Impact Analysis of Microfinance in Nigeria

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Abstract

This paper applies the financing constraints approach to study whether microfinance institutions improved access to credit for microenterprises in Nigeria or not. According to this approach, microenterprises with improved access to credit rely less on internal funds for their investments. Thus, investment sensitivity to internal funds of micro enterprises in Lagos State (a municipal with significant presence of Microfinance Banks (MFBs) was compared to that of micro enterprises in Ekiti State (a municipal with no (or limited) presence of MFBs) using a cross sectional survey method and Microfinance Institutions (MFI) branch location data. Results indicate that MFBs alleviated micro businesses' financing constraints. This approach is applicable to evaluating microfinance impact in other countries.

Keywords: Financial constraint theory, Microfinance, Logit regression

1. Introduction

The practice of microfinance in Nigeria is culturally rooted and pre-dates modern banking era. The traditional microfinance institutions provide access to credit for the rural and urban, low-income earners. They are mainly of the informal Self-Help Groups (SHGs) or Rotating Savings and Credit Associations (ROSCAs) types. Informal financial groups exist in all parts of the country and they are in form of traditional groups that work together for the mutual benefits of their members. The micro and small business entrepreneurs in Nigeria rely heavily on the informal financial market for funding. This condition provides a platform for informal institutions to attempt to fill the gap usually based on informal social networks. In many countries, people have relied on the mutually supportive and benefit-sharing nature of the social networking of these sectors for the fulfillment of economic, social and cultural needs and the improvement of quality of life (Portes, 1998).

In order to enhance the flow of financial services to micro, small and medium enterprises in the country, the Federal Government of Nigeria (FGN) launched the new Microfinance Policy, Regulatory and Supervisory Framework (MPRSF) in December, 2005. The MPRSF aimed among other things to bring the existing informal institutions under supervisory purview of the Central Bank of Nigeria (CBN). By doing this, monetary stability in the country is enhanced and financial infrastructure of the country is expanded to meet the financial requirements of the Micro, Small and Medium Enterprises (MSMEs) in the country (CBN, 2005). The policy is also meant to address the problem of lack of access to credit by small business operators. But since the launch of the MPRSF in 2005, has the access of MSMEs to credit improved? Can we say that more MSMEs in Nigeria access micro-credit on more easy terms than before the formal introduction of microfinance into the Nigeria financial market?

Ogunrinola and Alege (2008) carried out a study to ascertain the impact of a UNDP- sponsored microcredit programme in Nigeria on microenterprise development. They found variables such as pre-loan training and entrepreneur level of education impact significantly on microenterprise development. Bekele and Zekele (2008) also investigated long term survival of microenterprise finance by microfinance institution, they concluded that enterprise that did not participate in such schemes regularly are 3.25 times more likely to fail in comparison with businesses that participated regularly. The methodology employed in these two papers mentioned above, however, does not help understand if and how microfinance contributed to credit market development. The focus of this paper is not on the impact of a single MFI but on evaluating whether the microfinance industry, through its many institutions, improved local credit markets. This study contributes to the literature by studying whether Microfinance Banks (MFBs) collectively serving a local market improved credit access of the entrepreneurial poor. The rest of the paper is divided into four sections. In section II, relevant theoretical and empirical studies are reviewed while the methodology of the study is explained in section III. The findings of this study are presented in section IV while section V contains the concluding remarks.

