

Factors Influencing Loan Repayment of Rural Men in Ethiopia: The Case of Yaballo District

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Abstract

The study was conducted with the aim of identifying factors that influence loan repayment of rural men in Yaballo district using primary data that were collected through structured questionnaire from 140 sample men borrowers of Dadim and Cholkasa kebeles. Different sources of credit which the men used and repayment of the men to each source were also investigated. The estimation results of the logit model showed that age of the borrower, participation on off-farm activities, land size of borrowed, training, loan size loan diversion, and repayment period were found as the significant factors that enhance the loan repayment. Therefore, financial institution development practitioners should take those variables into consideration while giving credit to men borrowers.

Keywords: Loan repayment, Credit, Logit model, Defaulter, non-defaulter

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1. Introduction

1.1. Background of the Study

The root causes of economic vulnerability are many, but it is well understood that the most vulnerable population who are in the persistent poverty trap, are those who lack physical and financial resources. Physical resources imply the economic resource, land holdings, and input from which livelihoods are derived and financial capital with which to acquire the physical resource. To many developing countries the root cause of the poverty trap is not the constraint on physical resources but the financial constraint or credit constraint that prohibit the acquisition of those resources to poverty escaping scale (Calum *et al.*, 2008)

The terms micro-credit and microfinance are often used interchangeably, it is important to recognize the distinction between the two. Micro-credit refers to the act of providing the loan. Microfinance, on the other hand, is the act of providing the same borrowers with financial services, such as saving institutions and insurance policies. In short, microfinance encompasses the field of microcredit (Sengupta *et al.*, 2008).

Various empirical studies have concluded that without the development and adoption of new agricultural technologies and the use of credit facilities, it is impossible to expect rapid growth of agricultural productivity. However, with the introduction of new production technologies the financial need of farmers increase manifold. Steady agricultural development depends up on the continuous increase in farm investment. Most of the time, large investment cannot be made by the farmers out of their own funds because of their low level of incomes. Thus, here comes the importance and significance of the availability of rural credits to bring the gap between owned and required capital (Gebrehiwot, 2007)

Microcredit was given to the underprivileged individuals for income-generating activities that William proves the borrowers' living standards. The loans characteristics are, too small, short-term credit (a year or less), no collateral required, weekly repayment, poor borrower and mostly men who are not qualified for a conventional bank loan. Usually the loan pays high interest rates because of the high cost in running microcredit program. Microcredit is also used as the extension of very small loans to those who are in poverty that designed to spur entrepreneurship and help them out from poverty group. Beginning in the mid-seventies, savings and credit institutions started extending small loans to groups of poor men in the villages in order to empower them to invest in micro level businesses. This form of microenterprise credit is based on solidarity based group lending where every group member is tasked to ensure the repayment of all members (Gutu, 2014).

Regarding delivery of financial service, access to men's credit was very limited in Ethiopia. Because of this limited access, the majority of the poor gets financial services from informal sources; like money lenders, Iqub, Iddir. Like in other areas of the world, peoples in Ethiopia are living under poverty. Financial institutions in general and microfinance institutions in particular play crucial role for the development process of Ethiopia in general and southern Borana zone of Oromia regional state in particular. However, no study has been under taken in southern Borana zone regarding men's financial services and effectiveness of lending and its impact on repayment in Yaballo district particularly. In recent years, the informal and semi-formal lending institutions (such as Iqub, Iddir, Money lenders etc.) are becoming the dominant and important source in Ethiopia. Thus, the study has undertaken to analyze the extent to which men credit service functions and how default and non-default rates are associated with different personal and socio-economic characteristics of poor men in Yaballo district, southern Borana zone, of southern Ethiopia. Making men the beneficiaries of credit schemes is a targeting technique to supplement subsistence level of agricultural production. Microfinance interventions may lead to the empowerment of men by

increasing their incomes and their control over the income, enhancing their knowledge and skills in production and trade, and increasing their participation in household decision-making. As a result, social attitudes and perceptions may change, and men's status in the household and community may be enhanced (Kabeer, 1996).

