

**Effect of Micro-Credit on Welfare of Small Scale Entrepreneurs in Nigeria: A  
Case Study of Oyo State**

**Odunjo, V.O., Osawe, W.O.\* and Okoruwa, V.O.**

Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria

\*Corresponding Author: [osawe.wellington@yahoo.com](mailto:osawe.wellington@yahoo.com)

## Effect of Micro-Credit on Welfare of Small Scale Entrepreneurs in Nigeria: A Case Study of Oyo State

### Abstract

The study evaluated the effect of microcredit on small scale entrepreneurs in Oyo state, Nigeria and its implication on their welfare. Primary data were collected with the aid of well-structured questionnaire. Multi-stage sampling technique was adopted in selecting 200 respondents comprising agriculture and non-agriculture small businesses within Ibadan metropolis. The data collected were analyzed using descriptive statistics, Foster Greer Thorbecke and binary logit regression. Results of analysis of respondents' access to credit revealed that more than two-third (69%) of the respondents did not have access to microcredit while only 31% had access to microcredit. On the implication of microcredit access to welfare of the respondents, the study revealed that poverty incidence was higher ( $P_0=0.4876$ ) among respondents that did not use microcredit than those with access ( $P_0=0.4419$ ). This suggests that incidence of poverty declines with access to microcredit but this is only by a small percentage of about 5%. Similar to the result of poverty incidence, respondents who did not use microcredit had the highest ( $P_1=0.1104$ ) poverty gap. However, the severity of poverty index among respondents with access to microcredit was higher ( $P_2=0.0359$ ) than those without access ( $P_2=0.0352$ ). The study recommends that strategic policies should be set up to mitigate factors that inhibit access to micro-credit by small scale entrepreneurs as the study showed that access to microcredit is necessary for small business growth and for improving welfare. Such policies should target the economically active age group of small-scale entrepreneurs, improving their literacy levels, and encouraging their ownership of account with lending institutions such as micro-finance bank of choice.

**Keywords:** Microcredit, Small scale business, Welfare, Poverty, Nigeria

## 1. INTRODUCTION

Small and medium enterprises (SMEs) play a vital role not only in the economic development of emerging and developing countries but also in the socio-cultural transformations of these economies all over the world. Micro credit, as the name implies, is the name given to extremely small loans made to poor borrowers or to small businesses whose financial capital base are not large enough to access larger loans and the acquisition of such small loans would enhance business profitability of such ventures. It enhances the production capacity of the poor resource small businesses through financial investment in their human and physical capital (Okurut et al, 2004). Access to credit is undoubtedly a major financial capital resource for the take-off and sustainability of any business investment. It is also paramount in the process of expanding businesses and in the acquisition of modern technologies that will ensure competitiveness and value-addition (UNCTAD, 1995).

Simtowe and Phiri, (2007) and Muktar, (2009) stated that credit is a precondition to the growth of enterprises (entrepreneurship). It is an effective way for poor people to increase their economic security and thus their welfare. It enables poor people to manage their limited financial resources, reduce the impact of economic shocks and increase their assets and income (Robinson, 2001). Microcredit in its various adaptable models can assist the world to reduce and alleviate poverty, improve welfare and enhance economic development, particularly in developing economies (Hennessey, 2006).

In Nigeria, several financial institutions and programmes were set up to meet the needs of entrepreneurs, but these initial efforts were government-led through the vehicle of large industry, but lately emphasis has shifted to Small and Medium Enterprises (SMEs) following the success of SMEs in the economic growth of Asian countries (Ojo, 2009). Thus, the recent industrial development drive in Nigeria has focused on sustainable

development through small business development (Abiola and Salami, 2011; Babajide, 2012). However, lack of access to finance has been identified as one of the major constraints to small business growth coupled with the inability of the small scale enterprises to meet the standard of the formal financial institutions for loan consideration. This has resulted in informal institutions to often fill the gap usually based on informal social capital networks. Access to credit affects household welfare outcomes through alleviation of the capital constraints on business and increases the ability of poor households with little or no savings to acquire necessary inputs (Zeller, 1994). Furthermore, easing potential capital constraints through the granting of credit reduces the opportunity costs of capital-intensive assets relative to family labour, thus encouraging the adoption of labour- saving, higher-yielding technologies and therefore increasing productivity, a crucial factor in encouraging development, in particular in many African countries (Zeller, et al. 1997). In addition, access to credit increases small scale businesses' risk-bearing ability and by altering its risk-coping strategy and also for consumption smoothening. They both affect the resilience of households in bearing production and consumption risks. This study was therefore aimed at critically examining the effect of microcredit on small businesses entrepreneurs including small scale farmers' access to micro credit for their business growth and profitability. The results and recommendations from this study could be potentially useful to policy makers, development practitioners, academia and other researchers to explore appropriate means and policy channels to alleviate the plight of small scale business entrepreneurs which in turn could aid the drive for poverty alleviation and improved welfare.