2. Literature Review

Microfinance is the provision of financial service to the economically active poor who are hitherto un-served by the mainstream financial service provider. Microcredit is commonly defined in terms of loan amount as a percentage of average per capita income. In the context of Nigeria, with a per capita GDP of ₦112,800 (about $752) in 2008, loans up to ₦112,000 (around $750) will be regarded as micro loans, while Micro savings are defined as savings accounts with a balance of less than ₦22,500 (about $150), that is less than 20% of the average annual income per capita (USAID, 2004). The Central Bank of Nigeria (CBN, 2005) defined microfinance as the provision of financial services to the economically active poor and low income households. These services include credit, savings, micro-leasing, micro-insurance and payment transfer. In a similar notation, Yinusa (2006) described microfinance as an amazingly simple approach that has been proven to empower very poor people around the world to pull themselves out of poverty.   According to Central Bank of Nigeria 2004 annual report, the formal financial system provides services to about 35% of the economically active population while the remaining 65% are excluded from access to financial services.   The size of the unserved market by existing financial institutions is large. The average banking density in Nigeria is one financial institution outlet to 32,700 inhabitants. In the rural areas, it is 1:57,000, that is, less than 2% of rural households have access to financial services.

Lack of access to finance is one of the main constraint to the growth and expansion of small businesses.   According to Timmons and Spinelli (2004) the most serious causes of bankruptcy in small enterprises could be condensed into three categories: lack of vital business skills or knowledge, lack of access to finance, and an unfavourable economic climate. Savings and credit facilities have the potential for improving the incidence of survival among small enterprises. A review of the literature reveals that the provision of financial services is an important tool for mobilising resources for more productive use (Watson and Everett, 1999). The extent to which financial services are made available for small enterprises is a measures of the degree to which small firms can save and accumulate own capital for further investment at firm level (Hossain, 1988). Although small enterprises can assist in the effort to overcome unemployment, widespread poverty and income gaps that keep widening, the majority of small firms only have a limited access to services rendered by the commercial banks (Braverman and Guasch, 1986).

Review of the literature on credit markets shows that small enterprises do not have the same financial opportunities as large-scale enterprises. Credit constraint is experienced by small-scale enterprises due to the reluctance of banks to lend money to small enterprises, the wrong assumption that the risk associated with lending money to small enterprises is high, the presence of asymmetric information and the resulting adverse selection and moral hazard, the low expected return from small amounts of loans provided to small businesses and enterprises, the inability of small enterprises to provide precise information about themselves, and their inability to raise adequate collateral for their loans are the issues of concern (Stigilitz and Weiss, 1981;Webster, 1991; Scholtens, 1999; Rosmary, 2001; Kavanamur, 2002).

2.1 Financial Constraint Theory and Model Generation

This study applies the financing constraints approach to investigate whether microfinance institutions improved access to credit for microenterprises in Nigeria. The financing constraints approach, pioneered by Fazzari, Hubbard, and Petersen (1988) simply tests for   differences in sensitivity of investment to internal funds in enterprises with different levels of informational opacity by splitting a sample of enterprises into subsamples, defined according to suitable theoretical priors that characterize constrained and unconstrained firms (i.e., criteria such as enterprise's age and size). For each sub-sample, a reduced- form investment equation is estimated, where investment is modeled as a function of the enterprise's internal funds, usually defined as revenues minus expenses and taxes and used as a proxy for changes in net worth, as well as controls for enterprise-specific characteristics and investment opportunities determined from a variety of theoretical perspectives (Hubbard, 1998).   Though the financing constraint is an empirical approach, its theoretical underpinnings come from recent developments in the literature on investment. Cleary, Povel, and Raith (2007) show that for positive or slightly negative levels of enterprise wealth, investment is positively related to internal finance.

The financing constraints approach has been used to study small and medium enterprises in transition countries (Budina, Garretsen, and De Jong, 2000; Hartarska and   Gonzalez-Vega, 2006). The empirical analysis in this study adapted the financing constraints approach to fit the nature of the data, household microenterprises, and the microfinance market in Nigeria using two states in South West Nigeria, Lagos and Ekiti States. Lagos is a state with significant presence of MFBs. According to CBN record as at March 2009, Lagos states has a total of 147 microfinance banks, the highest concentration in the country, 74 of them have obtained their final license, while Ekiti state has a total of 13 MFBs with only 7 having obtained their final license. According to the 2006 census figure Lagos State has a population 9 013 534 while Ekiti state has a population of 2 384 212. Therefore,   Lagos

state has average microfinance bank banking density of one financial institution outlet to 61, 317 inhabitants, while in Ekiti state has one financial institution outlet to 183,401 inhabitant. It is on this basis we refer to Ekiti state as financial constraint area and Lagos state as financial unconstrained area in this paper.

