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Effect of Financial Deepening on Entrepreneurial Development in Nigeria

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ABSTRACT

The study investigated the effect of financial deepening on entrepreneurial development in Nigeria from 1999- 2018. The data for this study were sourced from Central Bank of Nigeria (CBN) statistical bulletin. Ordinary Least Squares (OLS) econometric technique and granger causality tests were adopted for the analysis. The series used in this study were well integrated at level 1(0). Given the ordinary least squares result, the study revealed that financial deepening exhibited positive and significant relationship with entrepreneurial development in Nigeria within the period under study. This positive and significant relationship was stimulated by the number of bank branches (BBCH) and banks credit to small and medium scale enterprises (SMEs). The study therefore recommends that since banks' credits to small and medium scale enterprises (SMEs) are significant in entrepreneurial development, monetary authorities should employ policies geared towards persuading banks to increase lending to SMEs at affordable rates. This will enable the SMEs in Nigeria to operate optimally and contribute meaningfully to economic growth of Nigeria. Again, banks should be encouraged to open more branches so that access to funds and other financial services will be seamless and timely.

Keywords: Deposit Money Banks, Entrepreneurial Development, Financial deepening, Financial Sector

INTRODUCTION

Banks and other financial institutions occupy strategic positions in the operation of any economic system and serve as the wheel through which economic activities rotates. This supports the economic theory that the financial sector of any economy is an engine of growth and development. The argument holds it firm that as the financial sector extends credit to the productive sectors of the economy at affordable costs, the overall economy grows inclusively. According to Nwakobi, Oleka and Ananwude (2016) the opportunity that is needed to sustain growth in an economy is lubricated by the handiness of liquid money –financial deepening.

Entrepreneurial development is partly dependent on the financial sector ability and willingness to facilitate financial intermediation. Again according to Okere, Njoku and Nwosu (2020) the development of any economy of any nation is greatly dependent on the functionality and interplay of the Small and Medium Enterprises (SME's). It is therefore evident to observe a clear linkage between financial deepening and entrepreneurial development in any economy. Financial deepening enhances rapid economic development if it provides mobilization, allocation, and operational efficiencies of financial resources. The axiom about economic development is that all planning, innovations and struggles to improve human living conditions end up with financial resources being mobilized (Eke, Okoye and Evbuomwan, 2020).

By financial deepening, wealth would be created and economic growth sustained, the poor will have greater access to financial services which in turn reduces the rate of poverty. The financial deepening precedes economic development, and it brought about through a conscious and deliberate policy by the monetary authorities. Newer and more financial institutions and branches are established and promoted, newer and newer financial instruments and services are introduced by monetary authorities, and this helps to accelerate the rate of real growth. In line with the supply leading hypothesis, Nwakobi , Oleka and

Ananwude (2016) is of the believe that access to financial services tends to reduce income inequality in the economy and encourage entrepreneurial development. In the same manner and with great repute to entrepreneurial growth, Paramaditha (2015) stated that financial deepening is needed to provide financing to the small and medium enterprises as a result of crowding out by large corporations, and that with a deeper financial sector, larger corporations can raise funding more easily through bonds and equity, so that banking can lend to small and medium enterprises.

Entrepreneurs (which form the major part of the deficit unit in Nigeria) not always have the funds to initiate a business; they need credit in order to start it. Bring into line the demand-following hypothesis, financial deepening appears as a result of an increase of demand in the real sector, evidencing a diversification of markets. As the real sector grows, so does the demand for financial services, which is followed by unblocking the resources in the traditional sector and mobilizing them into the modern sector, where they can be invested productively. According to report of the United Nations Industrial Development Organization (UNIDO, 2012) entrepreneurial activities have a significant role to play in economic development of any nation as they formed the backbone of the private sector; they make up over 90 percent of entrepreneurs of the world and account for 50 to 60 percent of employment generation; they also play an important role in poverty alleviation.

