

MICROFINANCE BANKS AND THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA: *An empirical Analysis (2000-2015)*

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Abstract: Small and Medium Scale Enterprises (SMEs) have been recognized worldwide as the bedrock of any nation's industrialization. Apart from generating more than 50% of employment in industrialized countries, the fact also remains that they are very close to the grassroots and therefore, foster a lot of rural development. Thus, the contributions of SMEs to economic growth and development have been recognized in Nigeria.

Ofoegbu, Akanbi & Joseph (2013) posit that SMEs are the panacea for the economic development of many developing countries including Nigeria. They argue that interest on SMEs would contribute to creation of jobs, reduction in income disparity, production of goods and services in the economy, as well as providing a fertile ground for skill development and acquisition. In addition, it serves as a mechanism for backward integration and a vehicle for technological innovation and development especially in modifying and perfecting emerging technological breakthroughs. SMEs contribute to improved living standards, bring about substantial local capital formation and achieve high level of productivity and capability.

Keywords: Small and Medium Scale Enterprises (SMEs), rural development, economic development.

1. INTRODUCTION

In Nigeria, one of the greatest obstacles that SMEs have to grapple with is access to funds. This is further compounded by the fact that even where credit facilities are available, they may not be able to muster the required collateral to access such. This situation has led invariably to many of them closing shop, resulting in the loss of thousands of unskilled, semi and skilled jobs across the country. Microfinance emerged as a noble substitute for informal credit and an effective and powerful instrument for poverty reduction among people, who are economically active, but financially constrained and vulnerable in various countries.

Micro-finance covers a broad range of financial services including loans, deposits and payment services and insurance to the poor and low-income households and their micro enterprises. The development of SMEs via effective financing options has stemmed debate and growing interest among researchers, policy makers and entrepreneurs, recognizing the immense contribution of the subsector to economic growth.

SMEs constitute the driving force of industrial growth and development. This is basically due to their great potential in ensuring diversification and expansion of industrial production as well as the attainment of the basic objectives of development. Throughout the process of financial deregulation and modernization, the government and Central Bank of Nigeria have developed a number of financial services programs to target these small scale industries and local operators to encourage self-sufficiency and promote main-stream financial transactions. However, these SMEs assistance programs initiated by the government over the years have failed to yield the desired result (Yumkella & Vinanchiarachi, 2003). The reason behind the failure is due to the myriad of challenges faced by the SMEs which include

lack of long term financing; inappropriate management skills; low market access; lopsided legislation; and dearth of adequate infrastructure (Lawson, 2007).

In response to the failure of Small and Medium Enterprise Equity Investment Scheme (SMEEIS) initiated in 2001, the government of Nigeria decided to introduce Micro-finance banks to bridge the gap between the commercial banks and small and medium business owners. According to the Central Bank of Nigeria, the Nigerian formal financial system, consisting largely of commercial banks, only caters to about 35 percent of the economically active population, therefore leaving 65 percent of the population to be serviced through NGO's (MFIs), money lenders, friends, relations and credit unions which are unregulated and problematic.

After wide consultation with stakeholders, the CBN produced the microfinance policy in December 2005 to ensure provision of financial services to the lower economic segments traditionally not catered to by the conventional financial institutions. This category of financial services is distinguished from other financial products by virtue of their characteristics like small size of loans, absence of asset-based collateral and simplicity of operations. Across developing countries, SMEs are turning to MFBs for an array of financial and non-financial services. The reason is because access to sustainable financial services enables owners of micro enterprises to finance income, build assets, and reduce their vulnerability to external shocks (Ehigiamusoe, 2005).

Microfinance institutions available in the country prior to 2005 were not able to adequately address the gap in terms of credit, savings and other financial services. As reported by the CBN, the share of micro credit as a percentage of total credit was 0.9%, while its contribution to GDP was a mere 0.2% (CBN, 2005). The indispensable role of finance to the growth and performance of SMEs and the adoption of microfinance as the main source of financing SMEs in Nigeria therefore makes it imperative to study the extent to which microfinance can enhance SME growth and performance.

OBJECTIVES OF THE STUDY

The study seeks to examine the effects of loans and advances from Micro-finance banks on the growth of SMEs in Nigeria. Specific objectives include:

1. To evaluate the extent to which Macro-finance banks have met the financing needs of SMEs in Nigeria.
2. To examine the extent to which loans and advances from Macro-finance banks have influenced SMEs' contribution to Nigerian's GDP.
3. To evaluate the extent to which loans and advances from Macro-finance banks influence SMEs growth in Nigeria.

2. LITERATURE REVIEW

In the developing world, Small and Medium Scale Enterprises (SMEs) are critical for inclusive economic growth. These vibrant businesses broaden opportunity, increase productivity, create jobs, and help alleviate poverty. In developed countries, SMEs represent more than half of GDP and account for nearly 2/3 of employment. Today, there are trillions of investments in dollars chasing returns around the globe. For SMEs in the developing world; however, only a trickle of capital reaches them though they are a potentially high impact and high return investment.

According to the Nigeria's national Council on Industry; an SME is define in terms of employment i.e. as one with between 10 and 300 employees. Currently small and medium sized enterprises are defined by their size. In the European Union, SMEs are defined as small or medium sized if it has not more than 250 employees and not more than 50 Million Euros turnover respectively, a balance sheet total of less than 43 Million Euro and if not more than 25% of the shares of such an enterprise are in the ownership of another enterprise. The Small and Medium Industries Equity Investment Scheme(SMIEIS) in Nigeria, defines small and medium enterprises(SMEs) as "enterprises with a total capital employed of not less than N1.5 million, but not exceeding N200 million, including working capital, but excluding cost of land and/or with a staff strength of not less than 10 and not more than 300".

