

FINANCIAL INTERMEDIATION AND ECONOMIC GROWTH: EVIDENCE FROM COTTAGE INDUSTRIES IN NIGERIA

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ABSTRACT

The Economic development of every nation depends on their capability of effective co-ordination of its financial system. The bed rock and most sensitive aspect of the financial system activity is its financial intermediation role between the deficit economic unit and surplus economic unit. Most work reviewed empirically showed various author's concentration on financial intermediation and economic growth of various countries. This paper therefore seeks to examine the same variable with special attention to micro – deficit economic unit and micro surplus economic unit. The factors that arouse the interest of the writers on this area are (1) there are more of cottage industries in Nigeria as a developing country. (2)the financial activities of these cottage industries are ignored in the financial system in developing nations. The study therefore adopted the ex-post facto research design. The time series data from 1992 – 2015 were collected from secondary sources and Unit Root Test, Erger Greager Co-integration Test and Error Correction Model(ECM) were used to estimate the hypothesis formulated in line with the objectives of the study. The research then contributes that: (1) Loans given to cottage industries by conventional banks have no significant relationship with the Nigeria economic growth. (2) Loans to Micro Deficit Economic Unit (MDEU) by micro finance institution have significant relationship with Nigeria Economic growth and also (3) The Deposit of Micro – Surplus Economic Unit (MSEU) with the Micro Finance institution has a significant relationship with the Nigeria Economic Growth. This study therefore recommends amongst others that: (1) Cottage Industries in Nigeria should be encouraged and modernized. (2) At early stage, the government should not be imposing much levies on the cottage and small – scale entrepreneurs and the government should also be providing them with social amenities like: electricity, water, road etc.

Key words: *Cottage Industry, Micro Finance, Micro financial Institution, Micro Finance Intermediation, Economic Growth, Micro Deposit Economic Unit, Micro Surplus Economic Unit.*

INTRODUCTION

Background of the Study:

In a developing nation, there exist more of cottage enterprises that are owned and managed by low income class and this becomes the determinant of the nature of finance/ fund needed for the owners to run such a business. At the same time, to reasonable extent, the economic growth of any developing nation depends on the quality of existing cottage entrepreneurship in that nation. If the entrepreneurs are enterprising, ambitious and courageous enough to bear the risk, the community/society will develop quickly (Okuma, 2017). Thorsten and Robert (2014) opined that the vast majority of firms around the world fall into the category of micro, small or medium sized enterprises (SMES). And according to Okuma (2017), in developing nations, most of their firms are not just in small- medium size but in micro and cottage (household) firms that are owned and managed by family members. In the developing nations, most of these enterprises do not find it easy to grow do to a lot of difficulties they encounter mostly as it relates to finance and financial intermediation.

Statement of Problems:

There are various sensitive economic targets the financial system and institutions are ignoring in quest of pursuing those objectives of their area of interests, and this is the area this study is focusing on, that is the area of micro-financial intermediation in the financial system. Micro financial intermediation is the aspect of financial intermediation that takes care of channeling of micro finance / fund from micro surplus economic unit to micro deficit economic unit, active low income group, micro entrepreneurs and cottage industries in the economic system.

Though, these aspects of financial intermediation suppose to be given more attention and interest by the government and financial regulatory bodies in the developing countries since the 90% of its citizens belongs to these groups. Much funds are being ignored or abandoned at the hands of the Micro-Surplus Economic Unit{MSEU} by the financial sector, most often these funds will be lying idle for a long time in the hands of these financially ignored class of people in the developing countries. Reason, the class of low income earners and micro entrepreneurs always found it difficult to approach the conventional financial institutions for financial assistance or for other financial dealings. These groups due to some factors are not even benefiting from a lot of government assisted programs specially meant for them. Some of the contributing factors are:

1. High level of illiteracy among the members of this group. High percentage of the members of MSEU and MDEU groups are made up of illiterate people. Therefore finding it difficult to know and monitor the country's fiscal and monetary policies.
2. Technicality of the policies and programmes targeted to assist the low income earners and micro entrepreneurs. Most of the government financial policies provided for micro-financial intermediations are too technical and most of the programmes meant to assist the low income earners and small / medium business owners are always very tight and rigid considering the people involved.
3. Political Influence: Most of the micro-financial activities engaged in the financial sector of the developing nations are being politicized; mostly as it affect its low income earners and the micro entrepreneurs business. This leads to mis-channeling of some international and government assisted programs meant to benefit the low income earners and small business owners to the members of high political class and their relations.
4. Conditions to meet by the low income earners and the small business owners before they can deal with the financial institutions. Most often, people of low income class found it very difficult to meet up with things expected of them by the financial institutions before they will be assisted.
5. Nonchalant attitude of the low income earners and micro business owners over the activities of the institutionalized micro-financial intermediation. They always put up I don't care attitude, having in mind that the bank is meant for the rich. This banking strategy of ignoring this aspect of financial intermediation makes it possible, the continuous existence of gap between the owners of resources at that level and the inventors that need the resources for project funding opportunity at the same level and for development of the economy of the developing nations like Nigeria at large.

