Economic Growth: Does Monetary Policy Matter?

Uzoma Friday Christopher, Orji Stephen Anayo and Johnbosco Chidi Nnaemeka

Enugu State University of Science & Technology Email: <u>steveannorji2020@gmail.com;christopher.uzoma@esut.ng;dejohnbos1@gmail.com</u>

ABSTRACT

The study examined the effect of monetary policy directives on the growth of Nigerian economy between 1986 and 2019. The work employed secondary data and other economic and econometric theories to establish the relationship between monetary policy directives and economic growth in Nigeria. Other analytic tools used were descriptive and diagnostic tests on dependent and independent variables. The study found that money supply was positive to growth while interest rate was negative to growth in the economy of Nigeria. Keywords: Economic, Growth, Monetary, Policy and Matter

INTRODUCTION

Economic growth is said to be an increase in the inflation - adjusted market value of goods and services that are produced in the economy over time [1,2,3]. Rapid economic growth could also be a just distribution of incomes, price stability etc, the objectives of every economy, be it developed or undeveloped, neo-fascist through liberal democrats to communist [4]. A growing economy produces more goods and services at each successive time period, raising the standard of living and reducing inequalities of income distribution [5]. This could be achieved through the instrumentality of monetary and fiscal policy directives [6]. Flowing from that, Nigeria draws her lessons from the successes of Brazil, Russia, India and china (BRIC Countries) to grow her economy among the 20 largest economies in the world by 2020 [7]. In line with this objective, Central Bank of Nigeria (CBN) as primary regulator took up the the challenge of leading the financial sector regulators to bring about the required reengineering in the economic sector, make it more resilient, stronger and capable of playing a more significant role, boost national development and make her a financial hub of Africa [8]. The instrument to adopt for this onerous task is monetary policy tools that are driven through the banking sector. Monetary policy therefore regulates the value,

supply and cost of money in line with the level of economic activities of such economy [9]. It could also be said to be the combination of policy measures designed by CBN to control the quantity and cost of money and credit in an economy to achieve expected level of economic growth. Nigeria an importdependent economy faced with stagnant growth, unstable business cycle and economic fluctuation has tried different instruments of monetary management and control at different times that regrettably have failed to achieve their set targets as their implementation became less effective with time due largely to policy inconsistency by the authorities among others. Such instruments include the traditional and selective techniques of monetary control. Selective instrument has been in use mainly in the developing including economies Nigeria as introduced in 1964 and re-introduced in 1969 to complement the traditional ones as they have special advantages of being more accurate, selective in approach, more predictable, more specific and swifter in their effects. Added to this is the fact that Nigeria does not possess the pre-requisite for the effective use of the traditional techniques of monetary control [10,11,12,13,14,15]. [16], argues that growth could only be promoted by a judicious mix of monetary and fiscal

policies that will result to price stability and moderate fluctuations etc. Evidently, to achieve real growth and stability, there is need for concerted and judicious effort the monetary management in that depends on the use of direct and indirect monetary instruments such as credit selective ceiling. credit control. administration of interest rates and exchange rates, cash reserve ratio and special deposit, open market operations,

LITERATURE REVIEW

Two economic policies,(monetary and fiscal) hold sway. While fiscal policy is a powerful instrument for stabilization employed by governments through the instrumentality of taxes and government expenditure, monetary policy seeks to control monetary growth and promotion of a virile financial system with a view to generate monetary stability in the economy [17]. [18], argues that monetary policy is the credit control measures adopted by the Central Bank of a country. It is a deliberate manipulation of cost and availability of money and credit by the government as a means of achieving the desired level of economic growth, creation of employment, price stability, employment. increase output. stabilization of the exchange rate and other economic objectives [19]. [20], posits that monetary policy is one of the macroeconomic instruments with which monetary authority of а country employed in the management of the economy to attend desired objective. [21], said that monetary policy consists of a government formal effort to manage the money in its economy in order to realize specific economic goals. Not done yet, [22], explains that monetary policy is valid only for a highly monitored economy otherwise the efficiency of monetary policy is restricted. Since its establishment in 1959, the Central Bank of Nigeria (CBN) has continued to play a traditional role expected of a Central Bank which is the regulation of the stock of money in such a way as to promote a social welfare, [23]. This room is based on the use of monetary policy that is usually targeted towards the achievement of full

www.iaajournals.org

reserve requirement, re-discount etc. Others include the reduction in the maximum ceiling on credit allowed for banks, reduction in the special deposit requirements against outstanding external payment arrears to CBN from banks, abolition of the use of foreign granted currency deposit as collateral for naira loans and the withdrawal of public sector deposits from banks to the CBN.