The model by Cleary, Povel, and Raith (2007) assumes that the cost of debt financing is endogenously determined and investments are scalable, meaning that change in the marginal cost of debt finance affects both the decision to invest and the choice of investment. This assumption permits the use of a logit model similar to the one used by Johnson, McMillan, and Woodruff (2002) to study investment decisions by small firms in transition economies.

The logit model assumes logistic distribution of the probability of an event; it tests for the presence or absence of a thing or an event.

$Pr_i = (1 + \exp(-\lambda_i))^{-1}$, where λ is linearly dependent on the variables hypothesized to affect the probability: $\lambda_i = \alpha + \beta X_i$. The probability thus varies from 0 to 1 ($\lambda = \pm\infty$), and the model is simplified by rearranging it into a log of the odds,

$\ln(P_i /(1 - P_i)) = \alpha + \beta X_i$. which, for examples consists of individual outcomes, and can be estimated with maximum likelihood. Interpretation of the coefficients can also be done by reverting back to the probabilities.

Thus, we estimate

$$Pr(IFA = 1) = f(\alpha + \beta_1 IF + \beta_2 IO + y/Z)\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$

where IFA is the decision to invest in fixed assets,

IF is the variable for internal funds capital;

IO is the investment opportunity variable, and

Z is a vector of variables that capture various characteristics of the enterprise and the states in which it operates. Firms without investment opportunities would not invest even if they had capital. Thus, we control for investment opportunity (IO) and separate it from the effect of internal funds (IF).

3. Data and Methods Employed for the Study

Microenterprise data are obtained from field survey carried out on Microenterprise development in Nigeria. The questionnaire was designed to ask detailed question on the enterprise business activity and included a section where certain information on the enterprise are extracted from the MFB records. The samples are collected for the two states using simple random sampling technique in each state. The geographical spread of MFBs in the two states was used as a basis for the random sampling technique employed in this study. Since the target clientele of MFBs are less wealthy households, and loans to microenterprises are usually defined as loans for self-employment and microenterprises, only enterprises with up to 10 employees were included in the analysis. The survey was carried out between September to December 2009. MFB data and the local government area they served are obtained from CBN published records as at September 2009.

In this study, Lagos state is classified as (credit) unconstrained state because of the high concentration MFBs and other banks as well as and non-bank financial institution in the state. The loans offered by MFBs in the state are relatively more varied with many options. The loan options available include regular loan, asset/equipment loan, festival loan, KIVA loan and special loan. They also have grouped - based loan and individual loan. In addition, while individual MFBs targeted a specific market group, collectively all the MFBs offered more choices to borrowers with different circumstances, for example, women, active poor, unregistered microentrepreneurs and those with more than 5 employees. Thus, collectively, MFBs in unconstrained municipalities appealed to more types of potential clients. On the other hand, Ekiti state is classified as (credit) constrained state because of limited number of MFBs and other banks, as well as and non-bank financial institutions in the state.

The Summary of the variables used in the econometric analysis are presented in Table 1

Insert Table 1 here (see appendix)

4. Analysis of Results and Discussion

4.1 Analysis of Enterprise Access to credit by Respondents

The dataset contains a section with detailed information on access to and use of credit by the enterprise owner/operator. Table 2 below provides information on enterprise perception on access to credit and credit use by the microenterprises with not more than 10 employees. The table reveals that 39.6% of these microenterprises had access microloans from Microfinance bank, 37% of the enterprises in the constrained area had access micro loan while 46% of those in the unconstrained area had access microloan. The average value of total amount recently

