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## FINANCIAL DEEPENING AND ENTREPRENEURSHIP DEVELOPMENT IN NIGERIA

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### Abstract

*Unavailability of finance is often argued to be the main challenge of entrepreneurship. However, governments of both developed and developing nations have been making concerted efforts to provide the means by which entrepreneurs get access to affordable finance. Therefore, this study examines the association between financial deepening and entrepreneurship development in Nigeria within a period of 1984 to 2014. The research design of the study is correlational because it relates dependent and independent variables. The study used multiple regression as a technique of data analysis. The results show that all the proxies of financial deepening have significant impact on credit to SMEs. Thus, money supply, net domestic credit and public sector credit are positively and strongly significant at 1% indicating that financial deepening plays a prominent role in developing entrepreneurs in Nigeria. Therefore, it is recommended among others that government at all levels including regulators of the Nigerian financial system especially CBN should be formulating policies of making finance available and accessible to entrepreneurs in Nigeria for development and growth.*

**Keywords:** Financial Deepening, Entrepreneurship, Development and Nigeria

### 1. Introduction

The issue of Entrepreneurship Development has continued to dominate the concern of both government and the private sector in both the developed and developing countries. The explosion of interest in Entrepreneurship Development

has not been sudden because as many economic development interventions failed through the 1980s, policymakers and researchers began to search for alternatives to the dwindling economic activities. Although Entrepreneurship Development was not a new approach, it was also not a popular approach during the age of structural adjustments and macroeconomic changes (1980s). However, Entrepreneurship Development has offered many things that other economic development interventions did not. For instance, most strategies were top-down but did not reach all the way down (Desai, 2009). For this reason, the idea of entrepreneurship was a perfect complement to an increasing focus on community-based economic development. Moreover, such interventions of the past focused more on building hard infrastructure such as roads, bridges and transport networks thereby neglecting how such infrastructure would be used. It is a known fact that Entrepreneurship Development can work without a perfect system of hard infrastructure and often with minimal other resources. In many countries, Entrepreneurship Development has gained popularity because it can be a low-cost, high-impact approach to economic development.

A key concern is the extent to which the quality of the financial intermediation process can be improved upon to alleviate the financial constraint faced by producers, marketers and workers. This is critical since businesses in such developing economies have often mentioned finance as their most important constraint on expansion and transformation (Fasua, 2006). Any significant amelioration of the financial constraint would, therefore, require a deepening and widening of money and capital markets, as well as a change in orientation by financiers that will give greater priority to longer-term finance, especially for young, dynamic firms both in traditional and new activities. Financial Deepening refers to the increased provision of financial services with a wider choice of services geared to all levels of society. However, the more liquid money is available in an economy, the more opportunities exist for continued growth. In the long run, therefore, Financial Deepening increases the ability of individuals and households to access even basic services like health and education, thus having a more direct impact on poverty reduction as well. It also plays an important role in reducing risk and vulnerability for disadvantaged groups, including women and the small entrepreneur (Levine, 1997).

Unavailability of finance is often argued to be the main challenge of entrepreneurship. Notwithstanding their importance and contribution in nation building, entrepreneurs face serious difficulties and harsh conditions when trying to access credit, especially from the formal financial institutions, a situation that seems to be a global phenomenon inhibiting Entrepreneurship Development

(Beck *et al* (2004). In view of the importance of Entrepreneurship Development to the country, successive governments in Nigeria have gone forward to evolve and implement certain measures that should encourage the growth and development of entrepreneurship. Most of the government-led strategies include laudable programs introduced by the Federal Government such as Industrial Development Centers (IDC), industrial estates, development finance assistance and incentives, Export Processing Zones (EPZ), National Directorate for Employment (NDE), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Small and Medium Enterprises Investment Scheme, SMEIS, and Peoples' Bank.

The importance of finance to entrepreneurship development cannot therefore be over-emphasized. On the one hand, availability of affordable finance for entrepreneurship endeavors may reduce prevailing poverty in a country and eventually lead to growth and development. On the other hand, lack of it will not only impede entrepreneurship development but also increase the potential for poor living standard. Thus, governments of both developed and developing nations have been making concerted efforts to provide the means by which entrepreneurs will access affordable finance.

A common feature of most of the researches on financial deepening and entrepreneurship development is the contrary opinions between policymakers and the intended beneficiaries on the effect of the programme on entrepreneurship development. On the one hand, policy makers insist that financial deepening has to a greater extent assisted in developing entrepreneurship in most of the countries that implemented it. On the other hand, beneficiaries in many countries seem to believe that there is nothing to show as far as the effect of financial deepening on entrepreneurship development is concerned. Many beneficiaries tend to believe that the issue of financial deepening is more of a theory and paperwork than practical and real. They see frequent pronouncements by policymakers on the achievements of Financial Deepening as mere political statements. Theoretically, it is this bidirectional scenario that gave rise to the two schools of thought in the finance-growth nexus. On the Supply side, the Harrod-Domar school of thought hypothesize that pressures of efficient financial markets increase the supply of financial services in advance of the demand for them in the real sector of the economy (Goldsmith, 1969). These scholars argue that there is a one-way causality from Financial Deepening to economic development; and that there is a unidirectional causality from finance to growth.

