Effect of Gender on Access to Loans in Malawi

ABSTRACT

*Access to **loan** is vital for households to supplement their current flow of income as they strive to meet their consumption and investment **expenditure** needs. The purpose of this study was to determine the effect of **gender** on access to loans and amount of money that is borrowed. This is a quantitative research that used secondary cross section data collected from all parts of the country by the Malawi National Statistical Office (NSO) called The Fifth Integrated Household Survey (IHS 5) data. This is cross section data that was collect in the period from 2019 to 2020. Data was analysed quantitatively by using descriptive statistics and econometric models. Probit model was used to assess the effect of gender on access to credit and a multiple regression was used to determine the effect of gender on amount of money a household borrowed. This study found that Malawians borrow money mainly for consumption. On access to loans, results show that, being female increases the probability of accessing loans but reduces the amount of borrowed money. **Education** was found to have positive effect on both access to credit and amount of credit. To increase the amount of money that women borrow, the study recommends that public loan programs like National Economic Empowerment Fund (NEEF) must put in place deliberate mechanisms aimed at increasing the amount of money they lend to women. On education, we recommend compulsory primary school education, Business Studies in secondary school education and **Entrepreneurship** module in Colleges.*

Keywords: {loan, gender, education, expenditure, entrepreneurship}

1.0 INTRODUCTION

1.1 Background

Many households in Malawi face financial constraints to meet consumption and investment expenditure needs. The current flow of income usually fall short of current expenditure requirements. In such cases, purchases are usually postponed or people supplement their current income with borrowed money. Male and female headed households face same economic constraints but sometimes have different privileges in society. This study aims at assessing the effect of gender on access to loans. (EESC, 2017) defines a loan as a contract under which a financial institution makes a sum of money

available to a client, who pays interest only on the amount actually drawn, which must be repaid within the agreed time limit. This definition restricts credit to mean formal credit because the type of source is only the financial institutions. In this study credit or loan shall mean a sum of money that one or more people, companies, organisations and governments borrow from financial institutions, organisations or other individuals so as to financially manage planned or unplanned events with a commitment to pay back at a later date with or without interest.

There are formal and informal loans. Formal loans include money borrowed from financial institutions with interest, security and conditions for payment that are well laid down well-laid down while informal loans refer to borrowing from friends, relatives, private money-lenders and communal groups without any formal agreement describing the terms of payment (NSO, 2020). In Malawi, formal loans can be accessed from various commercial banks and microfinance institutions. Formal loans require collateral. This restricts accessibility to majority of Malawians. As a result, there has been establishment of many informal credit service providers commonly known as Village Savings and Loans Associations (VSLAs) or Banki Mkhonde or Village Bank. Participation of women in village banks is greater than participation of men. Village banks that include men tend to be weaker as loan default is higher among male borrowers that among female borrowers. Other sources of informal loans include, friends and relatives, religious organisations and informal loan merchants (Katapila).

Women in the rural areas are the poorest of the poor and 57% of female headed households live below the poverty line (OXFAM, 2015). The first pillar of Malawi 2063 is agricultural productivity and commercialisation. Access to credit has been singled out as one of the key issues to be addressed by an Agricultural Finance Policy that will have to be developed (NPC, 2020). According to (NSO, 2020), 17.7 percent of Malawian households had access to loans but female headed household had lower access to credit at 16 percent as compared to male headed households at 18.4 percent. However, this represents an improvement from findings of (NSO, 2017) which showed that 12.5 percent of Malawians had access to credit although the gender disparity remain unresolved. Loans can be taken for consumption or investment. Loans for investment purpose are preferred over loans for consumption.

Gender has emerged as a key issue in development agenda in Malawi. Malawi National Economic Empowerment Policy states that women have less access to education, credit, land, and property than men (NPC, 2014). The policy emphasises on the need to review legislation to reduce constraints that women face when accessing credit. Several programs and projects are being implemented by the government as well as NGOs on women empowerment in Malawi. The government of Malawi, through the Ministry of Gender Children, Disability and Social Welfare, has an overarching program on women economic empowerment. The program started way back in the 1970s. Through this program, Extension workers have been trained in various business management and other business-related skills through different projects that were being implemented by the ministry over the years. One of the projects implemented by NGOs is the Women and Girls Voice Enhancement in Essential Services (WOGIVES) project which among other initiatives, it facilitated establishment of Village Savings and Loans Associations (VSLAs) that helped to transform lives of some women (OXFAM, 2015).