Despite the fact that there is a significant relationship between microfinance credit and welfare of the small scale entrepreneurs, their impact is limited because of the loan repayment procedures which did not give grace period before repayment starts. The

shortness of repayment time did not make it possible for micro-credit to be able to generate future income, thus preventing it from improving savings, consumption and welfare. Based on the problems highlighted above, some questions have become pertinent to provide answers to. These include what are the determining factors of welfare amongst small scale entrepreneurs and what is the influence of access to micro-credit to this welfare status? Is there any relationship between micro-credit access and poverty status of small scale business entrepreneurs?

To this end, this research was therefore set out to achieve the following objectives:

i) to examine the welfare status of small scale entrepreneurs. ii) to determine factors affecting the welfare of small scale entrepreneurs. iii) to examine the influence of micro-credit access on welfare of small scale entrepreneurs.

### **1.1. Literature Review**

The impact of microcredit on welfare is mixed. While some studies conclude that microcredit leads to welfare promotion, some others find negative or insignificant impact of microcredit on welfare. Imai et al. (2010) analyzed the poverty reducing effect of microfinance using cross-section data for 99 development countries in 2007. In their study, they find that the gross loan portfolio of microcredit has a statistically significant negative relationship to poverty incidence, and that the poverty reducing effect of microcredit tends to be larger in sub-Saharan African countries. Zeller and Sharma (1998) argued that microcredit can help to establish or expand family enterprises, potentially making a difference between grinding poverty and economically secure life. Mosley and Hulme (1998) in their study of 13 MFIs in seven developing countries concluded that household income tended to increase, but at a decreasing rate, as the debtors income and asset position improved. Some other studies suggest non-significant impact. Based on a study on 300 households in Kenya, 160 households in Malawi, and 150 households in Ghana,

Buckley (1997) observed that there was little evidence to suggest any significant and sustained impact of microcredit on beneficiaries in terms of micro-entrepreneurs graduating to higher operations, increased income flows or level of employment. Diagne and Zeller (2001) also suggested in their study on Malawi that microcredit did not have any significant effect on household income. Coleman (1999), using a sample of 445 households from Northeast Thailand, observed that the village bank credit did not have any significant impact on physical asset accumulation, production and expenditure on education. In other words, credit on its own is not an effective tool for helping the poor to enhance their economic conditions, unless, for example, there is access to markets and other inequalities are removed. Kondo et al (2008), using a model similar to Coleman (1999) and with some extensions, found in the case of rural households in the Philippines that microcredit has significant impact on welfare of small scale entrepreneurs and thereby on poverty alleviation.

## **2. METHODOLOGIES**

### **2.1. Study Area**

This study was carried out in Oyo State, Nigeria. Ibadan which is the capital city of Oyo State, is the third largest metropolitan area, by population, in Nigeria, after Lagos and Kano. The population of Ibadan according to census data is 3,565,108. Ibadan is a regional commercial hub for both agricultural and industrial goods from different parts of the country. There are eleven (11) Local Government Areas (LGAs) in Ibadan Metropolitan area consisting of five urban local government areas in the city and six peri-urban local government areas which form the two strata. These local government areas include the more urban (Ibadan North, Ibadan North-East, Ibadan North-West, Ibadan South-East, Ibadan South-West) and the less urban (Akinyele, Egbeda, Ido, Lagelu, Ona Ara and Oluyole) local government areas.

### **2.2. Sampling Technique and Data Collection**

Primary data were used for the study. The primary data were collected with the aid of well-structured questionnaire. Data collected with the questionnaire include information on demographic characteristics, education, occupation, housing and housing conditions, income, business characteristics and financial characteristics from small scale businesses within the sampling areas (urban and peri-urban). Multi-stage sampling technique was adopted in selecting the appropriate number of respondents involving agriculture and non-agriculture small businesses within Ibadan metropolis and this was done based on probability proportionate to size (Bryman, 2004). The first stage was the purposive selection of Ibadan, a regional commercial hub in Oyo State. Ibadan was purposively chosen due to its composition which is a blend of urban, peri-urban and rural structures characterized by year round booming commercial and social activities with networks of cooperative societies of different sizes. In the second stage, the different local government areas within Ibadan metropolis were identified and grouped into two strata including urban and peri-urban areas. Within these sub-groups, four local government areas each were randomly selected. In the last stage of the sampling procedure, 200 respondents (including agriculture and non-agriculture small businesses) were randomly selected from the four already selected local government areas in the sub-groups and this was done proportionate to size based on number of wards. The four local government areas selected and the number of awards included Lagelu (14 wards) with 60 respondents, Ido (10 wards) with 43 respondents, Ibadan North West (11 wards) with 47 respondents and Ibadan South East (12 wards) with 50 respondents. The respondents were small scale businesses that are agriculture and non-agriculture-based enterprises.

