

Factors Influencing MFIs Group Loan Repayment Performance: A Case of MSEs' Service Sector in Mekelle City, Ethiopia

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Abstract

Dedebit Credit and Saving Institution (DECSI) is a microfinance institution, which is engaged in development activities in Tigray regional state, Ethiopia. DECSI mainly provides credit services to low income people who are capable to work in income generating activities. Its corporate objective is to promote micro and small enterprise to alleviate poverty and unemployment. However, the institution has been facing increase in loan default rate from time to time on group owned MSEs for the past five years. Thus, the aim of this study was to identify and analyze the association of loan repayment with the factors that influence group loan repayment performance of the clients of DECSI operating in the service sector as group owned MSEs. This study applied explanatory research approach, cross-sectional primary data, stratified sampling techniques, and finally employed chi-square test to test the association of the independent variables and loan repayment performance. A total of eleven explanatory variables were included in the chi-square. According to the chi-square test, group formation (screening), peer monitoring, loan size, loan term and supervision have significant association with loan repayment performance. Therefore, DECSI, among others, should encourage self-screened group borrowers, revise loan term by considering the time required for the service sector to generate income, regular supervision for borrowers should be in place, and set loan size based on business scope to increase loan repayment performance of the clients.

Keywords: Chi-square, DECSI, Ethiopia, Factors, Group Loan, Mekelle, MFIs, MSEs, Service Sector.

1. INTRODUCTION

Most microfinance institutions provide collateral-free small loans to low income households. These loans are generally expected to use for self-employment and income generating activities (Kono & Takahashi, 2010). Microfinance can be a critical element of an effective poverty reduction strategy (Wolday, 2000).

Microfinance institution has grown in prominence since Mohammad Yunus started the Grameen Bank project in 1976. The Grameen bank of Bangladesh, which was founded by Mohammed Yunus, was one of the first microfinance institutions (MFIs). Mohammad Yunus came up on a group of villagers that were unable to pay off their debt to money lenders. He found that he was able to lend them what they needed out of pocket. He started lending services that avoid high interest rate that the traditional money lenders charged (Cabral, 2006).

The development of microfinance institutions in Ethiopia is a recent phenomenon. The proclamation, which provides for the establishment of microfinance institutions, was issued in July 1996. Since then, various microfinance institutions have legally been registered and started delivering microfinance services (Wolday, 2000).

DECSI evolved from a program established by the Relief Society of Tigray (REST), a local NGO founded in 1978. In 1993, REST conducted a socio-economic study on rural poverty in Tigray that indicated an unmet demand for finance by the rural poor. Based on this study, the Rural Credit Scheme in Tigray (RCST) was established under REST. Dedebit Credit and Savings Institution (DECSI) was established and registered in 1997 as a microfinance institution (MFI) providing credit and savings services for the rural and urban poor in the Tigray region of Ethiopia. It is one of the most famous MFIs in Ethiopia (Temesgen, 2014).

There are eleven types of loan (products) in DECSI. The size and loan period varies depending on the type of loan. Loan is provided either in group guarantee, individual with third party guarantee or through collateral. The Major types of DECSI's loan are regular loan, agricultural loan, civil servant loan, rural package (household centered) loan, urban package loan, business loan, housing loan, loan for graduates of technical and vocational education training, loan for university and college graduates, equipment leasing and cooperatives. There are many Micro and Small Enterprises in Tigray (MSEs). The most common MSEs financed by DECSI

are manufacturing, services and agriculture (Temesgen, 2014).

An extensive effort to reduce unemployment in the city of Mekelle is going on by the government through organizing those unemployed communities by assuming it is not an option rather it is very essential. Government is taking major role on how those organized peoples can access to loan from Dedebit Credit and Saving Institution (DECSI) microfinance institution.

Microfinance plays vital role in poverty reduction in developing countries. Loans taken from lending institutions vary from country to country, region to region and sector to sector. But most of MFIs in developing countries share the one common characteristic that is suffer from a considerable default rate (Kashuliza, 1993). Due to this reason, a study is needed in order to identify the determinant factors of group loan repayment performance.

2. LITERATURE REVIEW

Microfinance is defined as the attempt to improve access to small deposits and small loans for poor households neglected by banks or is defined as the provision of financial services to the poor involving small deposits and loans and use peer monitoring and joint liability structure to overcome the screening, monitoring and enforcement problems commonly encountered by formal lending institutions (Schreiner & Colombet, 2001).

Microfinance can be also defined as financial instruments, such as loans, savings, insurance and other financial products that are tailored only to the poor. Microfinance is created in the economy for the economic benefit of the poor and to alleviate poverty. Microcredit is the lending side of microfinance. Microcredit loans help the poor to be involved in income generating activities that allow them to accumulate capital and improve their standard of living (Hanim, Gilbert, & Gan, 2007).