Objective of the Study:

Most economic problems of the developing nations are directly or indirectly related to inability of the financial system to manage effectively the nation's finance at micro economic units and cottage industry level in such a way that it will yield positive results that will be useful to the economy. Micro finance units make up to 90% of the economic units in a developing nation like Nigeria and most of their activities are

excluded in the financial system and it negatively affects the policy of finance deepening of a developing nation. This study in trying to find out solutions to these issues by investigating on these objectives listed below.

1. To determine if there is a significant relationship between loan from conventional banks to cottage industry and economic growth in Nigeria.
2. To establish if a significant relationship exists between loan from micro-firm to cottage industries and economic growth in Nigeria.
3. To find out if there is a significant relationship between money deposits made by micro surplus economic units to micro finance institutions on the economic growth in Nigeria.

Hypothesis:

Ho₁: There is no significant relationship between the loan from conventional banks to cottage industry and Nigerian economic growth.

Ho₂: No significant relationship exists between the loan from micro-finance institutions to cottage industries and Nigeria Economic Growth.

4. Ho₃: There is no significant relationship between money deposits made by micro surplus economic units to micro finance institutions on the economic growth in Nigeria.

Scope of the Study:

This study focused on the impact of financial intermediation on Nigeria's economic growth as it relates to cottage industries, Micro Deficit Economic Unit, (MDEU) and Micro Surplus Economic Units (MSEU) and it will cover the period of 23yrs that is 1992-2015.

LITERATURE REVIEW

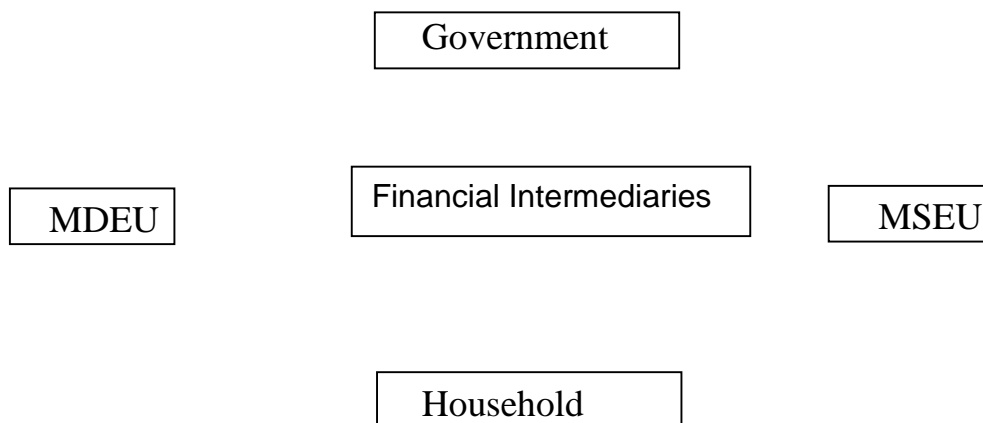
Conceptual Framework

Cottage businesses are those businesses owned and managed by family members in their homes. These are very micro sized firms to compare with the popular small and medium scale enterprise. What characterized these natures of business and their owners are- it's always in traditional setting, the scope of the Business is local and covers only extended family and friends, no employment, most the business skill are inheritance and natural talents, most people that handles such business are illiterates and unexposed, the business is not mechanized, the level of business and their owners are ignored by government polices makers in making their economic policies. The business and their owners do not make use of conventional financial intermediaries rather they raised their funds through saving, borrowing from friends, family members, local meeting, Isusu etc. while small-medium scale enterprises are defined by different professionals to suit their purposes. There is therefore no consensus on the definition of SMES throughout the world due to differences in general economic development and the prevailing social conditions within each country (Pacific Economic Co-operation Council 2003). Thus, various indices such as number of employers, invested capital, asset employed, sales volume, production capability, and a combination of these variables are used by various countries to classified a business under the SME sector (Ownalada and Ailal, 1999). Though in all these definitions, one may notice that the features of cottage entrepreneurship existing in developing nations are not accommodated. In developing nations, cottage enterprise is more closer to entrepreneurship, smaller than most SMES in existence, less recognized than SMES by authorities, has no link to financial institutions and intermediaries, they are not considered in policy making, they always engage themselves on isusu (uninstitutionalized financial system), and they are of a very large number in Nigeria.

Entrepreneurship then is the process of starting a business, a startup company or other organization. It is the development of a business from the ground up-coming with an idea and forming it into a profitable business. It is the Journey of opportunity exploration and risk management to create value for profit and/or social good while entrepreneur is defined as an individual who organizes or operates a business. Most of the developing nation's entrepreneurship and entrepreneurs are in cottage industries for. It is needful then for developing nations like Nigeria to concentrate more on development of its cottage industries which form more than 95% of what most authors are categorizing as SMES.

