Impact of Microfinance Institutions on Small and Medium Enterprises Development: A Case of Jigawa State, Nigeria

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Abstract

The main purpose of the study was to establish the impact of microfinance institutions on the development of small and medium scale enterprises in Jigawa state. Microfinance institutions in Nigeria plays a significant role in the financial intermediation process and also in improving the living standard of poor and low income earners whom constitute over 70 percent of the Nigerian population through the provision of small credit facilities to this group. Primary source of data was employed using the questionnaire and interview methods. A descriptive analysis of the questionnaire was made and also an ordinary least square (OLS) multiple regression model was used to establish the relationship between dependent variable and independent variables. The findings revealed that most of the respondents (60%) never had access to microfinance credit. The OLS result revealed that micro financing enhances the productivity; create employment and increases income generation which had a significant relationship with the small and medium scale enterprises in Jigawa. It was recommended that government should urgently tackle the problem of infrastructure development and maintenance. These include water, good road networks and electricity which impact greater on small and medium enterprises.

Keywords: Microfinance, Small and Medium Enterprise, Poor, Development, Jigawa
Introduction

In North-Western Nigeria and particular Jigawa state, microfinance bank plays a vital role towards the sustenance of the country’s economy. Microfinance banks are small scale banks that are approved by the federal government of Nigeria through the central bank of Nigeria to give loans to entrepreneurs to boost their existing business, or to start up a new one. Micro-finance banks have help small and medium scale enterprises to increase productivity, create jobs and help to alleviate poverty in Nigeria.

The role played by Small and Medium Enterprises (SMEs) in the growth of an economy and its sustainable development is globally acknowledged (CBN, 2004). Furthermore, small and medium enterprises are believed to be the engine room for the development of any developing economy, because they form the bulk of business activities in a growing economy like that of Jigawa state in particular and Nigeria as a whole. The world economic recession and the sustained slump in oil prices posed a serious challenge on Nigeria economy which accounted for a reduction in our external Reserves and also diminished on the nation’s capacity to finance much of its development needs (Ashamu, 2014).

Microfinance institutions that have provided sufficient income and employment opportunities for the poor in the developing countries over the last decades (Bhatt and YanTang, 2001) aimed at fighting poverty. Several efforts have been put made in that direction in various countries (e.g. ACCION’s BancoSol in Bolivia; Bank Rakyat Indonesia’s Unit Desa program in Indonesia; Amanah Ikhtiar Malaysia in Malaysia; and the Grameen Bank in Bangladesh) and the experiences of these microfinance programs initiatives triggered imitation efforts, in one form or another, in many countries throughout the world. The World Bank (2001) estimated that there are more than 7,000 Microfinance Institutions (MFIs) serving some 16 million poor populaces in most of the developing nations. Similarly, as at 2006, there were about 10,000 existing MFIs worldwide serving about 64 million borrowers (Ovia, 2007). This statistic shows the growth of microfinance activities at the global environment as well as the potential of MFIs in reducing poverty incidence in developing countries cannot be denied. Moreover, the growth and development of microfinance business increased over time due to the major role played by some MFIs such as the Grameen Bank of Bangladesh and Bank Rakyat in Indonesia. These MFIs directly focused their activities mainly for the purpose of poverty reduction by providing small non collateral loan to their clients.

The case of Nigerian’s poverty which is rated among the poorest countries in the world (CIA, 2001) has compelled authorities to embraced microfinance as a means of alleviating the menace of poverty among the populace alongside other global initiatives e.g. Millennium Development Goals (MDGs) program which has poverty alleviation as one of its objectives as well as numerous programmes at various points in time. However, private small scale entrepreneurs and NGOs follow suits by establishing microfinance institutions in order to provide their contribution towards tackling the poverty menace among the populace. Microfinance institutions were established in both rural and urban
communities for the purpose of providing accessible capital to the poor and low income group who have limited access to the commercial banks. Most of these microfinance institutions are conventional in nature but integrate Islamic microfinance window for the purpose of poverty alleviation among the poor population.