employment equilibrium, rapid economic growth, price stability and external balance of payments. The main objective the policy over the years remains at achieving internal and external balances and the promotion of non-inflationary growth in output. Monetary policy measures are designed to ensure stable inflation rate stimulates growth in the productive sector and reduce pressure on the balance of payments in order to maintain a stable exchange and positive interest rates. The most popular instruments of monetary control was the issuance of credit rationing guidelines, which primarily set the rate of change of the components and aggregate commercial Bank loans to the private sector. The sector and location of bank credit in CBN guideline was to stimulate the productive section and thereby stem inflationary pressures. The fixing of interest rates at a very low level was done mainly to promote investment and growth. Generally monetary policy refers to a combination of measures designed to regulate the value supply and cost of money in an economy. In accordance with the expected level of economic activity, [24]. Monetary policy is a set of measures used by the Central Bank of Nigeria and other monetary authorities control the cost, volume and availability of money in the economy in order to achieve desired economic objectives [25]. [26] sees monetary policy as any conscious action undertaken by the monetary authorities to change the quantity, availability or cost of money. According to [27], monetary policy could be one of the macroeconomic instruments with which monetary

authorities of a country employ in the management of the economy to attain desired objective. [28], argues that monetary policy consists of a government formal effort to manage the money in its economy in order to realize specific economic goals. Also [29] explains that the monetary policy is valid only for a highly monetized economy. For most economists the objective of monetary policy includes stability, price maintenance of balance of payment equilibrium, promotion of employment and output and growth and sustainable development. However, [30] posits that governments pronounced objectives may entirely be at variance with what the list contains but however, full employment has been ranked among the foremost objective of monetary policy in Nigeria. Economic growth on the other hand is the increase of the real per capita income of a country over a long period of time. It is measured by the amount of goods and services produced in a country, a desirable goal for any economy. Balance

Financial and Monetary policy of instruments economic growth according to [33] are the promotional support of financial intermediaries and variation of interest rates. This is to improve credit and savings, facilitate and regulate the macroeconomic balance of the economy. The primary goal of monetary policy in Nigeria has been the maintenance of domestic price and exchange rate stability since it is critical for the attainment of sustainable economic and external sector availability [3]. Examining the evolution of monetary policy in Nigeria in the past four decades, [7], observes that through the monetary management, Nigeria has been relatively more successful during the period of financial sector reforms which was characterized by the use of indirect rather than direct monetary policy tools, yet its effectiveness has been undermined by the effects of fiscal management and legal environment in which the Central Bank operates. Undoubtedly, scholars are of the opinion that stabilizes the economy if www.iaajournals.org

of payments is therefore the offshoot of a stable economy. According to [31]. Quantitative (general or indirect) and Qualitative (selective or direct) are the instruments of monetary policies available by the primary authority to control the economy through banks. These two instruments affect the level of aggregate demand through the supply of money, availability of credit and cost of money. Of these two also quantitative instruments (bank rate variations, open market operations and changing reserve requirements) are meant to regulate the overall level of credit in the economy through commercial banks. The other (selective credit control) aims at controlling specific of types credit through changing margin requirements and regulation of consumer credit [32]. Bank rate policy (the minimum lending rate of the CBN at which it rediscounts first class bills of exchange and held by government securities the commercial Banks is not left out.