In developing these cottage firms, the government should concentrate more on the area of finance which is the bedrock of every business, and considering the nature, level and size of the business, one would say that the fund they can manage must be micro-finance size. Micro-finance has to do with the provision of low fund and credit facilities to the low income class or cottage entrepreneurs. In every existing developing economy, there are the micro-surplus economic unit (MSEU) and micro-deficit economic unit (MDEU) that will have little or no importance to the economic system if there is no interaction or link between them.

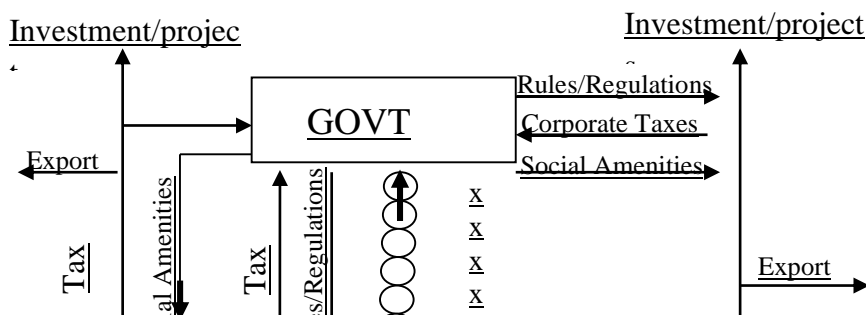
Fig. 1:



Assumed Economic system without Financials Interactions

The above diagram indicates a developing economic system where there is no link or interaction of any kind between any of the micro economic units as the financial intermediaries in the system. This nature of economic system in the developing country obstructs the economic growth and development in that country. Here, there is no existing medium of financial movement from one micro economic unit to the other and this will lead to idle funds in the hands of the micro surplus economic unit, these funds at this condition are not useful to the owners neither is it to the nation since the micro deficit economic unit at the same time will be lacking funds. The leftover of the Micro-Surplus Economic Unit is the fund that is needed to be channeled to Micro-Deficit Economic Unit which is always in cottage industry form in developing nations and by so doing, discouraging idle funds of the MSEU and at the same time encourages investment by the MDEU. This will only be achieved in an economic system where there is perfect micro financial intermediation. This function of micro financial intermediation is carried out in an economic environment by Micro Financial Institutions and Micro Financial Regulatory bodies. Micro economic Units whose savings exceed their current investment outlay (Savings-Surplus Units) can as a result of the interactions, lend the surplus to savings deficit units whose contemplated investment expenditure cannot be financed by their available savings. Hence, such interaction makes it possible for the investment decisions of firms or individuals to be separated from their financial decisions. Saving-Deficit economic units could interact directly with savings surplus units, more often than not; however, interaction is consummated through intermediaries who operate in the financial market. The exchange of funds is evidenced by instruments (e.g deposits, credits, shares, bonds etc) which either represent financial assets or liability to either the holders or issuers – financial assets and liabilities are therefore created as a result of the intermediation.

Fig. 2:



The financial intermediaries sometimes referred to as financial institution are establishments engaged in some form of borrowing and lending Hanson(1997). However, this study could be restricted to the activities of Micro Financial Institutions and the Micro Financial Regulatory bodies in Nigeria Financial System whose activities cover a broad spectrum of micro economic financial intermediation activities. In a general sense, a bank is referred to as a business establishment that safeguards people's money and uses it to create loans (credit) and investments (including trading), statutorily banks and other financial institutions Decree (BOFID, 1991), section 61, defines Banking business as business of receiving deposits on current account, savings account, or other similar accounts, paying or collecting cheques, drawn by or paid in by customers, provision of finance or such other business as the Governor of Central Bank of Nigeria (CBN) by order published in the Gazette, designated as banking business.

Empirical Framework

The study of Acha (2011) on “Does bank financial intermediation cause growth in developing economy: The Nigerian experience” Data obtained from CBN statistical bulletin was used and his hypothesis was tested using Granger Causality Test. It could not identify any significant causal relationship between bank's savings / credit and economic growth. The absence of such a relationship was conjectured to be due to the economic developmental stage characterized by infrastructural delay and the inefficient utilization of mobilized deposits. The study therefore recommended improvement in infrastructure such as roads and power supply. It also suggested close regulatory monitoring to ensure that mobilized deposits are used mainly in funding the productive sector.

Shittu, (2012) in his work titled “financial intermediation and economic growth in Nigeria” affirms that financial intermediation has a significant impact on economic growth in Nigeria. Shittu used time series data from 1970 to 2010 that was collected from CBN publications and was analyzed using unit root test and co-

integration test were done accordingly and error correction model was estimated using the Engle-Granger technique.

In the paper of Albina (2013) “Financial intermediation and economic growth: Evidence from the Baltic Countries” where the hypothesis that financial development promotes economic growth is largely supported by the empirical studies. His hypothesis was tested for the three Baltic countries using a time series approach that allows for interactions between the three countries. He found out that economic growth is a positive function of financial development the results also shows that there are long run interactions between the three Baltic countries.