Since 1970s, group lending programs have been promoted in many developing countries. The key feature of group lending is joint liability. This means all group members are treated as being in default if any one member of the group does not repay his/her loan. Therefore, each member is made responsible for repayment of loans of his or her peers (Besley & Coate, 1995). Most schemes give subsequent credit only if the group has fully repaid its previous loan. Loan under joint liability shows the threat of losing access to future credit incites members to perform various functions, including screening of loan applicants, monitoring the individual borrower's efforts, and enforcing repayment of their peers' loans (Zeller, 1996).

In analyzing Joint Liability Lending Institutions (JLLIs), economists have agreed that joint liability alleviates the four main problems (i.e., adverse selection, moral hazard, costly audits and enforcement) faced by formal credit institutions that lend to poor borrowers who cannot offer much in the way of collateral (Ghatak & Guinnane, 1999).

2.1. EMPIRICAL STUDIES ON LOAN REPAYMENT PERFORMANCE IN ETHIOPIA

Retta (2000) has examined loan repayment performance of group borrowers in Addis Ababa. His finding was frequency of loan, supervision, suitability of repayment period and other income sources are found to encourage repayment hence reduce the probability of loan default.

Abreham (2002) carried a study on the loan repayment and its determinants in small-scale enterprise financing in Ethiopia around Zeway area. His finding was education and work experience related economic activities before the loan are enhancing loan repayment. While extended loan repayment period influence the repayment performance negatively. In terms of gender composition 12.7% are females while the rest 87.3% are male borrowers. The mean loan-rationing ratio is larger for males while the mean loan recovery rate is less than female borrowers. The proportion of defaulters is 61.5% for females and 69.7% for males. Female borrowers are better payers relative to males. This supports the hypothesis that females feel more responsibility for their family than males.

Jemal (2003) analyzed the microfinance repayment performance of Oromia Credit and Saving Institution (OCSI) in Kuyu, Ethiopia. According to his finding, gender, loan size and number of dependants are negatively related to loan repayment. On the other hand, age was found to be positive. Income from activities financed by loan, repayment period suitability and loan supervision are positively and significantly related to loan repayment performance. Moreover, loan diversion is significant and negatively related to loan repayment rate. The negative sign implies that the use of diverted funds for non-income generating purposes.

Berhanu (2005) studied the determinants of loan repayment performance of smallholder farmers in North Gondar, Ethiopia. His finding revealed that experience and numbers of contacts were found to significantly influence the repayment performance. But, loan amount was found to have insignificant effect on loan repayment performance.

Fikirte (2011) conducted a study on the determinants of loan repayment performance in Addis Credit and Saving Institution (ACSI). She found that age has significant positive effect on the loan repayment performance which means as age increased; the probability of being defaulter is decreased. This implies that the borrowers are more aware on financial management and they feel responsibility as they get elder but education

and business experiences had no significant effect on the probability of being defaulter. In the group lending female borrowers have performed worse loan repayment performance than male. Moreover, the percentage of female defaulters was higher than non-defaulter.

Zelalem, Hassen, and Jema (2013) studied the determinants of loan repayment performance considering 14 explanatory variables. Among these, business experience was found to significantly influence the probability of being non-defaulter. The remaining variables like age, loan size and educational level were found to have no significant effect on the loan recovery rate.

Million, Nyikal, and Wania (2012) conducted a study on the factors affecting loan repayment performance. They found that education is an important determinant of loan repayment. An educated client is able to use modern technologies, perform farming activities based on cropping calendar, and manage resources properly. All these factors boost production, which improves loan repayment.

To summarize, training, repayment period experience and loan size are found to have positive impact on repayment performance, but some studies commented that repayment period and loan size have negative effect on the repayment rate, and other studies contended that loan size and experience have no significant effect on loan repayment performance. These show that the empirical evidences portrayed differences in their findings.

2.2. EMPIRICAL STUDIES ON LOAN REPAYMENT PERFORMANCE IN OTHER COUNTRIES

Godquin (2004) tested the explanatory power of models that attribute the performances of MFIs in terms of repayment rate to the use of group lending, social intermediation and dynamic incentives. Age, loan size, and duration showed a significant negative impact on the repayment rate but social ties and professional training of the borrower have expected positive impact on the repayment performance. According to the theory of dynamic incentives, repayment performance increased as loan size increases. The size of the loan showed expected negative sign and is significant in the specifications as in the study by Sharma and Zeller (1997). This negative sign is theoretically explained by the fact that the loan size increases the gain associated with ex-ante and ex-post moral hazard. The negative sign of the loan size of the loan could also be linked to the borrower's difficulty in repaying a larger amount over a given period (usually one year). It could be that, for a given duration, large loans do not meet the borrower's needs and are not suited to the local economy. This statement is related to the positive and significant sign of the duration of the loan throughout the specifications. Social ties inside the group had a significant and unexpected negative impact on the repayment rate. The coefficient of the age of the borrowing group at the due date has a positive and significant coefficient but female borrowers did not prove to have a significantly better repayment performance. Even though the coefficient is positive, it is not significant. It is indeed expected that the social ties and other benefits of the group, such as information-sharing, increase with the age of the group. As previously mentioned, however, the age of the group has a negative impact on repayment performance. If MFIs want to allocate larger loans to group members with whom they have an established relationship, they should also develop specific incentives for their experienced borrowers to have a better repayment performance.

