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Financial and Economic Factors as Predictors of Nigerian Economic Growth in the Manufacturing and Non-Manufacturing Sectors (1999-2018)

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Abstract

Over the years, the macroeconomic policies and the nations' economic growth have been a great concern to the government, investors, policy makers and researchers. Though, similar studies have been carried out on the issue of financial and economic factors in relation to economic growth within and outside Nigeria, but there are different submissions and conclusions in the literature which this study has come to fill the gap. Therefore, this study seeks to examine the determinants of economic growth in the manufacturing and non-manufacturing sectors of the Nigerian economy in the last twenty years of uninterrupted democratic rule in Nigeria from the 4th Republic (1999-2018). The study adopted a descriptive research design method. The data were obtained from the National Bureau of Statistics Facts book, for 2017 & 2018. The study used Generalized Least Square (GLS) approach, Augmented Dickey Fuller Test and Johansen and Juselius method of co-integration approach while vector error correction modelling technique was applied to adjust for long run relationship. Findings revealed a significant long run relationship between real exchange rate and economic growth likewise Inflation Rate shows a significant relationship with economic growth in Nigeria. It was concluded that the capacity to import was constrained by the changes and fluctuations of the financial and economic factors leading to low production of local products and high cost of production. It was also recommended that the government fiscal and monetary policies should focus on how to reduce inflation and interest rates and ensure stability in the nation's exchange rate.

Keywords: *Economic and financial factors, Economic growth, Exchange rate, Inflation rate, Interest rate*

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Background to the Study

The Nigerian economy is made up of the manufacturing and non-manufacturing sectors that contribute substantially to the real Gross Domestic Products (real GDP) of the economy. The real GDP is the expansion in a nation's capability to produce the goods and services its people want while the economic growth on the other hand is an increase in real aggregate output (real GDP) reflected in increased real per capital income and a country is said to experience economic growth if overtime, its real output (real GDP) increases as well as its real per capital income (Association of Accounting Bodies in West Africa (ABWA), 2009). The rate of economic growth is measured as the percentage increase in real GDP on yearly basis while economic growth shows the sustained increase in real GDP over a period (ABWA, 2009). The growth in the economy of a nation could be determined by economic and financial factors such as the rate of inflation, the currency exchange rate, the interest rate, taxation rate among many others. The exchange rate is generally regarded as reflecting the worth of an economy in terms of another economy. The more the exchange rate depreciates, the lower the value (in real terms) of the goods and services (including salaries and wages of workers) produced in a country vis-à-vis its trading partners. The fact has unfortunately, nationalistic and political coloration to exchange rate management (Nyong, 2005).

Ullah, Rauf and Rascol (2013) asserted that a sound macroeconomic policy has to do largely with the consistent management of short-term policy instruments pursuing a sustainable and predictable pace for aggregate economic variables and major prices (wages, inflation, interest rates and exchange rates). They established further that monetary, fiscal and exchange rate policies, together with structural reform, have major consequences for the social wellbeing of societies, not only in terms of protection against shocks and crises but also in terms of equity. One of the major challenges facing Nigerian sector is the fluctuation in exchange rate. Most countries including Nigeria have experimented with various types of exchange rate arrangement ranging from the peg system to weighted currency basket to manage floating and more recently to the monetary zone arrangement (Mordi, 2006). Once an exchange rate is not fixed, it is however, subject to variations which allow floating exchange rates to be more volatile. The degree of volatility and the extent of stability maintained will be affected by economic fundamentals.

The main focus of every developing nations like Nigeria is to improve the standard of living of all its citizenry and promote economic growth and development of the country but many economic factors such as inflation rates, exchange rates, interest rates, poverty, scarcity of resources, and the law of comparative advantage have limited the rapid growth of many developing nations like Nigeria. Aliyu (2011) noted that appreciation of exchange rate results in increased imports and reduced export while depreciation would expand export and discourage import. Therefore, depreciation of exchange rate will tend to cause a shift from foreign goods to domestic goods. Hence, it will lead to diversion of income from importing countries to countries exporting through a shift in terms of trade, and this would tend to have impact on the exporting and importing countries' economic

balance of payment and growth. Although a number of exchange rate reforms have been carried out by successive governments, the extent to which these policies have been effective in promoting export has remained unascertained. This is because despite' government efforts, the growth performance of Nigerian economy has been very slow.