1.2 Problem Statement

Access to credit is vital for households to supplement their income as they strive to meet their consumption and investment needs. In Malawi, credit is accessible to very few households. This cripples various aspects of livelihoods including farming and non-farm enterprises. Traditionally, there has been gender imbalance on provision of services and accessibility of financial services. According to NSO (2020), female headed household had lower access to credit at 16 percent as compared to male headed households at 18.4 percent. Many studies have been done on factors that affect access to credit but most of them were conducted outside Malawi did not give gender adequate attention it deserves. Owusu (2017) found that gender has no effect on access to credit in Afigya-Kwabre District of Ghana while Sekyi (2017) found that being female increases access to loans in Wa Municipality of the same country. (Diague, 1999) found that being a male headed household reduces the probability of accessing loans in Malawi. There is limited current information on the

effect of gender on access to credit in Malawi. This study attempts to determine the effect of gender on access to loans and amount of money borrowed.

1.3 Objectives

The main aim of this study is to understand access to loan in Malawi.

Specific objectives

The study will be able to;

a. Assess the purpose of loans that households access in Malawi.
b. Determine the effect of gender on access to loan in Malawi
c. Assess the effect of gender on the amount of loan that people borrow in Malawi.

1.4 Justification

The study contributes to the body of knowledge on finance especially, lending and borrowing. Access to loan is very important for consumers and entrepreneurs to effectively play their economic roles in any society. The findings of this study are useful to borrowers, lending institutions and policy makers. Borrowers might identify the limiting factors for them to access credit. This might offer them an opportunity to find ways of overcoming such constraints and be able to access loans. Lending institutions, might recognise untapped markets as well as aspects of the society that could be targeted as they promote their products. Policy makers could use the findings of this study to inform policy review and formulation with an aim of expanding credit accessibility to many citizens of the country. This makes the study relevant in implementing the first pillar of Malawi 2063. Bearing in mind the importance of credit, this study needed to be done to improve access to loans offered by both public and private entities in the country.

2. Methodology

2.1 Study Area and Data Source

This study covered Malawi as a country. Malawi is in Central Africa and it shares boundaries with Mozambique in the South and East, Tanzania in the North and Zambia to the West. This research used secondary cross section data collected by the National Statistical Office in the Fifth Integrated Household Survey (IHS 5). NSO. (2020). The data was downloaded on 28th October, 2022 following a request that was submitted on 27th October, 2022 tos. The data was collected from 11,434 households in the period from 2019 to 2020. NSO used multilevel sampling technique. The sample is considered as a good representation of the Malawi population and many important statistics that are used in making national policies are derived from this data. In this study, the sample was reduced to 9851 households due to missing values.

2.2 Theoretical Framework

This study applied the utility theory. The decision to obtain a loan is considered to be based on the level of utility that would be obtained by borrowing. As this level of utility increases, the probability to borrow also increases.

Access to loan is a binary variable that equals to one if the household head accessed credit or loan is the year preceding data collection and a value of zero otherwise. To assess determinants of such a dichotomous variable, we could use either a logit model or a probit model. These models give comparable results in large samples but they are based on different probability distributions. A logit model assumes the variable has a logistic Cumulative Density Function (CDF) while probit model assumes that the variable follows a normal CDF (Edriss, 2019). Let us assume that the error term is normally distributed ($\varepsilon_i \sim N(0, \sigma^2)$). We can apply the probit model. We assume that the decision to get a loan depends on the level of unobservable utility index (*I*) also called a latent variable, that is influenced by observable social economic and institutional characteristics, $x_i s$ such that as *I* increases, the probability of getting a loan increases. The βs are the parameters. Then;

$$I = \beta_0 + \beta_i x_i + \varepsilon \quad \text{.....1}$$

Suppose there is a critical level of the latent variable (*I**) whereby a household decides to get a loan if $I \geq I^*$, then the probability that a household head gets a loan can be presented as in equation 2. Let Y=1 when a household access a

loan and Y=0 otherwise. According to (Gujarati & Porter, 2008), we have the following relationship;

$P(Y = 1) = P(I_i^* \leq I_i) = P(Z \leq \beta_0 + \beta_i x_i) = F(\beta_0 + \beta_i x_i)$……..2

Taking the inverse of equation 2, we can get information about the latent variable and the parameters.