Time series studies have been conducted on the economies of the U.S, U.K, Japan, Netherlands and Canada towards resolving this issue (Wachtel and

Rousseau, 1998; Lee and Wong, 2005). However, not much has been done on Africa, in general and Nigeria, in particular. The studies carried out on Nigeria have not clearly resolved the issue as most of them concluded that financial sector development did not promote economic growth while a few of them found evidence to support demand-leading hypothesis. A closer examination of these previous studies reveals that the studies actually modeled the impact of Financial Deepening on economic growth in Nigeria with most of them using only the ratio of broad money to national income but conscious effort was not made to explore various proxies of Financial Deepening (Odeniran and Udejaja, 2010).

In view of this puzzle, therefore, it is only empirical analysis at unitary level that can determine whether it is Financial Deepening that leads to economic growth or vice versa as aggregating economic activities for the purpose of determining the role of each economic indicator may be misleading. This study, therefore, seeks to identify with pioneer works in setting the pace for investigating the path of Financial Deepening and Entrepreneurship Development nexus in Nigeria.

Consequently, the following research questions are set to be answered by this study:

- i. To what extent does money supply affect the financing of Entrepreneurship Development in Nigeria?
- ii) To what extent does net domestic credit affect the financing of Entrepreneurship Development in Nigeria?
- iii) To what extent does public sector credit affect the financing of Entrepreneurship Development in Nigeria?

The objective of this study is to investigate the effect of financial deepening on entrepreneurship development in Nigeria. Specifically, the study seeks to:

- i. examine the extent to which money supply affects Entrepreneurship development in Nigeria.
- ii. evaluate the extent to which net domestic credit affects entrepreneurship development in Nigeria.
- iii. determine the extent to which public sector credit affects entrepreneurship development in Nigeria.

In line with the objectives of the study, the following null hypotheses have been formulated:

- i. Money supply has no significant effect on Entrepreneurship Development in Nigeria.

- ii. Net domestic credit has no significant effect on Entrepreneurship Development in Nigeria.
- iii. Public sector credit has no significant effect on Entrepreneurship Development in Nigeria.

This research work aspires to fill the gap observed in the literature on the relationship between financial deepening and entrepreneurship development especially in Nigeria. The study will contribute to the body of literature on both the theoretical and practical financial discourse on entrepreneurship development, and provide a frontier for further research in the area. The study will also assist policy makers with the necessary information on the financing programmes and policies of government and the extent to which these policies and programmes affect in real term the volume of economic activities in the country. In addition, it will avail them the opportunity to understand the challenges of sustaining their laudable policy programmes to deepen the reach of financial services for the sustainable development of entrepreneurship in the nation.

Furthermore, the study will serve as a catalyst to the opening of investment doors for the economy. This is because the outcome of the research will place funds providers on a sound footing to understand better the gains of Financial Deepening in entrepreneurship financing. It will also lead to the creation of financing opportunities in the country, which are hitherto not available to the entrepreneurs.

## **2. Review of Related Empirical Studies**

Entrepreneurship researches have established relationships between Financial Deepening and Entrepreneurship Development (Schumpeter, 1931; Dobbin & Dowd, 1997; Borkowski & Kulzick, 2006; Carter & Wilton, 2006). The effective manifestation of the functions and roles of entrepreneurship in socio-economic development have often been attributed to the presence of certain factors in the financing environment of the entrepreneur over which he has little or no control. The most visible factors are the availability, accessibility and affordability of funding generally.

The report of the Central Bank of Nigeria (2011) revealed that the spread and coverage of financial service providers and the geographical distribution of investments by banks under the Small & Medium Enterprises Equity Investment Scheme (SMEEIS) as at 2010 presents a worrisome dimension with Lagos State accounting for 55.96% of the total number of projects financed under this scheme

within the period under consideration. In the distant second position is Ogun State with 7.65%. According to the CBN report the situation is such that a lot of the states did not record any transaction to date (CBN, 2010).

Furthermore, according to Komolafe (2011) of the 716 Microfinance Banks spread across the country, 282 are located in the South West zone, 169 in the South East zone, 106 in the South South zone, 78 in the North Central zone, 48 in the North West zone and 33 in the North East. This skewed distribution is likely to affect availability of finance for the populace in the zones where there is low concentration of these banks.

One can remark from the above statistics that the policy thrust on Microfinance banking has also not been placed on a good stead for it to perform the roles for which it was designed. This is more so as even the interventionist role of government only serve to further concentrate the sources of finance (in Lagos) where there are several options already in place (CBN, 2012).

