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The Impact of Financial Deepening on the Economy of Nigeria (1981-2018)

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Author's Contribution

This work was carried out in collaboration among all authors. Author UOE designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors GOU and COO supervise and managed the analyses of the study. Author GOU managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

This study was carried out to investigate the impact of financial deepening on the Nigerian economy between 1981 and 2018. Data employed for this study was elicited from Central Bank of Nigeria Statistical Bulletin of 2018. This study employed real gross domestic product as proxy for economic growth in Nigeria (regress and), while ratio of money supply to gross domestic product, ratio of private sector credit to gross domestic product and ratio of market capitalization to gross domestic product were adopted as regressors. The co-integration test and Fully Modified Least Squares (FMOLS) Model were utilized to analyze data. Inferential results generated there from indicated that financial deepening had positive impact on the Nigerian economy within the period under review. To boost economic growth, we recommend at this time that monetary authorities implement monetary policies to increase money. In the same vein, Nigerian commercial banks should be encouraged to improve upon credit facilities made available to the private sector. Recognizing the positive impact of international capital, this study also recommends that Nigerian policy makers

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ease some of the many restrictions that currently limit entry of international capital. This singular act would most definitely lead to more companies being listed on the exchange. The result would be the attainment of even more depth to Nigeria's economy.

Keywords: Financial deepening; Nigerian economy; money supply; private sector credit; market capitalization.

1. INTRODUCTION

1.1 Background to the Study

The financial sector of an economy is it life wire. In the absence of a viable and robust financial sector, no country can achieve significant success in the attainment of macroeconomicobjectives without a viable and robust financial sector. Given how sensitive a financial sector may be, theorists advice that investors be availed on the array of available financial instruments as this would further enhance and open up the financial system of such economy to both internal and external investors [1].

The more financial securities introduced in the financial system of any economy, the more deepened the financial sector of that economy is said to be. The more deepened a financial sector is, the more investors would troop in to invest in such market since there are several investment opportunities and choices of financial instruments available to them, depending on their quest and thirst for either risky or risk free securities, regardless of any class of risk averseness bracket the investor falls into, he would be able to find a suitable financial security he may want to invest in. That is the advantage a deepened financial market brings to the economy or country that has a deepened financial market, influx of investors within and without the enclaves of that country. So it suffices to say that financial deepening can be a catalyst or stimulus for economic growth and development especially in a country like Nigeria.

Financial deepening may be defined as the increase in the introduction and supply of financial assets or securities within the financial sector (financial market) of the economy.

Nzotta and Okereke [2] Opined that financial deepening is the capability of financial institutions in any given economy to efficiently and effectively channel savings towards investment purposes. Financial deepening vehemently channels savings and funds in the vaults of the banks and allocates them to households,

entrepreneurs, business and government for investment opportunities and beyond investment purposes with a view of return on investment, which will enhance economic growth.

This paper is structured into five segments or parts. The first part takes care of the introductory aspect of this study, while the second segment reviews related literature; theoretical review and empirical review. The third segment highlights the methodology employed in this study while the fourth part has to do with analysis of data for inference and the final part concludes and proffers policy recommendations.

1.2 Statement of Research Problem

There have been several studies on financial deepening and its impact on economic growth in Nigeria. These authors have utilized different proxies for financial deepening, and have generated different results and findings. While some found positive impact, others have instead observed a negative impact of financial deepening on the economy. Indeed, the presence of more financial instruments will not just add depth, but would also increase the possibility of riskier investments. For instance, the 2008 financial crisis was remotely linked to the wide(r) use of derivatives. And so while there are benefits of an economy being deepened, there could also emanate dangers that would ultimately wipe out whatever gains that had been achieved. This study thus empirically investigate the impact of financial deepening on economic growth in Nigeria, using different financial deepening variables available in the Nigerian financial market and different estimation techniques from previous authors and see if the results and findings to be obtained would vary or support the findings of pat works, since this study is carried out in more recent time than past studies.

In Nigeria, there have been the introduction and usage of various financial instruments in the financial market, yet there appears to be room for progress as the financial markets are not at peaked performance when compared to some other developing countries. Till today, investors in Nigeria still lose millions in investment and one wonders given these losses financial deepening can still be regarded as influencing economic growth positively, hence the need to carry out this research to investigate the impact of financial deepening on the Nigerian economy between 1981 and 2018.