Majority of the small and medium-scales enterprises (SMEs) in Jigawa are still at a low level of development, especially in terms of number of jobs, wealth and value creation. Despite the potential importance of SMEs in any economy, high mortality rate among established SMEs is a matter of major concern in developing economies. Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) noted that only 15% of newly established businesses survive the first five years in Nigeria. This is a pointer to the fact that there is a problem. The impact of micro-financing majorly should be seen in the multiplication of SMEs in Jigawa and across Nigeria. The survival of these SMEs should reflect in employment generation, engagement of available local resources, local technology utilization, improved standard of living and growing gross domestic product (GDP). The question is how many of these small businesses are transforming from the subsistence level at start-up to the stage of maturity and later expansion where they will have to employ more hands? Do the microfinance banks provide available and accessible credit facilities to SMEs? It is on this platform that this study intends to examine the impact of microfinance on the performance of small and medium scale enterprises development of SMEs operators in Jigawa state North-Western Nigeria.

Literature Review

There is no uniform or universally accepted definition of SMEs (ICA, 2009). Carpenter (2001) maintains that there is no one definition for SMEs; the concept of SMEs is defined in Nigeria and other countries based on one or all of the followings: the size or amount invested in assets excluding real estate; the annual turnover and the number of employees. In Nigeria, parameters such as asset base (excluding land), the number of workers employed and the annual turnover are used for the classification of SMEs. According to Peterson, Albaum and Kozmetsky (1986), a small business is one which is independently owned and operated and which is not dominant in its field of operation.

Microfinance is defined as the provision of financial services to the poor and low income group (Microfinance Gateway, 2010). It can also regarded as the process by which low income households will have greater access to a variety of high quality financial products to invest in their own small business enterprises. These services rendered by MFIs include credit, savings and money transfers. Microfinance clients include the poor and low income people who find it difficult to benefit from the conventional or formal financial institutions.

Also, Yunus (2006) describes microfinance as an amazingly simple approach that has been proved to empower very poor people around the world to pull them out of poverty. A key to microfinance is the recycling of loan. As each loan is
repaid—usually within six months to a year—the money is recycled as another loan, thus multiplying the value of each loan in defeating global poverty and changing lives and communities. Furthermore, microfinance clients are predominantly living along the poverty line, engaged themselves in small enterprises which include small retail shops, street vending, manufacturing, welding, carpentry and many others. In most cases where microfinance clients receive micro loan to start their businesses, several research suggests that only half or less of the total loan proceeds are used for businesses or micro enterprises development purpose only (Pollio and Oboubie, 2010) and (Haile, 2003). Most of the credit received tend to be spent on a range of households cash management needs which includes stabilizing consumption, expenses on education, health and other life cycle events (Microfinance Gateway, 2010).

This study adopted the Financial Growth Theory for small businesses as posed by Berger and Udell (1998) which is more likely to the Jigawa state’s economic environment. They said, the financial needs and financing options change as the business grows, becomes more experienced and less informationally opaque. They further suggest that firms lie on a size/age/information continuum where the smaller/younger/more solid firms lie near the left end of the continuum indicating that they must rely on initial insider finance, trade credit and/or angel finance. The growth cycle model predicts that as firm grows, it will gain access to venture capital as a source of intermediate equity and mid-term loans as a source of intermediate debt. At the final stage of the growth paradigm, as the firm becomes older, more experienced and more informationally transparent, it will likely gain access to public equity or long-term debt.

Some empirical studies on the impact of microfinance can be seen in the works of Khan and Rahaman (2007) where they used Analysis of variance and multiple regression analysis revealed that microfinance schemes are highly associated to build up of social and economic empowerment. Copestake et al. (2001) found that borrowers who were able to obtain two loans experienced high growth in profits and household income compared to a control sample, but borrowers who never qualified for the second loan were actually worse off due to MFI collection mechanisms.

