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# The determinants of women entrepreneurs' access to micro credit programme: A case study of Cowries Microfinance Bank (CMB) Lagos, Nigeria

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## Abstract

Women in Nigeria often participate more than their male counterpart in entrepreneurial activities and access to credit has been a major hindrance in their performance in this sector. To ensure inclusive growth, access to credit is of paramount importance especially in developing countries where more women are often the major participants in entrepreneurial activities. This paper examines the factors that determine credit accessibility among female entrepreneurs in Lagos state, Nigeria. A sample of 359 women entrepreneurs was selected from Cowries Microfinance Bank (CMB) through a simple random sampling technique and analysed with a probit regression. The results of the analysis indicate that all the variables that were used in measuring the determinants of women's access in microcredit programme are significant and have the expected signs except the variable age which is not significant. It is therefore, recommended that microfinance in the study area should consider the following factors: the marital status, years of experience in the business, educational level, poverty status, household size, and the income of income when given out loan to women entrepreneurs. As this will go a long way in ensuring that the loan product is given to the right people so that the benefit of the loan can be achieved.

Keywords: Microfinance; Microenterprises; Micro Entrepreneurs; Credit; Microcredit

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#### **1. Introduction**

Women's participation in entrepreneurial activities cannot be overemphasized most especially in developing countries where cultural, and gender stereotype are still more prevalent. In Nigeria, like other developing countries, women participate more in entrepreneurial activities because of their reproductive role, domestic role, stereotype, and cultural belief which often placed women at a disadvantage over their male counterpart. According to the NBS survey in 2010, more female engaged in the informal sector than their male counterpart, based on this survey, out of the total number of 13, 563,427 persons that engaged in informal sector business in Nigeria, 7,519048 (55.44%) are females while 6,044,379 (44.56%) are male.

Similarly, at the state level based on gender, microenterprises employ more female than male in Lagos state. From the total employment generation, for example, which stood at 5,577,012, female employment stood at 3,197,299 (14.17%) while the male employment rate stood at 2,379,713 (6.75%). This indicates a huge gap between the job created for female and male by this sector (NBS, 2010).

Given the prominent role play by Microenterprises business in terms of employment, and this employment generation often involves more women than men especially in developing countries. This is because women are often found in entrepreneurial activities because of their reproductive role, cultural beliefs, and domestic role which often prevent them from participating in white collar jobs.

However, carrying out this business efficiently and effectively has often been impeded due to lack of capital. To ensure access to capital by women entrepreneurs, past governments in Nigeria had embarked on some programmes and policies to help ameliorate the situations. One of such policies is the N220 wholesale fund which is meant to be given to micro entrepreneurs through microfinance institutions at a lower interest rate with 60% of the fund given to women. To complement this, the government has also through the CBN encouraged microfinance as stipulated in the Microfinance, Monetary and Policy Framework, to lend money to entrepreneurs with more focus on women entrepreneur (CBN, 2012). In spite of all these measures to enhance women entrepreneurship, many of women entrepreneurs in Nigeria still find it difficult to get access to some of these funds. For instance, according to the EFinA report in 2014, out of the 36.9 million adults in Nigeria who are financially excluded, 57.9% are female while 42.1% are male. These figures indicate that more female are financially excluded than their male counterpart. Also, at the state level, Lagos State is still one of the top ten states in Nigeria with financially excluded person (EFinA, 2014). Given the fact that microenterprises sector has the potential to employ more women than men because of the inability of most women in participating in white collar jobs due to their reproductive role, domestic role stereotype and cultural believes. Therefore access to capital for women entrepreneur is paramount, as the inability of women entrepreneur to gain access to credit could reduce the employment opportunities available for women in this sector, thereby leading to unemployment and high poverty rate among women.

In the literature, most of the studies on determinants of access to participation in microfinance programme especially in Nigeria are not gender specific. Therefore, given the high number of women in enterprises business in Nigeria and the high poverty rate among women, there is a need to examine the factors that determine women's access to micro credit. The essence of this is that it will help policy maker to be aware of the factors which they need to take into cognizance when given out loan to women

entrepreneurs so that the loan facility could be given to the women entrepreneurs that require these funds. Therefore, the objective of this study is to examine the factors that determine women's access to microcredit programme in Lagos, Nigeria.

Following the introductory aspect of this paper, the rest of this paper is divided into four sections: the second section deals with the literature review, while the third section is the methodology employed by the study; Section four provides the results, findings, and discussions and Section five presents the conclusion, recommendations and some suggestions for further studies.