1.3 Objectives of the Study

The broad objective of this study is to investigate the impact of financial deepening on the Nigerian economy between 1981 and 2018. While the specific objectives are:

- To ascertain the impact of the ratio of money supply to gross domestic product on economy of Nigeria.
- To assess the impact of the ratio of private sector credit to gross domestic product on economic growth in Nigeria.
- To assess the impact of the ratio of market capitalization to gross domestic product on Nigerian economy.

1.4 Hypotheses

- H0₁: The ratio of money supply to gross domestic product has no significant impact on economy of Nigeria.
- H0₂: The ratio of private sector credit to gross domestic product has significant impact on economic growth in Nigeria.
- H0₃: The ratio of market capitalization to gross domestic product has no significant impact on economy of Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

This section reviews supply-leading theory, demand-following theory and development theory.

This study is however, anchored on the supply leading theory.

2.1.1 Supply - Leading Theory

The supply-leading theory suggests that financial deepening enhances economic growth. The going concern and new innovations of the financial markets will brings about an enhanced level of saving and investment and encourage and catapult the effectiveness of accumulation of

capital. This theory postulate that a wellfunctioning financial system will certainly bring about and increase in the effectiveness of the economy and encourage the mobilization of savings, transfer resources from traditional (nongrowth) sectors to the more modem growth inducing sectors, creation of additional liquidity and also serves as a catalyst for capital accumulation. To a great extent, this will also lead to self realization of entrepreneurs in the modern competitative sectors of the economy the world over. The recent study conducted by Dernirguc-Kunt and Levine [3] in a theoretical review of the various analytical methods used in finance literature, they showed hard facts that financial development is pertinent for growth. To them, it is important for policy makers to be motivated in order to prioritize policies surrounding financial sector which will lead to economic growth in an economy.

2.2 Empirical Review

Emmanuel and Steve [4] Investigated the relationship that existed between financial deepening and entrepreneurial growth in Nigeria. The researchers employed secondary data source collected from [5] from 1986 to 2016. Their study utilized Pearson Correlation to ascertain the relationships that existed between the variables. Their empirical results showed that the ratio of money supply to Gross Domestic Product (M2/GDP) recorded a positive but insignificant relationship with entrepreneurial growth; the ratio of credit to private sector to GDP (CPS/GDP) recorded а positive (insignificant) relationship with entrepreneurial growth: and the ratio of deposit money banks' branches to GDP (DMBB/GDP) recorded a negative significant relationship with entrepreneurial growth. From the foregoing, their study deduced that money supply and credit to private sector were more active indicators of financial deepening that were capable of impacting entrepreneurial growth positively in Nigeria. They recommended that an effective regulation of supply of money in order to increase capital flows to the real sector of the Nigerian economy SO as to trigger entrepreneurial growth. Also, the Central Bank of Nigeria should ensure that commercial banks gives out more credit facilities to entrepreneurs (private sector), including the young graduates and new entrepreneurs without or common non collaterals to enable them invest in landed productive innovative ventures. They also recommended that more venture capital firms

should be established so as to enhance the funding of small, early-stage, emerging firms that have the potentials to grow and this will result to value and wealth creation.

Amaefula [6] Evaluated if economic growth was enhanced by financial deepening. The variables employed in this study were gross domestic product (GDP), money supply (M2) and credit to private sector (CPS). This study covered the period between 1981 and 2016. Multiple regression analysis model and Auto-Regressive Distributed Lag (ARDL) Model results showed that financial deepening indicators had no effect on economic growth but when they considered their pooled additive effect on economic growth, it was discovered to have a positive and significant effect at 1% level of significance. The ARDL result revealed that there was no evidence of short-run relationship that existed between financial deepening and economic growth, but the long-run equilibrium relationship was recorded to be only significant at 10% level of significance. The result further revealed that in case of distortion in the economy, there was approximately 0.2% adjustment speed adjusted towards long-run equilibrium. This showed a slow speed of adjustment towards equilibrium. Hence, the government should incorporate more reforms in the Nigerian financial system that will enhance positive effect of financial deepening on economic growth both in the short-run and longrun.

Tari and Oliver [7] Examined the causal relationship that existed between financial deepening and economic growth in Nigeria between the period 1970 and 2013. The study used the Toda-Yamamoto augmented Granger causality test and results elicited from the analysis revealed that the growth-financial deepening nexus in Nigeria supported the supply-leading theory. Put differently, it connotes that it was financial deepening that lead to growth and not the other way round. The study recommended that policy efforts should be channeled towards clearing drawbacks that would impair and distort the growth of credit allocated to the private sector, and will also act as a catalyst to boost investors' confidence in the stock market operations.