Over the years, the macroeconomic policies and the nations' economic growth have been a great concern to the government, investors, policy makers and researchers. Though, similar studies have been carried out on the issue of economic, political, cultural and financial factors in relation to economic growth within and outside Nigeria, but there are different submissions and conclusions in the literature which this study has come to fill the gap. Therefore, this study seeks to examine the determinants of economic growth in the manufacturing and non-manufacturing sectors of the Nigerian economy and how the economic and financial factors such as exchange rate, interest rates and inflation rates affect the Gross Domestic Products (GDP) in the last twenty years of uninterrupted democratic rule in Nigeria from the 4th Republic (1999-2018).

Literature Review

This study is anchored on the theories of the Purchasing Power Parity (PPP), the Balance of Payment (BOP), and Portfolio Balance. Purchasing Power Parity (PPP) theory simply states that a unit of any given currency should be able to buy the same quantity of goods in all countries while the Balance of Payment (BOP) Theory as demonstrated by Jhingan (2011), under a free exchange rate regime, a country's exchange rate depends upon its Balance of Payments. A favorable Balance of Payments raises the exchange rates, while an unfavorable balance of payments reduces the exchange rate and Portfolio Balance Theory (PBT) Theory was developed by Branson (1975), which assumes that residents distribute their wealth among three forms of assets – monetary base, domestic bonds, and foreign bonds. Exchange rate is in equilibrium when the holding of these assets are in their desired proportion. Other macro economic theories have identified various factors that influence the growth of a country from the classical, neoclassical and the new growth theories. Antwi, Mill and Zhao (2013) asserted that these macroeconomic factors include natural resources, investment, human capital, innovation, technology, economic and financial factors, governmental factors, foreign aid, trade openness, institutional framework, foreign direct investment, political factors, socio-cultural factors, geography, demography, and many others.

The study also reviewed other related literatures supporting its findings. Ismaila and Imoughele (2015) opined that macroeconomic policy refers to those policies of Government aimed at the aggregate economy, usually to promote the macro goals of full employment, stability, and growth. Common macroeconomic policies are fiscal and monetary. Fiscal policy is the macroeconomic policy where the government makes changes in government spending or tax to stimulate economic growth while monetary policy deals with changes in money supply or changes with the parameters that affects the supply of money in the economy. The objectives of this policy included the achievement of sustainable economic growth and development, stable price and full

employment. Some of the objectives set are potentially in conflict with each other, which means that, in attempting to achieve one objective, another one is 'sacrificed'. For example, in attempting to achieve full employment in the short-term price inflation may occur in the longer term.

Ullah and Rauf (2013) asserted that a sound macroeconomic policy has to do largely with the consistent management of short-term policy instruments pursuing a sustainable and predictable pace for aggregate economic variables and major prices (wages, inflation, interest rates and exchange rates). They established further that monetary, fiscal and exchange rate policies, together with structural reform, have major consequences for the social wellbeing of societies, not only in terms of protection against shocks and crises but also in terms of equity. Antwi, Mills and Zhao (2013) studied the impact of macroeconomic factors on economic growth in Ghana for the period 1980 to 2010 by means of co-integration and error correction models using yearly data for the period and then recommended actions that should be taken to speed up the growth process in the country.

The findings showed that long-run economic growth is largely explained by physical capital, foreign direct investment, foreign aid, inflation and government expenditure. In a related study conducted in Nigeria, Kolawole (2013) asserted that Macroeconomic stability is the fundamental basis of sustainable economic growth, because, it increases national saving and private investment and also improves exports and balance of payments with improving competitiveness. A macroeconomic stability, therefore, to a large extent guarantees economic wellbeing of the people. To this end, there are several factors identified as potential determinant of macroeconomic stability such as low inflation, low deficit, stability of real exchange rate and exchange relationship. These aforesaid factors are serious drivers of economic growth. He empirically examined the growth-effects of macroeconomic stability factors in Nigeria.