According to Enhancing Financial Innovation and Access, EFINA, report (2012), notwithstanding the global expansion in the financial sector, it is still below average in Sub Saharan Africa. Specifically, and without prejudice to the ongoing financial sector reforms in Nigeria, her financial sector is apparently still considered very weak and shallow. As such, most Nigerians still lack access to and use of financial services. In comparison to other African countries like Kenya, Tanzania and South Africa, Nigeria has the highest percentage of people who are financially excluded in absolute terms. EFINA (2012) reports further that 64.1 per cent of adults (56.3 million) have never been banked and only 32.5 per cent of adults (28.6 million) have bank accounts in Nigeria. The EFINA report also reveals that 72.8 per cent of adult women are unbanked and 76.2 per cent of rural adults are currently unbanked.

McKinnon (1973) and Shaw (1973) are among the earliest proponents of the concept of financial development generally. McKinnon (1973) in his contribution asserts that financial development through such instruments as financial liberalization policies would increase savings which consequently spurs investment and induce economic growth. Shaw (1973) argued that in a financial development setting financial liberalization leads to a more efficient allocation of resources, higher level of investment and economic growth generally. This McKinnon-Shaw postulation is responsible for the economic and financial liberalization policies of especially developing nations like Nigeria in the 1980s where, as noted earlier, the government had controlling shares in most of the

major financial institutions of banking, insurance and such other related agencies. The idea was to open up the economy to the free interplay of the economic forces of demand and supply to determine the operations of the market.

In another early study on this subject also, Goldsmith (1969) analyzed data from thirty-five countries for the period 1860-1963 and found that financial and economic development are positively correlated over periods as long as several decades. Financial Deepening was measured in his study by the ratio of financial intermediary assets divided by gross national product. He stresses in his conclusion that Financial Deepening largely occurs during the early stages of economic development when countries have low levels of income (Goldsmith, 1969). The study therefore clearly brings to the fore the fact that Financial Deepening can be better achieved in economies that record low scores in most economic development indices, that is the less developed economies or such economies that are still growing.

The finding of Goldsmith (1969) was later confirmed by De Gregor and Guidotti (1995) who note that over time, the correlations between Financial Deepening and economic development is strong in the early stages of development and are diminished or even eliminated as the economy achieves prosperity. This was their conclusion when they studied OECD countries whose development indices record similitudes in most dimensions. The import of this OECD countries' study is that the effect of Financial Deepening on growth becomes weaker as countries become more developed, perhaps because financial intermediaries actually have larger effects in less developed countries than in more developed ones. This finding was further reinforced in the work of Wachtel and Rousseau (1998) who found in a study of five industrialized economies at their early stages of development that the banking and securities markets mattered for industrialization and the expansion of commerce in four economies that are generally considered to have experienced financial revolutions over the past century. This finding is in tandem with the earlier position arrived at above by De Gregor and Guidotti (1995).

Similarly, Rousseau and Sylla (1999) examined the historical role of finance in the US from 1790-1850 and find a strong support for finance led growth. Of course if a similar study was to be done on the same USA economy today the results are likely to be different. This is because the US economy can be said to be fully developed today and any further deepening of its finances may not attract significant changes in their economic activities. In addition, Rousseau (1999) also investigated the Meiji era of Japan (1868-1884) and shows that the financial sector was instrumental in boosting Japan's explosive growth prior to the First

World War. This period in Japan's history is informative of how an economy can transform from a very barely heard of position in the closing years of the 19<sup>th</sup> century to a world superpower by the second generation.

Jung (1986) and Demetriades and Hussein (1996), using time-series analysis, find causality running both ways, especially for developing economies. Attempts have also been made on regional analysis within a country. Jayaratne and Strahan (1996) examine US liberalization over the restrictions on interstate branching in some states. They confirm that branch reform boosted bank-lending quality and accelerated real per capita growth rates. In addition, another study that lends voice to the thesis that Financial Deepening actually aids the growth of entrepreneurship even in developed economies was done in Italy by Guiso, et al (2002). Their study examine individual regions of Italy and find that local Financial Deepening enhances the probability that an individual starts a business, increases industrial competition, and promotes the growth of firms. What this means, therefore, is that when Financial Deepening is measured using disaggregated data especially on sectorial basis the chances are that it has effect on specific sectors at their early stages of development even in highly developed economies such as the US and Italy.

Bencivenga and Smith (1991) employed an overlapping generation model and demonstrate that an intermediation industry permits an economy to reduce the fraction of its savings held in the form of unproductive liquid assets and to prevent misallocation of invested capital due to liquidity needs. In other words, Entrepreneurship Development may be induced via the capital stock of an economy.