borrowed was N65, 980.54. The average amount borrowed by enterprises in constrained area was N41,678.16 while that of the unconstrained municipal is N80,282.92. This may be as a result of the competition in the unconstrained area which may have caused amount borrowed to soar. Similar pattern is observed for the amount currently owed by the enterprises and the loan range. Table 2 also reveals that, compared to enterprises in credit constrained areas, enterprise in unconstrained areas used proportionally more bank debt (38.5% versus 23.4%, respectively) and proportionally less credit from other sources apart from Banks (10.5% versus 22.9%, respectively). This may be because there are more financing windows available in the area. On average, the group of enterprises in credit constrained areas identifies 78.2% of their loans as loans for business purposes, while the enterprises in the unconstrained group identified 56.5% of their loans as loans for business purposes. This implies that the enterprises owners in unconstrained areas were able to get loan for other purpose other than business purposes.

Insert Table 2 here

Ninety-six percent of enterprises in credit constrained areas have never applied for loan in conventional banks while approximately 90% of enterprises in credit unconstarained areas have never applied for loan in conventional banks before. This implies that the microenterprises do not see themselves being able to access conventional bank loan which may indicate that many potential borrowers might not have even incurred the transaction cost to apply. This is consistent with the Consultative group to assist the Poor (CGAP) (2009) report that less that 10% of MSME in Nigeria access formal bank loan. Of the constrained group, 44% had taken the microloan more than once, while among enterprises in unconstrained area 62% had taken the microloan more than once. This implies that repayment is above 50% in the unconstrained areas because it is the repayment of the first loan that qualify individual for the second and third loan.

5. Discussion of Result

Results of the estimation of logit models are presented in Table 3 (see appendix). The results for the constrained location are presented in column 1 with the Wald value and factor change which is the odd ratio, while the result for the unconstrained location was presented in column II. The constant, which is the intercept, shows that when all the variables are zero, the coefficient for the constrained location is -3.281, while that of the unconstrained location are 0.755, the result obtained are both statistically significant. The main interest is in the signs and magnitudes of the variables measuring the impact of availability of internal funds (Average profit) because they represent the sensitivity of investment to internal funds. As expected, the coefficients on average profit are statistically significant. The magnitudes of these coefficients are consistent with the hypothesis that MFBs improve credit markets and alleviate credit constraints since enterprises in location with more MFBs face less severe financing constraints. Specifically, according to the first model on constrained location (location without heavy presence of MFBs), for each additional ₦1 000 in monthly profit the odds of investing in fixed asset increase by a factor of 1.51, while the odds of investing increase by the lower factor of 1.20 in the sample of microenterprises operating in credit unconstrained municipalities. Thus, investing in the constrained group is more sensitive to availability of internal funds than is investment in the unconstrained group. This is similar to the result obtained by Hartarsky and Nadolnyak (2008). The beta coefficient shows that if average monthly profit increase by ₦1 000, investment in fixed asset will increase by 0.4 in constrained locations and by 0.2 in unconstrained location. The Difference of a factor of 0.31 is statistically significant at the 1% and 5% level in the constrained and unconstrained locations respectively.

Results presented in Table 3 also show that, in unconstrained locations, microenterprises, where lack of skills and markets are not among the top three problems in the current business year, they are more likely to invest in fixed asset, probably to take advantage of new opportunities in the market. This relation is not observed in microenterprises in credit constrained municipalities. For a unit of additional skill and market gained, the chances of investing in fixed asset increase by 0.62 in unconstrained location, while the odd for investing increased by 2.534. The coefficient for market and skill is not statistically significant in the regression for the constrained location.

The result according to the first model on constrained location shows no significant relationship between hired employee and investment in fixed asset, perhaps because these businesses could not take full advantage of the available opportunities. In unconstrained location, the result is different, there is a negative relationship between hired labour and investment in fixed asset. The interpretation of these results is consistent with economic theories, and the empirical evidence observed, it shows the substitutability between hiring more employees and investing in fixed assets in unconstrained microenterprises. No such relation is found in the credit constrained location where limited access to capital might have prevented businesses from taking advantage of productive opportunities either by buying (renting productive capital) or by hiring labor. The result shows that for each additional labour hired,

investment in capital decrease by 0.2 The odd of investing in fixed asset is less than 1 for additional unit of labour hired in credit unconstrained location.