Instruments of Economic Policy

properly managed. For instance, [11], states that monetary policy stabilizes the economy if it is used to target inflation directly than the use to direct and stimulate growth. Reserve ratio on the other hand is the fraction of total deposit liabilities which commercial banks are required to maintain in the form of cash reserve with CBN is another tool of monetary policy instrument to manage the economy for growth. Also worthy of mention is the Open market operation which is the purchase and selling of securities in the money market by the CBN depending on what policy direction the CBN wants to follow is among the monetary instruments of control. Qualitative tools are employed by the CBN to direct banks on the sector of the economy to direct their credits. Included on this is Moral suasion, the method of using persuasion rather than coercion on banks to implement its directives. Reserve ratio is the fraction of total deposit liabilities which commercial banks are required to maintain in the form of cash

reserve ratio with CBN. It is the minimum amount of reserves that banks must hold in proportion to their total liabilities. The legal authority to implement monetary policy in Nigeria was vested on the

In the Keynesian analysis, monetary policy plays a crucial role in driving economic activities. The theory has it that a change in the supply of money can permanently change such variables as the rate of interest, the aggregate demand and the level of employment, output and income [15]. It also advocates cheap monev policy in а situation of unemployment and when the supply of money is increased, the result will be a fall on interest rate. Also depending on the marginal efficiency of capital, a fall in

Classicists believe that money is a veil and neutral in its effects on the economy as it simply affects the price level but nothing else [12]. An increase in money supply leads to an increase in the price level but the real income, rate of interest and the level of real economic activity remain unaffected. The main function of money according to the Classicists is to serve as the medium of exchange and to determine the general level of prices at which goods and services could be exchanged. The classical economics view of monetary policy is based on quantity theory of Money, which is the relationship between money and the price level. The quantity theory of Money is usually discussed in term of fishermen equation of exchange which is given by the expression MV=PY. In the expression, M denotes the supply of money over which the federal Government has some control: V denotes the velocity of circulation which is the average number of times a currency is spent on final goods and services over a course of a year; P denotes the price level of gross domestic product (GDP). Hence PV represent current normal

The Modern Monetary Economists however reject Keynessian view that the link between the supply of money and www.iaajournals.org

Central Bank of Nigeria through the CBN Act of 1958 and its subsequent amendments. The law mandated CBN to promote monetary stability and sound financial system amongst others.

Theories of Monetary Policy The Keynesian theory

the rate of interest will increase investment. [14] again argues that increase in investment will raise effective demand through the multiplier effects thereby increasing income, output and employment. Keynes believes in the existence of unemployment equilibrium. This implies that an increase in the level of output as well as the alternate influence of money supply on the price level depends upon its influence on aggregateoutput.

The Classical View

domestic product (GDP). The gross equation of exchange is an identity that the current market value of all final goods and services (normal GDP) must equal the supply of money multiplied by the average number of times a currency is used in transaction in a given year. The classical economics believe that the economy is always at or near the neutral level of real GDP. Thus, they assume that in the short run, the Y in the equation of exchange is fixed. They further argue that the velocity of circulation of money tends to remain constant, so that V can also be regarded as fixed. Given that both Y and V are fixed, it follows that if the Central Bank of Nigeria (CBN) were to adopt expansionary or contractionary monetary policy directive, it will lead to either an increase or decrease in money supply (MS). The only effect could be increase or decrease in price level P, in direct proportion for the change in money supply (MS). In other words, expansionary monetary policy can only lead to inflation and contractionary monetary policy can only lead to decrease in the price level.

The Monetarist (Modern) View

output is the rate of interest and that the Keynessian analysts considered only bonds and speculative cash balances as

the only two types of assets and that their allocation depended on the rate of interest which , in turn, resulted in changes in output. Arguing further they posit that modern monetary policy is the portfolio adjustment based on process which also posits that when Central Bank purchases securities in the open market, it invariably sets in motion substitution and wealth effects, as the public portfolio consists of a wide variety of assets such as bonds, equities, savings, mortgages etc which its effects will ultimately increase aggregate money demand and expand output. [7], examine the impact of monetary policy on Nigerian economy using Ordinary Least Square (OLS) method. The results show that monetary policy represented by money

www.iaajournals.org

supply has a positive impact on GDP growth and balance of payments but with a negative impact on rates of inflation and he concluded that CBN monetary policy is effective in regulating the liquidity of the economy with effects on macroeconomic variables such as output, employment and price stability.Two major phases in the economic history of Nigeria, before 1986 and after 1986 were the focus points considered in this work. While the former placed emphasis on direct monetary control through the dynamics of the oil sector and dependence external sector on to maintain price stability, healthy balance of payment position, the second relied much market mechanism. on

Data and Method

Data

Data for this study were drawn from the Central Bank of Nigeria Bulletin, National Bureau of Statistics and other related books. Annualized Panel data were collated from the annual reports from the CBN Bulletin for the period under review.