The most striking study was provided by Boyreau-Debray's (2003) who worked on Chinese financial deepening and growth, which revealed that credit extended by the banking sector at the state level has a negative impact on provincial economic growth. Yet an earlier study by Aziz and Duenwald (2002) concluded that the positive link between finance and economic development in China is actually more apparent than real because the non-state sector, which contributed most of China's remarkable growth, did not resort to the domestic financial system in any substantial way for financing. These studies did not, however, take cognizance of China's peculiarity as the fastest growing economy in the world whose performances using global economic indicators may not reconcile with such other countries that are only concerned with maintenance of present levels of growth.

But, Murinende and Eng (1994) did an exposition of the case of Singapore and find evidence of bidirectionality between financial deepening and economic development. Comparably, too, Demetriades and Hussein (1996) arrived at the same conclusions when they studied 16 developing countries of Asia with similar background and economic circumstances where they found evidence that favours a bidirectional relationship between Financial Deepening and economic development in some developing economies. The presence of bidirectional relationship between Financial Deepening and economic development is however logical because some developing nations have put in place certain policy measures aimed at boosting economic activities in their ailing economies. While such measures indicate a demand-led scenario, there is the incidence of a high rate of unemployment and significant poverty levels in these countries that also usher in the supply-side of the finance-growth nexus.

The above studies in the various countries of domiciliation indicate that financial deepening actually precedes and is an important precursor to economic development especially in an economy that is still developing. The US (Rousseau & Sylla, 1999), Italy (Guiso et al, 2002), and Japan (Rousseau, 1999) were at various times in their history beneficiaries of the financial deepening processes. However, these economies when looked at in different times and using aggregated data they showed no signs of the need for financial deepening due to the fact that their financial sectors developed alongside other sectors of their economies. Determining the relevance or otherwise of financial deepening would therefore depend on country specifics (Darren & Conrad, 2009; Desai, 2009).

Empirical studies on Nigerian finance-growth dynamics are not only limited in number but restricted in scope in terms of the measures of Financial Deepening and economic development generally. Afangideh (2009), using three stage least square estimation technique on a data spanning 1970 to 2005, found that a developed financial system alleviates growth financing constraints by increasing bank credit and investment activities with resultant rise in output. And, Ndebbio (2004), also, using an ordinary least square regression framework, finds that financial sector development affect per capita growth of output. He attributed the result to 'shallow finance' and the absence of well-functioning capital markets. These findings corroborate earlier studies in the McKinnon-Shaw context and also lend voice to the Harrod-Domar finance-growth nexus.

Conversely, Nnanna (2004) using ordinary least square regression technique concluded that financial sector development did not significantly affect per capita growth of output. Similarly, Nzotta and Okereke (2009), based on two stages least

square analytical framework for a period spanning 1986 to 2007, also concluded that Financial Deepening did not support economic development in Nigeria. There reasons are however based on the fact that there was a net negative economic development in the period of their study. Nevertheless, taking each economic development indicator individually and using country specifics in the study may reveal contrary findings.

The finding of Agu and Chukwu (2008) was quite different from other authors on Nigeria. The duo employed the Granger causality test to ascertain the direction of causality between Financial Deepening and economic growth in Nigeria between 1970 and 2005. Their findings reveal evidence to support both demand- and supply-leading hypotheses depending on the Financial Deepening variable that is used. Their study supports the demand led hypothesis for the banking sector's private sector credit and real broad money supply while it supports the supply leading hypothesis for loan deposit and bank deposit liabilities (Agu & Chukwu, 2008). These studies show that the indicators of private sector credit do not encourage the growth of that sector because of the dearth of funding in the private sector. Again, the findings also suggest that Financial Deepening however leads to increases in bank deposit and loanable amount. What the study did not do is to go further to inquire as to how such loanable funds are distributed in the economy. As earlier stated the choice of variables used for the study may be suggestive of the findings of that study.

For the explanation of the research framework, McKinnon-Shaw (1973) and Levine (1997) theories on Financial Deepening as well as Schumpeter's (1939) theory on entrepreneurship shall be adopted as our theoretical framework on the one hand, McKinnon-Shaw (1973) theorized that financial liberalization policies would increase savings which consequently spurs investment and induce economic growth. Levine (1997) also argues that lack of access to finance is one of the main factors that inhibit capital formation. As one of the major contributors to the literature on Financial Deepening, he opines that because of the high unit costs of small-scale lending and other imperfections, the entrepreneur cannot borrow against future earnings to invest. Lack of access to credit perpetuates poverty because entrepreneurs cannot afford the appropriate finance for their projects.

