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APPRAISAL OF THE REAL GROWTH EFFECT OF FINANCIAL DEEPENING INDICATORS: EVIDENCE FROM NIGERIA

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ABSTRACT

This study examined the effect of financial deepening on real economic growth in Nigeria. Financial deepening for the purpose of this study is proxied by such macro-economic variables as the ratio of money supply to real Gross Domestic Product (RGDP), private sector credit to real GDP, total savings to real GDP and stocks/securities to real GDP, while economic growth was measured using the real GDP values. To achieve this objective, we obtained data on the selected macroeconomic variables from the CBN Statistical Bulletin (2019). Furthermore, the study covered a period of thirty-three (33) fiscal years spread from 1987–2019 using a time-series data model. All data obtained were analyzed using the Ordinary Least Square (OLS) regression estimation technique which was computed using the Econometric Views (Eviews9). The result revealed generally that; the ratio of money supply to real GDP has a positive and significant effect on the real GDP; ratio of private sector credit to real GDP has a positive and significant effect on the real GDP; ratio of total savings to real GDP has a negative but significant effect on the real GDP. The study therefore concluded that financial deepening is a significant step towards promoting economic growth in Nigerian economy. However, this study recommended that the government should strategically ensure a balanced flow of money supply into the economy, while private sector credits (especially from the financial sector) should be made much more accessible and available to investors for enhanced real sector growth.

Keywords: Financial deepening, Economic growth, Macroeconomic variables

1.0 INTRODUCTION

The continuous search for ways of improving the economic performance of developing economies and the standard of living of its' citizenry has opened the doors for scholarly debates and alternative views. The link between the financial deepening indicators and economic growthof the developing economies has received considerable attention in recent times (Chamalwa& Bakari, 2016). Financial deepening indicators are the economic conditions that improve competitive efficiency of the financial market which in turn stimulate the non-financial sectors of an

economy. According to Nzotta and Okereke (2014) financial deepening is the ability of financial institutions in an economy to effectively mobilize savings for investment purposes. Financial deepening vigorously attracts the reservoir of savings and idle funds and allocates same to entrepreneurs, business, households and government for investments projects and other purposes with a view of returns which forms the basis for economic growth. Financial deepening has been identified as one of those strategies whose implementation can quicken the pace of economic growth and development. However, the effect of this strategy needs to be determined and reexamined from time to time especially for developing economies.

The growth importance of stock market and banks around the world has opened a new avenue of research into the relationship between financial deepening and economic growth (Arestis, Demetriades&Luintel, 2015). The general idea that economic growth is related to financial deepening was first highlighted by Schumpeter in 1911 as cited by (Okoli 2010). This opened a new avenue for research into the effect of financial deepening on economic growth. Recently, empirical studies on financial development and economic growth linkages such as Okoh, et al, 2022; Olawunmi, et al, 2021; Okoye, et al, 2020; Aderemi, et al, 2020; Ojo, et al, 2020; Okoye, et al, 2019; Nkechukwu&Okoh, 2015; Okoh&Nkechukwu, 2015) have arrived at mixed results thus creating further research gaps.

Financial reforms have been a regular feature of the Nigeria financial system. The Central Bank of Nigeria (CBN) has been trying hard to ensure that the financial sector in Nigeria maintain a considerable depth and remain liquid with a view to competing effectively with the global financial market. The reforms have evolved in response to the challenges posed by developments in the system such as systemic crisis, globalization, technological innovation and financial crisis. The reforms often seek to act proactively to strengthen the system, thus, there is need to deepen the financial sector and reposition it for growth and integration into the global financial system in conformity with international best practices, (Nwanna&Chinwudu 2016).

Some researchers like Ohwofasa&Aiyedogbon (2013) have argued that the level of financial deepening reflects the soundness of the financial sector and the ability with which credits are created with respect to lending and deposit rates. According to them financial deepening thus defines the positive role of the financial system on economic growth by the size of the sector's activity. That means that an economy with more intermediary activity is assumed to be doing more to generate efficient allocations to the productive sector and contribute to economic growth while other scholars in the debate maintained financial deepening is a consequence, and not a cause, of economic growth. The latter group maintained that economic growth increases demand for sophisticated financial instruments, which in turn leads to growth in the financial sector (Ardic& Damar, 2013).