Table 3 also shows the result in respect of asset loan received by micro entrepreneurs in both the constrained and the unconstrained locations. The model on constrained location (location without heavy presence of MFBs) revealed that for each additional ₦1 000 in asset loan received, the odds of investing in fixed asset increase by a factor of 1.0, while the odds of investing increase by the higher factor of 4.71 in the sample of microenterprises operating in credit unconstrained locations. Thus, investing in the constrained group is less sensitive to availability of asset loan than investment in the unconstrained group. The beta coefficient shows that if asset loan increase by ₦1 000, investment in fixed asset will increase by 0.61 in constrained locations and by 8.05 in unconstrained location. The Difference of a factor of 3.71 is statistically significant at the 10% and 1% level in the constrained and unconstrained locations respectively.

The result also shows sensitivity to internally generated revenue in both constrained and unconstrained location. The result shows that enterprises in constrained location are more sensitive to internally generated revenue than enterprise in unconstrained locations. This may be as a result of difficulties encountered by firms in constrained location to access external fund. The difference in the sensitivity is not much suggesting that enterprises even in the unconstrained location are still having difficulties in assessing external fund. The result shows that for one additional unit of internally generated revenue, the odds of investing in fixed asset increase by a factor of 2.25 in constrained location and a lower factor of 1.73 in unconstrained location. Even though the odd of investing in fixed asset is less sensitive in unconstrained locations to internally generated revenue, the differences in the factor is less than 1 suggesting some enterprises in the credit unconstrained location also depend more on internally generated revenue for their investment. The beta coefficient factor shows that a unit increase in internally generated revenue increase investment in fixed asset by 1.04 in constrained location and 0.03 in unconstrained location. The results obtained are both statistically significant at 1% and 5% in constrained and unconstrained locations respectively.

The result obtained shows that investment in fixed asset is not sensitive to business location in the credit constrained location because the result is not statistically significant, but the result obtained from the credit unconstrained locations shows that investment in fixed asset increase by a factor of .37 for enterprises situated in urban area, this could be as a result of competition in the urban area. Besides, business environment in Nigeria requires investment in fixed asset for businesses to thrive and fixed asset are more easily disposable in the urban area than in rural areas. The coefficient shows that for every business situated in urban area, investment in fixed asset increase by a factor of 0.9 and it is statistically significant at 5%. The result also shows that the variable for enterprise age and gender is not statistically significant on investment in fixed asset according to our sample. Although consistent with a notion that micro businesses have a lifecycle with heavier investment needs at earlier age, holding all else constant, evidence for a lifecycle investment is not observed in enterprises in constrained locations as well as unconstrained locations, the enterprises average age is 7.4 and 7.6 years in constrained and unconstrained locations respectively which suggests that they should still be investing in fixed asset but the result obtained suggests they are less sensitive to heavy investment in fixed asset. Similarly, the result for gender also shows no sensitivity to fixed asset. This is expected since majority of the respondents are female and are less likely to access productive capital such as credit, may be the reason for the less sensitivity to acquisition of fixed asset.

Usually, enterprises in production activities are more capital intensive than those in trade, services, and other activities. The evidence does not show that investment in industries like trade and services differs significantly from that in production in both types of locations. This eliminates possible concerns that investment may differ across sectors and is consistent with the theory suggested by Cleary et al. (2007) where the decision to invest and the size of investment are jointly determined by entrepreneurs. The result obtained shows that for each additional unit investment in trading business, the odds of investing in fixed asset increase by a factor of 3.4 for enterprises in constrained location, while the odds of investing increase by a factor of 4.1 in the sample of enterprises operating in credit unconstrained municipalities. Thus, investing in the unconstrained group is more sensitive to trading business than investment in the constrained group. The coefficient shows that with a unit increase in trading business, investment in fixed asset will increase by 0.61 in constrained locations and by 2.41 in unconstrained location. The Difference of a factor of .71 is statistically significant at 10% and 5% level in the constrained and unconstrained locations respectively.