### **3. Methodology and Data**

This study dwells on the effect of Financial Deepening on Entrepreneurship Development in the Nigerian economy over a thirty-year period (1984 – 2014). It

proxied money supply, net domestic credit and public sector credit for financial deepening and entrepreneurship development by the quantum of credit to SMEs as in Darren & Conrad 2009; Desai, 2009; Lucky, 2012). The research design adopted for this study is correlational design. The study uses data obtained from secondary sources only because the paradigm is positivism in nature. This study collected data for the research from secondary sources only. Specifically, data was collected from the Central Bank of Nigeria. Aggregated data on the Gross Domestic Product, GDP, bank credit as well as portion of credit to SMEs was obtained from the relevant governmental agencies – National Bureau for Statistics, SMEDAN, SMEIS and the Federal Ministries of Finance and Industries, respectively. For the purpose of this study Ordinary Least Square, OLS, (time series) multiple regression was adopted to examine the research hypotheses and the model of the study. This is for the reason that three independent variables are regressed against one dependent variable to obtain the impact of Financial Deepening on Entrepreneurship Development in Nigeria.

The model specified to examine the hypotheses of the study is as follows:

$$\text{SMEC} = \beta_0 + \beta_1\text{MS} + \beta_2\text{NDC} + \beta_3\text{PSC} + e$$

where:

SMEC = portion of credit to SMEs

$\beta_0$  = Constant

$\beta_1 - \beta_3$  = Coefficients of the independent variable

MS = Money Supply

NDC = Net Domestic Credit

PSC = Public Sector Credit

e = term error

Financial Deepening was measured using three well known measures/ratios. The first measure is Money Supply (MS) ratio otherwise known as the real measure of Financial Deepening. The ratio measures the degree of monetization in the economy as well as the depth of the financial sector while it also shows an expansion of payment and saving functions. The second measure used in the study is the ratio of domestic credit, which reflects the extent to which financial intermediaries allocate society's savings as well as firms' use of credit in addition to internal funds. The third measure is the portion of public sector credit. The basis for this indicator is that commercial financial intermediaries are able to identify profitable investments, monitor managers, facilitate risk management,

## **Table 1: Descriptive Statistics**

and mobilize savings for onward lending to public agencies for the implementation of government policies and programmes vis-avis the extension of such credit to other productive sectors of the economy. For the dependent variable measurement, this study uses the portion of credit to SMEs as proxy for entrepreneurship because the study covers all types of entrepreneurship in Nigeri

### **4. Results and Discussion**

Multiple regression was used to analyse the data collected and estimate the relationship between the independent variables (Money Supply, Net Domestic Credit, and Public Sector Credit) and the dependent variable (credit to SMEs). The technique of Least Squares has been used to estimate the regression coefficients in the model of the form:

$$\text{SMEC} = \beta_0 + \beta_1\text{MS} + \beta_2\text{NDC} + \beta_3\text{PSC} + e.$$

The descriptive statistics includes summary statistics, correlation coefficients and robustness tests are presented and discussed in table 1as follows:

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SMEC	30	13.25	15.37	14.5241	.60453	-.397	.427	-.797	.833
MS	30	.52	1.94	1.2135	.36811	.011	.427	-.414	.833
NDC	30	11.55	13.82	12.7418	.84004	-.134	.427	-1.498	.833
PSC	30	.47	.68	.5721	.05079	.079	.427	-.720	.833
Valid N (listwise)	30								

**Source: SPSS Output**

The descriptive statistics is first presented in Table 4.1; the correlation matrix is presented in Table 4.2, while the tolerance and variable inflation factor are presented in Table 4.3. The full results are contained in Appendix B (attached).

Table 4.1 indicates that, on average, during the period of the study credit to SMEs is about ₦15, while Money Supply, Net Domestic Credit, Public Sector Credit have a mean of ₦1, ₦13, and ₦0.60 respectively. The Table also indicates that PSC has the lowest standard deviation of 0.05079 signifying its lowest contribution to the credit to SMEs while Net Domestic Credit has the highest standard deviation of 0.84 which indicates its highest (positive) contribution to the SMEC. This can be confirmed by the mean values of the individual contributions of the independent variables to the credit to SMEs (See Appendix B).

**Table 2: Tolerance Value and Variable Inflation Factor**

Variables	Tolerance Value	VIF
MS	0.188	5.320
NDC	0.402	2.486
PSC	0.310	3.227

*Source: Regression Result Using SPSS Version 16*

The Tolerance Value and the Variance Inflation Factor (VIF) are two advanced measures of assessing multicollinearity between the independent variables of the

study. In Table 4.2, the variance inflation factors were consistently less than 10 indicating complete absence of multicollinearity (Odeniran & Udejaja, 2010). This shows the appropriateness of fitting the model of the study with the three independent variables. In addition, the tolerance values are consistently less than 1.00 thus further substantiating the fact that there is complete absence of multicollinearity between the independent variables (King & Levine, 1993).

### 4.3.1 Correlation Matrix

The correlation matrix is used to determine the relationship between the dependent and independent variables as well as between the independent variables themselves. Table 4.3 presents the correlation matrix for the observations. The full results are contained in Appendix A.