Adofu et al. [8] Conducted a study to ascertain the impact of financial deepening on economic growth in Nigeria between 1986 and 2010 using time series data extracted from the Central bank of Nigeria (CBN) statistical bulletin 2010. This research utilized Vector Error Correction Mechanism (VECM) as well as the Johansen cointegration and granger causality tests and revealed that causality runs from GDP to CBC and TDDC which supported the theory that economic growth causes financial deepening. Further findings of this study showed that even though GDP was influenced by certain financial deepening variables, yet past values of GDP was recorded to have more impact on GDP than financial deepening. The study recommended that the productive base of the Nigerian economy should be strengthened and mobilization of savings by the commercial banks should be enhanced and money supply should be increased.

Echekoba and Ubesie [9] Carried out a research on the assessment of financial deepening on the growth of Nigerian economy 1990-2016. The main objective of this study was to evaluate the effect of private sector credit, money supply and market capitalization on economic growth in Nigeria. The sources of data for this study were CBN statistical Bulletin and National Bureau of Statistics. The data obtained were analyzed using ordinary least square regression (OLS). The result of the analyses showed that the three independent variables of the study all have significant effect on Nigerian financial deepening. It was therefore recommended that policy makers should consider reducing impediments to liquidity in the stock market, easing restrictions on international capital and entry into the market to ensure that more companies are listed, policies aimed to reduce the high incidence of non performing credits to ensure that private sector credits are channeled to the real sector of the economy and monetary authorities should implement policies that increase the flow of investible funds and improves the capacity of banks to extend credit to the economy as this will make broad money supply and private sector, to significantly impact on economic growth in Nigeria.

Okafor et al. [10] Undertook a research on financial deepening and economic growth in Nigeria between 1981 and 2013. This research utilized the Phillips-Peron test for unit root to evaluate if the variables in the model were stationary or not. The VEC residual normality test and the Histogram-Normality test were employed in other to ascertain if the data set were normally distributed or not. Long run relationship test was carried out using Johansen cointegration test. The Error Correction Model as well as the Granger causality test was also used. The findings elicited from this study showed that that there existed a long run relationship between economic growth, broad money supply and private sector credit, with high speed of adjustment towards long run equilibrium. The findings further showed that while broad money recorded positive and insignificant impact on economic growth, private sector credit recorded negative and insignificant impact on growth. The Granger causality test results revealed that neither broad money supply nor private sector credit is granger causal for economic growth and vice versa. The study therefore recommended that policies that would enhance the private sector to thrive should be put in perspective in order to ensure that investors have access to credit facilities at low interest rate. the interplay of monetary and fiscal policies should be harnessed so as achieved macroeconomic goals and objectives in the economy.

3. METHODOLOGY

3.1 Research Design

This study adopts the ex-post facto research design as it deals with event that had taken place and secondary data were readily available for collection. Real gross domestic product was employed as the explained variable, while ratio of money supply to gross domestic product, ratio of private sector credit to gross domestic product and ratio of market capitalization to gross domestic product was employed as the explanatory variables. The model was estimated using Auto Regressive Distributed (ARDL) Model. Since we are making use of annualized time-series data and the study cover a long sample period, we made sure our data set were not impaired by unit root: hence we tested for stationarity of the series by employing the Augmented Dickey-Fuller (ADF).

3.2 Source of Data Collection

Data for this study were extracted from [5]. The study period covers 1981 through 2018.

3.3 Method of Data Analysis

This study used descriptive statistics, unit root test, correlation, normality test and Fully Modified Least Squares (FMOLS) Model in testing the hypotheses of the study. E-view 9.0 econometric statistical software package was used for the analysis.