Generally, there have been a gap in the level of economic growth and development and efforts are being made to reposition the financial system to enable it play requisite roles in developing economies like Nigeria. However, economic growth in Nigeria, whether as a result of financial deepening or other growth factors has been on decline in the recent past and therefore this study finds it imperative to assess the effect of financial deepening indicators on real economic growth in Nigeria while the specific objectives includes to:

- i. determine the impact of ratio of money supply to real economic growth in Nigeria (RGDP).
- ii. examine the relationship between ratio of private sector credit to real economic growth in Nigeria (RGDP).
- iii. establish the impact of ratio of total savings to real economic growth in Nigeria (RGDP).
- iv. assess the effect of ratio of stocks/securities to real economic growth in Nigeria (RGDP).

2.0 LITERATURE REVIEW

In this section emphasis is on the conceptual, theoretical and empirical review of financial deepening and economic growth in Nigeria. Financial deepening refers to the increased provision of financial services with a wider choice of services geared to the development of all levels of society. The size of the financial sector is usually measured by two basic quantitative indicators: "monetization ratio" and "intermediation ratio". Whereas monetization ratio includes money-based indicators or liquid liabilities like broad money supply to GDP ratio, intermediation ratio consists of indicators concerning to bank-based measures like bank credit to the private sector and capital market-based measures such as capitalization ratio of stock market (Ndebbio, 2014). According to author, economic growth and development of a country depends greatly on the role of financial deepening. According to Shaw (2014) financial deepening involves specialization in financial functions and institutions and organized domestic institution and markets.

According to DFID (2014) there are many different ways in which the financial sector can be said to "deepen". For example;

- I The efficiency and competitiveness of the sector may improve
- ii The range of financial services that are available may increase
- iii The diversity of institutions which operate in the financial sector may increase,
- v. The amount of money that is intermediated through the financial sector may increase,
- vi. The extent to which capital is allocated by private sector financial institutions to private sector enterprises responding to market signals may increase,
- vii. The regulation and stability of the financial sector may improve and particularly important from the welfare perspective more of the population may gain access to financial services.

Financial sector deepening enable the financial intermediaries perform their functions of mobilizing, pooling and channeling domestic savings into productive capital more effectively thereby contributing to economic growth of a country (Ndege, 2012). Financial deepening generally entails an increased ratio of money supply to gross domestic product. Financial deepening is thus measured by relating monetary and financial aggregates such as M1, M2 and M3 to the gross domestic product (GDP). The logic here is that, the more liquid money is available in the economy, the more opportunities exist for the growth of the economy.

Economic growth means the growth in a nation's real gross domestic product (an increase in a nation's output of goods and services) or the physical expansion of the nation's economy (Antwi, Mills & Zhao, 2013). Economic growth can also be illustrated as an upbeat change on the output of a nation's manufacturing goods and services, stretching over a certain period of time (Kanu&Ozurumba, 2013). In the view of Ndebbio (2014), financial deepening means an increase in the supply of financial assets in the economy.

Theoretically, the work is anchored on the Quantity Theory of Money (QTM) states that the general price level of goods and services is directly proportional to the amount of money in circulation, or money supply. The quantity theory descends from Nicolaus Copernicus (Volckart, 1997), The quantity theory of money (QTM) asserts that aggregate prices (P) and total money supply (M) are related according to the equation P = VM/Y, where Y is real output and V is velocity of money. With lower-case letters denoting percentage changes (growth rates), the QTM can be expressed as p = v + m - y, with p as the rate of inflation and y, v, and m as growth rates of output, velocity, and money stock, respectively. A central implication of the QTM is that a given change in the rate of money growth induces an equal change in the inflation rate, prompting Milton Friedman to claim that "inflation is always and everywhere a monetary phenomenon." (Friedman, 1970). A crucial assumption behind this claim is that the velocity of money or its growth rate is constant and money growth has no effect on real GDP growth at least at a sufficiently long horizon. In fact, many empirical studies of the QTM treat the velocity of money or its growth rate as constant. Instead of assuming the velocity of money or its growth rate is a constant, we can use the QTM equation, v = p + y - m, to allow the changes in velocity to be dictated directly by three sources: inflation, output growth, and money growth. The dynamic interactions among these three variables can be captured by econometric analysis, (Sargent, 1987).

There are a number of studies that have focused on financial deepening and economic growth across various economies which gives empirical insights on the subject matter and the eventual hindsight thereof reveals gaps in knowledge some of which are discussed here.

Mukhtar and Muhammad (2017) studied the impact of money supply on economic growth in Nigeria. The study used annual time series data for the period 1981 – 2015. Johansen co-integration approach is used to check the long run relationship among the variables while Vector Error Correction Model (VECM) is used to measure the short run dynamics and Pairwise Granger causality test is used to check the direction of the causality between the variables. The empirical result confirms long run relationship among the variables where money supply and interest rate have positive significant impact while real exchange rate has negative significant impact on the economy. However, in the short run lagged value of MS has negative significant effect but lagged value of EXR has negative significant effect while lagged value of GDP and lagged value of INT do not have any significant effect on the economy. Moreover, the causality test reveals bidirectional causality between MS and GDP,

unidirectional causality running from EXR to MS and INT to MS while there is no causality between EXR and GDP, INT and GDP, and also INT and EXR.