**Table 4.3 Correlation Matrix**

		SMEC	MS	NDC	PSC
SMEC	Pearson	1	.908**	.934**	-
Correlation			.000	.000	0.648**
	Sig. (2-tailed)		30	30	.000
					30
MS	Pearson		1	.763**	.824**
Correlation				.000	.000
	Sig. (2-tailed)			30	30
NDC	Pearson Correlation			1	.558**
	Sig. (2-tailed)				.001
					30
PSC	Pearson Correlation				1
	Sig. (2-tailed)				

\*\* Correlation is significant at the 0.01 Level (2-tailed)

Using Pearson Correlation of two-tailed significance the result shows that Money Supply is associated with credit to SMEs at 91% which is positive and significant at 1%. Again, Net Domestic Credit is associated with credit to SMEs at 93% which is also positive and significant at 1%. However, credit to SMEs is inversely related to Public Sector Credit at 65%. This signifies that both Money Supply and Net Domestic Credit are positively strongly significant at 1% while Public Sector Credit is negatively and strongly significant at 1%. This implies that any increase in Money Supply and Net Domestic Credit is causing a very good increase in credit to SMEs but for every increase in Public Sector Credit there is a significant decrease in the credit to SMEs. The result also indicates the association between the regressors themselves is positive but negligible. Therefore, multicollinearity between them is not expected to pose any problem to the validity of the result.

One of the salient features of Nigeria's growth drive is a conscious development of the financial sector. In the early seventies, as a result of the prevailing economic paradigm at that time, the sector was highly regulated with government holding controlling shares in most financial institutions. In 1986, the liberalization of the financial sector was a major component of government policy. By the year 2004, the consolidation exercise in the financial industry took a leading role in the National Economic Empowerment and Development Strategy (NEEDS), which was in place at that time to drive the economic agenda of the government. And in 2009, as part of the broad economic measures to respond to the adverse effects of the global financial and economic crises, the Central Bank of Nigeria in conjunction with the fiscal authorities engineered measures to avert an imminent collapse of the financial system with a view to maintaining economic growth. The essence of emphasis on the development of the Nigerian financial sector is in the theory of financial repression. The theory posits that efficient utilization of resources via a highly organized, developed and liberal financial system enhances economic growth (Rioja & Valev, 2004; Ang, 2007). This theory confirms earlier works on the importance of the financial system which could be traced back to the works of Bagehot (1873), Schumpeter (1912); Hicks (1969), McKinnon (1973), Shaw (1973), Levine (2000) as well as Benhabib and Spiegel (2000).

The results of the time series data in relation to the impact of Financial Deepening on Entrepreneurship Development are discussed. The study used three Financial Deepening proxies; Money Supply, Net Domestic Credit and Public Sector Credit and credit to SMEs was used to proxy Entrepreneurship Development. The regression results are presented in Table 4.4.

**Table 4.4: Financial Deepening and Entrepreneurship Development in Nigeria.**

Financial Deepening	Entrepreneurship Development
Variables	Credit to SMEs
Intercept	9.542
MS	0.001 *
NDC	0.005 *
PSC	0.017**
R	0.788
R <sup>2</sup>	0.676
Adj. R <sup>2</sup>	0.563
F. Sig	0.000
Durbin Watson	2.003

*Source: Regression Result Using SPSS Version 16*

Table 4.4 relates Financial Deepening proxies to the Entrepreneurship Development variable. The estimated relationship for the model is:

$$\text{SMEC} = 9.542 + 1.069 (\text{MS}) + 0.392 (\text{NDC}) - 2.296 (\text{PSC})$$

The model indicates that all the 3 variables of Financial Deepening have significant impact on credit to SMEs. Money Supply, Net Domestic Credit and Public Sector Credit are each significant at 1%, which provides evidence to reject hypothesis 1, 2 & 3 of the study. The implication of this result is that the higher the level of Financial Deepening the higher the credit for Entrepreneurship Development in Nigeria.

The first hypothesis of the study which states that Money supply has no significant effect on Entrepreneurship Development in Nigeria is rejected because the regression result in Table 4.4 provides that MS is significant at 1% implying that for every ₦1 increase in MS the credit to SMEs increases with ₦1.70. This result is not surprising because the credit to SMEs is 'created' from the pooled money supply in the economy.

Theoretically, the finding can be underpinned by Levine's (1997) theory of Financial Deepening where he states that creation of credit is a function of the money supply in the economy. The finding is also in line with the conclusions arrived at by Afangideh (2009), using three stage least square estimation technique on a data spanning 1970 to 2005 in Nigeria, where it was found that a developed financial system alleviates growth financing constraints by increasing

bank credit and investment activities. The finding is also in tandem with those of King & Levine (1993) and Odeniran & Udejaja (2010).