The active participation of men in agricultures called for the current paradigm of rural economic development via men empowerment. Nweze (1995) observed that rural men are; too poor to save, lack ability to organize financial self-help activities and need cheap credit to expand production and income of their farms and non-farm activities. However, no enough study has been under taken in Yaballo district regarding men's financial services and effectiveness merchants, friend and relatives etc. The formal financial institutions have not been interested in delivering credit to the poor because of collateral requirements (Abafita, 2003).

1.2. Statement of the Problem

The main factors from the borrower side include socio-economic characteristics such as, gender, educational level, marital status and household income level and peer pressure in group based schemes. Most MFIs in Ethiopia are experiencing default problems as can be observed from their declining repayment rates (Abafita, 2003). Yaballo Microfinance Institution (YMF) is among one of MFIs in the country providing services in Oromia Regional state (ORS) which also experiences considerable problem in loan repayment.

The borrowed loans are invested for productive purposes and then the generated additional incomes be used to repay to the lending institutions to have sustainable and viable production process. The low repayment of the customers discourages the lender to promote and extend loan to large and fragmented poor men. Microcredit is extended to the borrowers on the basis of financial discipline in that clients are expected to display the required effort not only from the loans but also to repay their loans on time. It is generally accepted that loan, which put in to productive use, results in good returns. But loan provision is such a risky business that, in addition to other reasons of varied nature, it may involve fraudulent and opportunistic behavior.

However, the loan repayment of the beneficiaries is low, still in Adwa town 32% of the men clients of debit credit and saving institution (DECSI) were not repay their loan on the right time in 2012 (DECSI Adwa branch). Moreover, factors contributing to the poor loan repayment of rural men are not studied more. One way to tackle the loan repayment problem is to investigate the factors which affect the loan repayment of MFIs (Onyeagocha *et al.*, 2012). Although loan repayment is determined by willingness, ability and other characteristics of the borrowers, businesses characteristics and characteristics of the lending institutions including product designs and suitability of their products to borrowers. Regarding the characteristics of borrowers, repayment of loan depends on the willingness and ability of the borrowers to repay. Therefore, individual borrowers can either repay their loans or choose to default. It is also true that the factors influencing loan repayment capacity among borrowers are not only likely to differ by programs but, also differ from country to country depending on the domestic business and economic environment (Tundui, 2013).

Failure by rural men to repay their loan on time or not repay them at all has been a serious problem faced by the lending institutions. There is no enough research worked on the loan repayment of rural men in Yaballo district of southern Ethiopia. Hence, this study was initiated to identify factors influencing loan repayment of rural men and then to supply possible recommendations that contribute to improve the situation.

1.3. Objectives of the study

The general objective of this study was to identify the factors influencing loan repayment of rural men in Yaballo district, Ethiopia.

2. Methodology of the Study

The study was conducted in Yaballo district, Oromia regional state of Ethiopia. It is located at 570km from capital city Addis Ababa. This research used cross sectional data type. For this study, qualitative and quantitative data were collected from primary and secondary data sources. Primary data were collected from the sample of rural men benefiting from the loan (micro-credit service) and workers of lending institutions. Secondary data were collected from district microfinance offices. For this study primary data were collected from sample respondents by using interview schedule, through questionnaire and physical observation. The secondary data of the study were collected by assessing documents (published, unpublished, formal and informal) methods. Econometric models (logit model) were used to analyze. In this case the value of this dependent variable is 0 and 1, which stands for 1 if the borrower is a non-defaulter and 0 if the borrower is defaulter. Therefore, loan repayment treated as dichotomous dependent variable. Loan repayment is, therefore, a non-continuous dependent variable that did not satisfy the key assumptions in the linear regression analysis. When the dependent variable was modeled is limited in its range, using ordinary least squares (OLS) may result in biased and inconsistent

Therefore, the cumulative logistic probability model is econometrically specified as follows:

$$P_i = E(Y = 1 | X_i) = \frac{1}{1 + e^{-(\beta_1 + \beta_2 X_i)}}$$

$$Y_i = E\left(Y = \frac{1}{X_i}\right) = \frac{1}{1 + e^{-\beta_1}}$$

Where:

P_i= is the probability that an individual would make a certain choice (default or not default) given X_i Logit

Y_i=dependent variable (loan repayment of the borrowers)

X_i=Explanatory variables

B_i = are parameters to be estimated

Hypothesis and definition of variables for loan repayment

Dependent variable (LRPB): Was defined as the loan repayment of borrowers, which is a dummy variable taking a value one if the borrower is non-defaulter and zero otherwise. The dependent variable for this study was loan repayment. It was hypothesized to be a function consisting of the following components.