Deepening the economy entails encouraging economic development which is greatly influenced the activities of the entrepreneurs/ SME operators in any economy and mostly the developing countries like Nigeria. Given the generally held view that entrepreneurial development is the key to poverty eradication, employment generation and rapid economic development and in order to deepen the financial system to accelerate the pace of economic growth in Nigeria, monetary authorities over the years have initiated and implemented various policies geared towards developing entrepreneurial through the development of small and medium scale enterprises (SMEs). The call for financial deepening necessitated financial reforms which have been a reoccurring feature in the Nigerian financial system. The reforms became indispensable due to the challenges faced in the financial system. The challenges according Nzotta and Okereke (2009) include systemic crisis, globalization, technological innovation, and financial crisis. The reforms always seek to act proactively to strengthen the system, prevent systemic crisis, strengthen the market mechanism, and ethical standards.

Deposit money banks through their intermediation role are meant to provide the needed financial succor to SMEs to enable them operate optimally. Prior researchers have identified inadequate funding as a threat to the performance of SMEs (Berger and Udell, 2001, Onwuchekwa, Ochachosim and Ifeanyi, 2013 and Onugu, 2005). Analysis of the annual trend in the share of deposit money banks credit to small-scale industries indicates a decline from about 7.5 per cent in 2003 to less than 1% in 2006 and a further decline in 2012 to 0.14 per cent (Sanusi, 2013). In 2015, the bank's total funding to SMEs declined from 17, 424.3 million naira to 12, 949 million naira in 2015. Banks are often reluctant to lend to SMEs because of the perceived risky nature of SMEs by them.

In spite of all the efforts of the monetary authorities in deepening the economy and enhance entrepreneurial development in Nigeria, unemployment rate has remained high, rising from 13.1% in year 2000 to 23.9% in 2011, 28.6% in 2017 (IMF, 2017; Risenetworks, 2013).Over 100 million Nigerians live below poverty line on less than US$1 a day and with the percentage of the population in abject poverty rising from 54.7% in 2004 to 60.9% in 2010 (Yusuf, 2011). Above all, Nigeria's human development index (HDI) remains appallingly low at 0.532 as at 2016, much below world weighted average of 0.7 (Human Development Report, 2017). Has financial deepening actually help in entrepreneurial development in Nigeria?

In view of the empirical studies available so far, this topic has not been well discussed in the background of Nigeria. The sheer size of the studies focused on financial deepening and economic growth (Odeniran and Udeaja (2010), Nwanna and Chinwudu (2016), Igwe, Edeh and Ukpere (2016), Nwakobi, Oleka and Ananwude (2019), Nzotta and Okereke (2009). Olawumi, Lateef and Oladeji (2017) centered on the profitability of selected banks. The only available study on financial development and entrepreneurial growth in Nigeria situation as at the time of this study was that of John and Ibenta (2017) and recently the work of Nwajiaku, Ananwude and Obi-Nwosu (2020). This study differs from that of John and Ibenta (2017) and Nwajiaku, Ananwude and Obi-Nwosu (2020) in that it introduced a better proxy for entrepreneurial development which is average manufacturing capacity utilization. Again, credit to small and medium enterprise is introduced as one of the indicators of financial deepening.

Thus, the objective of this study is to evaluate the effect of financial deepening on entrepreneurial development in Nigeria from 1999 to 2018. The specific objectives of the study include:

1. to examine the relationship between the ratio of money supply (M2) to Gross Domestic Product (GDP) and entrepreneurial development in Nigeria,
2. to evaluate the link between the ratio of credit to private sector (CPS) to GDP and entrepreneurial development in Nigeria and entrepreneurial development in Nigeria,
3. to assess the relationship between the ratio of deposit money banks' branches (DMBB) to total deposit and entrepreneurial development in Nigeria,
4. to examine the relationship between the credit to small and medium enterprises to GDP and entrepreneurial development in Nigeria.

This study is limited to the deposit money banks in Nigeria and incorporates the main financial deepening indicators and their relationship with entrepreneurial development from 1999 to 2018. The choice of 1999 as the base year is due to the materialization of democratic government in Nigeria which really reinforced the financial liberalization reforms.