Natukunda (2010) described micro finance credit lending terms and repayment performance and stated the loan sizes in most cases affect the nature of business and type of investment for the borrowers. The small loan size is often advanced by the micro finance institutions as a way of minimizing risks. However, when the clients are not given adequate funds to cater for their business needs, they tend to resort to multiple borrowing. This in turn affects their repayment and increases the risks of the loan. The respondents were divided as to whether Brac Uganda is giving them enough credit to cater for their business needs with some indicating that it was enough while others indicated that it was not. This is in line with the findings by George (2008) who indicated that sometimes the loans issued by MFIs are too small to make an impact on women's businesses. The perception of the respondents as to whether the loan period given by Brac Uganda is appropriate to their business needs indicated that members were satisfied with the loan period of five months. This concurs with Woolcock (2008), who argued that a long loan period may make the client to be extravagant and end up failing to pay back the loan. Clients taking small loans should not be given very long repayment period. From the research findings since the majority of the clients were dealing in small businesses and taking small loans, they need a short loan period for regular recapitalization.

Zeller (1996) analyzed the determinants of repayment performance of credit groups in Madagascar. His finding is groups with higher level of social cohesion have a better repayment rate. Moreover, the programs that provide saving service to their members have a significantly higher repayment rate. This result emphasizes the role of saving services for improving the performance of group credit programs. He also identified that with larger group size, the repayment performance improves. This result is in line with the hypothesized economies of scale, scope, and risk. However, it is to be noted that groups will have increasing costs of coordination, moral hazard, and free-rider problems when group size surpasses manageable levels. The optimal group size will vary with respect to socioeconomic and agro ecological conditions of the participating communities and with program characteristics.

Zeller (1996) assessed repayment performance in group-based credit programs in Bangladesh. Their hypothesis was that the bigger the group, the more imperfect are flows of information likely to be between members. Hence, problems arising out of asymmetric information make monitoring and enforcing costly and less effective. Rates of default are therefore expected to increase with group size (+). The sign of the coefficient is positive as expected; however, it is marginally insignificant at the 10-percent level. They found that the greater the loan size, the greater the probability of the default (+).

As per empirical analysis on determinants of repayment performance in credit groups by Zeller (1998) implementation of internal rules and regulations by the group members would lead to the better repayment performance that is decrement in the cost of operations of the lender and decrement in the default rate.

Olagunju and Adeyemo (2007) have analyzed the determinants of repayment decision among small holder farmers in Southwestern State of Nigeria. The result showed that the number of visits made by loan officers to the borrowers, higher level of education, and time of loan disbursement would have a better repayment performance. Moreover, borrowers with lower number of household members would meet their repayment obligation better than those with high number of household members. And having access to business related information and providing training to the clients are increasing the loan repayment rate of the borrowers.

Woolcock (2008) observed that if the loan term is too short, the borrower fails to generate revenue to enable him/her make repayments while a longer loan term may make the client extravagant and the client may in the end fail to pay back. For successful results, the loan terms should match the cash patterns to help the client budget cash flows. He also argued that if physical collateral were a requirement for borrowing, most MFIs clientele would be unable to participate due to their extreme poverty levels. Since borrowers do not have physical collateral, MFIs focus on using social collateral via group lending. Group lending encompasses a variety of methodologies, but all are based on the principle of joint liability. In essence, the group takes over the underwriting, monitoring, and enforcement of loan contracts from the lending institution.

Goldmark (2001) indicated that under joint liability each group member is made responsible for the loan of other group members. If one defaults, the other group members are required to cover the loan from their own resources, and if they do not, they lose access to future loans. It is thus in each member's interest to ensure that the other members pay.

George (2008) argued that a large majority of the micro finance institutions were offering very short loan repayment periods without grace periods, thus straining and pressuring them to make quick repayments. The clients did not feel the immediate impact of the loan but instead they felt immense pressure to put all their earnings towards loan repayment. He further indicated that the immense pressure associated with quick loan repayment and short grace period could have led some micro entrepreneurs to sell their land in order to meet the demand for quick repayments.

Hanim et al.(2007) reported that the probability of a loan repayment problem was higher for borrowers who repaid their loans on a weekly basis. As hypothesized, a weekly loan repayment schedule posed problems for borrowers who generated a lower revenue cycle. They have also revealed that age was positive and significant. Borrowers in the 46 to 55 age group had a higher probability of having repayment problems. This finding contradicted with the hypothesis that older borrowers were more responsible in repaying their loans than younger borrowers. This could be because the borrowers in this age group might have higher financial commitments to their family and business expenses. Thus, with higher financial obligations, they could have difficulty in repaying their loans. Borrowers aged between 18 and 25 years old had a higher probability of having a problem in repaying their loans. The age group 18 to 25 years old is the youngest group among borrowers. This finding supports the argument that older borrowers would be more responsible and disciplined in repaying their loans than younger borrowers. Lack of experience in the business involved, which resulted in less income received, might be the reason that the younger group has difficulty in repaying the loan. In addition, younger borrowers are not committed to repaying their loan because they might believe that even if they default; they still can receive microcredit loans from other microfinance institutions because they have more opportunities since they are still young. They found that significant positive sign on the gender variable indicated that the probability of a loan repayment problem was higher for males than for females.