The study sought to establish the nexus between monetary policy implementation Economic growth in and Nigeria. Specifically, the study is based on economic and econometric theories. statistical analysis and other available information that relate to economic growth via monetary policy tools for the study. It is anchored on the work of Onveiwu (2012) with little modifications to estimate and establish the relationship between monetary policy and economic growth in Nigeria. Broad money and interest rate are the independent variables, while economic growth is the

om the
ationalDescriptive statistics and other diagnostic
tests on both the dependent and
independent variables such as Stationary
were
unit root test, Co-integration test, Error-
correction test were used to complement
eview.om the
eview.and
validatewodel Specificationvalidate

dependent variable. The functional form of the model is specified as follows: For Multiple Regression Models, we have: RGDP= β 0+ β 1M2+ β 2 INTR + μ ------1 Where

- RGDP; Real Gross Domestic Product
- F = Functional Relationship
- $M_{\rm I} = Money supply$
- $IN^{2}TR = Interest Rate$
- INFR = Inflation Rate
- B_a = Benchmark (RGDP Intercept)
- $B_1 \beta_2 =$ Slope efficient
- $\mu = Error term.$

The estimated results from the econometric procedures will be evaluated subject to four criteria

- 1. Preliminary test
- 2. Economic criteria

3. Statistical criteria

4. Econometric criteria

Stationary Unit Root Test

In order not to run a non stationary data that could lead to spurious regression, Stationary Unit Test was run on the data. Again it is necessary since the data are time – series and to ensure that they have constant mean, variance and co-variance. The stationary or otherwise of a series can strongly influence its behaviour and properties. For a stationary series, "shock" to the system will gradually die

Uzoma <i>et al</i> away contrary to non-stationary data where the persistence of shocks will always be infinite [8]. The Augmented Dickey-Fuller (ADF) test was utilized in the analysis. Specifically, the model is as thus: $\Delta RGDP = \beta_0 + \beta_1 + M_{2t,1} + \beta_2 INTR_{t,2} + \mu$ Co-integra Two variables is said to be co-integrated if they have a long-term or equilibrium relationship between them. Co-integration can be thought of as a pre-test to avoid spurious situation [9]. As recommended	www.iaajournals.org Decision Rules: If the (ADF) test statistic is greater than the critical value at 5%, the variable is said to be stationary otherwise it is non- stationary. ation Test by Gujarati (2004) the ADF test statistics will be employed on residual value.The model specification is as follows: $\mu = \beta_2 + \beta_1 RGDP + \beta_1 M_2 + \beta_2 INTR$
Error Correction	on Mechanism.
Error correction mechanism measures the speed of short-run adjustment to long-run equilibrum, the value of the error correction mechanism determines the speed of short-run adjustments to long-	run equilibrium. The error correction model is specified as follows $\Delta RGDPE = \alpha_0 + \alpha_1 \Delta M2_t + \alpha \Delta INTR + \alpha_a 2_{\mu t-1} \pounds t$
Economic Criterion These are determined by the principle of economic theory I referred to the sign and size of the parameters of economic relationship the expected sign for the Table 1:	Test (A Priori Test) parameters associated with the various are shown below: The various variables are shown below.
Variables	Expected Signs
M ₂	+VE
INTR	-VE
Test of Si	gnificance
These are determined by the statistical theory and aimed at evaluating its statistical reliability of the estimates of the parameters of the model. The most	widely used statistical criteria is the square of correlation coefficient of determination (R ²),T- test and F- test of Significance.
Test for the goodness of fit describes how well the model was employed to describe the model whether a significant difference exists at a given probability level. In-short, it tests how well the sample regression function fits the data. How "close" the fitted regression line is to all of the data points, taken together. The	$R^2 ≤ 1$), thereby confirming the goodness of fit as the closer the value is to 1, the better the fit, otherwise the worst the fit [8]. A two tailed test is conducted at 5% level of significance and n-k degree of freedom (df), where n is the number of observation and k is the parameter estimated.