REVIEW OF RELATED LITERATURE

Conceptual Review

In line with the International Monetary Fund (2012), financial deepening is the multifaceted process through which financial markets provide services which enable the exchange of goods, services, savings and investments efficiently. Kiprop (2013) sees financial deepening as the increased provision of financial services, and access to basic financial services such as credit, savings and insurance that is, the increase in the size of the financial system and in its role of financing with a wider choice of service geared toward the development of all levels of society. But in the words of Akhator and Marcus (2018), 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. Fitzgerald (2006) is of the view that financial development involves the establishment and expansion of institutions, instruments and markets that supports investment and growth process.

Entrepreneurs not always have the funds to initiate a business; they need credit in order to start it. Conforming to the demand-following hypothesis formulated by Patrick (cited in Berthelemy and Varoudakis, 1996) financial deepening appears as a result of an increase of demand in the real sector, evidencing a diversification of markets. As the real sector grows, so does the demand for financial services, which is followed by unblocking the resources in the traditional sector and mobilizing them into the modern sector, where they can be invested productively.

Entrepreneurial development programme helps in creating small and medium scale entrepreneurs whose businesses are established across the length and breadth of the country and right into the remote areas unlike large-scale enterprises which require large capital out lay and are often established in urban centres, small and medium scale enterprises require relatively small capital resources and can be set up both in the urban and rural areas (Ovat, 2013 cited in Nwajiaku, Ananwude and Obi-Nwosu (2020). According to Nweze (2015), the level of development in the financial system undoubtedly determines the magnitude of funds that can be mobilized from surplus economic units and channel to deficit units for production.

The financial system vigorously seeks out and attracts the reservoir of savings and idle funds and allocates same to entrepreneurs, businesses, households and government for investments projects and other purposes with a view of returns and these forms the basis for economic development. With financial deepening, wealth would be created and economic growth sustained, the poor will have greater access to financial services which in turn reduces the rate of poverty. Access to financial services tend reducing income inequality in the economy and encourage entrepreneurial growth. With great repute to entrepreneurial development, Paramaditha (2015) is of the view that financial deepening is needed to provide financing to the small and medium enterprises as a result of crowding out by large corporations, and that with a deeper financial sector, larger corporations can raise funding more easily through bonds and equity, so that banking can lend to small and medium enterprises

According to John and Ibenta (2017) financial deepening entails the ability of financial institutions to facilitate financial intermediation; create and develop financial services and render these services at affordable rate in an economy to facilitate growth of business enterprises. In the words of Nzotta and Okereke (2009) financial deepening is the ability of financial institutions in an economy to effectively mobilize savings for investment purposes. In the opinion of Nnanna and Doggo (1998), financial deepening generally entails an increased ratio of money supply to Gross Domestic product. By CBN (2018) financial deepening indicators includes, (M2)- Money supply, credit to private sector and GDP at current basic prices.

Theoretical Review

The supply-leading hypothesis

Supply-leading hypothesis suggests that causality flows from finance to economic growth with no feedback response from economic growth. A well-developed financial sector is a pre-condition for economic growth. The hypothesis holds that well-functioning financial institutions can promote overall economic efficiency, create and expand liquidity, mobilize savings, enhance capital accumulation, transfer resources from traditional (non-growth) sectors to the more modem growth inducing sectors, and also promote a competent entrepreneur response in these modern sectors of the economy (Ohwofasa and Aiyedogbon, 2013 cited in John and Ibenta, 2017)

The central argument underlying supply-leading hypothesis is that financial deepening is a determining cause of economic growth. It posits that optimal allocation of resources is an outcome of financial sector development (Hurlin and Venet, 2008). A well-developed financial sector is a pre-condition for economic growth. Mckinnon (1973) and Shaw (1973) argued that a well-developed financial sector minimizes transaction and monitoring costs and asymmetric information; thus there is improvement in financial intermediation. The existence of well-developed financial sector enhances the creation of financial services as well as accessibility to them in anticipation to their demand by participants in the real sector of the economy. The supply-leading hypothesis presumes that the economy responds to growth in the real sector facilitated by financial development. Therefore, this study seeks to validate whether the supply-leading hypothesis holds in Nigeria or not.