The impact of microfinance on income has been analyzed at the enterprise levels. Hulme and Mosley (1996) conducted various studies on different microfinance programmes in numerous countries and found strong evidence of the positive relationship between access to a credit and the entrepreneur’s level of income. The authors indicated that the middle and upper poor received more benefits from income-generating credit initiatives than the poorest. McKernan (2002) evaluated three significant microcredit programmes in Bangladesh and discovered that the profit for self-employed activities of households could be increased by programme participation. These programmes were also examined at the village-level, Khandker (2005), showed that microloan have a positive impact on average households’ annual income, especially in the rural non-farm sector.

In 2006, Fasoranti, Akinrinola and Ajibefun examined the impact of microcredit and training on the efficiency of small scale entrepreneurs in Ondo
State. They identified technical efficiency of entrepreneurs to be influenced by human capital variables (which are characterized by level of education, business experience and age) and socio-economic/institutional variables (characterized by loan interest, loan size, contact with lender, training programme and training experience). This they estimated using stochastic production function frontier also called the composed error model of Aigner and ordinary least square. The study is premised on determining the link between access to credit, training and technical efficiency and highlighting other significant factors that influence the level of efficiency in the baking, furniture making, and burn brick making micro-enterprises. The result obtained showed initial outlay and man-hour to be the most significant factors influencing value of output for bakers, while capital outlay, man-hour worked and expenditure on equipment in that order to be significant factor influencing value of output for furniture makers. For the burnt brick firms, capital outlay and labor were found to be the most important factors influencing the value of output. The study concluded by showing that the significant determinants of technical efficiencies of bakers, furniture makers and burnt brick makers were age of operators, business experience, level of education, training experience, credit access, working capital and initial capital outlay. Well-structured entrepreneurship training programmes complemented with easy credit access can facilitate the desired improvement in the efficiency of small scale business people in the State.

While, Ogunrinola and Alege (2007), found the operation of UNDP-sponsored MFI to be beneficial to micro businesses in the rural based areas of Lagos State. Forty-two (42) of the enterprises that received microcredit reported business success as a result of the application of the loan received. Micro-entrepreneurs in the study achieved a very high loan repayment rate of 96 per cent and reduced rate of business failure and also restricted rural–urban migration.

Furthermore, Matovu (2006), using pooled data from Uganda, concludes that all the women clients reported increase in their incomes which has improved their standard of living, enabled them to send their children to school; pay their medical bills, feed their the women have been empowered economically. He also notes that well functioning families, and cope with future crises using their savings; market, entrepreneurial skills and other infrastructure support microfinance to achieve results. However, some of the findings may not be conclusive; one should therefore be careful in drawing conclusions there from.

Moreover, Khandker (2005) observes microfinance supports mainly informal activities that often have a low return and low market demand. It may therefore be hypothesized that the aggregate poverty impact of microfinance is modest or even nonexistent. If true, the poverty impact of microfinance observed at the participant level represents either income redistribution or short-run income generation from the microfinance intervention. Khander’s article examines the effects of microfinance on poverty reduction at both the participant and the aggregate levels using panel data from Bangladesh. The results suggest that access to microfinance contributes to poverty reduction, especially for female participants and to overall poverty reduction at the village level. Microfinance thus helps not only poor participants but also the local economy.
The importance of Small and Medium Enterprises (SMEs) in employment generation, economic empowerment, poverty alleviation and even distribution of development has long been recognized. A study of Nigeria’s informal sector put the estimated number of non-agricultural micro enterprises at 6.49 million with a total employment of 8.97 million. This group is dominated by wholesale and retail trade which accounts for about 49% of employment; manufacturing accounts for (30%). Other numerically significant sectors include repair of vehicles (3.2%), transport (2.9%), hotels and restaurants (2.6%) and building and construction (1.8%). By global standards, large enterprises are very few in Nigeria. They account for a disproportionately large share of the GDP. Because their links with the rest of the economy are weak, their impact on economic growth has been limited and often distorted (SMEDAN, 2007).