F-Test of Significance

F-test statistic is used to test the overall statistical significance of the independent variable. It is to test whether there is homogeneity or not between two groups. It is calculated by dividing the larger variance by the smaller variance. A one tailed test conducted at 5% level of significance and (V_1 / V_2) degree of freedom.Where:V₁ = degree of freedom (df) for the numerator; V₁=K-1. V₂ = degree of freedom (df) for the denominator; V₂=n-k

Econometrics Test of Significance (Second Order Test) Auto-correction Test

The aim of this test is to see whether the errors corresponding to different observations are serially correlated or not. Uncorrelated errors are desirable. The Durbin- Watson (D-W) statistics at 5% will be used to test for the presence of autocorrection problems. The region of no auto-correction remains:

 $Du > D^*$. (4 - du)

Where:

du = Upper Durbin - Watson

d* = Computed Durbin - Watson

The Granger Casualty Test the direction of influence [7]. The

ascertain

relationship

variable of interest.

Although regression analysis deals with the dependence of one variable on the other it does not necessarily imply causation. In other words the existence of a relationship between variables does not prove casualty or PRESENTATION AND ANALYSIS OF DATA

As a preliminary step on the impact of

monetary policy on economic growth in

Nigeria, unit root test was conducted on

four focus variables. Augmented Dickey

Economically speaking two variables will

be co integrated if they have a long run or

an equilibrium relationship between them

(Gujarati, 2004). The Augmented Dickey

Units Roots Results Fuller test, unit root test was also employed for this purpose. The results of the test are presented in table 2 bellow.

essence of casualty analysis using the

grandeur casualty test is to actually

а

between

casualty

two

3

whether

exists

ADF test Statistics Variables 5% Critical Value Order of Integration RGDP -3.164269 -1.9510001(1)M2 -2.917796-1.9538531(1)-3.332227 -2.943427INTR 1(0)From the unit root result summary above, indicate stationality at 5% level of the real gross domestic product, money significance. The null hypothesis is supply, interest rate and inflation rate thereforerejected.

Table 2:Unit Root Analysis Results

Co integration Test

Fuller (ADF) test was utilised for this purpose as a unit root test was conducted on the residuals. The result of the test is table presented in

Table 3: Cointegration Analysis Result

ADF Test statistics	Value Result				
-2.212842	-1.953381		COINTEGRATION		
From the co integrated resul	t above the	decision. This implies that there is a co			
ADF statistics is greater than	F statistics is greater than 5% level of integrating equations or vector a		ctor among	g the	
significance in absolute term.	This reveals	variables of	interest. There	efore there	is a
the rejection of the null hypo	thesis at 5%	long run	relationship	between	the
level of significance base	d on our	variables.			

If the computed value of Durbin-Watson lies within the non auto-correction region: it means there is no presence of autocorrelation problems. But if the Durbin Watson computed value lies outside the region there is the presence of auto-correlation problem. If it occurs, Heteroscedasticity Auto-correlation correction will be employed to avoid the spurious regression and remove its influence in the model.

www.iaajournals.org

Analysis and results of error correction mechanism test (ECM). Dependent Variables D(RGDP) Method: least Squares Date: Sample:

Table 4:

Variable	Coefficient	Std Error	t-statistic	Prob
С	43417.91	112963.1	0.384355	0.7033
D(M2)	4.132989	24.65302	0.167646	0.8679
INTR	-433.7313	5755.831	-0.075355	0.9404
ECT(-1)	-0.470635	0.654571	-0.718998	0.4774
R-squared	0.017577	Mean dependent var		24949.8
Adjusted R-square	-0.74525	S.D dependent var		140677.7
S.E of regression	145825.6	Akaike info criterion		26.72265
Sum squared resid	6.80E+11	Schwarz criterion		26.89860
Log likelihood	-477.0077	Hannan-Quinn criter		26.78406
F-statistic	0.190839	Durbin-Watson stat		0.991953
Pro(F-static)	0.901859			

From table 4 above the magnitude of the short-run disparity is -0.470635, that is to say that the degree of the short-run

Dynamics is 47.0 635. This shows a relatively very low speed of adjustment to equilibrium after a shock.