However, the findings contradict Shan, Sun & Morris, (2001) and Aziz & Duenwald (2002) who posits that the Chinese experience reveals that it is economic development that causes Financial Deepening and not the reverse argument that Financial Deepening leads to economic development. Also, Agu and Chukwu (2008) using the Granger causality test on data between 1970 and 2005 found that both demand- and supply-leading hypotheses are present in Nigeria depending on the Financial Deepening variable that is used.

Furthermore, the result also indicates that NDC impacts positively on the credit to SMEs at 1% level of significance. This implies that for every N1 increase in NDC there is an increase of N0.39 in the credit to SMEs. This therefore provides evidence for rejecting hypothesis two of the study which states that Net Domestic Credit has no significant effect on Entrepreneurship Development in Nigeria. There is a near consensus that a well-functioning financial sector is a precondition for the efficient reallocation of resources and the exploitation of an economy's growth potential through an enhanced domestic credit platform.

It is also easily discernible from this finding that the quantum of credit to SMEs as a result of increase in Money Supply is greater than the actual credit to SMEs in the Net Domestic Credit. This means that while Financial Deepening may be occasioned in the economy, less than 50% of the credit (N0.39) goes to the SMEs. Understandably, the banks envisage a very high risk level in lending to the entrepreneurs as a result of the near-absence of collateral that over-exposes the lender in the event of default. Hence, lenders come up with stringent conditions to be met by prospective borrowers in order to curtail the incidence of risk in lending to SMEs.

This finding further strengthens the work of DeGregorio and Guidotti (1995) who find evidence for a negative relationship between Financial Deepening and economic growth and development generally in twelve Latin American countries. This finding is also in concert with that of Davies (2006) in Eastern European countries. In Nigeria also, Ndebbio (2004), using an ordinary least square regression framework, finds that financial sector development weakly affect per capita growth of output. He attributed the result to shallow finance and the absence of well-functioning capital markets.

The result in respect of hypothesis three of the study which states that Public Sector Credit has no significant effect on Entrepreneurship Development in Nigeria indicates that PSC is negatively and significantly influencing credit to SMEs. Therefore, this provides evidence for rejecting the hypothesis. The implication of the result is that for every N1 increase in Public Sector Credit there is a decrease of N2.30 in the credit to SMEs. This is the most striking revelation of the study because the finding indicates that increases in Public Sector Credit lead to highly significant decreases in credit to SMEs. In other words, there is an inverse relationship between PSC and SMEC hence every increase in lending to PSC means less lending to SMEs. It is no wonder then that the increase in net domestic credit leads to a smaller increase in credit to SMEs but it leads to high increases in PSC because such funds are channeled into financing public sector credit. The finding also indicates that any action that leads to a reduction in the PSC is likely to increase lending to SMEs. Interestingly, this revelation of the study also tallies with the earlier findings of Boyreau-Debray's (2003) who concluded that credit extended by the banking sector at the state level has a negative impact on provincial economic growth.

Finally, the combined impact of the proxies of Financial Deepening on the credit to SMEs is indicated in the model summary of the regression result. The combined relationship between the dependent and independent variables of the study is 79% which implies strong positive relationship. While the coefficient of determination  $R^2$  shows that Financial Deepening in Nigeria occupies 68% in determining credit to SMEs, the remaining 32% is covered by other factors. The F-Significant value of 0.000 implies a significant impact of Financial Deepening on the credit to SMEs in Nigeria. The Durbin – Watson Statistic of 2.00 also indicates that serial correlation within the period of the study is not a problem to the validity of the result. The overall regression result reveals that all explanatory variables play a significant role cumulatively in increasing the credit to SMEs in Nigeria. Therefore, Money Supply, Net Domestic Credit and Public Sector Credit have significant impact on the credit to SMEs in Nigeria.

The final analysis indicates that financial institutions are not adequately financing entrepreneurs in Nigeria. A major implication of this finding is that while a Financial Deepening lead to Entrepreneurship Development in Nigeria there is a significant difference between the amount of money created through Financial Deepening and the actual amount of funds made available for Entrepreneurship Development (credit to SMEs). This is arguably so as prospective entrepreneurs do not mostly have access to capital for their entrepreneurial endeavors in Nigeria in view of the stringent conditionalities put in place by banks for entrepreneurs to

meet in order to be availed loans. Such measures normally include high transaction costs, the size of the loan, poor records, lack of organizational skills, gestation period of the operations of the entrepreneur's venture as well as the provision of a collateral or security as a hedge against business failure amongst others. Such demands by bankers usually kill the spirit of entrepreneurship in individuals.