Ogunmuyiwa and Ekone (2010) investigated the impact of money supply on economic growth in Nigeria between 1980 and 2006. Applying econometric technique OLS, causality test and E.C.M to time series data, the results revealed that although money supply is positively related to growth but the result is however insignificant in the case of GDP growth rates on the choice between contractionary and expansionary money supply.

Marshal (2016) studied the link between money supply and economic growth in Nigeria during 1970-2014. The researcher applied the cointegration and VAR model in a simple regression framework. Money supply (proxied by M2) has a short and long run positive and significant link on Real Gross Domestic Product in Nigeria.

Amoo, Eboreime, Adamu, and Belonwu (2017) studied the impact of private sector credit on economic growth in Nigeria for the period 1993 – 2013 using fully modified least squares. Findings show that credit is growthenhancing, even when trade openness, monetary policy, investment climate and infrastructure are low. Also, the composite local condition index analysis revealed that private sector credit increased economic growth when domestic or local conditions were favourable and the absorptive capacity of the domestic economy for credit was estimated at 29% of the GDP in 2013.

Steven and Obah (2017) analyzed the impact of National Savings on economic growth in Nigeria (1990-2015). Secondary data was adopted and Ordinary Least Square with the aid of E-view version 9 was used to determine the effects of National Savings on Gross Domestic Product. The result showed that there is a positive and significant relationship between National Savings and Gross Domestic Product in Nigeria.

Dhanya (2015) studied the impact of savings in economic growth in Botswana. The study applied the Harrod – Domar growth model. The study test was based on Auto Regressive Distributed Lagged (ARDL) model by Pesaran, Shin and Smith (1999) to check the existence of a long run relationship between Gross Domestic Product and Gross Domestic savings in Botswana. Results confirmed that savings positively impacted on the growth of the country.

3.0 RESEARCH METHODOLOGY

This study adopted the Ex-post facto research design. This approach was adopted because the event is situated in the past. The entire study is based on historical data on financial deepening and real economic growth situated in the past. The period covered is from 1987 to 2019. The data used was derived from the CBN statistical bulletin.

Model Specification

Gross domestic product (GDP) is the dependent variable (y) while ratio of money supply, ratio of private sector credit, ratio of savings and investment are the independent variables X1-X4.

Y = F (X1, X2, X3 ... Xn).

RGDP = F(RMSP, RPSC, RSVS, RSSC)

Economically, the model is specified as follows:

y = ao + a1RMSP + a2RPSC + a3RSVS + a4RSSC + E

Where:

RGDP = Gross Domestic Product is the dependent variable

RMSP = Ratio of money supply

RPSC = Ratio of private sector credit

RSVS = Ratio of savings

RSSC = Ratio of Stock/Security

E = Error term.

Independent Variables

Apriori Expectation

The apriori, expectation is that all the variables will be positively related to real economic growth (RGDP). i.e Ratio of money supply (RMSP), Ratio of private sector credit (RPSC), Ratio of savings (RSVS) and Ratio of Stock/Security (RSSC) will all have a positive impact on GDP.

Therefore:

a1, a2, a3, a4> 0(5)

4.0 DATA ANALYSIS AND RESULTS

The results obtained from the test carried out using the Eviews9 statistical package is obtained and summarized as follows.

Table 4.4.1 Descriptive Statistics

	RGDP	RMSP	RPSC	RSVS	RSSC
Mean	34782.59	0.046410	0.081709	9.112786	8.472740
Median	25267.54	0.032322	0.028153	8.830038	2.051499
Maximum	69023.93	0.123827	0.308508	23.24536	37.18638
Minimum	14953.91	0.000890	0.002140	3.335644	0.011675
Std. Dev.	18512.34	0.045575	0.097436	4.011089	11.59978
Skewness	0.645426	0.525125	1.072341	1.408320	1.382207
Kurtosis	1.886211	1.587112	2.604225	5.989062	3.858818
Jarque-Bera	3.996882	4.261508	6.539909	23.19344	11.52189
Probability	0.005546	0.018748	0.038008	0.000009	0.003148
Sum	1147826.	1.531542	2.696412	300.7219	279.6004
Sum Sq. Dev.	1.10E+10	0.066467	0.303798	514.8427	4305.755
Observations	33	33	33	33	33

Source: Eviews9 Output (2022)

From the table above, we can see the descriptive summary statistics of all variables considered for the purpose of this study. The mean represents the average of each variable throughout the study period have positive values; the median is the value at the center of the study period; maximum is the highest value obtained throughout the study period, while the minimum value is the lowest value obtained throughout the study period.