The Regression Analysis Result

Dependent Variables D(RGDP) Method: Least Squares Date: Sample adjusted:

1 0		Table 5:		
Variable	Coefficient	Std Error	t-statistic	Prob
C	17757 24	24628 88	0.72700	0.4760
	17757.24	24030.00	0.72700	0.4700
	4.755220	23.19745	5.167925	0.0021
INTR	-261.6127	5781.022	-0.045254	0.9642
R-squared	0.001112	Mean dependent war		17930.78
Adjusted R-square	-0.057646	S.D dependent var		145132.3
S.E of regression	149256.9	Akaike info criterion		26.74233
Sum squared resid	7.57E+11	Schwarz criterion		26.78838
Log likelihood	-491.7331	Hannan-Quinn criter		0.963130
F-statistic	0.018923	Durbin-Watson stat		
Pro(F-static)	0.981266			

From the regression results above the variables under consideration are real gross domestic product dependent variables, broad money supply and

interest rate. From the results, the estimated coefficient value of b, b and b are 1775 7.24, 4.7 35226 and - 26 16127 respectively.

Table 6.

Variables	Expected signs	Observation signs	Results		
M2	+VE	+VE	CWES		
INTR	-VE	-VE	CWES		

CWES - Conform With Expected Sign

Evaluation Based on Economic Criterion.

This subsection is concerned with evaluating the regression results based on the previous expectations. The signs and magnitude of each variable coefficient is evaluated against theoretical expectation. The sign of the entire variables coefficients are not totally in line with the real expectations. Broad money supply has positive relationship with real gross domestic product (RGDP) while interest rate has negative relationship with the domestic product (RGDP) within the period covered. The constant term is estimated at 1775 7.24 which means that the model passes through the point 1775

This subsection applies to all the t-test and the f test determine the statistical R² - Result and Interpretation

The coefficients of determination R² from the regression results the R² is given as 0.50 112. This implies that 50% of the variation in the real gross domestic

From distribution table the result of the three tests of significance is shown in the table 7 below. The result of the test is t - Test of significance Analysis Result

7.24 mechanically if the Independent variables are zero real gross domestic products could be 1775 7.24. The estimated coefficient for broad money supply is 4.7 35226. This implies that if we hold all other variables affecting real gross domestic product constant a unit increase in broad money supply will lead to 4.7 35226 increase in real gross domestic products on the average. Likewise, the estimated coefficient for the interest rate is -261.6127. This also means that a unit increase in interest rates will bring about -261.6127 degrees in real gross domestic product on the average.

Evaluation Based on statistical Criterion.

reliability of the estimated parameters. These tests are performed as follows

product is being explained by variation in broad money supply and interest rates on the average.

t- test Result and Interpretation

presented below and evaluated based on the critical value (2.0 42) and the value of calculated t statistics of each variables.

Table 7:					
Variables	t- computer (t*)	t- tabulated (ta/2	Conclusion		
M2	3.187925	1.960	Significant		
INTR	-0.045254	1.960	Insignificant		

Significant (Reje	ct Ho: accept H1)

Insignificant (Accept Ho: Reject H1)

From the t- test results above,. Therefore we reject null hypothesis full-stop hands broad money supply is statistically significant. Thus, broad money supply has a significant impact on the real gross Results and Interpretation of f test of significance

V= 3-3= V= 37-3=34, df = (2,34) at 5% level of significance and df = (2.34) at 5% level of significance and df = (2,34), $F_{0.05}$ =2.69 and F^{*} = 0.018923. since F< f0.05,

domestic product. Therefore we accept null hypothesis. Hence interest rate is statistically insignificant towards interest rate has no significant impact on real gross domestic products.

We accept the null hypothesis and conclude that the variables broad gross

domestic product.