$I = \beta_0 + \beta_i x_i$……..3

Empirical Econometric Models

The empirical probit model that was fitted to the data was as in equation 4.

$CR_{ACCESS} = \beta_0 + \beta_1 AGE + \beta_2 HHSIZE + \beta_3 LNEXP + \gamma_1 EDUp + \gamma_2 EDUs + \gamma_3 EDUp + \gamma_4 GENDER + \gamma_4 MARITAL + \gamma_5 RURAL + \gamma_6 BUS + \gamma_7 ALCOH\_EXP + \varepsilon$ ……..4

Factors that affect amount of credit accessed over a period of one year just before the data was collected, were assessed using Ordinary Least Squares (OLS) multiple regression. This choice of an econometric model was made because the dependent variable (amount of borrowed money) is a continuous variable. The general form of a multiple regression is as in equation 5 (Green, 2002) where Y is the dependent variable, ε is the error term and K is the number of independent variables.

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \cdots . + \beta_k x_k + \varepsilon$ ……..5

Equation 6 shows the empirical model that was estimated.

$CR\_AMOUNT = \beta_0 + \beta_1 AGE + \beta_2 HHSIZE + \beta_3 LNEXP + \gamma_1 EDUp + \gamma_2 EDUs + \gamma_3 EDUp + \gamma_4 GENDER + \gamma_4 MARITAL + \gamma_5 RURAL + \varepsilon$ …..6

3. Results and Discussion

In this section we present results of this study. We start with descriptive statistics followed by econometric results on the effect of gender on access to loan and amount of money that is borrowed.

3.1 Descriptive Statistics

The descriptive statistics are summarised in Table 3.1. The results show that 29 percent of the households reported to have borrowed money in the year preceding the data collection. This is a slightly higher percentage than the reported 18 percent possibly because this study focused on loans accessed by the household head and included loans from informal sources like relatives and friends. Female headed households formed 30 percent of the sample. The results also show that the average amount of accessed credit is MK14, 161.00 although the maximum amount borrowed was MK 6 million. This shows that the amount of borrowed money varied a lot as confirmed by a high standard deviation of MK 97,108.81.

On education, the descriptive statistics show that 52 percent of the household heads did not attain a Primary School Leaving Certificate of Education (PSLCE) while only 5 percent had a qualification higher than Malawi School Certificate of Education (MSCE). This points to the fact that, the majority of Malawi population have inadequate level of formal education. This has potential to negatively affect decision making in households.

In terms of business ownership, 8 per cent of the household heads stated that they have a non-farm business. The results also show that the major expenditure in on food whereby the average food expenditure is MK0.54 million in that year with a maximum of MK 3.9 million.

Table 3.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Credit access	11343	0.288	-	0	1.00

Credit amount	11343	14161.00	97108.81	0	6000000.00
Gender (male)	11343	0.701	-	0	1.00
Land ha	10967	1.832	4.704	0	403.50
Marital (married)	11343	0.701	-	0	1.00
Rural	11343	0.816	-	0	1.00
No qualification	11042	0.519	-	0	1.00
PSLCE	11042	0.179	-	0	1.00
JCE or MSCE	11042	0.255	-	0	1.00
Diploma & above	11042	0.048	-	0	1.00
Age	11343	31.007	7.052	1	117.00
Alcohol expenditure	11343	8484.81	46446.97	0	1258648.60
Food expenditure	11343	537383.55	351516.44	0	3948634.80
School expenditure	11343	36037.204	154207.66	0	4750522.00
Asset value	10817	13507.03	94334.17	0	6265100.00
Business	11341	0.08	-	0	1.00

Access to Loans by Gender

We also found out the percentages of male and female headed households who accessed loans. Results in Table 3.2 show that about 29 percent accessed loans of which 8 percent were female headed and 21 percent were male headed. This shows that male headed households had more access to credit than female headed households. This may be attributed to the fact that female household heads were few in the sample, comprising about 30 percent of the whole sample. However, The findings agree with observations reported in the National Economic Empowerment Policy statements (NPC, 2014). The policy explains that women have low access to credit partly because they have to seek approval of their husbands whenever they want to access credit.