Stationarity Test Result

This test is carried out to check if the data series are stationary or not. It is important to note that if a set of data is stationary, then the result obtained would be absurd and hence, the result from such data would be unacceptable. The best way of checking the stationary of a set of data is to carry out a unit root test using the Augmented Dicker-Fuller's Test.

Data Series	Augmented Dicker Fuller (ADF)	er- Test Critical Values @ 56 (TCV)	% Probability of ADF
RMSP	4.4272	2.9671	0.0490
RPSC	3.3352	2.9919	0.0099
RSVS	3.0385	2.9571	0.0098
RSSC	3.5156	2.9719	0.0042
RGDP	3.4422	2.9571	0.0087

Source: Eviews9 Output (2022)

The table above reveals the summary of the unit root test carried out. The null hypothesis states that the data is stationary. Using the Augmented Dickey-Fuller Test, the result must show a probability value that is lower than the critical value at any level of significance, in order to reject the null hypothesis.

From table 4.4.2 above, the augmented dicker-fuller (ADF) test statistics are greater than the test critical values (TCV) at 5% level of significance for all the data series (see also, appendix 1.0). Therefore, we hereby accept the null hypothesis which states that the data is not stationary.

Test for Multicollinearity

Although it is important to note that one of the formal way of checking for multicollinearity is by examining the probability value (i.e. P-value). When model produces an insignificant result, this may be as a result of the presence of multicollinearity in the set of data used. A perfect example of the presence multicollinearity would have been revealed in the first model above. This was corrected in the process of removing heteroskadasticity from the data. It is however pertinent that we test for multicollinearity in order to be sure that the result is significant enough for acceptance.

Multicollinearity is the situation where there is high level of correlation between two independent variables. When this occurs, it will render a significant variable to be insignificant by increasing the standard error. The first step in detecting possible multicollinearity is the use of correlation matrix which reveals the relationship between the independent variables.

Table 4.4.3 Correlation Matrix

	RMSP	RPSC	RSVS	RSSC
RMSP	1			
RPSC	0.11848	1		
RSVS	0.19455	0.18679	1	
RSSC	0.13818	0.11979	0.13641	1

Series: RGDP Sample 1987 2019

Source: Eviews9 Output (2022)

The various variables revealed a very low correlation, indicating that there is low tendency of multicollinearity in the data. The correlation between savings and money supply is the highest in the correlation matrix, and this can be explained by the normal economic trend; given that as there is a rise in money supply, it is expected that savings will also increase.

Test for Normality

This is a test carried out in order to correct an abnormal distribution by converting it to a normal distribution. If the set of data in a given variable is not normally distributed, then we have to interlock the variable by converting it into its logarithm form. In testing for normality, the null hypothesis assumes that the data is not normally distributed. Hence, if the probability value (P-value) is less than 0.05, then we reject the null hypothesis and then there is need for correcting the data.

The normality test carried out on each variable using Eviews9 is give below.

Table 4.4.4 Test for Normality

Data Series	Jarque-Bera Statistics	Probability Values
RMSP	4.2615	0.0187
RPSC	6.5399	0.0380
RSVS	23.1934	0.0000
RSSC	11.5219	0.0031
RGDP	3.9969	0.0055

Source: Eviews9 Output (2022)

The normality test carried out reveals a probability of as shown above. It is important to state the null hypotheses states that the variables are not normally distributed. However, reading from the Jarque-Bera (JB) chi-square statistic at 5% level of significance, the JB value for all the variables are higher and their respective corresponding probability values are less than 0.05 level of significance. The result shows that all the variables are normally distributed and the variables are suitable for the conducting of the analysis. Hence, we reject the null hypothesis which states that the data series are not normally distributed.