Zaghdoudi, Ochi and Soltani, (2013) in the article titled banking intermediation and economic growth: Some Evidence from MENA Countries. In their study, their result generally shows a negative correlation between all variables of banking intermediation and economic growth while, all variables of banking intermediation are positively correlated with each other. In arriving at these results, they used the method of GMM estimation of dynamic panels.

According to Ogiriki and Andabai, (2014) in their research work titled “financial intermediation and economic growth in Nigeria, 1988-2013: A Vector Error Correction Investigation” secondary data was collected from CBN statistical bulletin and national bureau of statistics. Their Hypotheses were formulated and tested using Vector Error Correction Model and the test for stationary proves that the variables were integrated in the order which implies that unit roots do not exist among the variables. There is also long-run equilibrium relationship between economic growth and financial intermediation and the result also confirms about 96% short-run adjustment speed from long-run disequilibrium. The coefficient of determination indicates that about 89% of the variations in economic growth are explained by changes in financial intermediation variable in Nigeria.

Nwaeze, Onyedikachi, and Nwabekee (2014) in the empirical results of their work “financial intermediation and economic growth in Nigeria (1992-2011)” shows that both total bank deposit and total bank credit exert a positive and significant impact on the economic growth of Nigeria for the period 1992-2011. They adopted the *expost facto* research design and time series data for the twenty years periodm1992-2011 were collected from secondary sources and the ordinary least square (OLS) regression technique was used to estimate the hypotheses formulated in the line with the objective. Ibrahim and Giscard (2015) made investigation on Financial Intermediation and Economic Growth in Cameroon. In their work, the relationship between F1 components and Economic Growth measured by GNP per capital is model by a vector Auto Regression Model Using secondary data for the period 1977 to 2006. The study shows no casual effect between F1 and growth and Vice Versa.

METHODOLOGY

Research Design

The *expost facto* design is employed in this study. *Expost facto* design is a systematic empirical inquiry in which the investigator does not have direct control over value of the variables included in the study (Kerlinger, 1973). The choice to use the design is influenced by the nature of the data which is in time series form.

Data Sources and Description of Variables

The data used in this research is in secondary data form gathered from CBN statistical bulletin of 2015. The time series data collected covers the period 1992 to 2015(23yrs).

DEPENDENT VARIABLE

In this work, Economic Growth is the dependent variable and the proposed test will adopt the Real Gross Domestic Product (RGDP) as a proxy for economic growth.

INDEPENDENT VARIABLES

The independent variables used as a proxy for financial intermediation as it relates cottage industries in Nigeria are:

1. Micro Finance Bank Loan and Advance (MFBLA)
2. Micro Finance Bank Deposit (MFD)
3. Deposit Money Bank Loan to Small Scale Enterprises (BLSSE).

3.5 Description of the Variables used for the Study

Table 1:

Variable	Acronym	Description	Source
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Real Gross domestic product	GDP	GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. The Real GDP is the proxy for economic growth. It is the dependent variables	CBN statistical Bulletin, 2015
Micro Finance loan and Advanced	MFLA	These are credits or loans giving to low income earners and micro firms owners in need of fund by micro finance institutions.	CBN statistical Bulletin, 2015
Micro Finance Deposits	MFD	These are deposits of money made by micro surplus economic units (MSEU) with the micro finance institutions.	CBN statistical Bulletin, 2015
Deposit Money Bank Loan to Small Scale Enterprises	BLSSE	These are loans to the small business owners by the conventional bankers (Deposit money bank)	CBN statistical Bulletin, 2015

3.6 Model Specification

The relationship between financial intermediation components as it relates to cottage industries in Nigeria and economic growth is present in econometric model as below.

$$RGDP = F(MFLA, MFD, BLSSE)$$

Where RGDP, MFLA, MFD, and BLSSE are as defined in the table 2 above.

For easy calculation and mathematical understanding, the model is thus transformed and expressed as follows.

$$RGDP = \beta_0 + \beta_1 MFLA + \beta_2 MFD + \beta_3 BLSSE + \mu$$

Where β_0 = Constant term (intercept)

$\beta_n = 1-3$ = coefficient of the Explanatory variables

μ = Disturbance, stochastic of error term

Aprior Expectations.

The following are aprior expectations of the coefficient of the econometric model, $\beta_1 > 0$, $\beta_2 > 0$, and $\beta_3 > 0$. This explains the theoretical linkage on the sign and magnitudes of parameter of the specified functions. Aprior expectation are determined by the principles of economic theory guiding the economic relationship among the variables being studied. It is therefore expected that (1) when there is increase in micro finance loan and Advance (MFLA), it will lead to increase in Real Gross Domestic Product (RGDP), (2) when there is increase in Micro Finance Deposit (MFD), it will lead to increase in Real Gross Domestic Product (RGDP) and (3) when there is increase in the Deposit Money Bank Loan to Small Scale Enterprises (BLSSE), it will lead to increase in Real Gross Domestic Product (RGDP).