Onyegocho and Chidebelu (2012) carried a study on determinant of loan repayment performance in Southeast State of Nigeria. They hypothesized that loan size to have a negative relationship with repayment rate. In other words, the higher the loan size given by the institution, the lower was the repayment rate of the clients. Their regression result strongly disagreed with this hypothesis. It stipulated that the higher the size of the loan to clients, the higher the repayment rate. This situation appears to be most unlikely because the amount to be repaid was relatively larger and if the loan was from development oriented institution with subsidized interest rate and little chance of repeat loans, the pressure or inclination of such clients would be to delay repayment.

Sylvester, Okpara, and Chukwudi (2013) assessed the determinants of loan repayment performance.

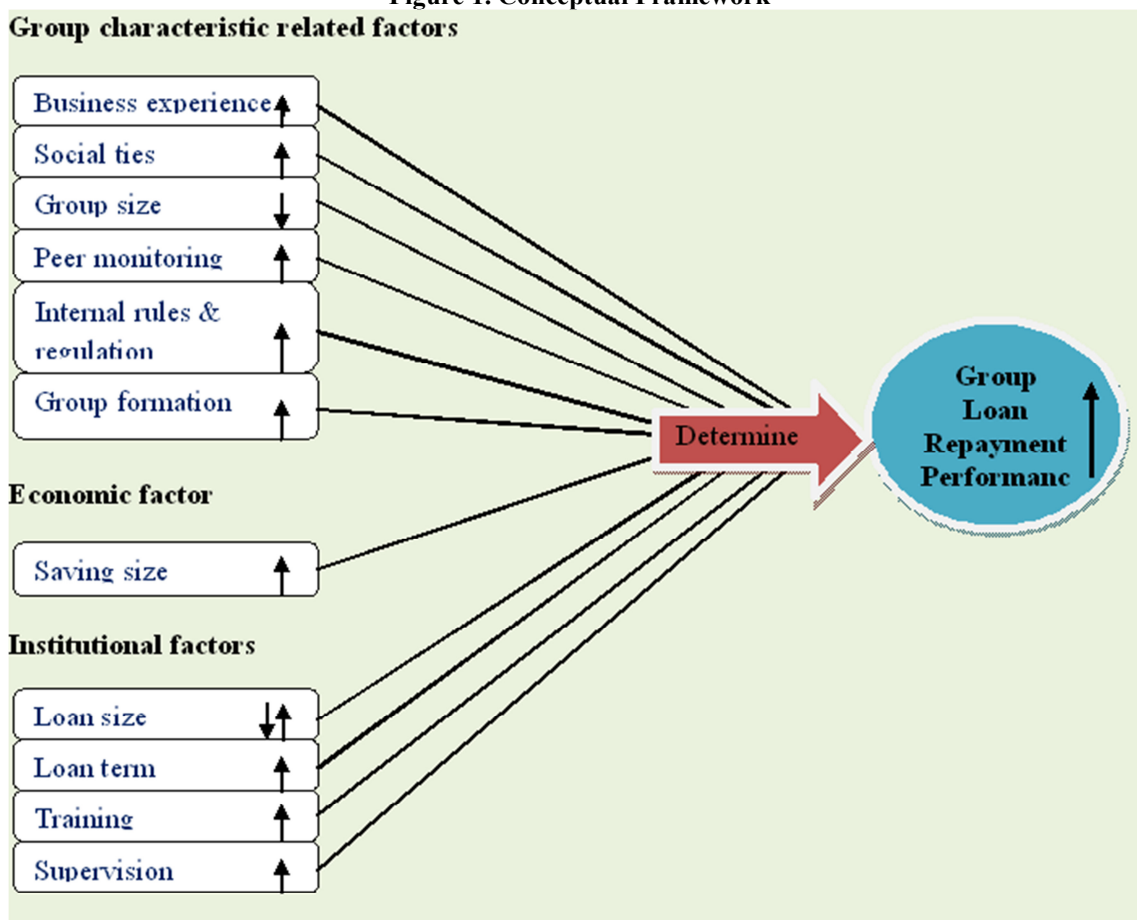
The coefficient of age of clients was significant at 1% but negatively signed indicating that age has an inverse relationship with repayment rate. This may be as they get old, in that they take less risk and invest less but think or concentrate more on their daily consumption activities without thinking of collecting loans. Experience coefficient is also significant at 1% and positively signed. This means that a client with higher business experience stands a better chance of repaying more loan than with those of lower business experience. The reason for this may be attributed to improvement in managerial skill which makes for higher profitability which in turn induces the need for more financial resources to further enhance profitability. The educational level coefficient had a positive sign indicating that education has direct relationship to the repayment rate and this showed that as level of education increases, borrowers enhances their ability to access, evaluate, and understand new production techniques. This underpins the assertion that educated farmers are more amenable to risk taking and change than the non-educated ones. The result of this study showed that the higher the literacy level of the clients, the higher will likely be non-default.