Using time series data for the period 1980 to 2011 and adopting various econometric techniques such as Granger causality test, and Error Correction Mechanism (ECM), the results reveal that real interest rate has direct and significant effects on Nigeria economic growth while external debt and real exchange rate impact negatively on growth in the country. The study concluded that for macroeconomic stability to be achieved in Nigeria, each of the factors should be examined individually such that its respective effect on growth could be identified while appropriate macroeconomics policy would be formulated and implemented where required. Using ARDL it was discovered that exchange rate fluctuations have long run and short run relationship on manufacturing sector output. The result showed that exchange rate has a positive relationship on manufacturing sector output but not significant (Lawal, 2016).

Edoumiekumo and Opukri (2013) evaluate Economic Growth Factor in Nigeria considering the Role of Global Trade by using annual time series data from 1981 to 2008. The result shows two co-integrating equations which establish the existence of long run

relationship among the international trade. Ordinary Least Square statistical technique was used to assess the degree of influence the variables have on each other. The results show that positive relationship exists between the variables, RGDP, export and import. The export parameter is insignificant at 5 percent. The overall model is significant at 5 percent. While the Granger causality test showed that there is causality between the variables and realized a unidirectional relationship. Real GDP Granger cause export and import Granger cause RGDP and export and concluded that Nigeria needs to increase or diversify her export goods to enjoy more of the benefits of international trade which will have robust impact on her economic growth. Ehinomen and Oladipo (2012) says that in Nigeria, exchange rate appreciation has a significant relationship with domestic output and it will promote growth in the manufacturing sector. It also ascertained that there is a positive relationship between the manufacturing gross domestic product and inflation. Olufayo and Fagite (2014), their research examined the impact of exchange rate volatility on the performance of Nigeria export sectors, separating the sectors into oil and non-oil sector. They adopted the econometrics method of Seemingly Unrelated Regression (SUR) and in testing the volatility of the exchange rate; they adopted GARCH (generalized autoregressive conditional heteroskedasticity) and examine the effect of floating exchange rate policy on the volatility of the nominal exchange rate. Using the GARCH model, they discovered that there exists volatility in the exchange rate of the country. Asher (2012) opines that exchange rate is used to determine the level of output growth of the country. However, with already existing exchange rate policies, a constant exchange rate has been uncertainty in the trade transaction. This has resulted to declines in standard of living of the population increase in costs of production which resulted in cost-push inflation.

Oladipupo and Onotaniyohuwo (2011) states that movements in the exchange rate have ripple effects on other economic variables such as interest rate, inflation rate, unemployment, money supply, etc. These facts underscore the importance of exchange rate to the economic well-being of every country that opens its doors to international trade in goods and services. The importance of exchange rate derives from the fact that it connects the price systems of two different countries making it possible for international trade to make direct comparison of traded goods. However, according to Obadan (2006) two concepts of exchange rate are commonly distinguished: nominal exchange rate and real exchange rate. The nominal exchange rate (NER) is a monetary concept which measures the relative price of two moneys or currencies, e.g. naira in relation to the US dollar. While the real exchange rate (RER), as the name implies is a real concept that measures the relative price of two goods – tradable goods (exports and imports) in relation to non-tradable goods (goods and services produced and consumed locally). Azeez, Kolapo and Ajayi (2012) found that oil revenue and balance of payment exert negative effects while exchange rate volatility contributes positively to GDP in the long run. Mundell (2015) brilliantly set out the implications of financial flows and financial markets integration. He demonstrated that, with increasing capital mobility, monetary policy is constrained and sometimes inefficient under fixed exchange rates. The stock of money, which is endogenous, adjusts to the economy. It has been further stated that the

structural transformation of a traditional economy dominated by primary activities into a modern economy with high productive activities in which manufacturing assumes a prominent role remains a defining feature of economic growth and development.