Method of Data Analysis.

In order to attain the objectives of this study, the following tests were employed with different motives; Unit Root Test is employed to determine the presence of unit root, which is to ascertain if the variables are stationary. This test was conducted under two specifications of the Augmented Dickey Fuller (ADF) Test (1) intercept (11) trend and intercept. If the time series are stationary in their levels, then they are said to be integrated of order Zero, i.e. 1(0); if the time series are stationary in their first differences, then they are said to be integrated of order one, i.e. 1(1); if stationary in their second difference, then they are integrated by other two i.e. 1(2) (Nwakobi & Alajekwu, 2015). The order of integration of the variables is investigated using the Augmented Dickey Fuller (ADF) (Dickey & Fuller, 1981) Unit Root Test for the test of presence of unit roots. Subsequently, other tests like Co-integration Test were used to establish if there exist long-run relationship among the variables and Error Correction Model is used to determine the speed in which the variables will attain a long run relationship.

DATA PRESENTATION AND ANALYSIS

Nigerian’s Macro Economic Variables on Real GDP, Micro Finance Bank Loan and Advances(MFLA), Micro Finance Bank Deposit(MFD) and Deposit Money Bank Loan to Small Scale Enterprises(BLSSE) are presented below.

Table 2:

YEAR	RGDP	MFLA	MFD	BLSSE
1992	19620.19	135.8	639.6	20400
1993	19927.99	654.5	2188.2	15462.9
1994	19979.12	1220.6	3216.7	20552.5
1995	20353.2	1129.8	2834.6	32374.5
1996	21177.92	1400.2	2876.3	42302.1
1997	21789.1	1618.8	3181.9	40844.3
1998	22332.87	2526.8	4454.2	42260.7
1999	22449.41	2958.3	4140.3	46824
2000	23688.28	3666.6	7689.4	44542.3
2001	25267.54	1314	3294	52428.4
2002	28957.71	4310.9	9699.2	82368.4
2003	31709.45	9954.8	18075	90176.5
2004	35020.55	11353.8	21407.9	54981.2
2005	37474.95	28504.8	47523.7	50672.6
2006	39995.5	16450.2	34017.7	25713.7
2007	42922.41	22850.2	41217.2	41100.4
2008	46012.52	42753.1	61568.1	13512.2
2009	49856.1	58215.7	76662	16366.5
2010	54612.26	52867.5	75739.6	12550.3
2011	57511.04	50928.3	59373.9	15611.7
2012	59929.89	80127.9	98789.1	13863.5
2013	63218.72	94055.6	121787.6	15353
2014	67152.78999...	82421.1	110628.4	16069.3
2015	69023.92999...	149325.5	159453.5	12949.5

4.1 Chart and Graphical Analysis of Data

Fig. 3

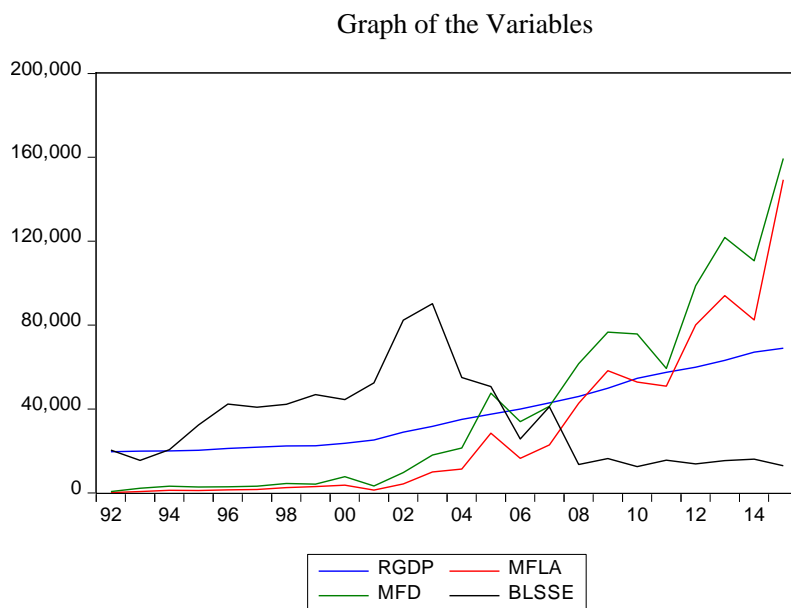
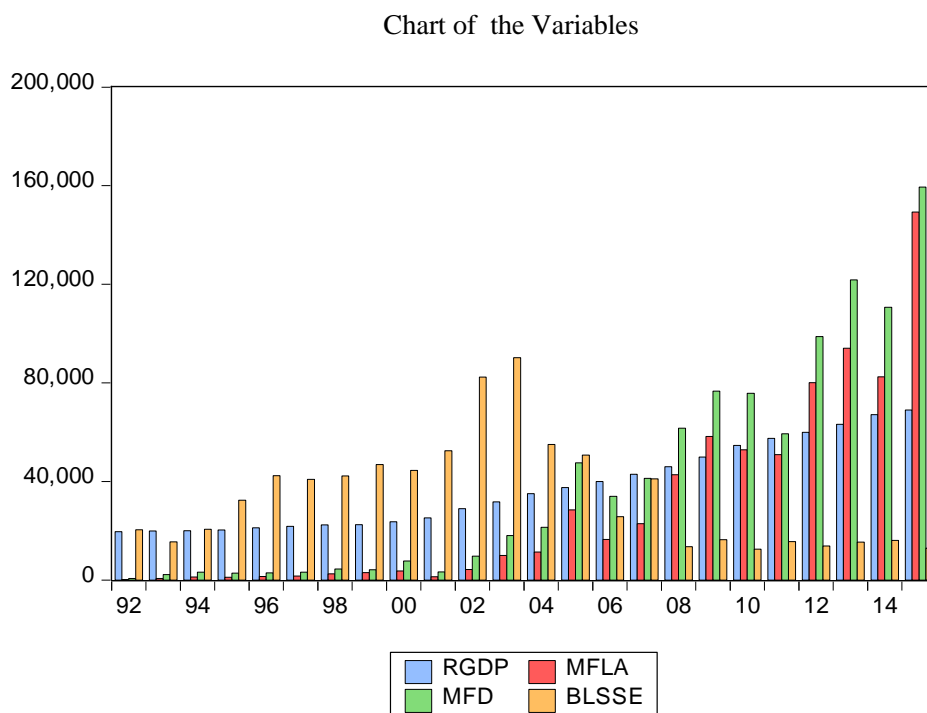