### **2.3. Empirical Model**

The data gathered were analyzed using descriptive statistics, Foster, Greer and Thorbecke (FGT) and logit regression analysis. Relevant descriptive statistics was used in examining the socio-economic characteristics of the respondents. The poverty measure

used in this analysis is the class of decomposable poverty measures by Foster, Greer and Thorbecke (FGT). They are widely used because they are consistent and additively decomposable (Foster et al., 1984). It is a generalized measure of poverty that measures the outfall from the poverty line and it is usually weighted by a poverty aversion parameter ( $\alpha$ ). Following the works of Olubanjo (1998) and Oyekale et al (2012), poverty indices was used as a proxy to measure welfare of rural farmers. The Foster-Greer-Thorbecke (FGT) poverty measure, which is decomposable by groups and sensitive to the depth of poverty within the poor, were used to assess the above indices among the rural households in the study area. It is a generalized measure of poverty that measures the outfall from the poverty line and it is usually weighted by a poverty aversion parameter ( $\alpha$ ).

The formula for FGT is given by:

$$FGT_{\alpha} = \frac{1}{N} \sum_{i=1}^H (Z - y_i)^{\alpha} \quad (1)$$

Z= an agreed upon poverty line (using Moderate poor: two-third of mean per capita consumption expenditure of total respondents).

N= total number of respondents in the study.

H= number of poor (those with per capita expenditure at or below z),

$y_i$ = individual household per capita expenditure

$\alpha$ = poverty aversion parameter, takes on value 0, 1, 2.

Low  $\alpha$  implies that the FGT metric weights all the individuals with incomes below z roughly the same. If  $\alpha$  is high, those with the lowest incomes (farthest below z) are given more weight in the measure. The higher the FGT statistic, the more poverty there is in an

economy. By setting the value of  $\alpha$  to zero, one, two respectively, the FGT poverty measure formula delivers a set of poverty indices which are contributing factors to vulnerability. They are, headcount ratio (H), poverty Gap (I), squared coefficient variation among the poor ( $Cv^2$ ).

In this case,  $\alpha$  is non-negative poverty aversion parameter, which can be 0 for poverty incidence, 1 for poverty gap or 2 for poverty severity.

### **2.3.1. Estimation of welfare of small scale entrepreneurs using poverty line.**

Poverty status of respondents was used as a proxy to determine the welfare status. Firstly, monthly household expenditure was expressed in per capita terms, that is, Monthly Per Capita Household Expenditure (MPCHHE) to adjust for household size, by dividing each respondent's household's monthly expenditure by the household size. Then, the Mean Monthly Per Capita Household Expenditure (MMPCHHE) was arrived at, by the summation of all MPCHHE and dividing it by total number of households. MMPCHHE allows us to have two poverty lines. The upper poverty line is equivalent to two-third of the MMPCHHE and the lower is equivalent to one-third of the MMPCHHE (Foster et al. 1984). Hence, the core poor households are those with MPCHHE less than one-third MMPCHHE, moderately poor have MPCHHE less than two-thirds MMPCHHE, and the non-poor have MPCHHE greater than two-thirds MMPCHHE.

To present the poverty profile of the people, various poverty indices like incidence, depth and severity were computed. FGT (Foster-Greer- Thorbecke) weighted index was used for the quantitative welfare assessment among the small scale entrepreneurs in the study area. The Foster-Greer- Thorbecke (FGT) poverty measure, which is decomposable by

groups and sensitive to the depth of poverty within the poor, were used to assess the above indices among the respondents in the study area.

The headcount ratio measures the ratio of the number of poor individuals or simply measures the poverty incidence (that is, the percent of the poor in the total sample). The poverty gap estimates the intensity of poverty based on the extent of income shortfalls below the poverty line by the poor in the sample, or simply measures the amount of money it would take to raise the per capita income or per capita expenditure of the average poor person up to the poverty line.