Small scale business, small scale industry and small scale entrepreneurship are used interchangeable to mean the same thing as small scale industry firm. It is deliberate to refer to the operational definition. In Nigeria and world-wide, there seem to be specific definition of small scale business. Different author, scholar, and scholars, and school have different

ideals as to the different in capital outlay. Number of employee, sales turnover, fixed capital Investment, available plant and machinery, market share and the level of development, these feature equally vary from one country to the other.

Thus in general, the specific characteristic/criteria used in describing small scale business are as follows:

- i. The number of people/person employed is usually a small business, because small numbers of people are employed.
- ii. Annual business turnover: because initial capital is low, the annual turnover will also be low.
- iii. Local operation: for most small firm, the area of operation is local. The employee lives in the community in which the business is located.
- iv. The sales value is manual.
- v. Financial strength is relatively minimal.
- vi. Managers are independent, and they are responsible only to themselves.
- vii. The managers are also the owner.
- viii. The owner of the business actually participates in all aspect of the management (that is, the management of the enterprises is personalized.)
- ix. They have relatively small market when compare to their industries.
- x. The amounts of employee are relatively small when compared to the Biggert companies in a similar venture.
- xi. The capital is mainly supplied by an individual or small group of individual/person or shareholders.
- xii. They usually have one, but many have several shop locations all in the same city or metropolitan areas.

There are many enterprises in Nigeria categorized as small business. Most of them are in commercial sectors and there is also a trend now toward the server industry hold, restaurant and fast food to mention but a few.

Nature of Microfinance Bank

The Central Bank of Nigeria recently introduced the Microfinance Policy, Regulatory and Supervisory Framework for Nigeria to empower the vulnerable and poor people by increasing their access to factors of production, primarily capital. To achieve the goals of this phase of its banking reforms agenda, the apex bank seeks to re-brand and re-capitalise hitherto community banks, to come under two categories of microfinance banks. They are MFBs licensed to operate as a unit within local governments and the other licensed to operate in the state or the federal capital territory with a minimum paid up capital base and shareholders' funds of ₦20 million and ₦1 billion respectively. Microfinance is defined as a development tool that grants or provides financial services and products such as very small loans, savings, micro-leasing, micro- insurance and money transfer to assist the very or exceptionally poor in expanding or establishing their businesses (Robinson, 2003).

Microfinance is mostly used in developing economies where SMEs do not have access to other sources of financial assistance (Robinson, 1998). That is microfinance recognize poor and micro entrepreneurs who are excluded or denied access to financial services on account of their inability to provide tangible assets as collateral for credit facilities (Jamil, 2008). The main objective of micro credit according to Maruth, et al., (2011) is to improve the welfare of the poor as a result of better access to small loans that are not offered by the formal financial institutions. Kolawole (2013) states that microfinance bank helps to generate savings in the economy, attract foreign donor agencies, encourage entrepreneurship and catalyse development in the economy.

The establishment of microfinance banks is to serve the following purposes according to Central of Nigeria, (2005); provide diversified, affordable and dependable financial services to the active poor; mobilize savings for intermediation; create employment opportunities and increase the productivity of the active poor in the country; enhance organized, systematic and focused participation of the poor in the socio-economic development and resource allocation process; provide veritable avenues for the administration of the micro credit programmes of government and high net worth individuals on the non-recourse case basis.

Microfinance Bank and SMEs Growth

Access to finance is only key to SMEs growth globally, Nigeria inclusive. In Nigeria, financial inclusion has been recognized as an essential tool for SMEs development. Lack of access to financial institutions also hinders the ability for entrepreneurs in Nigeria to engage in new business ventures, inhibiting economic growth and often the sources and consequences of entrepreneurial activities are neither financially nor environmentally sustained. Idowu, (2008) agrees that access to loans is one of the major problems facing SMEs in Nigeria. Diagne and Zeller (2001) also argue that insufficient access to credit by the poor may have negative consequences for SMEs and overall welfare. Access to credit further increases SMEs risk-bearing abilities; improve risk-copying strategies and enables consumption smoothing overtime.

The idea of creating Micro Finance Institutions (MFIs) is to provide an easy accessibility of SMEs to finance/ fund particularly those which cannot access formal bank loans. Microfinance banks serve as a means to empower the poor and provide valuable tool to assist the economic development process. Kolawole (2013) is of opinion that the promotion of micro enterprises in developing countries is justified because of their abilities to foster economic development. The main objective of micro credit according to Sunitha,(2010) is to improve the welfare of the poor as a result of better access to small loans that are not offered by the formal financial institutions.

CBN and Microfinance Policy

The Central Bank of Nigeria has put in place the following strategic measure to license and regulate the establishment of micro finance banks as well as promoting the establishment of NGO based micro finance institutions. In fact a lot of funds by many NGO channeled towards micro finance were undocumented. Under the current dispensation, the bank has put in place a well co-ordinated policy meant for NGOs which will equally have a great impact on micro activities.

The state and local Governments will be encouraged to participate in micro finance industry by engaging them to devote at least one percent of their annual budgets to micro credit initiatives which would be micro banks. The regulatory institutions for the micro finance banks would be strengthened and a campaign for transparency, professionalism and good governance would be pursued with vigor.

Statutory Policies for Promoting SMEs in Nigeria

With the attainment of political independence, Nigeria embarked upon an industrialization policy of import substitution, which encouraged substantially large scale industries that turned out to be capital intensive. In adopting the policy, it was expected that a high level of local value added would be achieved, with resultant savings in foreign exchange and achievement of technology transfer. This expectation however, turned out to be a mirage, as most of the companies established under this policy turned out to be mere assembling and packaging plants with insignificant local raw materials input and very little local value added. In fact, rather than import substitution and technology transfer, what has been achieved from the operations of these plants was an outflow, which was encouraged by an unexpected level of foreign exchange inflow from the export of crude oil.