To sum up, the empirical evidences showed that there are many factors that affect the group loan repayment performance positively or negatively. In most studies described that loan size, loan term, training, social ties, saving, experiences, peer monitoring, supervision, internal rules and regulation and group formation (screening) are found to positively affect group loan repayment performance; group size is found affecting negatively the group loan repayment performance; however, in some studies loan size found to have negative impact on the repayment performance and in some other studies loan size and experiences are found to have no significant effect on group loan repayment performance. This shows the empirical evidences revealed that the impact of the factors on the loan repayment performance differs in terms of the group characteristic related factors, economic and institutional factors.

2.3. CONCEPTUAL FRAMEWORK

Figure 1 below demonstrates the conceptual framework of the relationship between the dependent variable (group loan repayment performance) and the independent variables (those factors that determine loan repayment performance) mentioned above.

Figure 1. Conceptual Framework



Source: Adapted from Jemal (2003), Fikirte (2011), and Ghatak and Guimane(1999)

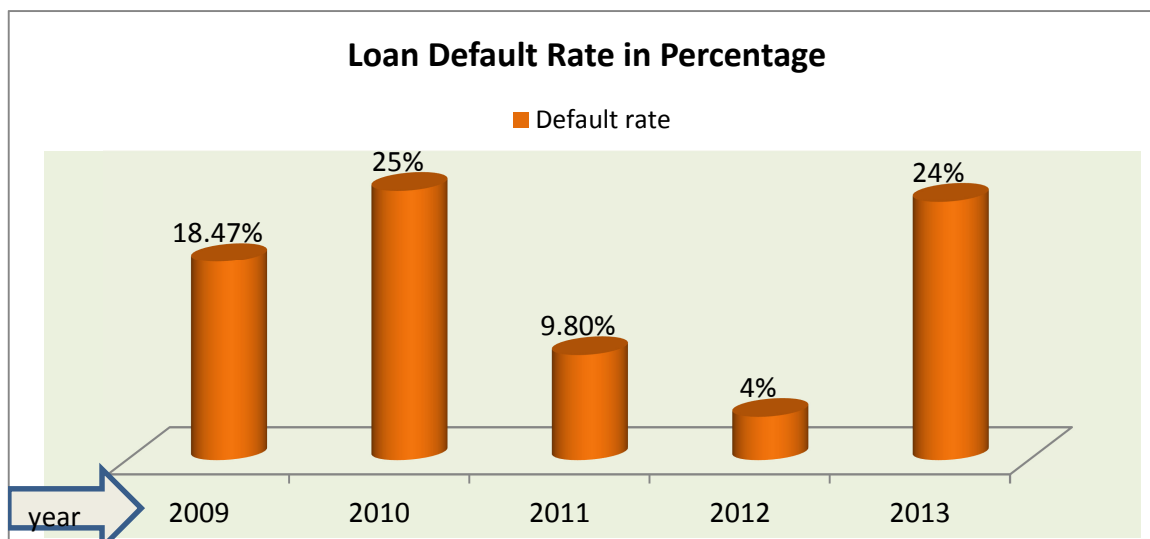
3. STATEMENT OF THE PROBLEM

Although the performance of the MFIs in Ethiopia has been impressive since their establishment, they are not free of default problems as can be observed in the following table. Hunte (1996) argued that default problems destroy lending capacity as the flow of repayment declines, transforming lenders into welfare agencies, instead of a viable financial institution. Loan default may also deny new applicants access to credit as the microfinance institutions management problems augment in direct proportion to the increasing default problem. One indicator of effective MFIs is the loan performance of the borrowers (Sengupta & Aubuchin, 2008). High repayment rates are associated with the benefits for both MFIs and borrowers (Godquin, 2004). If there is high repayment rate, the relationship between the MFIs and their clients will be good (Bond & Rai, 2009). In contrast, if there is low repayment rate, both the borrowers and MFIs will be adversely affected. So if the MFIs are not viable because of default problem, borrowers will not have access to loan and suffer from poverty, as a result affects the development of the country as whole.

Figure 2 below indicated that average default rate of the borrowers for the last five years is about 16% which is greater than the Ethiopian National Bank (NBE) minimum requirement set for all financial institutions, i.e., <5 percent (or >95 percent expected to be collected). In 2009 the default rate was 18.47% and increased to 25% in year of 2010. Though the default rate was decreasing to 9.8% and 4% in the years of 2011 and 2012, respectively, finally it increases to 24% in the year of 2013.