Table 3.2: Access to Credit by Gender

Access to Credit	**Gender**		
	Female	**Male**	**Total**
Did not Access Credit (%)	21.5	49.6	71.2
Accessed Credit (%)	8.4	20.5	28.8
Total (%)	29.9	70.1	100.0

Purpose of Credit

People borrow money for various reasons. This study wanted to find out the purpose of the credit that households borrow in Malawi. Table 3.3, gives a summary of the responses given by the sampled households. The results show that the majority of borrowers, actually do so to finance consumption not for business. We see that 38 percent borrowed for consumption while only 23 percent borrowed for business. The combined percentage of households that borrowed for agricultural purposes was 17 percent. This is a worrisome situation that may keep people in a poverty cycle because the little money earned in their economic activities is just used to repay the loans thereby leaving nothing for consumption at that point in time. Living standards deteriorate especially because the loans are repaid with interest. Borrowing for investment

is preferred to borrowing for consumption. This is because investment has potential to generate profits that can repay the loan while supporting the household financially at the same time.

Table 3.3: Purpose of Borrowing

Reason for obtaining the loan	%
Purchase Land	0.6
Purchase Agricultural Inputs	16.7
Business	23.4
Purchase Non-Farm Inputs	1.8
Consumption	38.4
Other (Specify)	5.1
Non-Farm Expenditure	13.8
Total	100

3.2 Effect of Gender and Other Variables on Access to Loan

The probit model fitted the data very well as shown by the large chi square statistic which also had a very small P-value. The model had a maximum likelihood ratio as high as -5971. We also fitted a logit model and the results were similar. See appendix 4, for details of the probit model output. For meaningful interpretation, we generated marginal effects from the probit model. Table 3.4, shows the marginal effects which are interpreted as probabilities.

Effect of Gender

Gender has a significant negative effect on access to loan at 1 percent level of significance (P-value = 0.001). The results in table 4.4 show that, being a male household head reduces the probability of accessing credit by 1 percent. This means that being a female household head increases the probability of accessing credit from the average. This may be because of high poverty rates among female headed households that forces the women to look fr loans. In addition to that, many women have formed Village Bank groups where they access loans informally. It can therefore be argued that most of the loans accessed by women are informal loans. The findings contradicts (Owusu, 2017) who found that being male increases the probability of getting a loan in Ghana.

Effect of Education

Primary and secondary education have significant positive effect on access to loan at 1 percent level of significance (P-value = 0.000) while tertiary education does not have a significant effect on access to credit. Refer to Table 4.4. This may be because literate people have better access to loan information than illiterate people. The effect of tertiary education might not have come out clearly because they formed a very small proportion of the sample (5%) as shown in descriptive statistics in Table 3.1. This result agree with the findings of (Biyase & Fisher, 2017) from Johannesburg. In their study, they also found that education increases the probability of accessing credit among poor people in South Africa.

Effect of Age, Household Size, Marital Status and Expenditure on Alcohol

The results in Table 3.4, show that age has a significant negative effect on probability of accessing loans at 1 percent level of significance (P-value = 0.000) ceteris paribus. Increasing age by one year reduces the probability of accessing credit by 0.4 percent on average, keeping all other factors constant. It means that being young increases the probability of accessing loans. This is an opportunity that can be utilised to improve welfare of the youth and the nation at large. Equipping young people with entrepreneurial skills would help them to use the accessed loans for setting up businesses.

Household size has a significant positive effect on access to credit at 5 percent (P-value = 0.02). This means that large families have a higher probability of going into debts. The partial explanation to this is in terms of high expenditure requirements of large families and high dependence rate in Malawi. In such families, households have to raise a lot of money to purchase food, clothes, medical bills, education expenditure and related expenses. The findings of this study disagrees with Biyase and Fischer, (2017) who found that household size has no significant effect on access to credit.

Another variable that has a significant positive effect on probability of getting a loan is alcohol expenditure. It is significant at 5 percent level of significance. (P-value = 0.02). This can be explained by the findings of Jolex & Kaluwa (2022) who established that alcohol expenditure has a crowding out effect on other expenditures including expenditure on food, education and this can be extended to investment expenditure. Such being the case, households head who drink alcohol excessively, reach the extent of borrowing money for drinking.