Uzoma <i>et al</i>	Table 9 fteete	faignifica	nco Ano	lucic Docu	www.iaa	ajournals.org
Computed f ratio value	able o. I-lest o.	f ratio val	nce Ana	Iysis Kesu	<u>11.</u>	
		I-ratio val	ue	Rest	<u>lll</u> iatioal Inciani	ficant
0. 018923	2. 09	and an Ea			istical insigni	ilcant
In this subsection the f	Evaluation Ba	ised on Eco	onomic	Criterion.	a madal aut	ocorrolation
In this subsection the re-	husto the real		optaine	itu aranga		
lest were used to eva	iluate the rest	uits	f Autoc	ity grange	T casually les	ι.
Res Using the Durbin Wats	on Statistics	the	D* = 1	74	rest	
region of no autocorrely	oli statistics,		D = 1. D* = 00	63130		
negative) is given as foll	ows:	5 01	(4 - du)	-4 - 1 74	- 2 26	
Du < d* < (4 du)	0113.			hstitution	the region	hecomes:
Du = 1.74			1 74> (963130 <	2 26	i becomes.
	Table 9. Auto	correlatio	n Analy	sis Result.		
Du D*		4 = du		Result		
1.74 0.0189	923	2.26		Autoco	rrelation pres	ent
The result shows that the	here is a prese	nce	doesn't	fall with	in zero Aut	ocorrelation
of autocorrelation prob	lem in the mo	odel	regions			
as a computer doubling	Western statis	tics	-			
	Granger Cau	sality Test	Analys	is Result.		
Pairwise Grander Casual	ty Test					
Date:						
Sample.						
Lags			_			
h		Table 1	0:	~1		_
Null Hypothesis			C	Jbs	f-statistic	Prob
M2 does not Granger caus	se	RGDP		37	109.941	8.E- 15
RGDP does not Granger ca	ause	M2			0.72032	0.4946
INTR does not Granger ca	use	RGFP		37	0.00313	0.0069
RGDP does not Granger ca	ause	INTR			0.15126	0.8603
			-	. 7	0.047664	0.7000
IN I R does not Granger ca	use	MZ	Ċ	57	0.247664	0.7822
M2 does not Granger caus	se	INTR			0.04176	0.9592
The grander casual	ty toot ch		ovpocto	tion since		bliched fact
unidirectional casual	ty test sin	JWS	expecta		c theory the	Diffieu fact
between broad money	supply and	roal	a IIIIC	in suppl	v will bring	about the
gross domestic product	supply allu is it also shows	no	increas	a in ecc	y will brillg	th of any
casualty relationship	hetween ar	2055	econon	$\frac{1}{10}$	other hand i	interest rate
domestic product and	interest rate	in	has m	inst sign	ificant impa	ct on the
Nigeria no casualty rela	ationshin hetw	een	econon	nic growth	of Nigeria	lso interest
interest rate and blood	money in Nige	ria	rate h	as a neg	ative relation	nshin with
values of the manufactu	ring sector out	nut	econon	nic growth	in Nigeria	this implies
of the country will	bring about	an	that an	increase	in the interes	t rate of the
increase in the econ	omic growth	of	country	/ relate	to a decrea	ase in the

Nigeria. This is consistent with the prior FINDINGS AND CONCLUSION The study found that money supply has a positive and significant impact on economic growth. An increase or decrease in money supply definitely increases or decreases output respectively, leading to

growth or depression as the case may be. Again interest rate has a negative relationship with economic growth which implies that an increase in interest rate

of

Nigeria.

growth

economic

will bring a decrease in economic growth

www.iaajournals.org

wth in Nigeria. CONCLUSION

From the foregoing we conclude that money supply is positive to growth in the economy while interest rate is to growth in the economy of Nigeria. The work agrees to Laudier (1993) that posits that monetary policies can only produce desired results if a highly integrated and monetized economy with an effective networking system is available.

REFERENCES

- 1. Abeng, M.O.(2006). Financial sector reform outcome in Nigeria: A quantitative evaluation (*CBN Bullion*, 53- 69).
- 2. Address, H. & Mobolaji, H. (2010). The fiscal monetary policy and economic growth in Nigeria: Further Empirical Evidence. 2Pp.137-142.
- 3. Ajayi, I.(1999). Evolution and functions of the Central Banks. *Central Bank of Nigeria Economic and Financial Review.* 37(4): 11-27.
- 4. Akujobi, LE.(2012). Monetary policy and Nigerias Economic Development. *Africa Research Reviews*, Pp.153 - 161
- 5. Anyanwu J.C. (2003). *Monetary economic: Theory, policy and institution.* Onitsha: Hybrid Publishers LTD.
- 6. Attamah Nick and Onyali, C. (2011) Intermediate and Advanced Macroeconomic Theory. NIGMOS Publishers, Iykzemas International, Enugu
- Bernhard, O. I. (2013). Monetary transmission mechanism in Nigeria: Casualty test. *Mediterranean Journal of Social Science*. Pp.337 -388.
- 8. Busari, D. (2002). Monetary policy and Macroeconomic Stabilzation under Alternative Exchange Rate Regime: Evidence from Nigeria.
- 9. CBN (2008). Central Bank of Nigeria (CBN), *Monetary policy department Series*,1, 2008. (BN/MPD/ Series/01/2008- www.cbn.
- Chukwu, C.A. (2009). Measuring the effect of the Monetary policy innovation in Nigeria. African Journal of accounting economic, Finance and banking Research Vol. 5. No 5. Pp. 141-153.