3.4 Model Specification

A model may be defined as an abstraction of reality. This research adapted the economic model previously used by [9] that researched on the assessment of financial deepening on the growth of Nigerian economy (1990-2016). The econometric model of this study, which had earlier been reviewed in the preceding section, is specified below:

$$GDPGRt = \alpha_0 + \alpha_1 CPSt + \alpha_2 MCRt + \alpha_3 M2t + U_t$$
(3.1)

Where,

GDPGR = Gross Domestic Product Growth Rate CPS = Ratio of private sector credit to GDP MCR = Ratio of Market Capitalization to GDP M2 = Ratio of money supply to GDP u = Error term α_0 and α_3 = Coefficients of their respective variables t = Time dimension

t = Time dimension

However, this study adapted the scholars' work by using the log version of the variables and replacing Gross Domestic Product Growth Rate with Real Gross Domestic Product as the explained variable. In that regard, the regression model is specified thus:

$$InRGDPt=\beta_0+\beta_1InM2t+\beta_2InCPSt+\beta_3InMKTt+\epsilon_t$$
(3.2)

Where;

RGDP = Real Gross Domestic Product MKT = Ratio of Market Capitalization to GDP β_0 and β_1 =Coefficients of their respective variables In = log

 ϵ = Error term and other acronyms in the model remain as explained above.

3.5 Decision Rule

The decision rule is we "fail to reject the null hypothesis" if the computed p-value is less than 5% significant level. On the contrary, "do not reject the null hypothesis" if the computed p-value is higher than 5% significant level.

3.6 Expected Results

Ratio of money supply to GDP is expected to have a positive impact on economic growth.

Ratio of private sector credit to GDP is expected to have a positive impact on economic growth.

Ratio of Market Capitalization to GDP is expected to have a positive impact on economic growth.

4. DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Pre-Estimation Test Result (Unit Root Test)

The unit root test from Table 4.1 shows that the integration order of the variables were stationary at I(1). As such, the appropriate estimation technique to employ for analysis is the Johansen's co-integration test and Co-integration equation.

4.2 Descriptive Statistics

The descriptive statistics presented in Table 4.2 shows that RGDP has the highest mean value of 33737.67, followed by M2 which has 14.20250, while CPS and MKT have 11.05262 and 10.59729 respectively. Note that the Mean describes the average value for each data series in the model. The Median explains the middle or centre point for each data series in the model. From the analysis, RGDP has the highest

Standard Deviation as it recorded 19604.06, implying that it is the most volatile variable in the model as it has the highest percentage of dispersion from the mean. Skewness measures the asymmetry or symmetry of the distribution of the series around its mean. A Skewness of zero (0) depicts a symmetrical distribution. On the other hand, a positive skew portrays an asymmetrical distribution with higher values; it has a long tail to the right. However, a negative skew illustrates an asymmetrical distribution with lower values, which has a long tail to the left. From Table 4.2, three variables, RGDP, M2 and CPS with 0.74, 0.6 and 0.9 respectively, are skewed a little to the right, while MKT which has 1.32 is skewed to the right. In conclusion, RGDP, M2 and CPS meet the rule of thumb of not greater than 1.0 and not less than -1.0. Thus, they have a normal distribution.

Kurtosis measures the peakedness or flatness of the distribution of a series. The kurtosis of a normal distribution is 3. If it exceeds 3, it means that the distribution is peaked or leptokurtic relative to the normal. Conversely, if it is less than 3, it shows that the distribution is flat or platykurtic relative to the normal. From Table 4.2, RGDP, M2 and CPS, are platykurtic because they have 2.0, 1.8 and 2.0 respectively, while MKT is said to be leptokurtic because it has 4.9.

Table 4.1. Unit Root Test

Variables	Augmented Dickey- Fuller test statistic	Probability Value	Critical value at 5%	Integration order/Inference
RGDP	-6.266366	0.0000	-2.948404	l(1)
M2	-5.643062	0.0000	-2.945842	l(1)
CPS	-4.876972	0.0003	-4.876972	l(1)
MKT	-6.748547	0.0000	-2.945842	l(1)

Source: Author's analysis using e-view 9 output

Table 4.2. Descriptive statistics

	RGDP	M2	CPS	MKT
Mean	33737.67	14.20250	11.05262	10.59729
Median	23068.85	12.69308	8.209316	6.851785
Maximum	70333.00	21.30726	20.77330	39.95010
Minimum	13779.26	9.151674	5.917270	3.053461
Std. Dev.	19604.06	3.931659	5.377672	8.410694
Skewness	0.737089	0.598480	0.875430	1.317994
Kurtosis	2.002950	1.828851	1.962942	4.892765
Jarque-Bera	5.014908	4.440146	6.556586	16.67406
Probability	0.081475	0.108601	0.037693	0.000239
Sum	1282031.	539.6951	419.9995	402.6968
Sum Sq. Dev.	1.42E+10	571.9438	1070.016	2617.372
Observations	38	38	38	38