Fig. 4



4.2 Chart & Graph Interpretations

The RGDP Graph is indicating an increasing trend starting from the year 1992 to 2015 which may be linked up to the positive contribution by the MFLA and MFD, to the economic growth. While the BLSSE, MFLA and MFD have fluctuating trend from 1992 to 2015. BLSSE has a very sharp increasing trend of 20400.0 million naira to 90176.5 million naira between 1992 to 2003 and later, sharply sloped to 12949.5 million naira in 2015 and this contributes to its insignificant effect on the economic growth. While the MFLA and MFD are fluctuating but more of the increasing trend. MFD in 1992 has the value of 639.6 million naira in 1992 but increased to 159453.5 million naira in 2015. And MFLA has the value of 135.8 in 1992 and increased to 149325.5 million naira in 2015, and both of them have positive and significant impact on the Nigerian economic growth,

4.3 Unit Root Test Analysis

Table 3: Augmented Dickey-Fuller (ADF)

Variables	Level ADF	Critical value at 5%	1 st Diff. (ADF)	Critical value at 5%	2 nd Diff. (ADF)	Critical value at 5%	Result
RGDP	0.350973	3.004861	1.895575	3.004861	4.934241	3.012363	1(2)
BLSSE	1.437783	2.998064	4.866194	3.004861	-	-	1(1)
MFD	3.824284	3.012363	-	-	-	-	1(0)
MFLA	4.99237	3.012363	-	-	-	-	1(10)

Source: Authors computation.

The need to know the stationarity of the variables is necessary in other to avert the occurrence of spurious results, it is equally needed to ensure that the parameters are estimated using stationary time series data. To achieve this, the Augmented Dickey – Fuller (ADF) is used. The essence of the ADF test is the null hypothesis of non-stationarity.

Comparing the ADF test statistics with the 5% critical values, the result of the unit root test reported in table 1 above indicated that RGDP is stationary at second difference since the ADF value of 4.934241 is greater than 3.012363 critical value at 5% level of significance.

BLSSE is stationary at first difference with the ADF value of 4.866194 greater than 3.004861 critical values at 0.05 level of significance.

MFD and MFLA are stationary at a level with ADF (MFD) value 3.824284 > 3.012363 critical value at 0.05 level of significance while MFLA has ADF value of 4.992370 > 3.012363 critical value at 0.05 level of significance.

Hence, the variables are not having short-run relationship and in other to avoid spurious results, the researcher then checks whether the variables have a long-run relationship by testing if they are co-integrated using Erger Greager method.

Table 4
4.4 Results of Erger Greager Co-integration Test

Null Hypothesis: RESID01 has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.119264	0.0044
Test critical values:		
1% level	-3.752946	
5% level	-2.998064	
10% level	-2.638752	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 11/26/16 Time: 04:29
Sample (adjusted): 1993 2015
Included observations: 23 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.904542	0.219588	-4.119264	0.0005
C	60.21091	880.6869	0.068368	0.9461
R-squared	0.446908	Mean dependent var		-67.59547
Adjusted R-squared	0.420570	S.D. dependent var		5545.174
S.E. of regression	4221.004	Akaike info criterion		19.61647
Sum squared resid	3.74E+08	Schwarz criterion		19.71521
Log likelihood	-223.5895	Hannan-Quinn criter.		19.64131
F-statistic	16.96834	Durbin-Watson stat		1.935936
Prob(F-statistic)	0.000489			

Using Erger Greager method of testing co-integration, one will conclude that since Augmented Dickey – Fuller (ADF) value 4.934241 > 3.012363 critical value at 0.05 level of significance, therefore, there is existence of a long-run equilibrium relationship in four (4) co-integrating variables at 5% significance level and the growth of Nigeria economy is positively affected by micro financial intermediation variables.