The importance of micro and small enterprises (MSEs) to the socio-economic development of low and middle-income economies is well documented (Daniels, 2003). In the poorest economies, MSEs, and microenterprises in particular, are a major source of employment and income (Mead and Liedholm, 1998), especially for the poorest members of society. Thus, there is a great deal of interest in the performance of firms in the micro-enterprise sector and its scope is to generate employment, both through new business start-ups and the expansion of existing businesses. Most microenterprises are characterized by low productive capacity which is manifested in low rates of growth and high mortality rate (Mead and Liedholm, 1998).

Methodology

This section contains the basic procedures and techniques used in the collection and analysis of data for the entire research. It describes the methodological framework used in attaining the objective of the study. The research focuses on the impact of microfinance being provided in Nigeria for the low income earners through various instruments by public, non-governmental and private organizations. Therefore, the research attempts to determine the impact of the instruments being used in alleviating the poverty of this portion of population.

Study Population

This refers to the population that the research will work with. The population for the research composes of ideal and the study population. This study was carried out Jigawa state, North-Western part of Nigeria. The target population of this study were the available Microfinance Institutions (MFIs) located in Jigawa state; and some selected small and medium enterprise in Jigawa, particularly those that may have benefited at one time or another from the financial and non-financial services rendered by a MFIs in Jigawa. The respondents were picked randomly in Jigawa state.
Sampling Size and Procedure

In survey design, determining sample size and dealing with non response bias is essential and a common goal of survey research is to collect data representative of a population. The sample for the research work has been drawn from the ideal population and the research has 5% margin error, thus 100 samples were used for the study.

Again, in choosing the sampling size and securing representative responses, the size of the sample was based on statistical estimation theory considering degree of confidence that is expected from this type of research. Accordingly a proper sample size of one hundred (100) was selected. Questionnaire was distributed to available Microfinance Institutions and some small and medium enterprises within the State.

Saunders, et al (2009) claimed that 5% margin error is sufficient enough to run any statistical test. One method of determining sample size is to specify margins of error for the items that are regarded as most important to the survey. (Cochran 1977). The sample has covered small scale entrepreneurs comprises of traders and skill acquisitions such as tailors that constitute the customers of microfinance banks. This category constitutes individuals with small scale business that can access the microfinance schemes being in operation.

Data Source and Instrument

Primary source of data was employed in the study due to non availability of reliable and accurate secondary data in states located at the North-Western part of Nigerian such as Jigawa. The instrument used in generating data for this study was a well structured self developed questionnaire. Every question was designed carefully because the final results will be genuine and academically sound.

Data Collection Technique

The researchers have personally administered the instrument (questionnaire) with the help of research assistants and the customer relation officers of some microfinance institutions located in Jigawa state. The instrument used in English language was also translated into Hausa language (this is to fit the local language of the study area) to enable the respondents understand the questions asked easily. The rationale behind the use of questionnaire is that, it is a data collection technique in which each person is asked to respond to the same set of questions in a predetermined order (Saunders et al, 2009).

Data Analysis Procedure

This is a process of transforming and modelling data aimed at making it more meaningful in order to answer the research questions thereby involving them in the decision making that affects their livelihood. The data generated
for the study were analyzed using both descriptive and inferential analytical techniques. The analytical technique employed is basically multiple regression analysis using the ordinary least square (OLS) approach. The descriptive statistic methods such as means, frequency counts and percentages were used in this study.

Model Development for Multiple Regression Analysis

The most general form for the model is adopted:

\[
\text{PRO} = f(\text{AGE, EDU, COB, AME, NEM}) \]
\[
\text{PRO} = \lambda_0 + \lambda_1 \text{AGE} + \lambda_2 \text{EDU} + \lambda_3 \text{COB} + \lambda_4 \text{AME} + \lambda_5 \text{NEM} \quad ... \ (1)
\]
\[
\text{PRO} = \lambda_0 + \lambda_1 \text{AGE} + \lambda_2 \text{EDU} + \lambda_3 \text{COB} + \lambda_4 \text{AME} + \lambda_5 \text{NEM} + \mu \quad ... \ (2)
\]