Banjoko (2009) opines that, the first phase of Nigerian industrial policy seriously neglected providing a realistic basis for the development of indigenous capability that is so crucial to any self-sustaining industrialization programme. No wonder after a decade and a half of active pursuit of import substitution policy, it had gulped much more foreign exchange than out the principal objectives of government for the promotion and development of small scale industries. These intended objectives include: The creation of employment opportunities; Mobilization of local resources; Mitigation of rural-urban migration and a more even distribution of industrial enterprises throughout the country.

Some micro lending institutions established to enhance capacity and development of SMEs were identified by Ogechukwu (2006) as including the defunct Nigerian Bank for Commerce and Industry (NBCI), National Economic Reconstruction Fund (NERF), and the National Export and Import Bank (NEIB). Others are the Bank of Industry (BOI), Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), National Poverty Eradication Programme (NAPEP), National Economic Empowerment and Development Strategies (NEEDS), Small and Medium Industries Equity Investment Scheme (SMIEIS), Small and Medium Enterprises Credit Guarantee Scheme (SMECGS), and the Microfinance Development Fund (MDF).

The Nigerian Bank for Commerce and Industry (NBCI)

In 1973, an Act was made to establish the Nigerian Bank for Commerce and Industry to provide capital for medium and long-term investments to indigenous bodies and persons engaged in industry and commerce and for matters connected therewith.

The principal functions of the bank include;

- (a) provide equity capital and funds by way of loans to indigenous persons, institutions and organizations for medium and long term investments in industry and commerce at such rates and upon such terms as may be determined by the Board in accordance with the policy directed by the President;
- (b) Engage and participate in such other banking and commercial business as may be directed by the Minister.

Also, without prejudice to the generality of the foregoing, the Bank shall in particular have power to engage in all aspects of merchant banking, particularly, confirmation of bills and financial obligations of third parties and acceptance and discounting of bills; underwrite such stocks, shares and debentures as are issued in furtherance of the policy of the Government; purchase and sell stocks and shares quoted on the Nigerian Stock Exchange; provide guarantees, including guarantees in respect of export credit and letters of credit issued by licensed banks; accept term deposits from the public, financial institutions, trust funds, the post office and such other bodies as the Board may direct; and provide cheque facilities for its customers.

The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN)

This agency was established in 2003, to facilitate the promotion and development of a structured and efficient Micro, Small, and Medium Enterprises (MSMEs) Sector that will enhance sustainable economic development in Nigeria. The Agency is the apex and coordinating institution for all matters relating to starting, resuscitating and growing MSMEs in Nigeria. The Agency is also saddled with the responsibility of contributing to the attainment of Vision 20-2020 and the cluster development approach of the Ministry of Trade and Investment. The small and medium enterprises development agency provides the following services: Generation and dissemination of Business information; Business Awareness creation; Business Development Services; Access to Market and Finance; Advancing Entrepreneurship Education; Stimulating Entrepreneurship/Enterprise Development; Enterprise cooperation and clustering and Policy Advocacy for improved Business Operating Environment,

The agency has overall objective of alleviating poverty, expanding gainful employment opportunities, wealth creation and sustainable economic growth and development.

Bank of Industry

The Nigerian Industrial Development Bank (NIDB), the National Economic Reconstruction Fund (NERFUND) and the Nigerian Bank for Commerce and Industry (NBIC) have been brought together to form the Bank of Industry (BOI) in October 2001.

The Nigeria Industrial Development Bank (NIDB) was established in 1964 under the guidance of the World Bank with the International Finance Corporation (IFC) holding 75% equity and producing the first Managing Director. The equity structure was diluted in 1976 as part of the indigenization decree.

BOI's vision is to be a leading self-sustaining Development Finance Institution, operating under sound management and banking principles that would promote the emergence and development of a virile competitive industrial sector in Nigeria. The core mandate of Bank of Industry (BOI) is to provide financial assistance for the establishment of large, medium and small projects; as well as expansion, diversification and modernization of existing enterprises; and rehabilitation of ailing industries.

The Bank of Industry has four subsidiaries from its merger:

- Leasing Company of Nigeria (LECON)
- NIDB Trustees Limited (NTL)
- NIDB Consultancy and Finance Limited (NIDB Consult)
- Industrial and Development Insurance Brokers (IDIB)

The Small and Medium Industries Equity Investment Scheme (SMIEIS)

The Banker's Committee is a body constituted by representatives of banks in Nigeria. The scheme was approved at their 246th meeting on December 21, 1999.

According to the banks' representatives, this was a response to President Obasanjo's concern and policy measures for the promotion of Small and Medium Industries (SMI) as a vehicle for rapid industrialization, sustainable economic development, poverty alleviation and employment generation. The Scheme requires all banks in Nigeria to set aside 10% of their profit before tax (PBT) for equity investment in small and medium scale industries. The scheme commenced on June 19th 2001.

The 10% of the Profit Before Tax (PBT) to be set aside annually shall be invested in small and medium industries as the banking industry's contribution to the Federal Government's efforts towards stimulating economic growth, developing local technology and generating employment. The scheme among other things assists the establishment of new, viable SMI projects, thereby stimulating economic growth, development of local technology, promotion of and creation of employment & indigenous entrepreneurship.

The funds will be available for projects in the real sector of the economy which include agro-allied, information technology and telecommunications, manufacturing, educational establishments, services (directly related to production in the real sector to enhance production), tourism and leisure, solid minerals, construction and any other activity as may be determined from time to time by the banker's committee. To qualify for the scheme, an enterprise, in addition to being engaged in any of the activities listed above, must have a maximum asset base of ₦200 million excluding land and working capital; with the number of staff employed by the enterprise not less than 10 or more than 300. The enterprise must be registered as a limited liability company with the Corporate Affairs Commission and comply with all relevant regulations of the Companies and Allied Matters Act(1990) such as filing of annual returns including audited financial statements. Comply with all applicable tax laws and regulations and render regular returns to the appropriate authorities. Timing of investment exit shall be a minimum of 3 years.