Dan and Wanjuu (2016) in a related study on the impact of industrialization on economic growth in Nigeria using the VECMmethodology, showed that capital/ industrial output ratio and the labor/ industrial output ratio has a negative impact on per capita GDP. The finding reveal that human capital, income levels and industrial output have not reached the threshold needed to contribute reasonable to economic growth. Overview of the manufacturing subsector in Nigeria On the importance of manufacturing sector to any economy, the world economic forum in 2013 noted thus "the manufacturing sector not only adds value to the overall economic growth but also creates more jobs than any other sector" (Aiyedogbon&Anyanwu, 2013). Also, in Azu and Nasiri (2015) where they researched on Exchange rate Fluctuation and Sustainable Economic growth in Nigeria and the essence of their research is to ascertain the relationship between real exchange rate and economic development applying those variables that adjudged to make up equilibrium exchange rate thereby defining how interrelated are Real Exchange Rate (RER), Gross Domestic Product (GDP), Export (EXP), Import (IMP), Foreign Exchange Reserve (FER) and Foreign Direct Investment (FDI). The major aim was to define how exchange rate fluctuation stimulates economic development in Nigeria from 2004 to 2014. Analyzing the data using (vector auto regression analysis) VAR technique, based on the prevailing situation in Nigerian economy within the period of study, one can envisage that RER fluctuation was significantly controlled by positive relation to real import as well as its negative relation to real GDP and foreign direct investment. In as much as the naira is been devalued by the CBN or forces of demand and supply in the foreign exchange market, the research shows that the tendency of increasing FDI would definitely pressurize for the appreciation of the naira, likewise would GDP growth.

Ayodele (2014) analyzed the impact of exchange rate on the economic performance of Nigeria using the Ordinary Least Squares (OLS) method. The study covered the period of 13 years from year 2000 to year 2012.From his findings, exchange rate of naira to dollar has negative correlation with the GDP. Though the Nigeria GDP keeps increasing every year, the negative impact had not allowed the GDP to grow maximally as expected. In fact, the naira exchange to $1.00 is N160.00 at the parallel market instead of the official rate of N158.00. This is as a result of the naira being cheaper has compared to dollar. The demand for dollar has remained so high, hence the increase in exchange rate and ultimately resulting to high cost of imported goods. According to King-George (2013), the effect of exchange rate fluctuations on the Nigeria manufacturing Sector was set to find out the effect of exchange rate on the Nigeria manufacturing Sector. Hypothesis was stated to guide the study. To evaluate this hypothesis, annual time series data on manufacturing gross domestic product a proxy for economic growth, exchange rate, private foreign investment and manufacturing employment rate were collected from the year, 1986 to 2010. A multiple linear regressions were adopted employing Ordinary Least Square (OLS) techniques. This analysis yielded some interesting results. From the

results it was observed that exchange rate has no significant effect on economic growth of Nigeria. Also that dependent variable (Manufacturing Gross Domestic Product) can be controlled by, exchange rate, private foreign investment and manufacturing employment rate.

Owolabi and Adegbite (2012) examined the effects of foreign exchange regimes on industrial growth in Nigeria for the period of 21 years (1985 – 2005). This study found out that exchange rate has significant effects on the economics growth with the adjusted R2 of 69%. Mori, Asid, Lily, Mulok and Loganathan (2012) investigated the effects of the exchange rates on economic growth in Malaysia using time series data spanning from 1971 to 2009. The results of ARDL bounds test suggest that long-run co integration exists between both nominal and real exchange rates and economic growth with a significant positive coefficient recorded for real exchange rate and concluded that both exchange rates have a similar causal effect towards economic growth and suggested that a systematic exchange rate via monetary policy should be properly developed to promote the stability and sustainability of economic growth in Malaysia. Dada and Oyeranti (2012) observed that there is no evidence of a strong direct relationship between changes in the exchange rate and GDP growth. Rather, Nigeria's economic growth has been directly affected by fiscal and monetary policies and other economic variables particularly the growth of exports (Oil). These factors have tended to sustain a pattern of real exchange rate management are necessary but not adequate to revive the Nigerian economy.

Methodology

The study adopted a descriptive research design method. The data for economic and financial factors such as exchange rate, interest rate, inflation rate and the Annual Gross Domestic Products (Implicit Price Deflator) in the last twenty years of uninterrupted democratic rule in Nigeria from the 4th republic (1999-2018) were obtained from the National Bureau of Statistics (NBS) Facts book, 2017 &2018. The economy consisted of 46 activity sectors of the economy while the manufacturing sector for the purpose of this study was made up of Oil Refining, Cement, Food, Beverage and Tobacco, Textile, Apparel and Footwear, Wood and Wood Products, Pulp, Paper and Paper Products, Chemical and Pharmaceutical Products, Non-Metallic Products, Plastic and Rubber products, Electrical and Electronics, Basic metal , Iron and Steel, Motor vehicles & assembly, Other Manufacturing and the non-manufacturing sector covered Agriculture, Industry, Construction, Trade and Services including :Transport, Information and Communication, Utilities, Accommodation and Food Services, Finance & Insurance, Real Estate, Professional, Scientific & Technical Service, Administrative and Support Services Business Services, Public Administration, Education, Human Health & Social Services, Arts, Entertainment & Recreation, Other Services. A census study was adopted because the study covered all the 46 sectors of the economy within the period under review while the study used Generalized Least Square (GLS) approach while the variables were subjected to unit root test so as to confirm their behaviours. Augmented Dickey Fuller Test was adopted to check the unit root and order of integration. Johansen and Juselius