Where,

\[
\text{PRO} = \text{dependent variables measuring SME performance for development proxied by monthly profit.}
\]
\[
f = \text{a function to be specified}
\]
\[
\text{The independent variables are: AGE = Age; EDU = Education; COB = Categories of Business; AME = Average Monthly Expenses; NEM = Number of Persons Employed}
\]
\[
\lambda_0 = \text{constant parameter}
\]
\[
\text{A priori: } \lambda_1 > 0; \lambda_2 > 0; \lambda_3 > 0; \lambda_4 < 0; \lambda_5 < 0;
\]
\[
\mu = \text{White Noise to take care of other variables}
\]

Equation 1 is the functional form; equation 2 above is the econometric transformation form of the model; and equation is the regression model with the error term.

Results

This section deal with the analysis of data, and the study’s objective was to find out whether or not microfinance had an impact on income generation of the SMEs, employment generation and also their productivity.
Descriptive Analysis

Table 1. Personal Profile of Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>18 – 24</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>25 – 34</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>35 – 44</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>45 – 54</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>55 and above</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>No Formal Education</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Primary Cert</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Secondary Cert</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Number of Children</td>
<td>None</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>1 – 2</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>3 – 4</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>5 and above</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors Computation using SPSS 16, 2016

Table 1 above provides some information on the socio-economic profile of the respondents. The majority of the respondents (80%) are men while only 20% are female. This confirms the fact that most of the entrepreneurs asked are the male counterpart. With respect to age distribution of the respondents, the age’s bracket 25 – 34 years and 35 – 44 years had 45% and 25% of the total responses showing that the micro-entrepreneurs in Jigawa state have the majority of people in this category, while 18 – 24 years, 45 – 54 years and above 54 years have 5%, 10% and 15% respectively. This implies that majority of the respondents fall within the economic active age group, that is, age group of 25 – 44 years which represent 60% of the total respondents. This also mean, that 60% of the economic active age group are employ by the SMEs subsector of the Jigawa state’s economy, that is the more reason why the sector if given more attention to, can contribute maximally to the GDP of the nation as a whole.

The study equally classified the respondents in terms of their level of formal qualifications. The survey revealed that among the responding SMEs, those who had never attended school (non-formal education) had 41%, postgraduate and graduate have a combined percentage of 14% while 25% had completed secondary education, few of the respondents with 7% had their basic primary education and another 13% had diploma as their highest level of education. Majority of the respondents in the sample size are illiterate. They
have do not have adequate knowledge judging from their educational qualification, to be able to provide intelligent answers to questions requested of them.

Our analysis further shows that among the SMEs, 28% had no children; partly due to their unmarried status. The result obtained also shows that 22% had 1-2 children, 35% had 3-4 children, while only 15% had more than 5 children. This implies that most of them are still within the stipulated average family size in Nigeria, which signifies a minimal level of poverty among the SMEs.

Annual Income of the Respondents

**Figure 1. Annual Income of the Respondents**

From the figure above, it is clear that most of the responding entrepreneurs with 56.67% have less than 50,000 naira as their annual income from the kind of occupation they are engaged in while 26.67% have between 50,001 – 100,000 naira as their annual income and only 6.67% have above 100,000 naira as their annual income. This indicated that most of the respondents do not have more money, which may be the reason why they engaged in the SMEs business.

Category of Business/Enterprises Operated

**Figure 3: Category of Business/Enterprise Operated**
The above figure 2 shows that most of the respondents are small business owners with 53.3% of the total responses, this is followed by the micro entrepreneurs with 26.7% and lastly the medium enterprise has only 20% of the total respondents. The introduction of microfinance will improve the strategy of small-scale development in Jigawa and such introduction can make the existing entrepreneurs to change their categories by improving on their businesses.

Table 2. Credit Enjoyed from Micro-Finance Institutions

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>60</td>
<td>60.0</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Valid Yes</td>
<td>40</td>
<td>40.0</td>
<td>40.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors computation using SPSS 16, 2016

With respect to credit being enjoyed by the respondents, 40% have benefited from the credit facilities of microfinance bank or institutions while 60% of the respondents never collected any credit from the microfinance bank or institutions. This implies that 80% of the entrepreneurs have never enjoyed credit facilities of the MFIs, which could have boasted the performance of the MSMEs subsector of the Jigawa economy.