Table 3.4: Effect of Gender on Access to Credit

variable	dy/dx	Std error	z-value	P>z
Gender (male = 1, otherwise 0)*	-0.049	0.015	-3.180	0.001
Household size	0.006	0.003	2.250	0.024
Age (years)	-0.004	0.001	-6.010	0.000
Marital status (married =1, otherwise 0)*	0.048	0.015	3.190	0.001
Log of land size	0.006	0.004	1.350	0.178
Rural (rural =1)*	0.025	0.015	1.610	0.108
PCLCE (has PSLCE = 1, otherwise 0)*	0.071	0.013	5.330	0.000
JCE or MSCE (has it =1, otherwise 0) *	0.079	0.013	6.130	0.000
Above MSCE (above it =1, otherwise 0)*	0.009	0.030	0.320	0.752
Education expenditure (MK)	-0.000	0.000	-0.140	0.892
Food Expenditure (MK)	-0.000	0.000	-0.440	0.662
Alcohol expenditure (MK)	0.000	0.000	2.340	0.019
Business (own business=1, otherwise 0)*	0.022	0.018	1.250	0.212
Log of assets value	-0.003	0.005	-0.630	0.529

3.3 Effect of Gender and Other Variables on the Amount of Accessed Loan

The effect of gender and other factors on the amount of money that people borrow in Malawi was assessed using a multiple regression model. The regression model, fitted the data well as shown by a very large F-statistic which is significant at 1 percent (P-value = 0.000). To check for omitted variables, Ramsey Reset Test was conducted and the null hypothesis of no omitted variables was not rejected. See Appendix 1 for results of Ramsey Reset Test. Then, Variance Inflation Factor (VIF) was used to check for multicolinearity. The results shown in Appendix 2 indicate that the level of multicolinearity was within tolerable levels as the average VIF was 1.5 which is less than 5 as recommended by (Daoud, 2017). On the first regression model, heteroskedasticity was detected. Using Breusch Pagan (BP) test, the null hypothesis of constant variance was rejected at 1 percent (P-value = 0.000). Detailed results of the BP test are in Appendix 3. We proceeded to estimate a regression with robust standard errors. Results of the multiple regression with robust standards errors are shown in table 5. Robust standard errors help in getting consistent parameter estimates in the presence of non-constant variance.

Effect of gender

Results in Table 5, show that gender (being male household head) has a significant positive effect on amount of credit at 1 percent level of significance (P-value = 0.001). Male household heads in Malawi have a higher average amount of credit than female housed heads by 22 percent holding all other factors constant. This means that women borrow small amounts of money. This

could be because women are risk averse or lenders refuse to give women large amount as loan. Borrowing small amounts of money may in turn limit the benefits that could be derived from the loan because even if the borrowed money is invested, the investment might be too small to yield helpful returns.

Effect of education

Each of the education dummy variable have significant positive effect on amount of money that is borrowed at 1 percent (P-values = 0.000). Household heads who have education qualifications, be it Primary School Leaving Certificate of Education, Junior Certificate of Education, Malawi School Certificate of Education, Diploma and above borrow larger amounts of money compared to household heads without any education qualification. The results are different form the findings of Sekyi, (2017) who found that education does not have a significant effect on the amount of loan that is accessed in Ghana. Household heads with tertiary education borrow the largest amounts of money followed by those with secondary school education.

Effect of other variables

Other factors that affect amount of credit are food expenditure, asset value, education expenditure, owning a business and location. Table 5, shows that food expenditure, education expenditure and owning a business have significant positive effects on amount of money that households borrow at 1 percent level of significance. However, poverty and staying in rural areas have significant negative effect of amount of loans.

Table 5: Effect of gender on amount of credit.

Log of borrowed amount	Coef.	Std.Err.	t-value	p-value
Gender (male =1, otherwise 0)	0.218	0.068	3.190	0.001
Household size	0.016	0.014	1.160	0.245
Age	0.002	0.003	0.660	0.507
Marital status (married=12, otherwise 0)	-0.050	0.072	-0.690	0.490
Log of farm land	0.008	0.021	0.380	0.701
Location (rural =1, otherwise 0)	-0.524	0.071	-7.360	0.000
PSLCE	0.248	0.055	4.470	0.000
JCE or MSCE (has it =1, otherwise 0)	0.435	0.054	8.060	0.000
Above MSCE (has it =1 ,otherwise 0)	1.118	0.141	7.940	0.000
Alcohol expenditure (MK)	0.000	0.000	0.610	0.539
Food expenditure (MK)	0.000	0.000	9.670	0.000
Education expenditure (MK)	0.000	0.000	3.310	0.001
Poor (poor = 1, otherwise 0)	-0.101	0.058	-1.740	0.083
Business (own bus =1, otherwise 0)	0.205	0.075	2.730	0.006
Lo of assets value	0.172	0.021	8.200	0.000
Constant	7.714	0.214	36.060	0.000
R-squared		*0.275*		
F-test		*74.969*		
Akaike crit. (AIC)		*9248.133*		
SD dependent var		*1.334*		
Number of obs		*2981*		
Prob > F		*0.000*		
Bayesian crit. (BIC)		*9344.133*		