method of co-integration approach was also adopted to confirm the long run effect of the explanatory variables to the response. Furthermore, vector error correction modelling technique was applied to adjust for long run relationship.

N.B:

Calculation of Annual GDP implicit price deflator $= \frac{\text{Total Annual Nominal GDP}}{\text{Total Annual Real GDP}} \times 100$

Model Specification

It is precisely expressed as follows:

IPDGDP = f (EXR, INT, INF) ……………………………………………..(1)

Thus, our growth function becomes:

$IPDGDP = \beta_0 + \beta_1 EXR + \beta_2 INT + \beta_3 INF + Ut$---…………………………….(2)

Where,

IPDGDP is Implicit Price Deflator (GDP) that represents the Annual Gross Domestic Product

EXR=Exchange Rate

INT= Interest Rate

INF= Inflation Rate

Ut is the error term assumed to be normally and independently distributed with zero mean and constant variance, which captures all other explanatory variables which influence economic growth but are not captured in the model.

β_1, β_2, β_3 are the partial elasticity of IPGDP.

Data Analysis

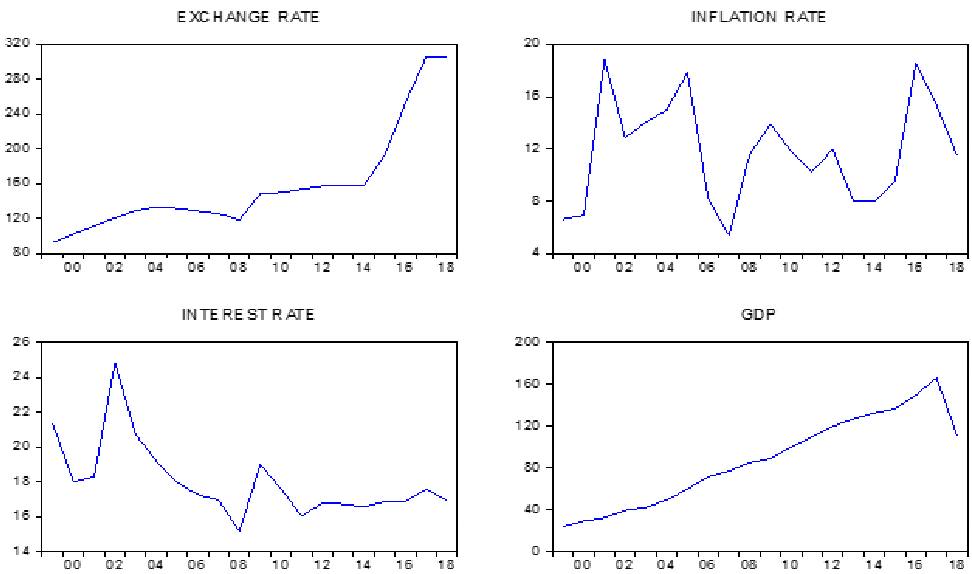

Fig. 1: Time Plot of Analysed Macro Economic Variables of Exchange Rate, Inflation Rate, Interest Rate and GDP

The time plot of the macro economic variables and economic growth in figure 1 indicates that the series do not behave well in predicting the long and short run effect on economic growth as it shows irregular variation. This resulted in subjecting the series to ADF test to know if truly there is unit root.