The policy makers such as the Federal Government of Nigeria through its agents; the Federal Ministry of Finance, the Central Bank of Nigeria (CBN), the Federal Ministry of Labour and Productivity, the National Directorate of Employment (NDE), the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), the Small and Medium Enterprises Investment Scheme (SMEIS), as well as banking institutions (commercial, mortgage, microfinance, savings and loans agencies) should recognise, reward and encourage Entrepreneurship Development efforts so that they can play their roles well because Entrepreneurship Development is vital to the industrialization process of the country at large. Its only natural that governments at the federal, state and local levels should create and sustain an enabling environment for entrepreneurial activities to thrive and succeed. There should be a 'think-tank' for these agencies that should harmonise their policy thrusts towards forming a common front to boost access to finance by entrepreneurs. The Federal Government should take lessons from countries such as India, Zambia, Kenya and South Africa where lending to entrepreneurs is a lucrative business. The Government should also stem the credit to the public sector especially where such credits are uncalled for.

Another policy implication of the findings of this research is that the quantum of credit usually apportioned to SMEs as contained in the CBN guidelines to the financial institutions must be strictly monitored for effective compliance in order to ensure that such credits are not 'recycled' within customers considered to be regular in repayments. Most banks are said to report a 20% credit allocation to SMEs as a government policy 'implemented' while in actual sense such credits never gets to the prospective entrepreneurs but rather availed to some 'regular' customers whom the banks are more comfortable to lend to. Such an arrangement is bound to kill initiatives as it does not encourage entrepreneurial endeavours that do not meet the lending appetite of the banks.

Government should also create the enabling environment for Financial Deepening processes to positively affect Entrepreneurship Development in the country. Financial Deepening is a sustainable tool for Entrepreneurship Development activities in Nigeria which must be developed to its fullest in order to achieve developmental objectives. It is therefore advised that the Government should

ensure that the policy objectives of deepening the financial reach (both geographically and in terms of choices) is pursued with all sense of patriotism. As it is today, the loan market in Nigeria is a sellers' market where products are tailored to the lenders' appetite leaving the prospective entrepreneurs to either measure up or fizzle out.

## 5. Conclusion and Recommendation

In line with the findings of this study the following conclusions are reached:

- a) The study concludes that Money Supply has significantly impacted on Entrepreneurship Development in Nigeria. In other words, the higher the Money Supply in the system the higher the credit to SMEs and invariably Entrepreneurship Development in Nigeria.
- b) It is also the conclusion of this study that Net Domestic Credit has significantly impacted on Entrepreneurship Development in Nigeria. This is indicated by the observation that the higher the Net Domestic Credit the higher the credit for Entrepreneurship Development in Nigeria.
- c) And, this study concludes that Public Sector Credit has significantly impacted on Entrepreneurship Development in Nigeria. However, the striking revelation of this finding is that the higher the Public Sector Credit the lower the credit to SMEs in Nigeria. This means that while increases in money supply and net domestic credit leads to increases in credit to SMEs, increases in Public Sector Credit leads to decreases in the credit to SMEs – in other words, Public Sector Credit is inversely related to the credit to entrepreneurs in Nigeria.

In view of the findings and conclusions of this study the following recommendations are proffered:

- i) The Central Bank of Nigeria should strengthen its monitoring and control mechanisms in ensuring that all money ‘created’ from the Money Supply for on-lending to entrepreneurs are properly channeled to them. This will go a long way in ensuring that entrepreneurial initiatives are not killed at source. Programs abound in developing countries with similar circumstances like Nigeria’s and the country can take a cue from such nations as Zambia, India and Bangladesh. The financial institutions need to impact more in financing Entrepreneurship Development as their role need to be felt by the SMEs in terms of growth and development. The financial institutions’ impact needs to be visible in promoting entrepreneurship growth and development. Entrepreneurs themselves should also be more receptive to new ideas and prepared to make financial commitments to ensure their growth.
- ii) The Federal Government of Nigeria should also come up with policy measures to the effect that the statutory 20% lending to SMEs by banking institutions are strictly complied with by putting procedures in place to confirm compliance with such policies which will ensure a

more equitable allocation of the domestic credit. That way, entrepreneurial activities can receive a boost that will compliment current government efforts at Entrepreneurship Development such as SMEDAN, SMEIS, NDE, NAPEP, and microfinance amongst others. This study further recommends that guidelines by the CBN to finance entrepreneurs need to be flexible enough to accommodate the serious minded entrepreneurs in Nigeria. The financial institutions should also appreciate and give technical assistance to the entrepreneurs and contribute more to SMEEIS to ensure its success in the SMEs sub-sector. It is the researcher's hope that deepening the financial sector in Nigeria will develop more interest in supporting the growth of SMEs.

- iii) With regard to the incidence of Public Sector Credit, the Federal Government should also come up with stringent policies that would discourage most especially state governments from borrowing unnecessarily. It is a known fact that years on end the Government has continued to churn out billions of dollars to finance public sector programs and there are more questions than answers as to whether these funds are spent for the purposes they were intended to achieve. That way, too, the 'crowding out' effect that lending to the Public Sector has on the loans to SMEs would be reduced and more funds are likely to be available in the lending agencies for entrepreneurs to access.

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