Table 3. Descriptive Statistics of Loan Collected

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes, how much loan did you acquire?</td>
<td>6</td>
<td>70000</td>
<td>200000</td>
<td>1.07E5</td>
<td>47187.569</td>
<td>2.227E9</td>
</tr>
</tbody>
</table>

Source: Authors computation using SPSS 16, 2016

Out of the 40% of the respondents who received loans from the MFIs, the minimum amount received was N70,000 while the maximum amount was just N200,000 and the mean amount is N106,666.7. This indicated that the loans being collected are reasonable to improve the capacities of the entrepreneurs for meaningful development and shifting them away from poverty.

Table 4. Main Purpose Acquiring Loan

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buy Business Inputs</td>
<td>13</td>
<td>13</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Buy new Equipment</td>
<td>20</td>
<td>20</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>40</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors computation using SPSS 16, 2016
The loans enjoyed by the entrepreneurs were equally classified into the purpose to which they were collected for, 50% of those that collected the loans used it to purchase new equipments, 33% for more business inputs and 17% for others such as changing line of business.

**Table 5. Average Profit Made per Month of the Entrepreneur**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N20001 – N40000</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>N40001-N60000</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>N60001- N80000</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>67</td>
</tr>
<tr>
<td>Above N80000</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Authors computation using SPSS 16, 2016

The analysis further shows that among SMEs, those who made above N80,000 as average profit by the end of each month constitutes 33%, N40001-N60000 and N60001-N80000 have 26% and 28% while N20001 – N40000 had the lowest percentage of 13%. This implies that most of the entrepreneurs are still within the stipulated average profit of SMEs in Nigeria, which signifies a moderate level of improvement in their performance.

**Table 6. Number of Employees**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>10</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>1-3</td>
<td>65</td>
<td>65.0</td>
<td>65.0</td>
<td>80.0</td>
</tr>
<tr>
<td>4-6</td>
<td>20</td>
<td>20.0</td>
<td>20.0</td>
<td>95.0</td>
</tr>
<tr>
<td>Above 6</td>
<td>5</td>
<td>5.0</td>
<td>5.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors computation using SPSS 16, 2016

From the enterprises sampled, 10% do not employ, 65% of the respondents employs between 1 and 3 while 20% have between 4-6 persons working for them, 5% employs more than 6 persons. This implies that, the enterprises have lesser people to work for them which explain further the nature of SMEs in Jigawa State.
Multiple Regression Analysis

Table 7. Multiple Regression Result of Impact of Microfinance on Small Business Operators’

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEc</td>
<td>2239.268</td>
<td>821.8036</td>
<td>2.724821</td>
<td>0.0234**</td>
</tr>
<tr>
<td>EDU</td>
<td>2064.859</td>
<td>5354.345</td>
<td>0.385642</td>
<td>0.7087</td>
</tr>
<tr>
<td>COB</td>
<td>-21009.46</td>
<td>12310.05</td>
<td>-1.706691</td>
<td>0.1221</td>
</tr>
<tr>
<td>AME</td>
<td>-59373.07</td>
<td>48409.30</td>
<td>-1.226481</td>
<td>0.2511</td>
</tr>
<tr>
<td>C</td>
<td>93933.23</td>
<td>101298.0</td>
<td>0.927296</td>
<td>0.3780</td>
</tr>
</tbody>
</table>

R-squared 0.783598 DurbinWatson stat 2.930583
Adjusted R-squared 0.663374
F-statistic 6.517844
Prob(F-statistic) 0.007885

Source: Authors computation using SPSS 16, 2016. Significant at 5% (**)

Table 7 above presents results from the regression of micro-financing variables on Entrepreneur’s productivity. The constant, which is also the intercept, reveals that when all the variables are zero, the Entrepreneur’s productivity will be (93933.23 > 0.05). The result obtained is significant at 5%. The coefficient for entrepreneur’s age is positive and significant at 5%. This is expected: as the entrepreneur advances in age, he becomes more productive.