Besides, the repayment performances of the group borrowers have been significantly fluctuating from time to time. Thus, whether default is random and influenced by erratic behavior or whether it is influenced by certain factors in a specific situation, needs an empirical investigation.

Figure 2. Default Rate in the Past Five Successive Years



Source: DECSI (2014)

4. OBJECTIVE OF THE STUDY

The main objective of this study was to examine the association of group loan repayment with the determinant factors that influence group loan repayment performance of MSEs service sector in Mekelle City.

5. MATERIALS AND RESEARCH METHODOLOGY

This section deals with an overview of the study area and research methodology. Specifically it presents selection of the research methods that are used in this study: research approach; data type, source and collection techniques; sampling techniques; and data analysis technique.

5.1. DESCRIPTION OF STUDY AREA

The study area is Mekelle city which is located at northern part of Ethiopia, in Tigray regional state. It is located at a distance of 783 kilometers from the capital city of Ethiopia, Addis Ababa. Mekelle is the capital city of Tigray regional state. It is located at latitude and longitude of 13° 29'N, 39° 28'E, respectively, with an elevation of 2084meters above sea level. It is a city with seven sub city administrations. Based on the study conducted in 2010 by Mekelle municipality, the city had an estimated total population of 248,566; of which 120,830 were males and 127,736 were females [Mekelle City Administration (MCA), 2010].

DECSI is located in Mekelle city, the capital city of Tigray. When the institution commenced in 1994,

it had branches in 8 Wereda of the region with only 31 employees. Today, it provides services from 165 functionally decentralized offices all over Tigray regional state as well as Addis Ababa and Gondar. The current number of the staff has reached 2,727. The institution delivers major types of loan like regular loan, agricultural input loan, civil servant loan, rural package loan, urban package loan, business loan, housing loan, and cooperative loan. In general, the institution operates in rural and urban Tigray catering the poorest of the poor segment of the community as farmers, youth, marginalized women, disabled veterans, TVETs, graduated students, contractors, Micro-Small Enterprises and agro-industries. Up to now, more than 8 billion Birr loan is disbursed to 3,104,769 clients, out of which 25 million loans is disbursed to 512 cooperative clients (Temesgen, 2014).

5.2. RESEARCH METHODOLOGY

5.2.1. RESEARCH APPROACH

For a similar study, Million et al.(2012) have applied descriptive approach; Paxton (1996) has applied explanatory approach; and Fikirte (2011), Jemal (2003), and Natukunda (2010) have applied both descriptive and explanatory approach. Besides, all the above researchers used a cross-sectional data. Thus, this study used a cross-sectional data and applied explanatory approach to analyze the factors that influence group loan repayment performance.

5.2.2. DATA TYPE, SOURCES, AND COLLECTION TECHNIQUE

Fikirte (2011) and Natukunda (2010) used primary data composed of qualitative and quantitative data collected through questionnaire and secondary data; and Jemal (2003) and George (2008) used primary data only composed of qualitative and quantitative data collected through questionnaire and interview. Therefore, in order to assess the determinants of group loan repayment performance, this study used primary data comprising quantitative data obtained by structured questionnaire from DECSI clients.

5.2.3. SAMPLE DESIGN

For a similar study, Fikirte (2011) and Natukunda (2010) used a stratified sampling technique to select sample respondents; Jemal (2003) and Godquin (2004) used simple random sampling, and George (2008) used multistage sampling method to select sample respondents.

Currently DECSI Mekelle branch has three sub-branches (loan centers) but the study focused on the two sub-branch (service delivery centers) selected based on default rate of the loan centers. The target populations of the two loan centers were 7 group loaners engaged in service sector consisting of 122 group members. A simplified formula (Yamane, 1967) was applied to determine the sample size at 90% level of significance.

$$n = \frac{N}{1 + N(e)^2} \text{----- (1)}$$

Where N = population size; e = the level of precision.

The sample size was:

$$n = \frac{122}{1 + 122(0.1)^2} = n = \frac{122}{2.22} = 55.$$

Therefore, the study used stratified proportionate random sampling to select the 55 sample respondents from the two loan centers.

TABLE 1. DETERMINATION OF PROPORTIONATE SAMPLE SIZE

(a) Sub-branch	(b) Activities	(c) Population in a group	(d) = $\frac{c \times 55}{122}$ Sample size
North	Janitor	65	29
	Car wash	10	4
	Café	4	2
	Service	18	8
South	Recreation	10	4
	Restaurant	9	4
	Internet	10	4
Total		122	55

Source: DECSI's North and South Branch office Report (2014)

The sample size accounts for about 45% of the population and this implies the sample respondents represent the target population.

5.2.4. METHOD OF DATA ANALYSIS

This study used the chi-square statistics for testing the association of the group loan repayment with the factors influencing the loan repayment performance.