Explanatory variables

Loan repayment is a function of the following independent variable= f((age of the borrower(x₁), education level(x₂), land size(x₃), number of livestock owned(x₄), off-farm income(x₅), family size(x₆), training(x₇), repayment period(x₈), Loan diversion(x₉),Loan size(x₁₀))

3. Result And Discussions

This section presents the results from the econometric analyses. The logit econometric model was selected for analyzing the factors influencing the loan repayment of the borrowers. As previously explained, binary logit model was employed to estimate the effect of hypothesized explanatory variables on the loan repayment of the credit users' rural men.

3.1.Socio-economic and institutional factors affecting loan repayment in the study area

The result of binary logistic model on socio-economic factors affecting loan repayment of the borrowers is presented in table 1. A total of ten explanatory variables were considered in the econometric model. Out of which three variables were founded to be significant at 5% probability level. These were age, land size of borrower, participation on off-farm activities. And three variables were significant at 1%; these were: training of borrower, repayment period and loan diversion. The coefficients of these significant variables were negative except age of borrowers, land size of the borrowers and training of the borrowers. On the other hand, four variables were found insignificant on dependent variables namely family size of the respondents, education level of the borrowers, loan size and number of livestock. Over all, the binary logistic model successfully predicted factors contributing to micro credit loan repayment problem.

Table 1. Results of binary logistic model

Independent variables	B	S.E.	Wald	Sig.(P)	Exp (B)
1. AGEB	0.174	0.070	6.217	0.013**	1.190
2. FMSZB	-1.250	1.562	0.641	0.423	0.286
3. EDULEVB	0.575	0.934	0.380	0.538	1.778
4. LONSZB	-0.114	0.204	0.314	0.575	0.892
5. LANDSZB	2.288	1.076	4.519	0.044**	0.102
6. NUBLIVKB	1.963	1.266	2.404	0.121	7.124
7. PARNOFACB	-2.902	1.138	6.503	0.011**	0.055
8. TRNGB	1.459	0.446	10.713	0.001***	4.302
9. RMPMPR	-2.172	0.521	17.379	0.000***	0.114
10. LNDVNB	-2.474	0.638	15.036	0.000***	0.084
Constant	-5.084	4.532	1.259	0.262	0.006

Source own survey (2019)

*** And ** significant at p<0.01 and p<0.05, B=regression coefficient, Exp (b) =odd ratio

Over all, correct prediction=85.6%, sig=significance, S.E=standard error

3.2. Elaboration of significant explanatory variables on determinants of credit use

Age of the household (AGEHH) is positively related with credit use and statistically significant at p<0.05 probability consistent with prior hypothesized. It is an important determinant of credit user those household head

having a higher age, due to life experience have much better association with formal credit institutions and provide better information about the institutions and that can facilitate access to use credit from the formal sources. If the age of borrowers is increased by one year, the odd ratio in favor of being non-defaulter of loan repayment was by 1.19 factors.

Training: This is the number of days per months or times men contacts with a development agent for technical guidance. This variable was found to influence positively and significantly the borrowers' loan repayment performance at 1% significance level consistence with the prior hypothesized. Thus, those rural men's who have frequent contacts with development agents are likely to settle their debt timely in contrary to those who have no or few contacts. If the access to get training is increased by one, the odd ratio in favor of being non defaulter of loan repayment is increased by 4.302 factors.

Land size (LANDSZHH) in hectares was found to be important factor in reducing agricultural credit use and significant at 5% probability level although researcher hypothesized that land size would have positive effect on credit user. The possible explanation is that as land size increases, the men can produce more from his large land holding, so that he need not go for credit. The odds ratio favoring being non defaulter of loan repayment is decreases by a factor of 10.2% for rural men who had lower land size. This a rural men facing the problem of low level of production due to shortage of farm land; the use of modern farm technologies would increase his productivity through the use credit for fertilizer and other improved farm inputs since Land is the basic asset of farmers.