The coefficient for level of education shows positive correlation but is not statistically significant. The result shows that when entrepreneur’s level of education increase by one level, entrepreneur’s productivity increases by 2064.859 unit but it is not statistically significant at any level. This implies that educational level has positive correlation with productivity; the significance of education hinges on the fact that it enhances the stock of human knowledge and management skills which consequently enhance productivity. This confirms the findings of Fasoranti et al, (2006) that the entrepreneur’s level of education enhances productivity.

The category of business operated by the entrepreneurs shows a negative and insignificant impact for the entrepreneur’s productivity. This may be due to the fact that the category of business been operated by the entrepreneur does not really matter in the study region to enhance productivity or performances of SMEs.

The coefficient of average monthly expenses is 0.734072 with a probability value of 0.0241 which indicates that it is statistically significant at 5%. This implies that a unit increase in monthly expenses (say salaries) will lead to increase in the profit volume (additional workforce which will increase productivity) of the entrepreneur by 73.4%. Therefore, we can conclude that
the higher the monthly expenses of the entrepreneurs the higher it is the level of profits they generate.

The coefficient of number of employees of the entrepreneurs was found to be statistically insignificant at all level and negatively related to the profit ($\alpha = -59373.07$). It implies that a unit increase in number of employees of an enterprise on average tends to decrease the profit generated by the enterprises. In other words, the result indicates that an enterprise which manages fewer employees is likely to generate higher profit than those have more employees. The coefficient of determination, that is, the $R^2$ is 0.78, which is acceptable for a cross-sectional data, like we have for this study. The overall statistic is significant at 1%. The decision rule is that when calculated $F$-value is significant we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that, Micro-credit do have the capability to influence the performance (expansion capacity) of SMEs and the factors that positively affect entrepreneur’s productivity are Entrepreneurs’ age, education, and average monthly expenses while other factors such as categories of business and number of employees do not enhance entrepreneur’s performance and productivity in Jigawa state, Nigeria. In addition, the Durbin-Watson value of 2.93 shows that there is no autocorrelation in the data used for the study, and so, we can conclude that the model is a good one.

**Conclusion**

The study examined the impact of microfinance on development of small and medium enterprises in North-Western Nigeria. Samples were drawn from the entrepreneurs who have enjoyed loans from some selected microfinance institutions in North-Western Nigeria. The review of literature shows that microfinance institutions have provided useful credit facilities to so many SMEs in North-Western Nigeria.

The findings of the study shows that microfinance can be regarded as powerful and effective tool in the development of SMEs mostly of whom do not have a capital, the result also shows that there is a significant improvement on the SMEs income generation, employment and overall productivity. That is to say, when the loans provided by the MFI are properly harnessed and supplied, SMEs can scale-up beyond the micro-level as a sustainable part of the process of economic development and in doing so, the poor can improve their situations. Therefore, it is against this, that we recommend the government should as a matter of urgency and considering the recession the country is into, to tackle major issues on infrastructural development such as power, good roads network, water, etc so as to improve the statuses of the SMEs operation for better.

Despite the limitations, the study makes significant contribution in the literature of microfinance impact assessment in general and North-Western Nigeria in particular because it has been observed from the literatures both within and outside the country on the relationship between microfinance and microenterprise development, that most research works treated microfinance as
a solution to poverty. To the best of our knowledge, the impact of microfinance on Small and Medium Enterprise development has not been empirically tested in the literatures, especially in North-Western Nigeria. Most researchers in North-Western Nigeria have also not taken time to document the nature, mode of operation and processes involved in microfinance. This study therefore becomes significant in filling this observed gap by testing empirically the impact of both the financial and non-financial services offered by Micro Finance Banks on small business development in Jigawa State, North-Western Nigeria. Therefore, studies in this area are yet to be tapped properly from the existing literatures that have been consulted, and therefore, room is opened to potential researchers in this area. The study also contributes to the literature on microfinance and small business development.

References