ERROR CORRECTION MODEL (ECM)

The existence of long-run co-integrating provides for short-run fluctuations, in order to straighten out or absolve these fluctuations, an attempt was made to apply the Error Correction Model (ECM). Therefore, ECM is meant to tie the short-run dynamics of the co-integrating equations to their long-run statics dispositions as stated in table below:

Table 5

Error Correction Model (ECM)

Dependent Variable: D(D(RGDP))

Method: Least Squares

Date: 11/26/16 Time: 06:02

Sample (adjusted): 1994 2015

Included observations: 22 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-170.5171	295.6063	-0.576839	0.5716
D(BLSSE)	0.018303	0.013433	1.362525	0.1908
MFD	0.068203	0.026642	2.560043	0.0203
MFLA	-0.084003	0.030766	-2.730416	0.0142
ECM(-1)	-0.031683	0.046217	-0.685524	0.5023
R-squared	0.381900	Mean dependent var		71.06091
Adjusted R-squared	0.236465	S.D. dependent var		950.1744
S.E. of regression	830.2672	Akaike info criterion		16.47809
Sum squared resid	11718840	Schwarz criterion		16.72605
Log likelihood	-176.2590	Hannan-Quinn criter.		16.53650
F-statistic	2.625911	Durbin-Watson stat		2.645331
Prob(F-statistic)	0.071120			

Sources: E-view Econometrics 9.5

Above is the computed Error Correction Model (ECM) result of the relationship between the finance intermediation evidence from cottage industries variables (MFD, MFLA, and BLSSE) and the economic growth. Re-structuring the econometric equation to accommodate the Error Correction Model coefficient of the independent variables, we have.

$$RGDP = -170.5171 + 0.018303BLSSE + 0.068203MFD - 0.084003MFLA$$

The positive coefficient of BLSSE and MFD are in conformity with apriori expectation which indicates that an increase in BLSSE and MFD will have positive contribution to RGDP. While the negative sign of coefficient of MFLA is not in agreement with apriori expectation which shows that any improvement on MFLA will have a reverse effect on RGDP.

The figures from table above are quite revealing that, the coefficient estimates of the constant and explanatory variables have alternated their signs as against the long-run relationship found in the normalized co-integrated equation. This shows exactly what is needed to be done in order to absolve the short-run dynamics of relationship. Again, the significance of ECM (-1) holds that a negative and ‘statistically significant error correction model coefficient is a necessary condition for variables to be co-integrated in this study, the error correction coefficient is -0.031683. The negative sign of the coefficient satisfies one condition of statistically significant error correction model. The ECM(-1) coefficient of -0.031683 means that the speed at which its variable will converge at a long-run or attain a long-run relationship is 3% while the fact that Adjusted R – squared value 0.236465 of the estimated model shows the co-efficient of multiple determinants. It indicates that 24% of the changes that occur in the dependent variables (RGDP) are influenced by the changes in the independent variables. Hence it is a poor financial policy for boosting of RGDP in Nigeria. By implication it then means that the remaining 76% changes in the dependent variable (RGDP) is caused by changes in those explanatory variable that are not accommodated in the equation (i.e. Stochastic Error Term) and value of F-(statistics) 2.625911 suggest that the error correction model does not

significantly explain the short term changes in RGDP, BLSSE, MFD and MFLA. The MFD independent variable is having statistical significant relationship with RGDP at probability of 0.0203 while MFLA also has probability of 0.0142 which is also statistically significant and the BLSSE is not statistically significant with the probability of 0.1908. All the variables of micro intermediation put together has no significant relationship with the economic growth which is confirmed by the Probability (F-Statistics) at 0.07112 and finally the value of Durbin – Watson (DW) 2.645331 also indicates the absence of auto correlation which shows the absent of positive first order serial Correlation.

Summary of Findings

The findings of this study are as follows

1. There is no statistical significant effect of loan from conventional banks to cottage industries on economic growth in Nigeria. The alternative hypothesis is therefore rejected.
2. There is a significant relationship existing between credit from micro finance institution to cottage industry and Nigeria economic growth. The Null hypothesis is therefore rejected.
3. There is a significant effect of money deposits made by cottage entrepreneurs and low income earners to micro finance institutions. The Null hypothesis is therefore rejected.

In summary, the result of Probability (F- Statistics) shows that financial intermediation, evidence from cottage industries in Nigeria has no significant effect on Nigeria economic growth.