Demand following hypothesis

The demand-following hypothesis predicts that growth in demand for financial services depend upon growth of real output as well as commercialization and monetization of agriculture and other traditional subsistence sectors. The hypothesis predicts that the financial sector precedes and induces real growth. The Keynesian theory of financial deepening asserts that financial deepening occurs due to an expansion in government expenditure. In other words, it states that financial development responds to changes in the real sector. The Keynesian theory of financial deepening asserts that financial deepening occurs due to an expansion in government expenditure.

In the words of Ohwofasa and Aiyedogbon (2013), it indicates that any early efforts to develop financial markets might lead to a waste of resources which could be allocated to more useful purposes in the early stages of growth. As the economy advances, this triggers an increased demand for more financial services and thus leads to greater financial development.

Empirical Literature Review

Eke, Okoye and Evbuomwan (2020), carried out a study on entrepreneurship and financial deepening in selected African economies from 1995- 2014 and evidence from the augmented Toda-Yamamoto technique shows that human capital does not have long run causal effect on entrepreneurship , and financial deepening, which suggests low quality human capital for entrepreneurial development. Nwakobi, Oleka and Ananwude (2019) investigated the effect of financial deepening on economic growth in Nigeria: A Time Series Appraisal (1986-2018). The model estimation followed the Auto-regressive Distributive Lag (ARDL) approach with the effect estimated in line with the granger causality analysis and found that economic growth in Nigeria is not affected by financial deepening. The study also stated that the level of growth in the economy is what influences the level of development in the banking sector.

John and Ibenta (2017) examined the relationship between financial deepening and entrepreneurial growth in Nigeria from 1986 to 2016. The study employed Pearson Correlation in establishing relationships between the variables. The results revealed that the ratio of money supply to Gross Domestic Product (M2/GDP) has a positive but not significant relationship with entrepreneurial growth; the ratio of credit to private sector to GDP (CPS/GDP) has a positive (not significant) relationship with entrepreneurial growth; and the ratio of deposit money banks' branches to GDP (DMBB/GDP) has a negative and significant relationship with entrepreneurial growth. In view of this, study concludes that money supply and credit to private sector are better indicators of financial deepening that can affect entrepreneurial growth positively in Nigeria.

Wairagu (2016) studied the effects of financial deepening on entrepreneurial growth in Kenya. The financial deepening indicators comprised of credit received by entrepreneurs/SMEs, the affordable nature of interest rates, savings culture coupled with the financial sector regulation. The study employed a descriptive survey design and data were derived from both primary and secondary sources. The collected data were afterwards coded before the actual analysis with the useful aid of the Statistical Package for Social Sciences (SPSS). Major study findings indicated that the growth rate of the loans accessed by entrepreneurs/SMEs was on an unchanging progress in the period between 2006 and 2016. The four notable determinants (credit access, interest rates affordability, savings culture together with financial sector regulation) also had a confirmatory correlation with the expanded (growth) rate of entrepreneurs/SMEs.

Olawumi, Lateef and Oladeji (2017) examined the effect of financial deepening on the profitability of selected commercial banks in Nigeria using secondary data. Findings revealed that each component of financial deepening indicators has a strong relationship and are statistically significant. This provides empirical evidence that financial deepening made positive contributions to the level of profitability of the selected commercial banks in Nigeria. The study concluded that contributions of each component of financial deepening to selected commercial banks performance is strong and are statistically significance.

Muhsin and Şerife(2016) examined the role of financial development on entrepreneurship by employing panel data estimation methods for 17 emerging markets economies over the period 2004-2009. In order to determine the linkages among the variables, two different measures for financial development and three institutional factors were utilized in the analysis. Empirical findings indicated that while financial development and per capita income level have significantly and positively impact on entrepreneurship theoretically

Odeniran and Udeaja (2010) examined the relationship between financial sector development and economic growth in Nigeria. It tests the competing finance-growth nexus hypothesis using Granger causality tests in a VAR framework over the period 1960-2009. Four variables, namely; ratios of broad money stock to GDP, growth in net domestic credit to GDP, growth in private sector credit to GDP and growth in banks deposit liability to GDP were used to proxy financial sector development. The empirical results suggest bi-directional causality between some of the proxies of financial development and economic growth variable. Specifically, various measures of financial development granger-cause output even at 1per cent level of significance with the exception of ratio of broad money to GDP. Additionally, net domestic credit is equally driven by growth in output, thus indicating bidirectional causality. The variance decomposition shows that the share of deposit liability in the total variations of net domestic credit is negligible, indicating that shock to deposit does not significantly affect net domestic credit.