### 2.3.2. Logistic regression model

The logistic regression method was used to capture the effect of micro credit on welfare of small scale entrepreneurs in the study area. Logit estimations are used when the outcome variable takes two possible states, hence the name binary models. This will identify the variables that have significant influence on the welfare of small-scale entrepreneur. The logistic regression model expresses a qualitative dependent variable as a function of several independent variables. It is used when the dependent variable is dichotomous and the independents are of any type. In this analysis, welfare of small scale entrepreneurs (Z) is the dependent variable which takes the value of 1, if the welfare is better (above the poverty line) and 0 if otherwise.

The regression function is of the form:

$$z_i = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n \quad (2)$$

Where

Z= 1 is poor and 0 if otherwise (better welfare).

$\beta$  are parameters to be estimated

$X_i$  is a vector of independent variables that include:

$X_1$  = Age

$X_2$  = Gender (1=male; 0 otherwise)

$X_3$  = Marital status (1=married; 0 otherwise)

$X_4$  = Educational status

$X_5$  = Household size

$X_6$  = Access to credit (1=yes; 0=otherwise)

$X_7$  = Source of credit

$X_8$  = Income

$X_9$  = Membership in association (1=yes, 0=otherwise)

### 3. RESULTS AND DISCUSSIONS

We first examine the socio-economic characteristic attributes that have impact on micro-credit access while we later examines the poverty profile of households and the attendant implication on the ability of households to access micro-credit and finally we critically examine the implication of micro-credit access to the welfare of the respondents.

#### 3.1.Socio-economic characteristics

The socio-economic characteristic was disaggregated into household characteristics, child characteristics, and maternal characteristics.

From Table 1, more than half (51.5%) of the respondents fall within the age bracket of 31-50 years with about 17.5% within 51-70 years of age. The average age of respondent was found to be 38 years with a standard deviation of 12.57. It could be observed that most respondents are within the active and productive age group. The Table 1 also reveal that more than half (58.0%) of the respondent are female while 42% are male. This implies female dominance in small scale business in the study area.

Results also show that small scale entrepreneurs have some form of education though mostly at the secondary level representing half (50.0%). Only 4% had no form of education. It can be deduced from this that few of the small scale entrepreneurs have high level of literacy. The level of education affects the standard of living which may influence the quality of business in the area of marketing, production and processing. Furthermore, more than two-third (69%) of the small scale entrepreneurs have between 1 to 5 household members. The average household size was 4.7 with 2.1 as the standard deviation. 93.5% of small scale entrepreneurs are engaged in non-farm activities with trading being the prominent occupation at 55.5% followed by artisan representing 32%. Only 6.5% are engaged in farming activities. There is a need to have diverse income sources in other to smooth income and consumption. This will increase households' consumption expenditure and reduce their likelihood of being poor or vulnerable to poverty. According to Cohen, (2009), households with diverse income sources have a better chance of protecting themselves against risks thereby, reducing their vulnerability to poverty. Table 4.1 shows a distribution of households' secondary occupation. Trading is the occupation in which the households secondarily engage in the most. About 16.8% of the households have no secondary occupation which might be as a result of lack of credit to diversify their income sources. 18.4% of the households engage in farming as a secondary occupation. Their interest in agriculture could stem from the fact that agriculture is the single largest employer of labour forces accounting for about 70% according to NBS (2006) and is often seen as an important avenue for reducing poverty (Agenor, et. al., 2004).

**Table 1: Socio-economic characteristics**

Variable	Frequency	Percentage	Mean	Standard Deviation
<b>Sex</b>	(n=200)			
Male	84	42.0		
Female	116	58.0		
<b>Age (years)</b>				
≤ 30	60	30		
31 - 50	103	51.5	38	12.57
Above 50	37	18.5		
<b>Marital Status</b>				
Single	33	16.5		
Married	164	82.0		
Divorced	3	1.5		
<b>Religion</b>				
Christianity	111	55.5		
Islam	88	44		
Traditional religion	1	0.5		
<b>Type of education</b>				
No formal	8	4.0		
Primary	30	15.0		
Secondary	100	50.0		
Tertiary	62	31.0		
<b>Household size</b>				
1 - 5	139	69		
6 - 10	58	29	4.7	2.1
Above 10	3	1.5		
<b>Primary Occupation</b>				
Farming	13	6.5		
Trading	111	55.5		
Artisan	64	32.0		
Others	12	6.0		
<b>Secondary Occupation</b>				
Farming	46	18.4		
Trading	94	37.6		
Artisan	68	24.2		
Others	42	16.8		

Source: Field survey (2013)

### **3.2. Access to microcredit**

On the analysis of access to microcredit, Table 2 shows the distribution of respondents by their access to microcredit. Small scale entrepreneurs accessed microcredit for business start-up, expansion of existing business ventures, purchase of inputs which would increase their income stream, increase their consumption expenditure and reduce their vulnerability to poverty but access to microcredit differs from its utilization. From table 4.10, more than two-third (69%) of the respondents did not have access to microcredit while only 31% had access to microcredit. This may be due to gross shortage of loan-able funds. The table also shows the distribution of income of respondent. About 78% of the respondents earned less than ₦ 60,001 out of which 14.5% earn below the minimum wage.