4. Conclusions ad Policy Implications

4.1 Conclusions

This study was conducted to assess the effect of gender on access to credit in Malawi using IHS 5 data. Findings of this study show that the main purpose for households to borrow money is consumption. On access to credit, the results show that there is gender disparity in access to credit. Males have a lower probability of accessing credit than females. However, men borrow more money than females. The results also show that education increases both the probability of accessing loans and the amount of money borrowed. Household size also has a positive effect on access to credit although its positive effect on amount borrowed is not significant even at 10 percent level of significance. However, as people get older, the probability of accessing a loan falls and age has no significant negative influence of amount of credit.

4.2 Policy Implications

On purpose of loans, the study has found that, many households borrow for consumption. The study recommend that institutions of higher learning should enhance teaching of entrepreneurship to all students even to those students not pursuing business related programs. The Ministry of education should make Business Studies to become a compulsory subject at secondary school level considering that majority of learners in the country do not get into universities and colleges. Business Colleges can also reach out to communities with short courses on entrepreneurship.

The study has found that female headed households have a higher probability of getting a loan but borrow less money than male headed households. The study recommends that public loan programs like National Economic Empowerment Fund (NEEF), should have deliberate mechanisms of lending more money to women for them to engage in large scale businesses. One way would be providing business trainings to existing women dominated Village Banks and provide the loans through those groups.

The findings show that, poverty and residing in rural areas reduce the amount of borrowed money while asset value increases the credit. Therefore, we recommend that Government, Non-Governmental Organisations (NGOs), and other stakeholders should implement projects aimed at poverty reduction to enhance social security programs like Social Cash Transfer and Public Works Programs. Citizens must be encouraged to accumulate assets to be able to borrow large amounts of money

ETHIC APPROVAL

This research used data from National Statistical Office. This is a government department which allows authors to use their data for research purposes. The requirement was to cite the data set as has been done under methodology.

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APPENDIX

Appendix 1: Results of Ramsey Reset Test

Ramsey RESET test for omitted variables
Omitted: Powers of fitted values of lnloan
H0: Model has no omitted variables
F(3, 2962) = 1.91
Prob > F = 0.1257

Appendix 2: Results of Variance Inflation Factor Test

	VIF	1/VIF
marital	2.243	.446
gender	2.202	.454
foodexp	2.031	.492
poor	1.823	.548
hhsize	1.727	.579
edut	1.464	.683
eduexp	1.424	.702
edus	1.328	.753
rural	1.325	.755
lnasset	1.243	.804
lnland	1.231	.812
edup	1.156	.865
alcoholrexp	1.036	.965
age	1.033	.968
business	1.024	.976
Mean VIF	1.486	.

Appendix 3: Results of Breusch Pagan Test

Breusch-Pagan test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of lnloan
H0: Constant variance
chi2(1) = 46.52
Prob > chi2 = 0.0000

Appendix 4: Results of Probit Model on Determinants of Access to Credit

cr_access	Coef.	St.Err.	t-value	p-value	Sig
Gender (male = 1)	-.138	.043	-3.22	0.001	***
Household size	.016	.007	2.25	0.024	**
Age	-.012	.002	-6.00	0.000	***
Marital status (married =1)	.139	.045	3.13	0.002	***
lnland	.017	.013	1.35	0.178	
Rural (rural = 1)	.072	.046	1.58	0.114	
PSLCE	.198	.036	5.47	0.000	***
JCE or MSCE	.22	.035	6.27	0.000	***
Above MCSE	.027	.085	0.32	0.750	
Education expenditure	0	0	-0.14	0.892	
Food expenditure	0	0	-0.44	0.662	
Alcohol expenditure	0	0	2.34	0.019	**
Business (own business = 1)	.062	.049	1.26	0.206	
Log of asset value	-.008	.013	-0.63	0.529	
Constant	-.313	.129	-2.42	0.015	**