Source: Authors' analysis using e-view 9 output

Jarque-Bera (JB) tests whether the series is normally distributed or not. The test statistic measures the difference of the skewness and kurtosis of the series with those from a normal distribution. In JB statistic, the null hypothesis which states that the distribution is normal is rejected at 5% level of significance. From the results of the analysis presented in Table 4.2, Jarque-Bera statistic is 5 with a Probability of 0.008 for RGDP; 4.4 with a Probability of 0.11 for M2; 6.6 with a Probability of 0.004 for CPS and 16.7 with a Probability of 0.00 for MKT. Therefore, we reject the hypothesis of a normal distribution for RGDP, MKT and CPS. Nevertheless, the hypothesis of a normal distribution is accepted in the case of M2.

Although these skewness and kurtosis indicate departure from normality, such point is not strong enough to discredit the goodness of the dataset for the analysis in view.

4.3 Correlation Analysis

Table 4.3. Correlation matrix

	RGDP	M2/	CPS/	MKT/		
		GDP	GDP	GDP		
RGDP	1.000000					
M2/GDP	0.901602	1.000000				
CPS/GDP	0.926953	0.955240	1.000000			
MKT/GDP	0.788517	0.725527	0.703197	1.000000		
Source: Author's analysis using e-view 9 output						

4.4 Co-Integration Test

From the co-integration test result in the Table 4.4, the output at 5% critical value of the trace statistic is greater than the 5% level of significance. Therefore, we conclude that there exists a long-run relationship among the variables.

Table 4.4. Co-integration test result

Date: 03/24/20 Time: 19:18							
Sample (adjusted): 1983 2018						
Included observat	tions: 36 after adjustm	ients					
Trend assumptior	n: Linear deterministic	trend					
Series: RGDP M2	2_GDP CPS_GDP MK	T_GDP					
Lags interval (in fi	irst differences): 1 to 1						
Unrestricted Coin	tegration Rank Test (1	Frace)					
Hypothesized		Trace	0.05				
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**			
None *	0.610004	61.28091	47.85613	0.0017			
At most 1	0.375016	27.38262	29.79707	0.0926			
At most 2	0.249052	10.46156	15.49471	0.2469			
At most 3	0.004171	0.150469	3.841466	0.6981			

Trace test indicates 1 cointegratingeqn(s) at the 0.05 level, * denotes rejection of the hypothesis at the 0.05 level

4.5 Co-Integration Regression Results

Table 4.5. Results of co-integration regression

Dependent Variable: LOG(RGDP)							
Method: Fully Modified Least Squares (FMOLS)							
Date: 03/25/20 Time: 07:57							
Sample (adjusted): 1982 2018	5						
Included observations: 37 afte	r adjustments						
Cointegrating equation determ	inistics: C						
Long-run covariance estimate	(Bartlett kernel, Nev	wey-West fixed ban	dwidth				
= 4.0000)							
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
LOG(M2)	0.146081	0.305767	0.477753	0.6360			
LOG(CPS)	0.527145	0.185334	2.844299	0.0076			
LOG(MKT)	0.437541	0.053377	8.197170	0.0000			
С	7.783097	0.435787	17.85985	0.0000			
R-squared 0.928106 Mean dependent var 10.28630							
Adjusted R-squared	Adjusted R-squared 0.921570 S.D. dependent var 0.55			0.559006			
S.E. of regression	0.156551	1 Sum squared resid 0.808774					
Long-run variance	0.023818						

Source: Author's analysis using e-view 9 output

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From the result of the Fully Modified Least Squares (FMOLS) in Table 4.5, the R squared as well as the adjusted R squared were recorded to be 93% and 92% respectively. This implied that about 93% of variations in the regressand (real gross domestic product) were caused by the regressors (independent variables) while the remaining 7% was caused by variables not captured in the model. A keen observation of the result revealed that all the regressors had positive impact on the regressand, supporting the result of correlation analysis. However, only LOG (CPS) and LOG (MKT) had significant impact on LOG (RGDP), while LOG (M2) had an insignificant positive impact on LOG (RGDP). The result further revealed that a percentage increase in LOG (M2) would bring about a 14% increase in LOG (RGDP), while a percentage increase in LOG (CPS) would bring about 53% increase in LOG (RGDP). Also, a percentage increase in LOG (MKT) would bring about 44% increase in LOG (RGDP).