### **3.3. Use of microcredit**

Microcredit is used for a wide range of purposes and many of these help the users to protect against and cope with risks. It is more common to use microcredit to protect against risk ahead of time than to use it to smooth consumption after a shock (Cohen, 2009). 41.5% of the respondents spent the credit purchasing inputs, about 7.0% used it to start-up businesses and about 3.5% accumulated assets. This confirms the findings of Cohen, (2009) who found that small scale businesses use loans to improve and smooth incomes through enterprise and other productive investments; to accumulate or retain physical assets (for example, investments in housing, vehicles, equipment, livestock and jewelry); to build financial assets such as savings or livestock; to build human assets through investment in children's education and family health care.

**Table 4.2: Business-related characteristics**

Variable	Frequency	Percentage
<b>Income</b>	(n=200)	
≤20,000	29	14.5
20,001-40,000	72	36.0
>40,000	99	49.5
<b>Access to Microcredit</b>		
No	138	69.0
Yes	62	31.0
<b>Use of Microcredit</b>		
Input purchase	83	41.5
Business start up	14	7.0
Asset accumulation	7	3.5
Non-Use	96	48.0
<b>Years of experience</b>		
<10	31	15.5
11-15	48	24.0
>15	121	60.5
<b>Membership of Association</b>		
Yes	111	55.5
No	89	44.5

Source: Field survey (2013)

### 3.4. Poverty profile of small-scale entrepreneurs

The relative poverty line was thus defined based on total expenditure used as a proxy for income of the respondents. The poverty line is an expenditure-based threshold line that divides the poor and the non-poor respondents in the study area.

The mean per capita household expenditure (MPCHHE) per month for the respondents stood at ₦13,474.7915 while the two-thirds of the MPCHHE amounted to ₦9,028.11. Hence, households were classified as moderately poor if their mean per capita expenditure was below ₦9,028.11 for the month. The headcount poverty index showed a poverty incidence of 51% implying that more than half of the respondents were below

the poverty threshold indicating that 102 of the respondents were moderately poor while about 49% are currently non-poor as shown in Table 3.

**Table 3: Distribution of respondents based on poverty status**

Poverty Status	Frequency	Percentage (%)
Poor	102	51.0
Non-poor	98	49.0
<b>Total</b>	<b>200</b>	<b>100</b>

Source: Field survey (2013)

### 3.5. Welfare status of households

Table 4 shows a poverty status of respondents across different socioeconomic characteristics. In general, the poverty incidence of respondents was 0.5100 implying that about 51% of the respondents are poor. The poverty gap was 0.2007 while the disparity in income distribution among households was 0.0984.

#### Gender

The result showed that out of 102 small scale entrepreneurs that are poor 62.7% were female poor while about 37.2% of their male counterparts were poor. This implies that the incidence of poverty was higher among female small scale entrepreneurs than male which are consistent with the findings of Obayelu and Awoyemi, (2010) in their study on spatial dimension of poverty in rural Nigeria and that of Arun and Imai (2012). The depth of poverty among female small scale entrepreneurs was deeper than among male.

#### Age

Poverty incidence increased with age of respondents till age bracket greater than 70 years ( $P_0=0.6875$ ) and then declined. This can be linked with low per capita expenditure and high household size. Poverty gap was highest ( $P_1 = 0.1677$ ) among respondents who were

greater than 70 years age bracket but lowest ( $P_1 = 0.0631$ ) among respondents who were within the age bracket 31-50 years. The highest ( $P_2 = 0.0584$ ) severity of poverty index was observed among respondents who were greater than 70 years and the least ( $P_2=0.0177$ ) among those within the age bracket of 31-50 years. This shows that as respondents advance in age, poverty level rises.