Participation on off-farm activity (PARNONAC) was the other variable that influences credit use negatively and significant at 5% level which was consistent with the prior hypothesized. The possible explanation for this result is if rural men are participated on off-farm activities like petty trade, handcraft, selling of the fruit and other off-farm activities, they also have other source of money invested from non-farm activity. Therefore those invested money used for purchasing of home commodity like for consumption purpose and for other rural men expense and no needs of using the credit for other expenditures. The odds favoring odd ratio in favor of being non defaulter of loan repayment is decreases by a factor of 5.5% for men who had not participated in off- farm activity.

Repayment period (RPMPR): This variable was founded to be influence negatively and significantly the borrowers' loan repayment rate at 1% significance level. The arrangements of suitable loan repayment period for borrowers decrease the chance of being defaulter by 11.4%.

Loan diversion (LNDVN) This variable was found to influence negatively and significantly the borrowers' loan repayment performance at 1% significance level consistence with the prior hypothesized. An application of entire loan for an intended purpose and product business decrease the probability of being defaulting by 8.4%. Whereas those men do not applying the loan borrowed for an intended purposes such consumption, clothing, housing and other expenses could be have high probability of being defaulter by the same factor already expressed.

4. Conclusion and recommendation

4.1. Conclusion

In this study attempt was made to look into the factors that affect loan repayment of rural men borrowers of Yaballo district and to assess different sources of credit that serving the rural men in the study area. Beckman and Foster (1969) defined loan as the power or ability to obtain goods or services in exchange for a promise to pay for them later. Default is defined as failure to pay a debt or a loan at the right time. On the contrary, non-default is defined as payment of a debt or a loan at the right time. Moreover it assessed the impact of the credit scheme on the economic and living conditions of the borrowers. Both descriptive statistics and econometric analysis were carried out to accomplish the above-mentioned tasks.

The same analysis was done on the responsibility over the loan effect on loan repayment of the rural men in the study area. This variable showed that most of respondents reported that they themselves have full control over the loan they borrowed that enables them to be engaged in various sources of income generation to increase their repayment capacity.

Factors that are found to be significant determinants of loan repayment were level of age of borrowers, loan diversion, and training, participation on off-farm activities, repayment period, and land size. All of these factors increase the probability of loan repayment except that of loan diversion. On the other hand, the remaining ones are insignificant such as, education status; numbers of livestock, family size and loan size reduce the loan repayment.

4.2. Recommendations

Based on the major findings of this study, the following recommendations could be drawn along with some policy implications to be brought to the attention of the institution and any other interested parties.

The significant factors that were found to enhance the repayment were loan repayment period, and participation on off-farm activities. This implies that since most of the respondents were using credit service from formal credit institutions which is due to low interest rate charged where the repayment period was formal and regular throughout time. Whereas participating on off-farm activities should be more thought to the men to increase

their repayment capacity. Secondly, loan diversion implies the use of the loan whether for an intended purpose or not that was found as factor negatively affecting the loan repayment.

Therefore, while designing the lending strategy in such a way that those factors enhancing the repayments are duly taken in to account can be recommended in general, this needs a great care. For instance loan diversion was found to significantly decrease the probability of repaying loan in full. But it is not recommended to exclude those with loan diversion hoping to reduce loan default, since these donors contradict the objective of MFIs.

- ✓ In line with the basic idea of improving the loan repayment, the screening of borrowers deserves good attention.
- ✓ From the evidence provided in this study, borrowers who are aged and were must be encouraged to use credit worthily that needs further encouragement.
- ✓ On the other hand, since the men were using their credit from formal credit institutions they need deep awareness about the formal terms of repayment.
- ✓ The credit agents being on the side of government must visit and give trainings for their clients timely and regularly in order to increase the men loan repayment ability and awareness.
- ✓ Moreover, researcher has seen that only six out of ten variables that were significant in the loan repayment equation This means that important information is being ignored as in the case where some variables contributing to good repayment are neglected when it comes to the use of these variables in identifying good borrowers with such characteristics. So another area of focus as far as teaching the borrowers to be participate in different income generating activities such as off-farm activities like trade, handcraft and others.
- ✓ The best remedy can also be identifying clients into defaulters and non-defaulters, while at the same time the institution should attempt to avoid incorrect use of such factors as criteria for rationing.

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