6. DATA ANALYSIS AND DISCUSSION

This section presents, analyzes and interprets the response gathered from the respondents through structured questionnaire. For this purpose, the chi-square statistics was employed to compare non-defaulter and defaulter groups with respect to their variables in order to analyze the association of group loan repayment with the explanatory variables.

6.1. DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

In this section, the respondents' demographic characteristics are presented with particular reference to gender, age and education level in Table 2 below.

Table 2: Demographic Characterizes of Respondents

Category	Number	Percent
Gender:		
Male	25	50
Female	25	50
Total	50	100
Age:		
18-25	15	30
26-35	19	38
36-45	8	16
46+	8	16
Total	50	100
Educational level:		
Secondary	9	18
Diploma	13	26
Degree	28	56
Total	50	100

Source: Own Computation (2014)

As indicated in Table 2 above, among the 50 respondents;

- 25(50 percent) of the respondents were female borrowers and 25(50 percent) respondents were male borrowers.
- Respondents in the age category of 18-25, 26-35, 36-45 and 46+ accounts for 30 percent, 38 percent, 16 percent and 16 percent, respectively.
- Majority (56 percent) of the respondents have attended first degree followed by diploma holder (26 percent). The remaining respondents (18 percent) had secondary school.

6.2. RESULTS, ANALYSIS, AND DISCUSSION

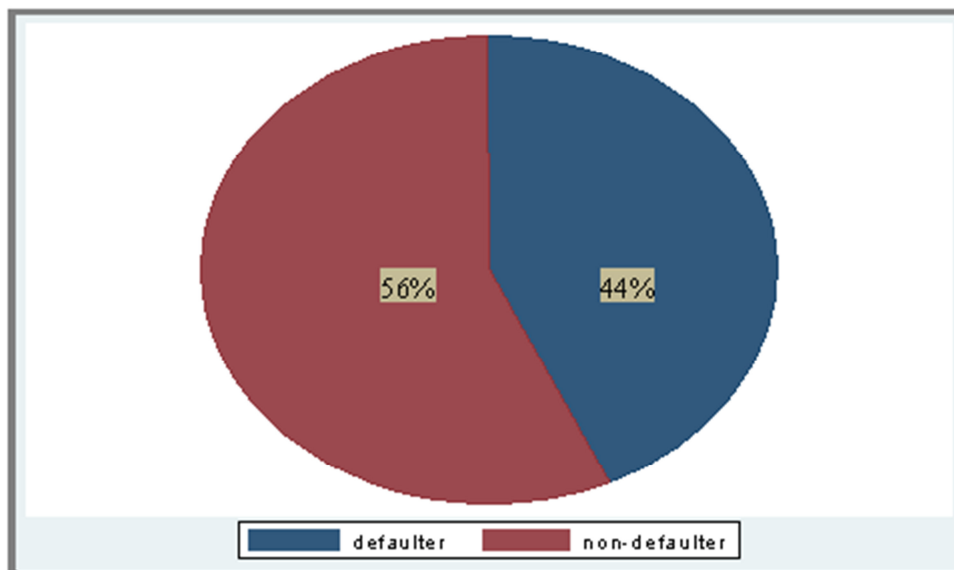
6.2.1. STATUS OF GROUP LOAN REPAYMENT

To know the loan repayment status, group borrowers were asked whether they have paid back fully and on repayment with arrears (i.e., 30, 60, 180, less than 360 days past due), or not paid successfully (defaulted, i.e., greater than 360 days past due) in the form of "Yes" or "No" response question. Such an objective response and direct measurement of the binary dependent variable (i.e., group loan repayment equal to "1" if groups were non-defaulters and "0" otherwise) was used to determine the factors that affect group loan repayment performance in similar studies of Paxton (1996) and Million et al.(2012).

Out of the total respondents 28 (56 percent) were able to repay the loan within the given maturity period, and hence they are creditworthy. Whereas the remaining 22 (44 percent) respondents have defaulted (i.e., greater than 360 days past due) on their loan and this implies that the borrowers are not creditworthy.

The following Figure 3 shows the status of loan repayment by the group borrowers. Default problems destroy lending capacity as the flow of repayment declines, transforming lenders into welfare agencies, instead of a viable financial institution. Loan default may also deny new applicants access to credit because the micro finance institutions management problems augment in direct proportion to the increasing default problem (Hunte, 1996). Concerning this matter, annual reports of DECSI indicates that the loan default rate for DECSI is fluctuating from time to time as summarized in Figure 2 above, especially in the years of 2010 and 2013. This result also found 44 percent default rate. This implies that high loan default rate might threaten the financial sustainability of DECSI.

Figure 3. Status of Loan Repayment by the Group Borrowers



Source: Own Computation (2014)

6.2.2. CHI-SQUARE TEST

In this section, the association of the dependent variable against the explanatory variable is examined by using the chi-square test. Thus, the results are analyzed and discussed as follows below.

6.2.2.1. LOAN REPAYMENT AND GROUP CHARACTERISTIC RELATED FACTORS

Group characteristics related factors include group size, social ties, business experience, peer monitoring, group formation and internal rule and regulation of group borrowers. The description of these variables is provided below to indicate their association with group borrowers in terms of loan repayment performance.