### **Household size**

Respondents with more than 11 members in their household had the highest incidence of poverty ( $P_0 = 0.8889$ ). This implies that about 89% of respondents with more than 11 members were poor. Poverty gap was highest ( $P_1 = 0.3334$ ) among respondents with more than 11 members and least among households with not more than five members indicating that the larger the household member, the more resources is needed to bring it out of poverty. The highest severity of poverty index was observed among respondents with over 11 members ( $P_2=0.1525$ )

### **Educational attainment**

The result reveals that respondents with no formal education had the highest ( $P_0=0.6000$ ) incidence of poverty while respondents with tertiary education had the least incidence ( $P_0=0.4500$ ). The result shows that respondents with no formal education had the highest ( $P_1 = 0.1210$ ) poverty gap index while those with primary education had the least ( $P_1=0.1026$ ). However, severity of poverty index (inequality in income distribution) was highest among those with secondary education and least among those with no education. This result contradicts the suggestion that education reduces inequality in income distribution as reported by Obayelu and Awoyemi (2010).

### **Microcredit access**

Poverty incidence was higher ( $P_0=0.4876$ ) among respondents that did not use microcredit than those with access ( $P_0=0.4419$ ). This suggests that incidence of poverty declines with access to microcredit but this is only by a small percentage of about 5%. Similar to the result of poverty incidence, respondents who did not use microcredit had the highest ( $P_1=0.1104$ ) poverty gap. However, the severity of poverty index among respondents with access to the use of microcredit was higher ( $P_2=0.0359$ ) than those without access ( $P_2=0.0352$ ). This implies that the disparity in income distribution among respondents with access to credit was higher than among those without access to credit.

**Table 4: Poverty Profile of respondents**

Characteristics	$P_0$ (Poverty Incidence)	$P_1$ (Poverty Gap)	$P_2$ (Poverty Severity)
Gender			
Male	0.3794	0.0228	0.0026
Female	0.6400	0.1089	0.0363
Age			
15-30	0.3438	0.0900	0.0282
31-50	0.2308	0.0631	0.0177
51-70	0.3871	0.0740	0.0362
>70	0.6875	0.1677	0.0584
Marital Status			
Married	0.4851	0.1120	0.0372
Divorced	0.1000	0.0374	0.0140
Widowed	0.2000	0.0228	0.0026
Household size			
1-5	0.2406	0.0329	0.0065
6-10	0.7473	0.1804	0.0581
>10	0.8889	0.3334	0.1525
Educational attainment			
No education			
Primary education	0.6000	0.1210	0.0285
Secondary education	0.4750	0.1026	0.0345
Tertiary education	0.4552	0.1076	0.0364
	0.4500	0.1185	0.0360
Microcredit			
No	0.4876	0.1104	0.0352
Yes	0.4419	0.1041	0.0359
All	0.5100	0.2008	0.0984

Source: Field survey (2013)

$P_0$ =Poverty Incidence;  $P_1$ =Poverty Gap;  $P_2$ =Poverty Severity

### **3.6. Factors affecting welfare of small-scale entrepreneurs**

This section reports the results from the binary logistic model used to evaluate the factors affecting welfare of small scale entrepreneurs in the study area

The result of the regression analysis is presented in Table 5. The diagnostics reveal that the model has a log likelihood ratio of -107.58354 and a chi-square statistics of 62.01; which is significant at 1 percent. This shows that the model is a good fit for the data. Four of the ten variables in the model were statistically significant at different levels. One of these variables was positively significant while others were negative as presented in Table 5. The significant variables are household size and its squared term, education, membership of local group, and source of credit. Micro credit had no significant effect on the welfare of small scale entrepreneurs.

The assumed linearity of the relationship between welfare status (poor), size of the household and its squared term is confirmed by their relevant coefficients. Household size had a positive influence on welfare at 1% level for both. The larger the households, the likelihood that the small scale entrepreneurs tend to be poor i.e. poor welfare. This corresponds to the findings of Arun and Imai, (2012) that larger household tends to compete the more for limited family resources.

Education of respondent was significant at 10% level. Education can affect people's standard of living through a number of channels: it helps skill formation resulting in higher marginal productivity of labour that eventually enables people to engage in more remunerative jobs. Hence, just as expected the number of years of education was negatively correlated with welfare. This implies that the higher the number of years spent in school the lower the likelihood of being poor. Thus a higher level of education is an important determinant of small scale entrepreneurs' welfare status and correspondingly, micro-credit access. This conforms to other studies concluding that literacy and educational attainment decrease poverty (World Bank, 2002). Imai and Gaiha, (2007) also

observed similar pattern of relationship between log consumption per capita (a proxy for welfare) and education of head of households for Vietnam.