Micro-finance Banks

The practice of microfinance in Nigeria is culturally rooted and dates back several decades. The traditional microfinance institutions provide access to credit for the rural and urban, low-income earners. In order to enhance the flow of financial services to Nigerian rural-urban low income earners and small business enterprises, Government has, in the past, initiated series of publicly-financed micro / rural credit programmes and policies. Notable among such programmes were the establishment of Nigerian Agricultural and Co-operative Bank Limited (NACB), the Peoples Bank of Nigeria (PBN), the Community Banks etc.

There was still a huge untapped potential for financial intermediation at the micro and rural levels of the Nigerian economy despite attempts by Government in the past to fill this gap, through supply-driven creation of financing institutions and instruments which failed, due to the poor capitalization and restrictive regulation. The micro-finance banks was later established in line with micro-finance policy frameworks which shall be adequately capitalized, appropriately regulated and supervised to address the need of financing at the micro levels of the economy.

The introduction of the microfinance policy transformed the then community banks into micro-finance banks with minimum capital requirement of ₦20 Million for a unit based and ₦1.0 Billion for multiple branches operation in a state.

The specific objectives of the policy are the following; Make financial services accessible to a large segment of the potentially productive Nigerian population which otherwise would have little or no access to financial services; Promote synergy and mainstreaming of the informal sub-sector into the national financial system; Enhance service delivery by microfinance institutions to micro, small and medium entrepreneurs; Contribute to rural transformation and Promote linkage programmes between universal / development banks, specialized institutions and micro-finance banks.

Presently, micro-finance banks in Nigeria have not fully achieved the above objectives as a result of being inadequately capitalized, high interest rate, stringent criteria for giving loans to small enterprises as a result of high mortality rate among others, but are generally contributing immensely to the survival of SMEs in Nigeria.

3. SUMMARY

SMEs play a very important role in developing economies. This view appears to be supported by Chijah & Forchu (2010) when they argue that the promotion of micro enterprises in developing countries is justified in their abilities to foster economic growth, alleviate poverty and generate employment. The benefits of SMEs cannot be overemphasized they include; contributions to the economy in terms of output of goods and services, and creation of jobs at relatively low capital cost. It is a vehicle for the reduction of income disparities thus developing a pool of skilled or semi-skilled workers as a basis for the future industrial expansion.

The Central Bank of Nigeria recently introduced the Microfinance Policy, Regulatory and Supervisory Framework for Nigeria to empower the vulnerable and poor people by increasing their access to factors of production, primarily capital. To achieve the goals of this phase of its banking reforms agenda, the apex bank seeks to re-brand and re-capitalise hitherto community banks, to come under two categories of microfinance banks. They are MFBs licensed to operate as a unit within local governments and the other licensed to operate in the state or the federal capital territory with a minimum paid up capital base and shareholders' funds of N20 million and N1 billion respectively.

The Nigerian government has used different approaches over time to address the real problems that exist in giving a more equitable distribution of finance for the needs of SMEs. Distinctively, is the Central Bank of Nigeria, the Nigerian Bank for Commerce and Industry (NBCI), Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), Bank of Industry, the Small and Medium Industries Equity Investment Scheme (SMIEIS), Commercial Banks and Micro-finance banks. These institutions over time have provided finance to SMEs. But the question is – how adequate are their financing compare to the actual needs of these SMEs in Nigeria.

4. METHODOLOGY AND DATA

The study used the ex-post facto research design. This design was used since the relevant data for this research are collected from secondary sources. Data collected was analysed using simple linear regression to highlight the relationships between loans and advances from Micro-finance banks and SMEs' growth for the period under review. The statistical techniques used for the study is the Ordinary Least Square techniques.

SOURCE OF DATA

The data for this study were obtained mainly from secondary sources. The relevant data used for analysis was obtained from Statistical Bulletins of the Central Bank of Nigeria, the National Bureau of Statistics and the Nigeria Stock Exchange covering the periods of 2000 to 2015.

POPULATION OF THE STUDY

The population of the study include all SMEs and Microfinance Banks in Nigeria from the period 2000 - 2015. This population is taken since data collected from the Statistical Bulletins of the Central Bank of Nigeria (CBN), the National Bureau of Statistics and the Nigeria Stock Exchange are provided in aggregate. CBN (2015) report estimates the population of Micro-finance banks in Nigeria at 5,345 as at 2015.

SAMPLE SIZE

The sample size is the same as the population of the study. This includes all Microfinance Banks in Nigeria (Estimated at about 5,345 as at 2015) from the period 2000 - 2015. This is because data collected from the Statistical Bulletins of the Central Bank of Nigeria, the National Bureau of Statistics and the Nigeria Stock Exchange are provided in aggregate.

METHOD OF DATA ANALYSIS

The study estimate parameters in the model using the ordinary Least Square regression techniques vide the E-view Version 8. First, we estimate the relationship between SMEs' Financing Needs and Micro-finance Loans and Advances, Inflation Rate & Interest Rate. Second, we estimate the relationship between SMEs' Contribution to GDP and Micro-finance Loans and Advances, Inflation Rate & Interest Rate. Third, we estimate the relationship between SMEs' Growth (proxied by sales) and Micro-finance Loans and Advances, Inflation Rate & Interest Rate.