Nwanna and Chinwudu (2016) examined the financial deepening and economic growth in Nigeria from 1985 to 2014. The study adopted the supply leading hypothesis. The study used annual time series data for 1985 to 2014 obtained from the Central Bank of Nigeria statistical bulletin. The Ordinary Least Square (OLS) econometric technique was employed in which variations in the dependent variable, economic growth, measured by gross domestic product growth rate was regressed on money supply ratio to gross domestic product, private sector credit ratio to gross domestic product, market capitalization ratio to gross domestic product and financial saving ratio to gross domestic product. The result of the analysis revealed that both bank-based and stock market financial deepening proxies have a significant and positive effect on economic growth.

Igwe, Edeh and Ukpere (2016) determined the impact of financial deepening on economic growth in Nigeria. The supply leading hypothesis was adopted as the theoretical framework of the study. Data for analysis was for the period 1981-2012 were obtained from the Central Bank of Nigeria Statistical Bulletin. The explanatory variables were logged values of broad money supply/GDP and credit to the private sector/GDP. The times series data were tested for stationarity using the ADF unit root tests of stationarity and were found to be stationary at first difference. The Engle-granger co-integration technique and Error correction model was used for the test of long-run relationship. Findings revealed that money supply (MS) was positive and weakly significant in determining economic growth. Ashwani and Sheera (2018) empirically investigated the impact of financial deepening and economic growth in Hong Kong: An ARDL Approach was adopted and ARDL bounds-testing approach confirms that there is the short-run as well as long-run relationship between financial deepening and economic growth in Hong Kong economy.

Songul, Ilhan and Ali (2009) investigated the causality between financial development and economic growth in sub-Saharan Africa for the period 1975-2005. Using panel co-integration and panel GMM estimation for causality, the results of the panel co-integration analysis provide evidence of no long-run relationship between financial development and economic growth. The empirical findings shows a bi-directional causal relationship between the growth of real GDP per capita and the domestic credit provided by the banking sector for the panels of 24 sub-Saharan African countries. The findings imply that African countries can accelerate their economic growth by improving their financial systems and vice versa.

Nwajiaku, Ananwude and Obi-Nwosu (2020) examined the effect of financial deepening on entrepreneurial growth in Nigeria (1986-2018). Granger Causality test with Autoregressive Distribute Lag (ARDL) technique of model estimation were used. The study revealed that there is no significant effect of financial deepening on entrepreneurial growth but entrepreneurial growth was found to have significantly influenced financial deepening through banking and insurance sector deepening.

METHODS AND MATERIALS

This study is designed to examine the effect of financial deepening on entrepreneurial development in Nigeria1999 to 2018. To achieve this, an ex-post-facto research design was employed because the events that are observed in this study had taken place and nothing can be done to change the figures, but can only be observed in order to analyze it. A multiple regression analysis based on the classical linear regression model, otherwise known as Ordinary Least Square (OLS) technique is chosen by this study. The study's choice of this technique is based not only by its computational simplicity, but also as a result of its optional properties, such as linearity, unbiasedness, minimum variance, zero mean value of the random terms (Gujaratis,2004) However, following the characteristics of time series data, it incorporates Unit root. The unit root test is to ascertain the stationarity status of the variables.

In addition, the Granger causality test was applied in this study as a means of ascertaining causality among the two variables- financial deepening variables on one hand and entrepreneurial development proxy on the other hand. Basically Granger measures precedence and information content.