The variable, availability of investment opportunity was used as control variable in the model. It implies that even if there is access to credit, enterprise without investment opportunity will not invest in fixed asset. The result obtained shows that availability of investment opportunity is sensitive to investment fixed assets in both locations. But enterprises in the constrained locations are more sensitive to investment in fixed asset with availability of investment opportunity. The result obtained is statistically significant at 1% and 5% respectively.

The full model containing all predictors were statistically significant at 5%, X^2 (10, N =86) = 52.22, p < .014, for the constrained location and X^2 (10, N = 197) = 64.43, p < .000 for the unconstrained location indicating that the models were able to distinguish between respondents that were sensitive to financial constrained and those that were not. The financial constrained model as a whole explained between 22.5% (Cox and Snell R square) and 37.5% (Nagelkerke R square) of the variance of possibility of investment in fixed asset, and correctly classified 85.1% of cases. While the financial unconstrained model explained between 20.2% (Cox and Snell R square) and 27.5% (Nagelkerke R square) of the possibility of investing in fixed asset, and correctly classified 77.2% of cases. With the results obtained, the models also passed the goodness of fit test. The chi-square value for the Hosmer − Lemeshow goodness of fit test is 11.686 with a significance level of .551 for the constrained location and chi − square value of 14. 244 with a significance level of .371 for the unconstrained locations, both values are greater than .05, therefore indicating support of the model. As shown in Table 3, the major factors influencing investment in fixed assets are average profit, asset loan, internally generated revenue, investment in trading business, and availability of investment opportunities in constrained location, while it is average profit, asset loan, internally generated revenue, investment in trading business, availability of investment opportunities, number of employees and business location in the unconstrained location. The strongest predictor of investment in fixed asset is the kind of business the entrepreneur engaged in. In this case it is trading business. Although, trade business does not require huge investment in fixed asset but it simply show that investment in fixed asset for all micro enterprises simply follow the same pattern irrespective of their kind of business.   The odds ratio of 3.4 indicate that respondents who are engaged in trading business are 3 times more likely to invest in fixed asset than those who are not in the constrained locations. In the unconstrained locations, the strongest predictor of investment in fixed asset is the asset loan received by the entrepreneur. The result shows that those who received the asset loan are 4.7 times likely to invest in fixed asset than those who did not. We therefore recommend that microloan should be made more accessible to more microentrepreneurs since it availability alleviate credit constraint in the financial market in Nigeria as evidence by our study.

6. Conclusions

This paper uses the financing constraints approach to study the impact of microfinance on access to credit for microenterprises in Nigeria. It uses data collected from a field survey and Central Bank of Nigeria data on Microfinance Banks in Nigeria by location. Binary logit regression was used to assess the impact of microfinance in a financial constrained and unconstrained location on the likelihood that respondents would invest in fixed asset, to assess the respondents' sensitivity to financial constraint. The model contained ten independent variables (average profit, market & skill, hired employee, asset loan, enterprise age, internally generated revenue, business location, entrepreneur gender and availability of investment opportunity). The data and method employed here produce results consistent with more traditional impact study in Nigeria for the same period. They show that MFBs improved access to credit in locations where more MFBs offered financial products because investment in local microenterprises was less sensitive to availability of internal funds in unconstrained location, than investment in microenterprises in locations where microfinance activities were limited or non-existent and where micro entrepreneurs had to rely more on internal funds for investment. Popularity of microfinance forces MFBs to be more transparent and thereby decreases the cost of assembling a database with MFBs branch distribution, therefore making the financing constraints approach more attractive for use in the future.