Variables Definition and Measurement

The following variables are considered in the models. Table 3.1 Variables Definition and Measurements

Variables	Definition	Measurements
SMEFN	Small & Medium Enterprises Financing Needs	This represents amount of loans and advances requested by Small & Medium Enterprises from Micro-finance banks in period t (Olowe et. al., 2013 and Eze & Opala, 2015).
SMECGDP	Small & Medium Enterprises Contribution to Gross Domestic Products in Nigeria	This represents the contributions of Small & Medium Enterprises to Nigeria's Gross Domestic products in period t (Olowe et. al., 2013 and Eze & Opala, 2015).
SMEASG	Small & Medium Enterprises Asset Growth	This is computed as the Logarithm of total Asset of Small & medium Enterprises in Nigeria in period t (Olowe et. al., 2013).
MFBLA	Micro-finance Banks Loans and Advances	This represents Loans and Advances granted to Small & Medium Enterprises in Nigeria in period t (Olowe et. al., 2013 and Eze & Opala, 2015).
INFR	Inflation Rates	Inflation rates in Nigeria in period t. This is adopted as moderating variable in the Model (Eze & Opala, 2015).
INTR	Interest Rates	Interest rates in Nigeria in period t. This is adopted as moderating variable in the Model (Eze & Opala, 2015).

Source: Olowe, F. T., Moradayo, O. A. and Babalola, O. A. (2013) and Eze, T. C. and Opala, C. S. (2015).

Model specification

The regression model takes guide from the work of Olowe et. al., (2013) and Eze and Opala (2015) but was modified as:

$$Y_{.t} = \alpha_0 + \alpha_1 X_{.t} + \alpha_2 X_{.t} + \alpha_3 X_{.t} + \varepsilon_t \quad \dots 3.1$$

Where, $Y_{.t}$ = Dependent variable

$X_{.t}$ = Independent variable

α_0 = The intercept term

$\alpha_1 \dots \alpha_n$ = Coefficients

ε_t = disturbance term

Model 1

$$SMEFN_t = \alpha_0 + \alpha_1 MFBLA_t + \alpha_2 INFR_t + \alpha_3 INTR_t + \varepsilon_t \quad \dots 3.2$$

Where; α_0 = the intercept term

α_1, α_3 = the regression parameters (i.e. coefficient of explanatory and control variable)

SMEFN = SMEs Financing Needs in period t

MFBLA = Micro-finance Banks Loans and Advances in period t

INFR = Inflation rate in period t

INTR = Interest rate in period t

t = time series dimension (ranges from I to T)

ε_t = disturbance term

Model 2

$$\text{SMECGDP}_t = \alpha_0 + \alpha_1 \text{MFBLA}_t + \alpha_2 \text{INFR}_t + \alpha_3 \text{INTR}_t + \varepsilon_t \quad \dots 3.3$$

Where; α_0 = the intercept term

$\alpha_1, \dots, \alpha_3$ = the regression parameters (i.e. coefficient of explanatory and control variable)

SMECGDP = SMEs Contribution to GDP in period t

MFBLA = Micro-finance Banks Loans and Advances in period t

INFR = Inflation rate in period t

INTR = Interest rate in period t

t = time series dimension (ranges from I to T)

ε_t = disturbance term

Model 3

$$\text{SMEAS}_t = \alpha_0 + \alpha_1 \text{MFLA}_t + \alpha_2 \text{GDP}_t + \alpha_3 \text{INFR}_t + \alpha_4 \text{INTR}_t + \varepsilon_t \quad \dots 3.4$$

Where; α_0 = the intercept term

$\alpha_1, \dots, \alpha_4$ = the regression parameters (i.e. coefficient of explanatory and control variable)

SMEASG = SMEs Asset growth in period t

MFBLA = Micro-finance Loans and Advances in period t

GDP = Gross Domestic Products in period t

INFR = Inflation rate in period t

INTR = Interest rate in period t

t = time series dimension (ranges from I to T)

ε_t = disturbance term

5. DATA PRESENTATION AND ANALYSIS**DATA PRESENTATION**

Data used for the study are Total Assets of Microfinance Banks, Gross Domestic Products SMEs Contribution to GDP, Micro-finance Banks' Loans and Advances, SMEs Financing Needs, Inflation Rates and Interest Rates for the period 2000 -2015. They are presented in table 4.1.

Table 4.1: Total Asset of SMEs, Gross Domestic Products, Small and Medium Enterprises Contribution to Gross Domestic Products, Micro-finance Banks Loans and Advances, Small and Medium Enterprises Financing Needs, Inflation Rate and Interest Rate for the period 2000 -2015, (Figures are in Billions of Naira except for Inflation and Interest rates stated in percentage)

YEAR	TASMEs	GDP	SMECGDP	MFBLA	SMEFN	INFR	INTR
2000	12014.70	6713.57	2634.62	31666.60	2811355.00	6.90	21.55
2001	4884.40	6895.20	3835.51	31314.00	3122516.00	18.90	21.34
2002	15463.50	7795.76	4732.21	41310.90	3515215.00	12.90	30.19
2003	28689.20	9913.52	5214.20	622420.00	3800000.00	14.00	22.88
2004	34162.30	11411.07	5332.12	922456.00	7878880.00	15.00	20.82
2005	82866.90	14610.88	7324.12	988980.00	8544000.00	17.80	19.49
2006	55145.80	18564.59	9345.14	882420.00	6720000.00	8.20	18.70

2007	75549.80	20657.32	10888.47	688900.00	4999990.00	5.40	18.24
2008	122752.80	24296.33	15224.11	665120.00	4998780.00	11.60	21.18
2009	151610.00	24794.24	20000.22	781350.00	5800000.00	12.50	19.71
2010	170338.90	54613.26	21442.33	5168050.00	11500000.00	11.80	22.51
2011	117872.10	62980.40	23988.77	6192800.00	15000000.00	10.30	22.42
2012	189293.40	71713.94	26111.00	5596320.00	18000000.00	12.10	23.78
2013	237837.60	86092.56	31002.22	5541400.00	25120000.00	8.20	24.69
2014	221652.30	89043.62	33215.11	6325351.00	26315055.00	8.60	25.40
2015	243522.50	92455.75	35022.21	6826522.00	28150210.00	9.70	26.10

Source: Central Bank of Nigeria Statistical Bulletin Various years Publications

DESCRIPTIVE STATISTICS

This statistic describe the properties of the data used in the study. The result of the descriptive statistics is shown in *table 4.2*.