Table 1: Augmented Dickey Fuller (ADF) Unit Root Results

Variable	**Test @ Levels**	**ADF Critical Values**	**Test @ 1st Diff.**	**ADF Critical Values @ 5%**	**Test @ 2ND Diff.**	**ADF Critical Values @ 5%**	**Remark**
EX	1.423959	-3.02997 (0.9982)*	-2.36057	-3.04039 (0.1656)**	-3.090586	-3.05217 (0.047)***	I(2)
INF	-3.228909	-3.081002 (0.0384)*	-	-	-	-	I(0)
INT	-2.931839	-3.029970 (0.0602)*	-5.70040	-3.040391 (0.0002)**	-	-	I(1)
GDP	-0.153898	-3.052169 (0.9278)*	-3.77579	-3.052169 (0.0012)**	-	-	I(1)

**signifies P-values @levels;* ***signifies P- values @first order difference*
****signifies P-values @second order difference*
Source: Extracted from E- Views Output, Version 17

Due to the stochastic trend process associated with all macro-economic variables, it is important that these series are tested for the presence of unit root. Augmented Dickey Fuller test method was used to test the presence of unit root. This was done to confirm the order of integration so as to reduce the rate of type 1 error. The result of the ADF unit root stationarity test in table 1 for Exchange Rate confirmed the presence of unit root at level (P-value 0.9982 >α = 0.05 significance level) and at first order differencing (P-value 0.1656 >α = 0.05). Stationarity of the series was achieved at the second order differencing and integrated to order 2. Inflation rate was stationary at level I (0), Interest Rate (INT) and Gross Domestic Product (GDP) was found to be stationary at first order differencing (P-values 0.0002, 0.0012 < α = 0.05) and integrated to order I (1).

Table 2: Co integration Result

Hypothesized No. of CE(s)	Eigen Value	Trace Statistics	0.05 Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob. **
	Unrestricted Co integration Rank Test (Trace)				Unrestricted Co integration Rank Test (Maximum Eigenvalue)		
None	0.72304	62.0776*	47.85613	0.0014	23.10971	27.58434	0.1688
At most 1	0.68823	38.9679*	29.79707	0.0034	20.97856	21.13162	0.0525
At most 2	0.52819	17.9894*	15.49471	0.0206	13.52109	14.26460	0.0653
At most 3	0.21983	4.46826*	3.841466	0.0345	4.468257*	3.841466	0.0345

Trace & Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level
** denotes rejection of the hypothesis at the 0.05 level*
***MacKinnon-Haug-Michelis (1999) p-values*

Source: Extracted from E-views Output, Version 17

Based on the result of the unit root tests, the study proceeded to test for the existence of any co-integration among the model equation. The Johansen and Juselius (1992) co integration approach was employed to determine whether there was a co integrating relationship between economic growth, EX, INF and INT. This method utilized both the trace and maximum Eigen statistic in determining the significance or otherwise of the co-integrated series as suggested by the unit root results. Evidence from the trace and maximum Eigen statistic as shown in the upper part of table 2 revealed at least three co-integrated equations for both statistics (P-values <5% significance level). The existence of a co-integrated series from the result above thus implies the existence of possible long run relationship among the variables over time.

Table 3: Normalized co integrating coefficients

Variables	Coefficients	T-statistics	
EX	-1.016412 (0.03248)	-8.69574	**Log likelihood = -261.7816**
INF	12.19988 (2.36634)	-2.65756	
INT	-0.914963 (3.98245)	4.40629	

Standard error in parenthesis ( )
Source: Extracted from E-views Output, Version 17

Analysis of the normalized coefficients as shown in table 3 reveals a significant long run relationship between real exchange rate and economic growth in Nigeria. Specifically, a percentage change in Exchange Rate tends to 1.0164 decremental change in Nigerian economic growth. This indicates that the degree of the responsiveness of economic growth to changes in exchange rate is negatively inclined. Inflation Rate shows a significant relationship with economic growth such that a unit increase in Inflation rate leads to 12.19988 change in economic growth holding other factors at constant. Further analysis of the estimated Inflation Rate coefficients shows that the degree of the responsiveness of economic growth to changes in Inflation Rate is elastic within the scope of the current study. Interest Rate also shows a significant relationship with economic growth such that a unit increase in Interest Rate tends to 91.5% percentage change in economic growth holding other factors at constant. Further analysis of the estimated Interest Rate coefficients shows that the degree of the responsiveness of economic growth to changes in Interest Rate is negatively inclined within the scope of the research study.