This research was carried out to evaluate the impact of financial deepening on economic growth in Nigeria. The result of data analysed revealed that all the regressors recorded positive impact on real gross domestic product in Nigeria. To be very precise, ratio of money supply to real gross domestic product had a positive insignificant impact on real gross domestic product to real gross domestic product was observed to have a positive significant impact on real gross domestic product on real gross domestic product in Nigeria, ratio of private sector credit to real gross domestic product was observed to have a positive significant impact on real gross domestic product, in the same vein, ratio of market capitalization to gross domestic product had a positive significant impact on real gross domestic product in Nigeria.

The result further revealed that all the independent variables conformed to apriori expectations, since all the regressors recorded positive impacts on real gross domestic product in Nigeria. The findings of this study were in agreement with past studies such as: [4,9,8] and [7]. However, the findings was in negation of the study carried out by [6] who recorded negative impact of financial deepening on economic growth in Nigeria.

4.6 Test of Hypotheses

4.6.1 Test of hypothesis one

H0₁: The ratio of money supply to gross domestic product has no significant impact on economic growth in Nigeria.

Since the p-value for ratio of money supply to gross domestic product (LOG(M2))of 0.64 (64%) is >5% level of significance, the null hypothesis that ratio of money supply to gross domestic product has no significant impact on economic growth in Nigeria is not rejected (See Table 4.6).

4.6.2 Test of hypothesis two

H0₂: The ratio of private sector credit to gross domestic product has no significant impact on economic growth in Nigeria.

Since the p-value for of private sector credit to gross domestic product LOG (CPS) of 0.0076 (0.8%) is within the acceptable significance level of 5%, that is, < 5%, we fail to accept the null hypothesis that there is no significant impact of the ratio of private sector credit to gross domestic product on economic growth in Nigeria. (See Table 4.6).

4.6.3 Test of hypothesis three

H0₃: The ratio of market capitalization to gross domestic product has no significant impact on economic growth in Nigeria.

Since the p-value of ratio of market capitalization to gross domestic product LOG (MKT) of 0.0000 is within the acceptable significance level of 5%, that is, < 5%, we fail to accept the null hypothesis that there is no significant impact of the ratio of market capitalization to gross domestic product on economic growth in Nigeria. (See Table 4.6).

Table 4.6. A priori expectation

Variables	Expected Signs	Actual Signs	Remark	
LOG(M2)	Positive (+)	Positive (+)	Conform	
LOG(CPS)	Positive (+)	Positive (+)	Conform	
LOG(MKT)	Positive (+)	Positive (+)	Conform	

4.7 A priori Economic Expectation Result

The result is evaluated based on economic theories and literatures in line with what is obtainable in Nigeria and what is applicable all over the world.

5. CONCLUSION AND RECOMMENDA-TIONS

5.1 Conclusion

The broad objective of this study was to investigate the impact of financial deepening on

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the Nigerian economy between 1981 and 2018. This study utilized real gross domestic product as the regressand while ratio of money supply to gross domestic product, ratio of private sector credit to gross domestic product and ratio of market capitalization to gross domestic product were utilized as the regressors. The results of the Least Fully Modified Squares (FMOLS) showed that all the independent variables recorded significant positive impact on real gross domestic product in Nigeria except ratio of money supply to real gross domestic product in Nigeria that had a positive insignificant impact on real gross domestic product in Nigeria. From the result of the Fully Modified Least Squares (FMOLS), inference can be drawn that financial deepening has had positive impact on economic growth in Nigeria within the period under review.

5.2 Recommendations

This study proffers the following recommendations:

- Monetary authorities in Nigeria should implement policies that would enhance increased money supply in the economy; this will encourage capital flows and become a catalyst for economic growth in Nigeria.
- The central bank of Nigeria should compel commercial banks in Nigeria to grant more credit facilities to the private sector at a reduced lending rate; this will enhance economic growth since entrepreneurs would seek out these loan facilities for investment and this will in turn boost economic growth in Nigeria.
- Evidence suggests that market capitalisation encourages economic growth; therefore this study recommends that policy makers in the Nigerian financial markets should ease restrictions on international capital and entry into the market to ensure that more companies are listed, this will boost economic growth in Nigeria.

5.3 Contributions to Knowledge

This study contributes to knowledge by way of currency as this study is conducted in more recent time compared to past studies; the study will also contribute to the literature on the debate of the subject matter.