Table 4.4.5 Regression Result

Dependent Variable: RGDP Method: Least Squares Date: 04/23/19 Time: 02:05

Sample: 1987 2019

Included observations: 33

Variable	Coefficien	t Std. Error	t-Statistic	Prob.
C	19017.89	1336.930	14.22504	0.0000
RMSP	2.212796	38956.38	5.680189	0.0000
RPSC	8.437956	13623.68	6.193597	0.0000
RSVS	-25.78579	178.6628	-1.443266	0.0100
RSSC	11.21516	82.41799	1.360766	0.1844
R-squared	0.979198	Mean dependent var		34782.59
Adjusted R-squared	0.966226	S.D. dependent var		18512.34
S.E. of regression	2854.358	Akaike info criterion		18.88981
Sum squared resid	2.28E+08	Schwarz criterion		19.11655
Log likelihood	-306.6818	Hannan-Quinn criter.		18.96610
F-statistic	329.5084	Durbin-Watson stat		1.908117
Prob(F-statistic)	0.000000			

Source: Eviews 9 Output (2022)

The above regression result reveals an acceptable result after adjustments have been made to correct possible signs of multicollinearity. The R-squared value reveals the ability of the independent variables to account for 97% of the systematic variations in the dependent variables, while the error term is responsible for the remaining 3%. The adjusted R-squared value of approximately 96% means that the model has a high predictive power, as the independent variables can predict about 96% of the changes in the dependent variable. There is absence of autocorrelation as revealed by the Durbin Watson statistics of 1.90, while the F-statistics is high at 329.51 and the overall result are significant as revealed by the P-value of the F-statistics at 0.0000.

Decision Rule:

Accept the Null hypothesis (H0) if the p-value of the t-statistics is greater than p-value tabulated (p-valuecal>p-valuetab) at 0.05 level of significant which is less than 95% degree of confidence, but not significant otherwise Reject Ho and accept H1. If the null hypotheses (Ho) of the (p-valuecal>p-valuetab) at 0.05 significant level which is significant for the study. The interpretations of the result would be done in line with specific objectives and the null hypotheses as captured in the model.

Hypothesis One (Money_Supply-GDP Ratio, RMSP)

From the regression result, the coefficient of money_supply-GDP ratio (RMSP)is 2.212796. This indicates that the money_supply-GDP has a positive effect on the economic growth in Nigeria. The inference is that, holding all other variables constant, a 1% increase in the money_supply-GDP ratio causes a 2.212796 increase in economic growth in Nigeria. However, the p-value of 0.0000shows that the money_supply-GDP ratio as a measure of financial deepening significantly affects economic growth in Nigeria as measured by the real GDP at 5% level of significance, leading to the rejection of the null hypothesis which states that there is no significant impact between ratio of money supply to real economic growth in Nigeria (RGDP).

Hypothesis two (Private Sector Credit-GDP, RPSC))

From the regression result, the coefficient of private sector credit-GDP ratio (RPSC) is 8.437956. This indicates that the private sector credit-GDP has a positive effect on the economic growth in Nigeria. The inference is that, holding all other variables constant, a 1% increase in the private sector credit-GDP ratio causes an8.437956 increase in economic growth in Nigeria. However, the p-value of 0.0000 shows that the private sector credit-GDP ratio as a measure of financial deepening significantly affects economic growth in Nigeria as measured by the real GDP at 5% level of significance, leading to the rejection of the null hypothesis which states that there is no significant effect between ratio of private sector credit to real economic growth in Nigeria (RGDP).

Hypothesis Three (Total Saving-GDP, RSVS)

From the regression result, the coefficient of total savings-GDP (RSVS) is -25.758. This indicates that the total savings has an inverse effect on the economic growth as measured by the real GDP in Nigeria. The inference is that, holding all other variables constant, a 1% increase in the total savings causes a 25.758 decrease in economic growth in Nigeria as measured by the real GDP. However, the p-value of 0.0100 shows that the total savings significantly affects economic growth as measured by the real GDP in Nigeria at 5% level of significance, leading to the rejection of the null hypothesis which states that there is no significant relationship between ratio of total savings to real economic growth in Nigeria (RGDP).

Hypothesis Four (Stocks/Securities-GDP,RSSC)

From the regression result, the coefficient of stocks/securities-GDP ratio (RSSC) is 11.2152. This indicates that the total stocks/securities-GDP has a positive effect on the economic growth in Nigeria. The inference is that, holding all other variables constant, a 1% increase in the total stocks/securities-GDP ratio causes an 11.2152 increase in economic growth in Nigeria as measured by the real GDP. However, the p-value of 0.1844 shows that the total stocks/securities-GDP ratio as a measure of financial deepening has no significant effect on economic growth in Nigeria as measured by the real GDP at 5% level of significance, leading to the acceptance of the null hypothesis which states that there is no significant relationship between the ratio of stocks/securities to real economic growth in Nigeria (RGDP).

Discussion of Results

Money Supply (as Measure of Financial Deepening), and Economic Growth

The result indicates that the money supply-GDP ratio has a positive effect on the economic growth in Nigeria, while the p-value of 0.0000 shows that the money supply-GDP ratio as a measure of financial deepening significantly affects economic growth in Nigeria as measured by the real GDP at 5% level of significance. Following the results obtained, it is evident that money supply as a means to achieving financial deepening contributed to economic growth in the long run. The flow of money in circulation increases investments in short term and long term assets and other economic activities which are expected to generate more money for the investors, thereby contributing to the real GDP.