## 2. Literature review

In the literature different factors are used as determinants of women entrepreneurs based on the country context, and different authors arrived at different results for these factors. For instance, Kifle et al. (2013) found the amount of monthly savings of the client, the size of the family, the number of land holdings in hectares are the factors that are significant determinants of women's access to microfinance programme in Rural Dire Dawa-Ethiopia.

Bhoj et al. (2013) examined the determinants and implication of rural women's participation in a self – help group microfinance programme in Uttarakhand State of India. The study found the age of the respondents, levels of education, income from non-farm, herd size and distance to the market as the significant variables that influenced the respondents' participation in the self-help group microfinance programme.

In an earlier study by Anjugam and Ramasamy (2007), it was found that the age of the women and value of the productive asset which did not include land had a significant but negative influence on women's access to a self-help group microfinance programme in Tamil Nadu. Besides, the authors also found that the social backwardness, indebtedness and the availability of other microcredit programmes have a significant positive influence on women participation in the programme.

Anyiro et al. (2014) used a multistage random sampling technique to select 120 members of women selfhelp group in Iswikwuata area of Abia State, Nigeria. The data were analysed through a probit regression, and the result of the probit regression indicates that women participation in self-help group micro credit was determined by the size of the household, membership experience, access to credit, primary occupation, mode of entry and their annual contributions.

Shah and Panigrahi (2015) used a logit regression estimate and found that factors that play an important role in determining women's participation in a Self-Help Group (SHG) credit programme are household head status, age. Education, the number of children born by respondents, means of generating income, case, informal debt, proximity to banks, migration and financial capability of the household.

## 3. Methodology

3.1. Area of study

Lagos State which was the former capital of Nigeria was chosen as the case study area due to some significant advantages it has over other States in the country. Such advantages are the high volume of commercial activities, the presence of seaports, highest number of microfinance and microenterprises. Also, the state ranked third among other states with regards to population size.

Furthermore, from the twenty Local Government Areas (LGAs) in Lagos State, two Local Government Areas were selected (Amuwo Odofin LGA and Ojo LGA). The selection of these two LGAs is based on the high number of microenterprises in these LGAs. Also, the location of our case study bank (CMB) in one of the LGAs (Amuwo Odofin) and the plan of the case study bank to open another branch in the second LGA (Ojo LGA).

#### 3.2. Data

A simple random sampling method was used to select 359 female entrepreneurs from the list of CMB in the study areas. The 359 female micro entrepreneurs are active and comprise of 183 Participants from Amuwo Odofin LGA and 176 Non-participant from Ojo LGA.

## 3.3. Data analysis

The analysis was carried out using descriptive statistic to describe the data. Further statistical analysis was done with the use of a probit regression model. Since our data is normally distributed and our dependents variable is a binary response function with a value of either 1 or 0 number, therefore, probit regression analysis is more suitable for the analysis of our data.

The Probit regression analysis was used to estimate the factors that influence women's participation in the microcredit programme. Our outcome variable is a binary response variable with 1 representing participation in the credit programme, and 0 represent non-participation in the credit program. The probit regression is estimated with the used of maximum likelihood estimator and it is given as:

$$P(y_i=1 \mid x_i) = \Phi(x_i'\beta) = \int_{-\infty}^{xi'\beta} \Phi(s) ds = \int_{-\infty}^{xi'\beta} \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}s^2} ds$$

The P indicates the likelihood or probability and  $\Phi$  is the Cumulative Distribution Function (CDF) of the standard normal distribution. The parameters/coefficient of the variables is estimated with the maximum likelihood estimator. Our model is specified as:

 $P = \beta_0 + \beta_1 X_i + U$ Where P = participate (1) or not participate (0)  $X_i = vectors of the determinants of participation which are:$   $X_1 = age$   $X_2 = Marital status of the women entrepreneur$ 

X<sub>3</sub> = Years of education of the women entrepreneur

X<sub>4</sub> =Numbers of years of business experience of women entrepreneur

X<sub>5</sub>= household size of the women entrepreneur

X<sub>6</sub> = membership of political party (1 = member, 0 otherwise)