Model Specification

Empirically, there is a strong link between financial sector development and economic development. The link between finance and development has been empirically modelled in Levine (1997). Similarly, Songul, Ilhan and Ali (2009) traced the link between financial development and growth in sub-saharan African countries. In Nigeria, the study of Eke, Okoye and Evbuomwan (2020) and John and Ibenta (2017) empirically establish the relationship between financial deepening and entrepreneurial growth in Nigeria.

In testing the validity of the already stated objectives, this model was used; entrepreneurial development is a function of financial deepening indicators: Broad money supply (M2) bank credit to private sector, credit to small and medium scale enterprises and deposit money banks' branches to total deposit.

Mathematically this can be expressed as:

ETD = f (BMS, CPS, CSM, BBS)……………………………………………….. (i)

The above functional relationship of the model can be transformed to econometric form as presented below:

$ETD = \alpha_0 + \alpha_1 BMS + \alpha_2 CPS + \alpha_3 CSM + \alpha_4 BBS + \mu$ ……………………… …..…(ii)

Where,

ETD = Entrepreneurial Growth proxied by Average Manufacturing Capacity Utilization

BMS = Ratio of Money Supply to GDP

CPS = Ratio of Credit to Private Sector to GDP

CSM = Ratio of Credit to small and medium enterprises to GDP

BBS = Ratio of Deposit Money Banks' Branches to total deposit

α_0= Intercept

α_1- α_4= Coefficients

μ= error term

Apriori Expectation

$\alpha_1, \alpha_2, \alpha_3, \alpha_4 > 0$.

BMS, BBCH, CPS and SME are expected to exhibit positive and significant relationship with entrepreneurial development.

Data analysis and interpretations

The analytical framework of this study consists of basic steps carried out on the model as specified in previous section. These include: unit root test, Ordinary Least Squares (OLS) technique and Granger Causality

PRESENTATIONS OF RESULTS

Stationarity Test

In an attempt to estimate the relationship between financial deepening on entrepreneurial development in Nigeria, the first task is to test for presence of unit root. This is necessary in order to ensure that the parameters are estimated using stationary time series data. To do this, the Augmented Dicky-Fuller (ADF) is used. The table 1 below shows that all the series are stationary at level . 1(0)

Table 1: **Test of Stationarity**

Series	ADF Test Statistic	5% Critical Value	Order	Remarks
EDT	3.145088	3.029970	I(0)	Stationary
BBCH	5.322073	3.098896	I(0)	Stationary
BMS	3.096896	3.029970	I(0)	Stationary
CPS	4.346703	3.02970	I(0)	Stationary
SME	4.391077	3.065585	I(0)	Stationary

Source: Extracted from e-views

In the results shown in Table 1 above, the ADF test statistic for each of the variables are greater than the respective critical values. Thus, we accept the hypothesis of unit roots in each of the time series. In our final evaluation, all the variables are stationary at level I (0). Once all the series stationary in the level, one can estimate an econometric model.

Table 2: Ordinary Least Squares

Dependent Variable: ETD
Method: Least Squares
Date: 09/03/20 Time: 11:06
Sample: 1999 2018
Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BBCH	-0.042119	0.009129	-4.614006	0.0003
BMS	0.017784	0.021355	0.832784	0.4180
CPS	0.005977	0.027988	0.213556	0.8338
SME	0.017285	0.003656	2.002736	0.0548
C	57.54368	1.780011	32.32772	0.0000

R-squared	0.800166	Mean dependent var	53.40938
Adjusted R-squared	0.746876	S.D. dependent var	7.212322
S.E. of regression	3.628620	Akaike info criterion	5.627900
Sum squared resid	197.5032	Schwarz criterion	5.876833
Log likelihood	-51.27900	Hannan-Quinn criter.	5.676494
F-statistic	15.01554	Durbin-Watson stat	1.841350
Prob(F-statistic)	0.000040		