Further justification to this result can be seen in the studies of Mukhtar and Muhammad (2017) and Marshal (2016). In the study of Mukhtar and Muhammad (2017), the empirical result confirms long run relationship among the variables where money supply and interest rate have positive significant impact while real exchange rate has negative significant impact on the economy. The explanation centered around the available of profitable investments where money in circulation can be invested. While in the study of Marhal (2016) which focused on Nigeria, money supply (proxied by M2) has a short and long run positive and significant link on Real Gross Domestic Product in Nigeria. With this, we can infer that changes in money supply help to explain the changes in RGDP in Nigeria.

Private Sector Credit (as Measure of Financial Deepening), and Economic Growth

This result indicates that the private sector credit-GDP has a positive effect on the economic growth in Nigeria, while the p-value of 0.0000 shows that the private sector credit-GDP ratio as a measure of financial deepening significantly affects economic growth in Nigeria as measured by the real GDP at 5% level of significance. Following the result obtained, it is evident that the availability of credit facilities from the private sector (e.g. bank credits) as a means to financial deepening also promotes economic growth by adding significantly to the overall GDP in the long run. Credit facilities are usually made available to business firms or individuals who are directly or indirectly involved in economic activities, and these credits are used to either support existing business ventures or to start-up new ones.

In accordance with the results obtained from this study, Amoo, Eboreime, Adamu, and Belonwu (2017) and Eyas (2014) provided evidence in this regard. The studies show that credit is growth-enhancing, even when trade openness, monetary policy, investment climate and infrastructure are low. Furthermore, Eyas (2014) found that there is a long-run relationship between private sector credit and economic growth.

Total Savings (as Measure of Financial Deepening), and Economic Growth

The result indicates that the total savings has an inverse effect on the economic growth as measured by the real GDP in Nigeria., while the p-value of 0.0100 shows that the total savings significantly affects economic growth as measured by the real GDP in Nigeria at 5% level of significance, leading to the rejection of the null hypothesis which states that there is no significant relationship between ratio of total savings to real economic growth in Nigeria (RGDP). This resultexplain the importance of money in circulation as compared to money kept out of circulation when savings increase, investments will reduce, and as a result, there will not any addition to economic growth in the long run. Savings usually discourage investments, and it is the increase in investments that will drive the desired economic growth by contributing directly to the GDP.

In explaining the relationship between savings and economic growth, other studies such as Steven and Obah (2017) and Dhanya (2015) have also provided evidence. In the study of Steven and Obah (2017), it was revealed that there is a positive and significant relationship between national savings and the gross domestic product (GDP), and they explained that savings are usually channeled into profitable investments by financial institutions. This result is slightly contrary to the one obtained in this study. However, Danya (2015) with evidenc from Botswana in Africa revealed that there is significant relationship between Savings and Economic growth and the study supported HarrodDomar growth Model. Policies are suggested accelerating Economic growth in the country.

Total Stocks/Securities (as Measure of Financial Deepening), and Economic Growth

This result indicates that the total stocks/securities-GDP has a positive effect on the economic growth in Nigeria. The inference is that, holding all other variables constant, a 1% increase in the total stocks/securities-GDP ratio causes an 11.2152 increase in economic growth in Nigeria as measured by the real GDP. The P-value of 0.1844 shows that the total stocks/securities-GDP ratio as a measure of financial deepening has no significant effect on economic growth in Nigeria as measured by the real GDP at 5% level of significance, leading to the acceptance of the null hypothesis which states that there is no significant relationship between the ratio of stocks/securities to real economic growth in Nigeria (RGDP).

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study has investigated the effect of financial deepening on economic growth in Nigeria, and emphases were laid on such measures of financial deepening as the ratio of- money supply to real GDP (RMSP), private sector credit to real GDP (RPSC), total savings to real GDP (RSVS) and stocks/securities to real GDP (RSSC), while economic growth was measured using the real GDP(RGDP) values. In order to achieve the objective of this study, secondary data on the macroeconomic variables used were obtained from the CBN statistical bulletin (2017). We applied the ex-posto facto research design, while the time series data were used. Furthermore, we used the descriptive analysis technique and ordinary least square (OLS) regression estimation technique to test the formulated hypotheses.

