INF + 3.5044 INT

T. Ratio (-0.1981) (4.2560) (-1.4776) (1.3641)

Pro. Value (0.8455) (0.006) (0.0145) (0.0013)

$R^2 = 0.6806$

$R^{-2} = 0.6207$

F. Ratio = 11.362

D.W = 2.4988

MODEL TWO

GDP = F(IMP, INF, INT)

$GDP = a_0 + a_1 IMP, a_2 INF + a_3 INT + U$

GDP = -668484.6 + 5.0858 IMP – 577878 INF + 172179 INT

T. Ratio (-0.3562) (18.5638) (-0.3447) (0.1682)

Pro. Value (0.7263) (0.0000) (0.0039) (0.0164)

$R^2 = 0.9784$

$R^{-2} = 0.9743$

F. Ratio = 241.838

DW = 2.0683.

INTERPRETATION OF RESULTS:

EXCR = 9.32864 + 2.9831 IMP – 0.6212 INF + 3.5044 INT

T. Ratio = (-0.1981) (4.2560) (-1.4776) (1.3641)

Pro. Value (0.8455) (0.0006) (0.0145) (0.0013)

$R^2 = 0.6806$

R^{-2} = 0.6207
F. ratio = 11.362
DW = 2.4988

The estimate of exchange rate (a_0) is 9.228364. This indicates that if the value of the independent variables is zero, the dependent variable is -9.3284 and it is not statistically significant at any level.
The Coefficient of import rate (a_1) is 2.9831. This shows that there is a direct relationship between the independent variables and the dependent variable and it is statistically significant at 1% level. This shows that import of goods and services within the period contributes to the growth of the Nigerian economy.
The estimate of inflation rate (a_2) is -0.6213. This indicates that there is an inverse relationship between the independent variables and the dependent variable and it is statistically significant at 5% level. Though, it is statistically significant at 5% level, but inflation does not contribute to the growth of the Nigerian economy.
The coefficient of interest rate (a_3) is 3.5044. This signifies that there is a direct relationship between the independent variables and the dependent variable and it is statistically significant at 5% level. This shows that interest rate in Nigeria at the particular period contributes significantly to the growth of the Nigerian economy.
The co-efficient of determination (R^2) is 0.6806. This indicates that the independent variables explained 68% of the total variation in the dependent variable while the remaining 32% is unexplained due to error term.
The value of the Durbin Watson is 2.4989. This shows that there is absence of auto-correlation among the explanatory variables.

MODEL TWO

GDP = - 668484.6 + 5.0858IMP – 577878 + 172179IN
T. Ratio = (-0.3562) (18.5638) (-0.3449) (0.1682)
Pro. Value = (0.0000) (0.0039) (0.0039) (0.0164)
R^2 = 0.9784
R^{-2} = 0.9743
F. Ratio = 241838
DW = 2.0683

The estimate of Gross Domestic Product (a_0) is -668484.6. This indicates that if the value of independent variables is zero, the dependent variables is -668484.
The estimate of import rate (a_2) is 5.0858. This shows that there is a direct relationship between the independent variables and dependent variable and it is statistically significant at 1% level. This shows that import of the country for the particular period contributes to the growth of the Nigerian economy.
The estimate of inflation rate (INF) is -577878. This indicates that there is an inverse relationship between the independent variables and the dependent variable and it is statistically significant at 5% level. This shows that inflation which is not in conformity with the growth of the economy contributes adversely to the growth of the Nigerian economy.
The estimate of interest rate (INT) is 3.5044. This signifies that there is a direct relationship between the independent variables and the dependent variable and it is statistically significant at 5% level. This shows that interest contributes to the growth of the Nigerian economy with particular reference to deregulation of foreign exchange market in Nigeria.
The coefficient of determination (R^2) is 0.9784. This shows that the independent variables is able to explain 98% of the total variation in the dependent variable while the remaining 2% is unexplained due to the error term.
The value of Durbin Watson is 2.0683. This indicates that there is absence of auto correlation among the explanatory variables.

CONCLUDING REMARKS:

This research study is basically on the deregulation of the foreign exchange market and its impact on the growth of the Nigerian economy.
The result of the regression shows that the growth experienced in the Nigerian economy is occasioned by the importation of foreign currencies into the country. This goes further to imply that importation has a direct

impact on the growth of the Nigerian economy. The estimate of interest in 3.5004. This illustrates that interest rate has a direct relationship to the growth experienced in Nigeria.
The estimate of inflation is -577878. This shows that it has an inverse relationship on the growth of the Nigerian economy and it is statistically significant at the 1% level.
This study has been centered on the appraisal of the impact of deregulation of the foreign exchange market on the growth of the Nigerian economy. The study could not review all aspects of this topic as a result of its broad nature of the deregulation of foreign exchange market in Nigeria. The research review the major aspects of foreign exchange market as it affects the growth of the Nigerian economy. This research has shows that the work of deregulation of foreign exchange market cannot be over emphasized in Nigeria.
Having analyzed the impact of deregulation of the foreign exchange market on the growth of the Nigerian economy, one is forced to conclude from the stand point of empirical evidence that there is in-deed a direct relationship between the growth of the Nigerian economy and the deregulation of the foreign exchange market.
From the aforementioned discussion, government should put regulatory policy in place that will ensure a steady interest rate. In fact, government should also put machinery in place through the Central Bank to monitor the valuation of money to curb the trend of inflation in the country.

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APPENDIX I

Dependent Variable: EXCR
Method: Least Squares
Date: 02/12/12 Time: 14:50
Sample (adjusted): 1990 2010
Included observations: 21 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-9.328364	47.09614	-0.198071	0.8455
IMP	2.983100	6.882300	4.256026	0.0006
INF	-0.621305	0.420479	-1.477615	0.0145
INT	3.504424	2.568981	1.364130	0.0013

R-squared	0.680554	Mean dependent var	75.86235
Adjusted R-squared	0.620658	S.D. dependent var	54.27478
S.E. of regression	33.42823	Akaike info criterion	10.03354
Sum squared resid	17879.15	Schwarz criterion	10.23268
Log likelihood	-96.33535	F-statistic	11.36226
Durbin-Watson Stat	2.498847	Prob (F-statistic)	0.000306

APPENDIX II

Dependent Variable: EXCR
Method: Least Squares
Date: 02/12/12 Time: 14:56
Sample (adjusted): 1990 2010
Included observations: 21 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-668484.6	1876657	-0.356210	0.7263
IMP	5.085797	0.273963	18.56383	0.0000
INF	-5778.773	16754.96	-0.344899	0.0039
INT	17217.85	102367.1	0.168197	0.0164

R-squared	0.978423	Mean dependent var	7747862.
Adjusted R-squared	0.974377	S.D. dependent var	8321392.
S.E. of regression	1332027.	Akaike info criterion	31.21916
Sum squared resid	2.84E+13	Schwarz criterion	31.41830
Log likelihood	-308.1916	F-statistic	241.8382
Durbin-Watson Stat	2.068260	Prob (F-statistic)	0.000000