5.4 Suggestion for Further Research

Many authors have written on financial deepening and economic growth in Nigeria, therefore further studies in this area should cover the impact of financial deepening as it affects money supply in Nigeria.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX (Data Used for Analysis)

Year	RGDP	MKT CAP	M2	CPS	GDP	MKT/	M2/	CPS/	
						GDP	GDP	GDP	
1981	15,258	5.00	14.47	8.57	144.83	3.45	9.99	5.92	
1982	14,985.08	5.00	15.79	10.67	154.98	3.23	10.19	6.88	
1983	13,849.73	5.70	17.69	11.67	163.00	3.50	10.85	7.16	
1984	13,779.26	5.50	20.11	12.46	170.38	3.23	11.80	7.31	
1985	14,953.91	6.60	22.30	13.07	192.27	3.43	11.60	6.80	
1986	15,237.99	6.80	23.81	15.25	202.44	3.36	11.76	7.53	
1987	15,263.93	8.20	27.57	21.08	249.44	3.29	11.05	8.45	
1988	16,215.37	10.00	38.36	27.33	320.33	3.12	11.97	8.53	
1989	17,294.68	12.80	45.90	30.40	419.20	3.05	10.95	7.25	
1990	19,305.63	16.30	47.42	33.55	499.68	3.26	9.49	6.71	
1991	19,199.06	23.10	75.40	41.35	596.04	3.88	12.65	6.94	
1992	19,620.19	31.20	111.11	58.12	909.80	3.43	12.21	6.39	
1993	19,927.99	47.50	165.34	127.12	1,259.07	3.77	13.13	10.10	
1994	19,979.12	66.30	230.29	143.42	1,762.81	3.76	13.06	8.14	
1995	20,353.20	180.40	289.09	180.00	2,895.20	6.23	9.99	6.22	
1996	21,177.92	285.80	345.85	238.60	3,779.13	7.56	9.15	6.31	
1997	21,789.10	281.90	413.28	316.21	4,111.64	6.86	10.05	7.69	
1998	22,332.87	262.60	488.15	351.96	4,588.99	5.72	10.64	7.67	
1999	22,449.41	300.00	628.95	431.17	5,307.36	5.65	11.85	8.12	
2000	23,688.28	472.30	878.46	530.37	6,897.48	6.85	12.74	7.69	
2001	25,267.54	662.50	1,269.32	764.96	8,134.14	8.14	15.60	9.40	
2002	28,957.71	764.90	1,505.96	930.49	11,332.25	6.75	13.29	8.21	
2003	31,709.43	1,359.30	1,952.92	1,096.54	13,301.56	10.22	14.68	8.24	
2004	35,020.55	2,112.50	2,131.82	1,421.66	17,321.30	12.20	12.31	8.21	
2005	37,424.95	2,900.06	2,637.91	1,838.39	22,269.98	13.02	11.85	8.26	
2006	39,995.50	5,120.90	3,797.91	2,290.62	28,662.47	17.87	13.25	7.99	
2007	42,922.41	13,181.69	5,127.40	3,668.66	32,995.38	39.95	15.54	11.12	
2008	46,012.52	9,562.97	8,008.20	6,920.50	39,157.88	24.42	20.45	17.67	
2009	49,856.10	7,030.84	9,411.11	9,102.05	44,285.56	15.88	21.25	20.55	
2010	54,612.26	9,918.21	11,034.94	10,157.02	54,612.26	18.16	20.21	18.60	
2011	57,511.04	10,275.34	12,172.49	10,660.07	62,980.40	16.32	19.33	16.93	
2012	59,929.89	14,800.94	13,893.22	14,649.28	71,713.94	20.64	19.37	20.43	
2013	63,218.72	19,077.42	15,154.64	15,751.84	80,092.56	23.82	18.92	19.67	
2014	67,152.79	16,875.10	16,238.52	17,131.45	89,043.62	18.95	18.24	19.24	
2015	69,023.93	17,003.39	18,525.22	18,675.47	94,144.96	18.06	19.68	19.84	
2016	67,931.24	16,185.73	21,624.63	21,082.72	101,489.49	15.95	21.31	20.77	
2017	68,490.98	21,128.90	22,363.43	22,092.04	113,711.63	18.58	19.67	19.43	
2018	70,333.00	21,904.04	25,079.72	22,521.93	127,762.55	17.14	19.63	17.63	
	Source: Central Bank of Nigeria Statistical Bulletin of 2018								

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