Following the results obtained from the test of hypotheses in the previous chapter, it was revealed that; the ratio of money supply to real GDP has a positive and significant effect on the real GDP (Coefficient: 2.21, P-value, 0.0000); ratio of private sector credit to real GDP has a positive and significant effect on the real GDP (Coefficient: 8.44, P-value, 0.0000); ratio of total savings to real GDP has a negative but significant effect on the real GDP (Coefficient: -25.79, P-value, 0.0100); while the ratio of stock/securities to real GDP has positive but insignificant effect on the real GDP (Coefficient: 11.22, P-value, 0.1844).

In conclusion therefore, financial deepening significantly affects economic growth in Nigeria and indicators of financial deepening such as money supply (as proxy by the ratio of money supply to real GDP) and private sector credit (as proxy by the ratio of total credit to real GDP) have positive and significant effect on the real GDP used to proxy economic growth in Nigeriawhereas total savings (as proxy by the ratio of savings to real GDP) has a negative but significant effect on economic growth, while stocks/securities (as proxy by the ratio of stocks/securities to real GDP) have a positive effect on economic growth in Nigeria, but this effect is not significant.

Recommendations

Following the results obtained from the study, it is important to make the following recommendations;

- The government should strategically ensure a balanced flow of money supply into the economy, while private sector credits should be made much more available and accessible to investors.
- That policy initiatives should be targeted towards removing obstacles in capital markets operations and strengthen the healthy and competitiveness of the banking system.
- Consider reducing impediments to liquidity in the stock market and easing restrictions on international capital for free entry into the market to ensure that more companies are listed.
- That policy makers should regularly address reported cases of abuse and other sharp practices in the financial system that may hinder economic growth through money supply.
- Policy makers should regularly address reported cases of abuse and other sharp practices by bank officials and stock market participants as there is need to continually boost confidence in the financial system.

REFERENCES

- Adeboye, B.C. (2013). Long run relationship between budget deficit and economic growth. London, Macmillian Press.
- Aderemi, T. A. et al (2020). Globalization and economic growth: evidence from European countries, European Financial and Accounting Journal, 15(1), 67-82
- Akpan, D.B., (2004). Financial liberalization and endogenous growth: the case of Nigeria. IDEP Senegal, http://www.unidap.org.
- Amoo, G.B.A, Eboreime, M.I., Adamu, Y. &Belonwu, M.C. (2017). The impact of private sector credit on economic growth in Nigeria. CBN Journal of Applied Statistics, 8(2), 1-22.
- Antwi, S., Mills, E. F. A., & Zhao, X. (2013). Impact of macroeconomic factors on economic growth in Ghana: A Cointegration Analysis. International Journal of Academic Research in Accounting, Finance and Management Sciences, 3(1), 35-45.
- Ardic, O. P. & H. E. Damar (2013). Financial sector deepening and economic growth: Evidence from Turkey are They Cointegrated. International Journal of Financial Research, 1(1), 37-43.
- Arestis, P., Dennelnades, &Luintel, K. (2015). Financial development and economic growth: The Role of Stock Markets. Journal of Money, Credit and Banking, 33(i), 16-41.
- Chamalwa, H. A.& Bakari, H. R. (2016). A vector autoregressive (VAR) cointegration and vector error correction model (VECM) approach for financial deepening indicators and economic growth in Nigeria. American Journal of Mathematical Analysis, 4(1), 1-6.
- DFID (2014). The importance of financial sector development for growth and poverty reduction, policy division working paper financial sector team department for international development, London.
- Dhanya, J. (2015). The impact of savings in economic growth: An empirical study based on Botswana. International Journal of Research in Business Studies and Management, 2(9), 10-21.
- Diamond, D.W. (1984). Financial intermediation and delegated monitoring. Review of Economic Studies, 51(3), 393–414.
- Fisher, S. (2001). The importance of financial markets in Economic Growth: Memo, The Brazilian Mercantile and Futures Exchange, Citigroup, Campos do Jordao, Brazil, 31.
- Friedman, M. (1970). The counter-revolution in monetary theory. Wincott Memorial Lecture, London.
- Friedman, M. A. (1957). Theory of the Consumption Function. Princeton, N.J.: Princeton University Press.
- Ghani, E. (2012). How financial markets affects long-run growth: A cross country study. World Bank Working Paper Series Sub-operations Evaluation Department, Washington, D.C.
- Ghildiyal, V., Pokhriyal, A.K. and Mohan, A. (2015). Impact of financial deepening on economic growth in Indian perspective: ARDL bound testing approach to cointegration. Asian development policy review, 3(3), 49-60.
- Goldsmitt, R. (2009). Financial structure and Development. New Haven, Yale University Press.