Discussion of Findings

The result of hypothesis one reject the alternative hypothesis, hence there is no statistical significant effect of loan from conventional banks to cottage firms on Nigeria economic growth. This does not agree with apriori expectation and may be attributed to the fact that conventional bank are not meant for cottage and small scale enterprises in Nigeria and their conditions for transaction will not be favourable for such class of people and business. And also time series data use is collected after the introduction of SAP in 1986 and there was high level of inefficiency in financial intermediation, to large extent, the cost and pricing of securities have not been positively affected by the market mechanism, various distortion are still prevalent, both in the cost of short term and long term fund and instrument. The level of interest rate at the money market does not sustain efficiency in resources use (optimum use of resources) and the allocation process (Nzotta, 2014).

The Null hypothesis of objective two(2) and three(3) were rejected and this indicates that deposits of low income earners and cottage industry /owners to micro finance institutions are having significant effect on the economic growth and the credit from micro finance institution to cottage industry owners is also having significant relationship with economic growth in Nigeria. This is an agreement with apriori expectation and in conformity with the work of Acha (2011) and Shittu (2012). Since the majority of businesses in developing countries are in the form of cottage industry, it is of economic importance to effectively and efficiently mobilize surplus funds at that level by micro finance institution for transformation into credit facility that will be extended to cottage entrepreneurs with deficit fund.

Conclusion

This study x-rays three basic micro bank financial intermediation function indicators as predictors of economic growth in Nigeria. A review of related empirical literature on the relationship between the correlates was carried out. Though a number of studies on Nigeria economy and the banking sector intermediation function have been carried out over the years but little or nothing has been done on micro finance intermediation and that is what instigated the author on this area.

The apriori expectation about the signs of the parameter estimates of MFLA and MFD are in confirmation to economic theory and conclude that the Micro Finance Deposit MFD by the Micro Surplus Economic Unit has significant relationship with the Nigerian economic growth which is indicated by the probability of 0.0203 and Micro Finance Loan and Advances by the micro deficit economic unit with probability of 0.0145 shows that it has a significant relationship with the Nigerian Economic Growth. These results are in conformity with the conclusions of other articles studied empirically e.g the study of Shittu (2012) which concludes that the financial intermediation has a significant impact on Economic growth in Nigeria, the work of Nwaeze, Onyedikachi and Nwabekee (2014) also concludes that the financial intermediation and Economic growth has a relationship and also in the work of Albina (2013) where he studied the financial intermediation and Economic Growth: Evidence from the Baltic countries and his hypothesis that financial development promoted economic growth is largely supported by the empirical studies. while the apriori

expectation about the sign of the parameter estimate of BLSSE is not in conformity to economic theory that deposit money bank loan to small scale enterprise has no significant relationship to RGDA with probability of 0.1908 which is above 0.05 significant level. This result is also in conformity with the conclusion of Acha (2011) in his study “Does Bank financial intermediation cause growth in developing economic. That Nigerian experience” where he could not identify any significant casual relationship between bank’s savings/ credit and economic growth”. With the value of Adjusted R-Squared, it is concluded that 24% changes in RGDP in Nigeria is influenced by the finance intermediation, evidenced from cottage industries and also with the value of Prob.(F. Statistic) at 0.07112, it is therefore concluded that financial intermediation, evidence from cottage industry has no significant relationship with Nigerian economic growth.

Recommendation

Considering the positive contributions of the micro economic unit (MEU) in Nigeria. I am recommending that all the bodies (government, CBN, micro finance Banks) involve in micro financial intermediation should be more proactive and strategic in ensuring that their surplus cash should be deposited in the bank. And also ensure availability of cash for investment for micro deficit economic unit. Both the micro – finance bankers and the micro – finance regulatory bodies should in the course of micro – finance intermediation formulate better policies appropriate strategic and excellent business forms that will favour both low income class and cottage entrepreneurs both in theory and practice as this is the easiest way to facilitate economic growth and development of developing nations.

The function of the microfinance bank does not stop with allocation of credit to micro deficit economic unit (MDEU) for funding of project after appraisal, it includes supervision and the implementation of project by requesting for progress and project reports and provision of technical and management advice to the investors since most of them are not exposed to the technicality involved.

The monetary authorities should be using their credit guidelines to direct and or mandate banks mostly micro – finance banks to channel their mobilized savings to priority sectors of cottage industries.

Exposure of the micro-business entrepreneurs on the need to making use of micro-finance institutions, both in depositing and borrowing of fund in alternative to conventional banks

In dealing with these cottage entrepreneurs, Banks should ensure simplicity of operation, including formalities involved. This will ensure that dealings with intermediaries don’t require specialized skill.

Nigerian government should be encouraging cottage entrepreneurship and small business development by making such firms tax free at early stage and stop imposing unnecessary levies on them, at the same time ensure provision of social amenities, like water, road, electricity to them. At last the government should encourage the rural banking.

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