Social association to a local group was significant at 10% level. The different survival livelihood strategies that people employ to meet up with their basic needs is dependent on the level and the kind of resource or livelihood asset available to them (Lawal et. al, 2011). According to IFAD, (2001); increasing access to capital and social assets is crucial for broad-based growth and poverty reduction. It is important for households to devise strategies that would protect them against risks ahead of time and reduce their vulnerability to poverty. The estimate reveals that the likelihood of small scale entrepreneurs to become poor reduces as they tend to become a member of a local group. This implies that being a member may provide them with survival livelihood strategies such as loan, market information, training etc that translate into increasing productivity of members.

**Table 5: Determinants of welfare of Small-scale Enterprises.**

Coefficient	Coefficient	Standard error	Z	P >  Z
Gender	-0.010	0.380	-0.62	0.998
Age	0.051	0.330	0.15	0.877
Marital status	-0.390	0.460	-0.85	0.396
Religion	-0.646*	0.366	-1.77	0.077
Household size	0.740***	0.170	4.34	0.000
Household size squared	0.012***	0.004	3.12	0.002
Number of years of education	-0.649*	0.387	-1.68	0.094
Access to Microcredit	-0.110	0.378	-0.29	0.771
Membership of local group	-0.053*	0.030	-0.72	0.085
Source of credit	-0.026	0.171	-0.15	0.880
Constant	-1.022	1.531	-0.67	0.505

Number of observation = 200      Log likelihood = -107.58354

Prob> chi2 =0.0000

Pseudo R-squared =0.2237

LR Chi2=62.01

*Source: Authors' Analysis from Field Survey (2013)*

#### 4. CONCLUSION AND RECOMMENDATION

The study evaluated the effect of microcredit on small scale entrepreneurs in Ibadan. Also, it isolated the factors affecting welfare on the small scale entrepreneurs. Primary data was used to sample 200 respondents from Ibadan. The data was analyzed using descriptive statistics, Foster Greer Thorbecke and binary logit regression.

The results revealed that more than half (58.0%) of the respondent are female while 42% are male. This implies female dominance in small scale business in the study area. The average age of respondent was found to be 38 years with about 52% of the respondents within 31-50 years of age. More than two-third of the respondents have some form of education with secondary education representing 50.0% and 4% had no form of education. The average household size was 4.7 with about 70% of the respondents within 1-5 household members. Analysis of respondents' access to credit revealed that more than two-third (69%) of the respondents did not have access to microcredit while only 31% had access to microcredit. This may be due to gross shortage of loan-able funds. More so, 41.5% of the respondents spent the credit purchasing inputs, about 7.0% used it to start-up businesses and about 3.5% accumulated assets. On the implication of micro-credit access to welfare of the respondents, the study revealed that poverty incidence was higher ( $P_0=0.4876$ ) among respondents that did not use microcredit than those with access ( $P_0=0.4419$ ). This suggests that incidence of poverty declines with access to microcredit but this is only by a small percentage of about 5%. Similar to the result of poverty incidence, respondents who did not use microcredit had the highest ( $P_1=0.1104$ ) poverty gap. However, the severity of poverty index among respondents with access to the use of microcredit was higher ( $P_2=0.0359$ ) than those without access ( $P_2=0.0352$ ). Furthermore, the study showed that household size had a positive influence on welfare at 1% level for both. The larger the households, the likelihood that the small scale entrepreneurs tend to be poor. Also, the number of years of education was negatively correlated with welfare.

This implies that the higher the number of years spent in school the lower the likelihood of being poor. Thus a higher level of education is an important determinant of small scale entrepreneurs' welfare status and correspondingly, micro-credit access.

The study recommends that strategic policies should be set up to mitigate factors that inhibit access to micro-credit by small scale entrepreneurs as the study showed that access to microcredit is necessary for small business growth and for improving welfare. Such policies should target the economically active age group of small-scale entrepreneurs, improving the literacy levels of small-scale entrepreneurs, and encouraging small-scale enterprise owners to have an account with lending institutions such as micro-finance bank of choice.