Table 4.2: Results of Descriptive Statistics on the Variables Used for the study: Gross Domestic Products, Inflation Rate, Interest Rate, Micro-finance Banks Loans and Advances, Small and Medium Enterprises Contribution to Gross Domestic Products, Small and Medium Enterprises Financing Needs and Total Assets of SMEs for the Period 2000 – 2015

	GDP	INFR	INTR	MFBLA	SMECGDP	SMEFN	TASMEs
Mean	37659501	11.49375	22.43750	2.58E+09	15957026	1.10E+10	110228.5
Median	22476825	11.70000	21.98500	9.02E+08	13056294	7.30E+09	100369.5
Maximum	92455750	18.90000	30.19000	6.83E+09	35022216	2.82E+10	243522.5
Minimum	6713570.	5.400000	18.24000	31314000	2634623.	2.81E+09	4884.400
Std. Dev.	32517456	3.738176	3.090563	2.73E+09	11328169	8.81E+09	83826.29
Skewness	0.642702	0.386923	0.873953	0.530830	0.388838	0.934588	0.284670
Kurtosis	1.752993	2.522996	3.543327	1.407610	1.689196	2.379015	1.693392
Jarque-Bera	2.138192	0.550914	2.233588	2.441885	1.548657	2.586296	1.354249
Probability	0.343319	0.759225	0.327327	0.294952	0.461013	0.274406	0.508076
Sum	6.03E+08	183.9000	359.0000	4.13E+10	2.55E+08	1.76E+11	1763656.
Sum Sq. Dev.	1.59E+16	209.6094	143.2737	1.12E+20	1.92E+15	1.16E+21	1.05E+11
Observations	16	16	16	16	16	16	16

Source: Author's Computation using E-view Version 8

The results of the descriptive statistics in table 4.2 show that the average (mean) value of GDP for the period under review is ₦37.66 Billion. The minimum GDP for the period under review of ₦6.71 Billion was recorded in year 2000; while the maximum value of ₦92.46 Billion was recorded in year 2015. Similarly, the average inflation rate for the period under review was 11.49 percent. The minimum inflation rate of 5.4 percent was recorded in year 2007; while the maximum of 18.9 percent was recorded in year 2001.

Results in table 4.2 further shows an average (mean) value of interest rate during the period under review was 22.44 percent. The minimum interest rate of 18.24 percent was recorded in year 2007; while the maximum value of 30.19 percent was recorded in year 2002. Similarly, on the average the value of Micro-finance banks' loans and advances to SMEs for the period under review was ₦2.58 Billion. The minimum loans and advances of ₦31.66 Billion was recorded in year 2001; while the maximum value of ₦68.3 Billion was recorded in year 2015.

In the same vein, results in table 4.2 shows an average value of SMEs' contribution to GDP was ₦15.9 Billion. The minimum value of SMEs' contribution to GDP of ₦2.6 Billion was recorded in year 2000; while the maximum value of

₦35.02 Billion was recorded in year 2015. Moreover, the average value of SMEs financing needs for the period under review was ₦11.6 Billion. The minimum SMEs' financing needs of ₦2.8 Billion was recorded in year 2000; while the maximum value of ₦28.15 Billion was recorded in year 2015. Similarly, the average value of SMEs' total assets for the period under review was ₦10.1 Billion. The minimum assets value of ₦4.88 Billion was recorded in year 2001; while the maximum value of ₦243.5 Billion was recorded in year 2015. This statistics thus, indicates the largeness of SMEs asset base in Nigeria.

UNIT ROOT TEST

The Unit root test is conducted to ensure that data used for analysis are stationary to avoid spurious results. The results of the tests are reported in table 4.3.

Table 4.3: Results of the Unit Root Test on the Variables SMEFN, MFBLA, SMECGDP, TAMFB, GDP, INFR and INTR

Variable	ADF-Stat	5% Critical Value	P-Value
SMEFN(-1)	-2.454824	-3.098896	0.0303
MFBLA(0)	-3.144380	-3.098896	0.0462
SMECGDP(-1)	-2.535643	-3.098896	0.0261
TASMEs(-1)	-4.010147	-3.175352	0.0134
GDP (0)	-3.303041	-3.098896	0.0350
INFR (0)	-3.419496	-3.081002	0.0271
INTR (-1)	-4.049678	-3.119910	0.0101

Source: Author's Computation using E-view Version 8

Table 4.3 indicates that the ADF statistic of Micro-finance banks' loans and advances, GDP and Inflation rates at raw are -3.144380, -3.303041 and -3.419496; and their corresponding P-values are 0.0462, 0.0350 and 0.0270 respectively. Therefore, the null hypothesis that the data series have unit root at raw level is rejected. Hence, Micro-finance banks' loans and advances, GDP and Inflation rates are I(0) variable. But SMEs financing needs, SMEs contribution to GDP, Total assets of SMEs and interest rates have ADF statistics of -2.454824, -2.535643, -4.010147 and -4.049678 respectively at first difference, while their associated P-values are 0.0303, 0.0261, 0.0134 and 0.0101 respectively. This implies that SMEs financing needs, SMEs contribution to GDP, Total assets of SMEs and interest rates are I(1) variables.

DATA ANALYSIS

Data collected was analysed using the ordinary least square regression techniques vide the E- view Version 8.