Source: eviews

From the results in table 2 above, the descriptive statistics ($R^{2,}$, F-statistic and DW- statistic) are significant are within the acceptable bounds. The coefficient of determination ($R^{2)}$ shows how much of the variance in the dependent variable is explained by the model. The regressors (BBCH, BMS, CPS and SME) explained about 80 percent of the variance in the entrepreneurial development while 20 percent is left unaccounted for which is attributed to error term. This model satisfies the requirements for goodness of fit. The Durbin-Watson statistic of 1.841350 shows the absence of autocorrelation which makes the estimate unbiased, consistency and reliable for policy formulation. . But in order to be sure of data employed, a more reliable test was conducted to check for serial correlation which is more serious than autocorrelation (see table 3, below). The Breusch–Godfrey LM test statistic with a probability of 0.1998 indicates that the model does not have significant serial correlation problem

The F- statistic of 15.01554 compared to its prob.(F-statistic) of 0.0000.40 at 5% significance level reveals the explanatory variables (BBCH, BMS, CPS and SME) are jointly significant in explaining the changes in the entrepreneurial development in Nigeria.

Table 3: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.247758	Prob. F(2,13)	0.3194
Obs*R-squared	3.220953	Prob. Chi-Square(2)	0.1998

Table 4: Granger causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
BBCH does not Granger Cause ETD	18	6.28892	0.0123
ETD does not Granger Cause BBCH		1.10989	0.3589
BMS does not Granger Cause ETD	18	0.01065	0.9894
ETD does not Granger Cause BMS		0.60734	0.5596
CPS does not Granger Cause ETD	18	0.69586	0.5163
ETD does not Granger Cause CPS		0.70618	0.5115
SME does not Granger Cause ETD	18	14.3717	0.0005
ETD does not Granger Cause SME		0.75945	0.4876

Source;eviews

From the table 4 above, it can be observed that the number bank branches (BBCH) granger causes entrepreneurial development but entrepreneurial development does not granger causes the number of bank branches in Nigeria. Again, banks credit to small and medium scale enterprises granger cause entrepreneurial development in Nigeria. However, we will go on and test for individual contributions of each of these variables to entrepreneurial development by looking at the objections stated at the introduction part of this study**.** From the table above, BBCH and SME showed positive and significant relationship with entrepreneurial development in Nigeria within the period under review. Other variables; BMS and CPS manifested positive relationship but the relationship were insignificant (see table 2 above)

CONCLUSION AND RECOMMENDATIONS

The main objective of this study is to examine the effect of financial deepening on entrepreneurial development in Nigeria from 1999- 2018. It employs the ordinary least squares testing (OLS) technique to examine the relationships between financial deepening and entrepreneurial development in Nigeria. The stationarity test indicates that the variables are integrated at level 1(0). The granger causality test revealed that the number of bank branches granger causes entrepreneurial development in Nigeria. Also bank credit to small and medium scale enterprises granger causes entrepreneurial development. This finding collaborates with the theoretical postulation of the supply-leading hypothesis and the empirical works of Warigu (2016) and John and Ibenta (2017).

From the analysis, the study concludes that there is a significant relationship between financial deepening and entrepreneurial development in Nigeria. Both the ordinary least squares and granger causality tests revealed that the number of bank branches (BBCH) and the banks credit to small and medium scale enterprises(SME) demonstrated positive and significant impact on entrepreneurial development in Nigeria within the period (1999-2018)

RECOMMENDATIONS

Based on the finding, the study therefore makes these recommendations:

1. Since banks' credit to small and medium scale enterprises (SMEs) is significant in entrepreneurial development, monetary authorities should employ policies geared towards persuading banks to increase lending to SMEs at affordable rates. This will enable the SMEs in Nigeria to operate optimally and contribute meaningfully to economic growth of the country.
2. Banks should be encouraged to open more branches even more in the rural areas so that access to funds and other financial services will be seamless. The number of customers per branch of a bank is very high compared to other developed and developing countries of the world. Availability of developed, affordable and timely financial services is a major incentive that spurs entrepreneurial mindset to establish an enterprise
3. The environment for doing business in Nigeria should be improved by the government most especially the electricity generation and good road network. So many Small and Medium enterprise operators in Nigeria have to provide electricity, water, security and even sometimes construct or rehabilitate roads within their area of operation in order to operate.

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