REFERENCES

- Abiola, I & Salami, A.O. (2011). Impact of Microfinance Bank on Standard of Living of Hairdressers in Ogbomoso North Local Government of Oyo State. Nigeria. *International Business Management*, 5(1), 27 -32
- Agenor, P.R., Izquierdo, A., and Fofack, H. (2004). IMMPA. A Quantitative Macroeconomic Framework for the Analysis of Poverty Reduction Strategies. The World Bank, Washington, DC.
- Arun, T. and Imai, K. (2012) Does Microfinance Reduce Poverty in India. The School of Economics Discussion Paper Series 0814, Economics. The University of Manchester
- Babajide A (2011) Impact Analysis of Microfinance in Nigeria [www.ccsenet.org/ijef](http://www.ccsenet.org/ijef)  
*International Journal of Economics and Finance* Vol. 3, No. 4; September 2011.
- Bryman, A., (2004) *Social Research Methods*. New York: Oxford University Press Inc
- Buckley, G (1997) 'Microfinance in Africa: Is it either the Problem or the Solution?' *World Development* 25(7): 1081-1094.
- Cohen, M (2009). 'Hedonistic pricing models and the valuation of intangible assets', PhD thesis, Southern Cross University, Lismore, NSW.
- Coleman, B. E. (1999). The Impact of Group Lending in Northeast Thailand. *Journal of Development Economics* 60, 105-141
- Diagne, Al.and Zeller, M. (2001). Access to credit and its impact on welfare in Malawi. Research Report No 116. International Food Policy Research Institute (IFPRI), Washington, D.C. (*Peer-reviewed book under the guidelines of IFPRI's Publication Review Committee*).
- Foster J., Greer J., and Thorbecke E. (1984). A Class of Decomposable Poverty Measures. *Econometrica* 52 (May): 761-66.
- Hennessey M. (2006), "The Microfinance Moment" *The Punch* (Newspaper), December 4, pp. 16.
- Imai, K. S, Arun, T, and Annim, S.K. (2010). Microfinance and Household Poverty Reduction: New Evidence from India. *World Development*, 38(12), 2010: 1760-1774.

- Imai, K., and Gaiha, R. (2007). Vulnerability, Shocks and Persistence of Poverty- Estimates for Semi-Arid Rural South India. Economics Series Working Paper 128, Oxford: Department of Economics, University of Oxford.
- Kondo, T., Orbeta A., Dingcong C. & Infantado C. (2008). Impact of Microfinance on Rural Households in the Philippines. NONIE Working Paper No. 4 (January).
- Lawal, J.O., Omonona, B.T., and Oyinleye, O.O. (2011). Effects of livelihood Assets on Poverty Status of farming Households in Southwestern Nigeria. Paper prepared for presentation at the EAAE 2011 Congress; Change and Uncertainty. ETH Zurich, Zurich Switzerland.
- Mosely, P. and Hulme, D. (1998) 'Microenterprise Finance: Is There a Conflict Between Growth and Poverty Alleviation?', *World Development*, 26(5): 783-790
- Muktar, M. (2009). The Role of Microfinance Banks in the Promotion and Development of Entrepreneurship in Semi Urban and Rural Areas. Retrieved from Focus Nigeria: [www.focusnigeria.com/microfinance-bank.htm](http://www.focusnigeria.com/microfinance-bank.htm)
- National Bureau of Statistics- NBS (2006): 2006 Population Census. National Bureau of Statistics: Federal Republic of Nigeria, Abuja.
- National Population Commission (NPC). (1991). *Delineation of Enumeration Areas Countrywide: Training and References Manual for Census 1991 pp5*
- Ojo, O. (2009). Impact of Microfinance on Entrepreneurial Development: The Case of Nigeria. Proceedings of the International Conference on Economics and Administration (ICEA-FAA Bucharest), (pp. 536 – 545). Romania.
- Okurut, N., A. Schoombee and S. Van dar Berg (2004). Credit Demand and rationing in the Informal Financial Sector in Uganda. Paper on the DPRU/Tips/Cornell Conference on African Development and Poverty reduction.
- Olubanjo, O.O. (1998) Profile of the poor and poverty alleviation in the countryside: The case of four spatial settlements in Ogun State, Nigeria, *The Nigerian Rural Sociologist* 2(1): 31-40.
- Oyekale A.S, Adepoju A.O and Balogun A.M (2012). Determinant of Poverty among Riverine Rural Households in Ogun State, Nigeria

- Robinson, M. (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*. World Bank, Washington
- Simtowe, F.P. and A. Phiri, (2007). To what extent are credit constraints responsible for the non-separable behavior at household level? *Evidence from tobacco growing households in rural Malawi*. *J. App. Sc.*, 7: 1741-1747.
- UNCTAD (1995): *Issues concerning SMEs, Access to finance*, Geneva: United Nations.
- Zeller, M. & Sharma, M. (1998). *Rural finance and poverty alleviation*. Washington D.C., USA, International Food Policy Research Institute (IFPRI)
- Zeller, M., Schrieder, G., von Braun, J. and Heidhues, F. 1997. *Rural Finance for Food Security for the Poor: Implications for Policy and Research*. Food Policy Review No. 4. Washington, D.C.: International Food Policy Research Institute (IFPRI).
- Zeller, M. (1994), "Determinants of Credits Rationing: A study of informal lenders and formal credit groups in Madagascar", Discussion Paper No.2. Washington, D.C.:IFPRI.