Hypothesis 1

Ho: The financing needs of SMEs in Nigeria have not been significantly met by Macro-finance banks.

Ha: The financing needs of SMEs in Nigeria have been significantly met by Macro-finance banks.

Table 4.4: Regression Results on the Relationship between Small and Medium Scale Enterprises Financing Needs and Micro-finance Banks Loans and Advances, Interest Rate & Inflation Rate

Dependent Variable: SMEFN
Method: Least Squares
Date: 02/24/17 Time: 12:37
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MFBLA	2.813685	0.411932	6.830464	0.0000
INFR	-1.05E+08	2.75E+08	-0.380102	0.7105
INTR	2.48E+08	3.47E+08	0.715466	0.4880
C	-6.08E+08	7.86E+09	-0.077302	0.9397

R-squared	0.853522	Mean dependent var	1.10E+10
Adjusted R-squared	0.816903	S.D. dependent var	8.81E+09
S.E. of regression	3.77E+09	Akaike info criterion	47.15005
Sum squared resid	1.70E+20	Schwarz criterion	47.34320
Log likelihood	-373.2004	Hannan-Quinn criter.	47.15994
F-statistic	23.30793	Durbin-Watson stat	0.905881
Prob(F-statistic)	0.000027		

Source: Author's computation using E-View Version 8

The result reported in table 4.4 shows that the coefficient of Micro-finance banks loans and advances, and interest rates are 2.814 and 2.480 respectively. This indicates a positive relationship with SMEs financing needs. Their corresponding P-Values are 0.0000, and 0.4880 respectively, thus indicates that while Micro-finance banks loans and advances has significant positive relationship with SMEs financing needs, interest rates has insignificant positive relationship at 5 percent level of significance. Result shows that a 1 % change/increase in Micro-finance banks loans and advances will led to an increase in the fulfilment of SMEs financing needs to the tune of 281.4%. In addition, the coefficient of inflation rate at -1.05, with a P value of 0.7105 indicates an insignificant inverse relationship with SMEs financing needs at 5%.

The R square (Coefficient of determination) at 0.8537 shows that the independent variables jointly explains variations in SMEs financing needs to the tune of 85.37%; thus, indicates a strong relationship. The Durbin Watson statistic at 0.906 indicates absence of serial correlation in the series. The coefficient of the F statistics at 23.308 and its corresponding P value at 0.0000 shows that our estimates are significant at 1%. The author therefore, rejects the null hypothesis and concludes that the financing needs of SMEs in Nigeria have been significantly met by Macro-finance banks.

Hypothesis 2

Ho: Loans and advances from Macro-finance banks have not significantly influenced SMEs' contribution to Nigerian's GDP.

Ha: Loans and advances from Macro-finance banks have significantly influenced SMEs' contribution to Nigerian's GDP.

Table 4.5: Regression Results on the Relationship between Small and Medium Scale Enterprises Contribution to Gross Domestic Products and Micro-finance Banks Loans and Advances, Interest Rate & Inflation Rate

Dependent Variable: SMECGDP
Method: Least Squares
Date: 02/24/17 Time: 12:38
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MFBLA	0.003693	0.000533	6.921932	0.0000
INFR	-338814.0	356253.0	-0.951049	0.3603
INTR	-60268.79	448772.3	-0.134297	0.8954
C	11670504	10183547	1.146016	0.2741

R-squared	0.851523	Mean dependent var	15957026
Adjusted R-squared	0.814403	S.D. dependent var	11328169
S.E. of regression	4880279.	Akaike info criterion	33.85162
Sum squared resid	2.86E+14	Schwarz criterion	34.04477
Log likelihood	-266.8130	Hannan-Quinn criter.	33.86151
F-statistic	22.94016	Durbin-Watson stat	1.293429
Prob(F-statistic)	0.000029		

Source: Author's computation using E-View Version 8

The result reported in table 4.5 shows that the coefficient of Micro-finance banks loans and advances is 0.0037 with a corresponding P –Value of 0.0000. This result indicates that Micro-finance banks loans and advances have a significant positive relationship with SMEs contribution to GDP at 1 percent level of significance. However, inflation and interest rates have negative and insignificant relationship with SMEs contribution to GDP at 5 percent level of significance.

The R square (Coefficient of determination) at 0.851523 shows that the independent variables jointly explains variations in SMEs contribution to GDP to the tune of 85.15%; thus, indicates a strong relationship. The Durbin Watson statistic at 1.2934 indicates absence of serial correlation in the series. The coefficient of the F statistics at 22.940 and its corresponding P value at 0.0000 shows that our estimates are significant at 1%. The author therefore, rejects the null hypotheses and concludes that loans and advances from Micro-finance banks significantly influence SMEs contribution to GDP.

Hypothesis 3

Ho: Loans and advances from Macro-finance banks negatively influence SMEs growth in Nigeria.

Ha: Loans and advances from Macro-finance banks positively influence SMEs growth in Nigeria.

Table 4.6: Regression Results on the Relationship between Small and Medium Scale Enterprises Growth and Micro-finance Banks Loans and Advances, Gross Domestic products, Interest Rate & Inflation Rate

Dependent Variable: TASMEs				
Method: Least Squares				
Date: 02/27/17 Time: 09:32				
Sample: 2000 2015				
Included observations: 16				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MFBLA	-0.026404	0.009989	-2.643472	0.0229
GDP	0.004818	0.000876	5.498457	0.0002
INFR	2789.832	2011.968	1.386619	0.1930
INTR	-4343.103	2378.664	-1.825858	0.0951
C	62953.00	53612.54	1.174222	0.2651
R-squared	0.931135	Mean dependent var		110853.5
Adjusted R-squared	0.906093	S.D. dependent var		83021.91
S.E. of regression	25441.39	Akaike info criterion		23.37645
Sum squared resid	7.12E+09	Schwarz criterion		23.61788
Log likelihood	-182.0116	Hannan-Quinn criter.		23.38881
F-statistic	37.18328	Durbin-Watson stat		1.523892
Prob(F-statistic)	0.000002			