- Greenwood & Jovanovic (2010). Financial development, growth and the distribution of income. Journal of Political Economy, 98(5), 1076-1107.
- Kanu, S. I. &Ozurumba, B. A. (2013). Migrant's remittances and economic growth in Sub-Saharan Africa: Evidence from Nigeria, Ghana and South Africa. Interdisciplinary Journal of Contemporary Research in Business, 4(10), 534-550.
- Manasseh, C, et al (2021). Impact of financial intermediaries on Nigerian economic growth, International Journal of Financial Research, 12(348), 10-5430
- Marshal, I. (2016). The link between money supply and economic growth in Nigeria: An econometric investigation. IIARD International Journal of Economics and Business Management, 2(3), 42-51.
- McKinnon, R. (1973). Money and capital in economic development. Washington, DC: Brookings Institution.
- Mukhtar, D. G. (2017).Impact of money supply on economic growth in Nigeria.Dutse Journal of Economics & Development Studies, 3(1), 133-144.
- Ndebbio, J.E. (2013). Financial deepening, economic growth and development: Evidence from selected Sub-Saharan African countries. African Economic Research Consortium, Nairobi, Research Paper 142.
- Ndebbio, J.E.U. (2014). Financial deepening, economic growth and development: Evidence from Selected sub-Saharan African Countries. African Economic Research Consortium (AERC)Research Paper 142, Nairobi, August.
- Ndiyo N.A (2005). Fundamentals of research in behavioural sciences and humanities. Calabar: Wusan Publishers.
- Nnanna, J. & Dogo, M. (1999). Structural reformmonetary policy and financial deepening. The Nigerian Experience. Economic and Financial Review, 36(2), 1-23.
- Nwanna, I. O. & Chinwudu, C.F. (2016). The effect of financial deepening on economic growth in Nigeria. IOSR Journal of Economics and Finance, 7(4), 11-28.
- Nzotta, S. M & Okereke, E.J. (2009). Financial deepening and economic development in Nigeria. African Journal of Accounting, Economics, Finance and Banking Research, 5(5), 1-27.
- Nzotta, S.M. & Okereke, E.J.(2009). Financial deepening and economic development of Nigeria: An empirical investigation. Journal of Accounting, Economics, Finance and Banking Research, 5(5), 52-66.
- Nzotta, S.M. & Okereke, E.J. (2014). Financial deepening and economic development in Nigeria: An Empirical Investigation. African Journal of Accounting, Economics, Finance and Banking Research, 5(5), 52-66.
- Odhiambo, N. M.(2010). Financial deepening and poverty reduction in Zambia: an empirical investigation. International Journal of Social Economics, 37(1), 41 53.
- Ogunmuyima, M.S. &Ekone, A.F. (2010). Money supply economic growth nexus in Nigeria. Journal of Social Science, 22(3), 199-204.
- Ohwofasa, B.O. & Aiyedogbon, J.O. (2013). Financial deepening and economic growth in Nigeria: An Empirical investigation. Journal of Economics and Development Studies, 1(1), 24-42.

- Ojo, L.B. et al (2020). Political corruption, income inequality and poverty reduction in Nigeria, Acta Universitas DanibusRelationesInternationales, 13(1), 7-19
- Okoh, J. I. et al (2022). Stochastic panel analysis of globalization and poverty reduction in BRICS countries: implications for sustainable development, International Journal of Management, Economics and Social Sciences, 11(2/3), 98-119
- Okoh, J.I. & Eke (2015). Capital market and economic growth nexus: evidence from Nigeria, IOSR Journal of Business and Management, 17(1),31-38
- Okoh, J.I &Iwiyisi (2019). Linking the stock market indicators with economic growth in Nigeria, The Business and Management Review, 10(2), 117-131
- Okoli, M. N. (2010). Evaluating the nexus between financial deepening and stock market in Nigeria. European Scientific Journal, 4(2), 1-18.
- Okoye, et al (2019). Persistence of fiscal deficits in Nigeria: examining the issues, Investment Management and Financial Innovations 16(4), 94-109
- Olannye, P. I. (2006). Research methods for business: A Skill Buildingapproach. Lagos: Peejan Publication.
- Sargent, T. (1987). Macroeconomic theory. Academic Press.
- Schumpeter, J. A. (1911). The theory of economic development. Cambridge, MA7 Harvard University Press.
- Shaw, E. 1973. Financial deepening in economic development. New York: Oxford University Press.
- Steven, E. &Obah, D.O. (2017).Impact of National savings on economic growth in Nigeria. IIARD International Journal of Economics and Business Management, 3(4), 28-60.
- Stiglitz, J.E., & Greenwald B. (2003). Towards a new paradigm in monetary economics. Cambridge: Cambridge University Press.