Table 4: Vector Error Correction Estimates

Error Correction:	D(GDP)	D(EX)	D(INF)	D(INT)
CointEq1	0.060950	-0.011048	-0.009581	0.010813
	(0.02153)	(0.03301)	(0.00854)	(0.00312)
T-statistics	[2.83049]	[-0.33465]	[-1.12218]	[3.47040]

R-square = 0.32032 ***Adj. R-squared*** = 0.280336 ***AIC*** = 8.02966
Source: Extracted from E-views Output, Version 17

The error correction modeling allows for the determination of the short run adjustment process towards the long run equilibrium state in the system. The result of the error correction term in table 4 suggests that over 6.1% of the disequilibrium errors in the system arising from the influence of external shocks are corrected per time. However, this system has the inertial of adjusting back to a state when acted upon by external forces as it exhibits a convergence property. We can also see that about 32% of the variation in the explanatory variables of exchange rate, inflation rate and interest rate can be accounted for when the short run effect has been corrected. The lower AIC 8.02966 is a confirmatory

report that the Vector Error Correction estimates is best in modeling the effect of economy using the analyzed macro-economic variables compared to the Ordinary least square counterpart.

Table 5: Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
INF does not Granger Cause EX	18	3.60554	0.0568
EX does not Granger Cause INF		3.59981	0.0570
INT does not Granger Cause EX	18	1.22021	0.3268
EX does not Granger Cause INT		1.55908	0.2472
GDP does not Granger Cause EX	18	3.28981	0.0698
EX does not Granger Cause GDP		6.69109	0.0100
INT does not Granger Cause INF	18	3.25263	0.0716
INF does not Granger Cause INT		6.20137	0.0129
GDP does not Granger Cause INF	18	0.62063	0.5528
INF does not Granger Cause GDP		0.41959	0.6659
GDP does not Granger Cause INT	18	1.95077	0.1816
INT does not Granger Cause GDP		0.55126	0.5891

Source: Extracted from E-views Output, Version 17

The Engle Granger Causality of table 5 indicates the rejection of the null hypothesis of no causal effects if the P-value > 0.05 level of significance. This implies that inflation rate tends to forecast Interest Rate and vice versa with exchange Rate forecasting GDP on the long run. The study is in tandem with the findings in Owolabi and Adegbite (2012); Dada and Oyeranti (2012); Mori, Asid, Lily, Mulok and Loganathan (2012); and Lawal (2016) while King-George (2013) gave a contrary opinion.

Conclusion

The study empirically investigated the impact of financial and economic factors on the economic growth of the manufacturing and non-manufacturing sectors in Nigeria. Findings revealed a significant long run relationship between real exchange rate and economic growth likewise Inflation Rate shows a significant relationship with economic growth in Nigeria. In the same circumstance, Interest Rate shows a significant relationship with economic growth but further analysis of the estimated Interest Rate coefficients shows that the degree of the responsiveness of economic growth to changes in Interest Rate is negatively inclined within the scope of the research study. Therefore, it was observed that the fact that Nigeria is highly dependent on the external sector for

import of inputs has made the effect of high inflation and interest rates a worst situation especially with the dwindling economic position of Nigeria in the manufacturing and non-manufacturing sectors. The capacity to import was constrained by the fluctuations of the exchange rate leading to low production of local products and high cost of production. Though, this study established that there was a positive relationship between exchange rate and economic growth but the resultant negative effects of interest and inflation rates; and other extraneous variables such as technology, human skills, national income, per capita income and per capita consumption are necessary indicators for a country's economic growth. Therefore, inflation rate determines Interest Rate and vice versa while Exchange Rate predicts GDP on the long run.

Recommendations

Based on the findings, this study recommended among others that:

1. The government fiscal and monetary policies should focus on how to reduce inflation and interest rates and ensure stability in the nation's exchange rate.

2. There is the need to increase the quality of the nation's labour force through education and training in advance technology.

3. Government should encourage the export promotion strategies in order to maintain a surplus balance of trade.

4. There is the need for expansion of knowledge in technological innovations.

5. Effective fiscal and monetary policies should be put in place to attract foreign investors into Nigeria.

6. Government should encourage exportation of goods rather than importation to encourage buying of Nigerian products.

7. There is the need for the diversification of the economy to areas such as agriculture and agro-investment rather than reliance on crude oil and importation of goods or products.

8. There should be proper restructuring of the economy to encourage foreign direct investment to increase the real gross domestic product (real GDP) of the Nigerian economy.

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