 $X_7$  = Income of the women entrepreneur

B<sub>0</sub>= Constant/ intercept

- $B_i$  = Coefficient of the variables
- U = error term

# 4. Results, findings and discussions

## 4.1. Descriptive statistics

Variables	Treated : Freq %	Untreated: Freq %	
Treat	183	176	
Marital:			
Single	65 35.52	71 40.34	
Married	118 64.48	105 59.66	
Mem_ political:			
Non-member	56 30.60	79 49.89	
Member	127 69.40	97 55.11	
Edu :			
No formal	20 10.93	2 1.14	
Primary	49 26.78	21 11.93	
Second	61 33.33	58 32.95	
OND	40 21.86	61 34.66	
Graduate	13 7.10	33 18.75	
Post	0 0	1 0.57	
Pov status:			
Non-poor	76 41.53	69 39.20	
poor	107 58.47	107 60.80	
Age group			
<=25	3 1.64	15 8.52	
<=35	70 33.25	73 41.48	
<=45	62 33.88	51 28.98	
<=55	28 15.30	29 16.48	
<=65	20 10.93	8 4.55	
Empowerment:			
Not empowered	90 49.18	39 22.16	
empowered	93 50.82	137 77.84	

Table 1. Variables that were used in measuring

Table 1 gives the descriptive statistics for some variables that were used in measuring the factors that determine access to microcredit programme. From the table, out of the total number of 359 women entrepreneurs that were selected, 183 (50.97%) were participants in the credit program, while 176 (49.02%) are non-participants. Majority of the participants and non-participants entrepreneurs are married as indicated by the frequency and percentage as 118 (64.48) and 105 (59.66%) for participants and non-participants respectively. While 65 (35.52%) and 71 (40.34%) represents the frequency and percentage of participants and non-participants that are not married respectively in Table 1.

Furthermore, more than half of the participants and non-participants in the programme are members of a political party and this is represented by the frequency and percentage as 127 (69.40%) and 97 (55.11%0 for participants and non-participants respectively.

Also, most of the respondents are educated for both participants, and non-participants and just a few have no formal education. Regarding poverty status more than half of the respondents are poor and this is depicted by the frequency and percentage of 107 (58.47%), and 107 (60.80%) for participants and nonparticipants respectively. on the other hand, 76 (41.53%) and 69 (39.20%) represents the non-poor for participants and non-participants respectively.

Table 2. Maximum likelihood Estimate of the Probit Model			
Variable	Coefficient	P-Value	Marginal Effect
Age	0.009894	0.283	0.0032422
	(0.0092)		
marital	0.3290672	0.029**	0.1078328
	(0.1510)		
Yr_edu	-0.0844295	0.000***	-0.0278889
	(0.0192)		
No yr buss	0.656898	0.003***	00215261
	(0.0222)		
hh size	-0.1334456	0.002***	-00437291
	(.04211)		
Mem_political	0.408113	0.006***	0.1337355
	(0.1491)		
Income	-0.00114	0.000***	-0.000012
	(3.0700)		

#### 4.2. Probit regression results and discussions

Note: no of observation = 359, LR chi-squre =84.44 and a P value of 0.0000 The exchange rate at N165 per USD. N= Naira amount

\*, \*\*, and \*\*\* represents 10%, 5%, and 1% level of significant respectively. Values in parentheses represent Standard Error

Table 2 shows the result of the probit regression model. The results of the probit regression indicate no missing value as the number of the observation is 350 women entrepreneurs. A likelihood ratio chi-square of 84.44 and a P value of 0.000 show that, our model as a whole is statistically significant. All the variables were highly significant and also have the expected signs except the variable age which is not significant even at 10% level of significance. The variable marital which represents the marital status of the respondents is significant at 5% and has a positive sign with a marginal effect of 0.1078328. This indicates that participation in the programme will likely increase by 107.83% for married women entrepreneurs while holding other variables constants.

Yr\_ edu variable which represents the number of years of education of the respondents has a negative sign and highly significant. This indicates that a one year increase in the number of years of education of the women entrepreneurs will lead to 27.67% fall in their participation in CMB loan program. Our result is in line with the result of Anyiro et al. (2014) and Shan and Panigrahi (2015).

No- yrs in buss variable which depicts the number of years the women entrepreneur have been in the business. The variable is positive and highly significant. This shows that a 1% increase in the number of years in the business by women entrepreneurs has the likelihood to increase the probability of participation by 21.53% while holding other variable constants. Our result is consistent with Anyiro et al. (2014).

Hh\_ size variable is negative and highly significant. The negative sign of the variable indicates that a % increase in the size of the household of the micro entrepreneurs will likely lead to a 43.73% decrease in participation in the program by the respondents (Kifle et al., 2013; Anyiro et al., 2014; Shal and Panigrahi, 2015).

Memb\_ political is negative and highly significant. The sign indicates that being a member of a political party will increase the probability of participation by 13.37% Income variable is negatively and highly significant, this shows that the higher the income of the respondents the likelihood of participation will reduce. By 0.112% our result is consistent with Anyiro et al. (2014).