Source: Author's computation using E-View Version 8

The result reported in table 4.6 shows that the coefficient of Micro-finance loans and advances, and interest rate are -0.0264 and -4343.103 respectively. This indicates an inverse relationship with Total assets of SMEs. Their corresponding P –Values are 0.0229 and 0.0951 respectively, thus indicates that Micro-finance loans and advances, and interest rate have significant relationship with total assets of SMEs at 5 % and 10% level of significance respectively. In addition, the coefficient of GDP, and inflation rates are 0.004818 and 2789.832 respectively. This indicates a positive relationship with total asset of SMEs. Their corresponding P –Values are 0.0002 and 0.1930 respectively, thus indicates that while GDP has significant positive relationship with SMES assets growth at 1 percent level of significance; inflation rate has insignificant positive relationship.

The R square (Coefficient of determination) at 0.931135 shows that the independent variables jointly explains variations in SMEs asset growth to the tune of 93.11%; thus, indicates a strong relationship. The Durbin Watson statistic at 1.5239 indicates absence of serial correlation in the series. The coefficient of the F statistics at 37.183 and its corresponding P value at 0.0000 shows that our estimates are significant at 1%. The author therefore, rejects the null hypotheses and concludes that Loans and advances from Macro-finance banks positively influence SMEs growth in Nigeria.

6. DISCUSSION OF FINDINGS

Hypothesis 1 seeks to establish whether the financing needs of SMEs in Nigeria have been significantly met by loans and advances from Macro-finance banks. Findings show that Micro-finance banks loans and advances has significant positive relationship with SMEs financing needs. Result indicates that a 1 % change (increase) in Micro-finance banks loans and advances will led to an increase in the fulfilment of SMEs financing needs to the tune of 281.4% .

This finding supports Kotun & Obeg-Odoom (2009) and Brown, Earle & Lup (2004). The implication of this finding is that Micro-finance banks have contributed significantly to the growth of SMEs through the provisions of loans and advances.

The second hypothesis seeks to establish whether Loans and advances from Macro-finance banks have significantly influenced SMEs' contribution to Nigerian's GDP. Finding shows that Micro-finance bank' loans and advances have significant positive relationship with SMEs contribution to GDP.

This finding supports Hartarska & Nadolnyak (2008) and CBN (2004). The implication of this finding is that Loans and advances from Micro-finance banks have enhanced SMEs contribution to the growth of GDP in Nigeria.

Hypothesis 3 seeks to establish whether Loans and advances from Macro-finance banks positively influence SMEs growth in Nigeria. Findings show that Micro-finance loans and advances have significant relationship with growth of SMEs assets.

This finding supports NISER (2004), and Olutunla & Obamuyi (2008). The implication of this finding is that loans and advances from Micro-finance bank impacts on the growth SMEs Assets.

7. SUMMARY OF FINDINGS

The study examines the effects of loans and advances from Micro-finance banks on the growth of SMEs in Nigeria. The study specifically seeks to evaluate the extent to which Macro-finance banks have met the financing needs of SMEs in Nigeria. Secondly, to examine the extent to which loans and advances from Macro-finance banks have influenced SMEs' contribution to Nigerian's GDP and finally, to evaluate the extent to which loans and advances from Macro-finance banks influence SMEs growth in Nigeria.

Specific findings from the study indicate that the financing needs of SMEs in Nigeria have been significantly met by Macro-finance banks. Secondly, that Loans and advances from Macro-finance banks have significantly influenced SMEs' contribution to Nigerian's GDP. And thirdly, that Loans and advances from Macro-finance banks positively influence SMEs growth in Nigeria.

8. CONCLUSION

The study investigates the effects of loans and advances from Micro-finance banks on the growth of SMEs in Nigeria. Results have shown that financial services obtained from MFBs have significant positive impact on SMEs growth in Nigeria. The study indeed contributes to literature on the effects of Micro-finance banks on SMEs growth in Nigeria. Successive governments in Nigeria have always had a policy /programme for SMEs, but most of the programmes have failed to achieve sustainable growth in the SMEs sub-sector due to corruption and mismanagement. However, with the establishment of Micro-finance banks across the nation, the desired results is been achieved.

The study concludes that Micro-finance banks loans and advances have significant positive relationship with SMEs financing needs. Thus, Micro-finance banks have contributed significantly to the growth of SMEs through the provisions of loans and advances.

Secondly, Loans and advances from Macro-finance banks have significantly influenced SMEs' contribution to Nigerian's GDP. Result shows that Micro-finance bank' loans and advances have significant positive relationship with SMEs contribution to GDP.

Thus, Loans and advances from Micro-finance banks have enhanced SMEs contribution to the growth of GDP in Nigeria.

Thirdly, Micro-finance loans and advances have significant relationship with growth of SMEs assets. Hence, loans and advances from Micro-finance bank impacts on the growth SMEs Assets.

9. RECOMMENDATIONS

Based on this conclusion, the study recommends that:

1. Micro-finance Banks should be further encouraged to lighten the condition for borrowing and increase the duration of their customers' loans so that their clientele base could be increased.
2. Micro-finance Banks should further recapitalize and increase their funding to SMEs and also assist them through the provision of training on credit utilization and information on government programmes so as to further enhance SMEs growth in Nigeria.
3. Since, findings show that loans and advances from Micro-finance banks impacts positively and significantly on the growth of SMEs' Assets as well as its contribution to GDP, Supervisory authorities should further encourage Micro-finance banks to increase funding to SMEs. This will further enhance their growth into large scale businesses as well as contribution to national economy (GDP).

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