- 11. Familoni, K.A. (1989). Development of Macroeconomic Policy. *Concept Publications*, Lagos.
- 12. Friedman, M., (1963). A monetary history of the united states. 1867-1960). Princeton, NJ: Princeton University Press
- 13. Ikhide, S.I., (1993). Financial sector reforms, macro economic instability and the order if economic liberalization: Evidence from Nigeria. *AERC Workshop paper.* Nairobi.
- 14. Jhingan, M.L. (2001). Monetary and Banking International Trade. *Vrinda Publications (P) LTD*, Delhi.
- 15. Jhingan, M.L. (2002). Monetary Economic, 5th Revised and Enlarged Edition; Delhi; Vrinda publication (p) LTD
- 16. Jhingan, M. L. (2016) Macro Econometric Theory, Vrinda Publications Ltd, Mayur Vihar Phase-1 Delhi-110091
- 17. Laudier, D. (1993). The demand of money: Theories, evidence and problems; 4th New York: Harper Olin's.
- Micheal, B.& Ebibai, T.S. (2014). Monetary policy and economic growth in Nigeria (1980- 2011). Asia Economic and Financial Review, Pp.20- 32.
- 19. Ndem, A.N. (2005). Fundamentals of Research in Behavioral science and humanities, WUSEN Publisher.
- 20. Nnama, O.J. (2001). Monetary policy framework in Africa: The Nigeria Experience in Proceedings: conference on Monetary policy frameworks in Africa. Reserve Bank of south of Africa, Pretona.
- 21. Nwankwo, G.O (1991). The Money and capital market in Nigeria. London: Macmillan.

- 22. Obasikene, A. C.(2006). Understanding Monetary and Fiscal policies in Nigeria.
- 23. Ojo, M.O, (1989). Analysis of some prison data, Journal of Applied Statistics, 16(6): 377- 383.
- 24. Orji, J. (2009) Banking and Finance: Principles, Policies and Institutions, Enugu. Splash media organization.
- 25. Okeke, A. (2001) Foundation statistics for business decisions, Enugu, Macro Academic Publishers.
- 26. Onwumere, J. (2009) Business and Economic Research Methods, Enugu.Elements of Banking: Nigerian Institute of Bankers, Question and Answers. First Edition 1978 - 1983, Amos Printers, Lagos.
- 27. Okwu, A.T. (2012). Empirical Analysis of the effect of monetary Policy innovations of stabilization of commodity price in Nigeria European Journal of economic, France and Administrative Science, 32: 64-79.
- 28. Omoka, P.C. & Ugwuanyi, C.U. (2010). Monetary, price and output. A causality test for Nigeria.

www.iaajournals.org

American journal of scientific Research. Vol.(8) Pp.78-87.

- 29. Onyeiwu, C. (2013). Monetary Policy and economic growth of Nigeria. Journal of economic and sustainable development, 3(7), (2012): 62- 70.
- 30. Onyeiwu, C. (2012). Monetary Policy and economic growth of Nigeria. Journal of economic and sustainable development, 3(7), (2012): 62- 70.
- 31. Owalabi, A.U. & Adventure, T.A. (2014). Impact of monetary policy on industrial growth in Nigeria. International journal of Academic Research in Business and social science Vol. 4.(10), Pp18- 31.
- 32. Sanusi, I.S. (2010). Neither the Washington nor Beijing Consensus: Developmental models to fit African Realities and culture. Paper presented at the Eire Icon Africa Public lecture series (AAPLS) @ the royal school of Medicine, I dimple street London, UK, March, 27, 2012.
- 33. Shaw,E.S.(1999).Financial deepening in economic development. New York: Oxford UniversityPress.