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Appendix

Table 1.   Definition of variables used in Analysis

S/No.	Variable	Definition
1.	Investment in fixed asset (IFA) (Dependent variable)	A dummy variable that takes the value of one if fixed assets were purchased in the past 12 months and zero if otherwise
2.	Average Profit (Aveprof)	Actual figure for average profit per month was taken. Profit is defined as enterprise income less business expenses.
3.	Market and skill (Mktskill)	A dummy variable that takes the value of one if the entrepreneur has indicated that market and skill issues were among the top constraints in the past 12 months and zero if otherwise.
4.	No of employees (NOE)	Number of paid employee in enterprise
5.	Asset Loan (Assetloan)	Value of asset in loan in actual (in Naira value)
6.	Enterprise Age (Entage)	Age of the enterprise (in years)
7.	Internal generated fund (IGR)	A dummy variable that takes the value of one if entrepreneur finance fixed asset purchased with funds generate internally and zero if otherwise.
8.	Business location (Bizloc)	A dummy variable that takes the value of one if enterprise is located in urban area and zero if business is located in rural area
9.	Gender	A dummy variable that takes the value of one if owner is female and zero if otherwise.
10.	Kind of business activity (KOB)	A dummy variable that takes the value of one if micro-business is in retail trade and zero if otherwise
11.	Investment Opportunity (Invoppor)	A dummy variable that takes the value of 1 if enterprise has an investment opportunity and zero if not

Source: Author's Compilation, 2010

Table 2.   Access and Use of Credit by Respondents

	All	Constrained	Unconstrained
Percentage of those who reported have access microloan (%)	39.6	46.0	37.0
Average value of recent loan (₦)	65,980.54	41,678.16	80,282.92
Average value of loan outstanding for repayment per person (₦)	3,228.69	1,113.23	5,344.15
Average Loan range	N10,000 – N100,000	N8,000 – N50,000	N50,000 – N100,000
Percentage use of Bank loan	30.9	23.4	38.5
Application for conventional Bank loan (%)	6.9	4.0	9.8
Percentage use of other loan type apart from Bank loan	16.7	10.5	22.9
Percentage of loan for business purpose only	67.0	78.2	56.5
Microloan taken more than once	53	44	62

Source: Author's Compilation, 2010   *$1 = ₦151 at the time of survey.

Table 3. Logit Regression Results on Micro-enterprises in Constrained and Unconstrained Location in South – West Nigeria.

	Column I Constrained				Column II Unconstrained			
	Coeff	Wald	Sig.	odd-ratio	Coeff	Wald	Sig.	Odd – ratio
Constant	-3.281 -(3.92)	1.855	.173	0.038	.755 (2.22)	.503	.478	2.129
Aveprof	0.210 (2.29)***	1.746	.018	1.511	0.452 (1.81)**	5.135	.023	1.201
Mktskill	0.942 (0.18)	1.139	.286	1.566	0.628 (1.61)*	2.640	.104	2.534
NOE	0.080 (1.02)	0.462	.497	1.083	-0.249 -(2.75)*	3.367	.067	1.283
Assetloan	0.61 (1.61)*	2.442	.108	1.010	8.05 (4.16)***	10.736	.001	4.712
Entage	0.134 (0.78)	1.200	.273	1.144	-0.37 (1.13)	.625	.429	.963
Intgenrev	1.049 (3.08)***	1.539	.013	2.254	0.308 (1.97)**	.814	.042	1.732
Bizloc	0.906 (0.92)	1.213	.271	2.475	-0.986 (2.711)	4.360	.037	.373
Gender	-1.122 -(0.61)	.864	.353	.326	0.120 (1.05)	.076	.783	1.127
KOB	0.610 (1.87)*	3.081	.079	3.403	1.352 (2.17)**	1.546	.041	4.140
Invoppor	2.437 (3.18)***	6.638	.010	11.437	0.742 (1.57)**	1.216	.027	2.100
Pseudo R-Squared	Cox & Snell 22.5		Nagelkerke 37.5		Cox & Snell 20.2		Nagelkerke 27.5	
Hosmer & Lemeshow Test	.551				.371			
Classification Table	85.1				77.2			
Observation	87				205			

Source: Author's Compilation, 2010 ***1% significance level   ** 5% significance level *10 Significance level