The income variable is highly significant and negative this indicates that a one percent increase in the income level of the women entrepreneur will likely lead to a 0.0014% fall in the level of participation by the women micro entrepreneurs. Our result is supported by the findings of Bhoj et al. (2013).

# 5. Conclusion, recommendation, and suggestion for further studies

## 5.1. Conclusion and recommendation

Using probit model to estimate the factors that determine women entrepreneur access to Cowries micro credit programme in Lagos, Nigeria. The results from the study have revealed that the marital status, numbers of years spend on education by the Women entrepreneurs, number of years in the business (business experience), household size, membership of political party, and income are the main significant factors that influence women decision to participate in the micro credit programme in Lagos, Nigeria. Thus, microfinance institutions and policy makers should take these factors into cognisance when extending loan

facilities to women entrepreneurs in the study area. Taking this into consideration will help to ensure that the rights women entrepreneurs are given the credit facilities which will subsequently help to achieve the objectives and aims of the loan programmes among women entrepreneurs since women contribute to the growth and development of the country.

## 5.2. Suggestion for further study

Caution should be taken in generalising this study for the whole country as the study is unable to cover other geographical areas in the country. Given this, it is therefore, suggested that further study should examine other geographical areas in Nigeria so that the result can be generalised.

# References

Amenya L.M. and Ombui K.A. (2016), "Determinants of financial performance of savings and credit cooperative societies in Kiambu County, Kenya", *International Journal of Social science and information Technology*, Vol. 2 No. 9, pp. 78-99.

Anjugam, M. and Ramasamy, C. (2007), "Determinants of women's participation in Self-Help Group (SHG)-led microfinance programme in Tamil Nadu", *Agricultural Economics Research Review*, Vol. 20, pp. 283-298.

Anyiro, C.O., Ajuka, P.N., Emerole, C.O. and Orji, I.E. (2014), "Determinants of women's participation in self help group led micro-financing of farms in Isuikwuato Local Gvernment area of Abia State, Nigeria", *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development,* Vol. 14 No. 3, pp. 21-29.

Bhoj, S., Bardhan, D. and Kumar, A. (2013), "Determinants and implications of rural women's participation in microfinance programme: An analysis of dairy self-help groups in Uttarakhand State of India", *Livestock Research for Rural Development*, Vol. 25 No. 10.

CBN - Central Bank of Nigeria (2008), *Microfinance Policy, Regulatory and Supervisory Framework for Nigeria (Revised)*, Central Bank of Nigeria, Abuja, Nigeria.

CBN - Central Bank of Nigeria (2012), *Microfinance Policy, Regulatory and Supervisory Framework for Nigeria* (*Revised*), Central Bank of Nigeria, Abuja, Nigeria.

EFInA (2014), Enhancing Financial Inovation and Access in Nigeria (EFInA) 2014 Survey, available at: http://www.efina.org.ng/assets/Documents/EFInA-Access-to-Financial-Services-in-Nigeria-2014-Survey-Key-Findings.pdf (accessed January 10 2017).

Fernando, R. (2011), "Logit, Probit and Tobit: Models for categorical and limited dependent variables. PLCS/RDC Statistics and Data Series at Western", available at: http://rdc.uwo.ca/events/docs/presentation\_slides/2010-11/Fernando-Logit2011.pdf (accessed, May 24 2016). Kifle, D., Tadesse, Y. Belay, S. and Yousuf, J. (2013), "Determinants of women's participation in microfinance services: Empirical evidence from Rural Dire Dawa, Ethiopia African", *Journal of Agricultural Economics and Rural Development*, Vol. 1 No. 1, pp. 001-007.

National Bureau of Statistics (NBS), (2010), National Manpower Stock and Employment Generation survey. Household and Microenterprises (informal sector), NBS, Abuja, Nigeria.

NBS & SMEDAN, (2010), *Survey Report on Micro, Small and Medium Enterprises (MSMEs) In Nigeria*. NBS & SMEDAN, Abuja, Nigeria.

NBS, (2013), *Economic outlook for the Nigerian economy (2013-2016)*, NBS, Abuja, Nigeria.

Shah, D. and Panigrahi, S. (2015), "Determinants of participation of women in Self-Help Groups (SGHs) and credit delivery from formal and informal sources to BPL households in Odisha", *Indian Journal of Agricultural Economics*, Vol. 70 No. 3, pp. 405-416.

Wooldridge, J. (2002), Econometric analysis of cross section and panel data, MIT Press, Cambridge, MA USA

Wooldridge, J.M. (2012), *Introductory Econometrics: A Modern Approach*, Fifth Edition, South-Western, Cengage Learning: Mason, USA.