LOAN REPAYMENT BY GROUP SIZE AND GROUP FORMATION, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The following Table 3 shows the comparison of non-defaulter and defaulter groups by using group size and group formation.

Table 3: Distribution of Group Borrowers by Group Size and Group Formation.

Variables	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)		Freq.	Percent		
	Freq.	Percent	Freq.	Percent				
Group size								
Below 6	19	67.86	12	54.54	31	62	0.9266	0.336
6 and above	9	32.14	10	45.46	19	38		
Total	28	100	22	100	50	100		
Group formation								
Self-screened	21	75	5	22.73	26	52	13.4870*	0.000
Screened by other	7	25	17	77.27	24	48		
Total	28	100	22	100	50	100		

* Significant at 1 percent level.

Source: Own Computation (2014)

Table 3 above shows that borrowers who have small group size looks higher loan repayment performance. The survey result shows 31(62 percent) of the respondents replied that their group size is below 6 while 19 (38 percent) respondents replied that their group size is 6 and above. 19(67.86 percent) of non-defaulters and 12(54.54 percent) of the defaulters are below 6 in their group size. This shows the existence of a positive relationship/association between small group size and loan repayment performance. However, the

association between group size and loan repayment performance is insignificant with statistical result of $\text{Chi}^2 = 0.9266$, at $p = 0.336$.

This result is in line with the finding of Zeller (1996) who assessed repayment performance in group-based credit programs in Bangladesh. Their finding was that the bigger the group, the more imperfect are flows of information likely to be between members. Hence, problems arising out of asymmetric information make monitoring and enforcing costly and less effective. Rates of default are, therefore, expected to increase with group size increases.

Thus, the result implies that there is a difference in terms of loan repayment among these two groups (defaulters and non-defaulters) in terms of group size although the difference is statistically insignificant according to the Chi-square test statistics.

The survey result showed that 52 percent of the sample respondents were self-screened but 48 percent of the respondents were screened by others. Borrowers who self-screened and non-defaulter were 21(75 percent) and self-screened and defaulter were 5(22.73 percent). Furthermore, when it is tested whether self-screening has a significant association with loan repayment of group borrowers, Pearson chi-square value ($\text{Chi}^2=13.4870$ at $P=0.000$) reveals that there is statistically significant positive association between self-screening and loan repayment performance.

This result is consistent with the finding of Ghatak and Guinnane (1999) who suggested that group formation displays positive matching under a joint-liability contract. Screening is an important function of group formation, and several studies suggest the importance of practical measures in screening. Groups that directly screened members according to their local reputations, or that had adopted a written internal constitution, experienced significantly fewer problems with loan delinquency.

Hence, this result portrays that screening and selecting of creditworthy group member is more effective with groups that are formed by the members themselves because the group may have relevant and adequate information about their member with regard to his/her work ethics and intention to work as a team.

LOAN REPAYMENT BY SOCIAL TIES AND BUSINESS EXPERIENCE, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The next Table 4 presents the comparison of credit worthy and non-credit worthy group borrowers by using social ties and business experience.

Table 4: Distribution of Group Borrowers by Social Ties and Business Experience

Variables	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)		Freq.	Percent		
	Freq.	Percent	Freq.	Percent				
Social ties								
Have social ties	15	53.57	15	68.18	30	60	1.0958	0.295
Have no social ties	13	46.43	7	31.82	20	40		
Total	28	100	22	100	50	100		
Business experience in years								
Below 6 yrs	10	35.71	9	40.91	19	38	0.1411	0.707
6 and above yrs	18	64.29	13	59.09	31	62		
Total	28	100	22	100	50	100		

Source: Own Computation (2014)

The survey result indicated that those who have social ties are 30(60 percent) and those who have no social ties account 20(40 percent). 15(53.57) of non-defaulters and 15(68.18 percent) of defaulters have social ties.

The above Table 4 revealed that social ties have no association with loan repayment performance. The association between social ties and loan repayment performance is statistically insignificant with the Chi^2 result of ($\text{Chi}^2 = 1.0958$, $p = 0.295$). This result contradicts with the study of Besley and Coate (1995) which stated that if social ties among members are sufficiently strong, the net effect is positive because by defaulting willfully a borrower incurs sanctions from both the lender and the community.

Therefore, this study implies that the existence of social ties has no statistically significant association with loan repayment performance because the group may fail to put pressure on the defaulting member in order not to adversely affect their social relationship.

Table 3 above illustrates that 38 percent of the respondents have below 6 years business experience but the other 62 percent have 6 and above business experience. 18(64.29 percent) of the non-defaulters and 13(59.09

percent) of the defaulters have 6 and above business experience.

Though the survey result shows that as business experience of the borrowers increases, the probability to be non-defaulter increases but the association between the business experience and loan repayment performance is not statistically significant with Chi^2 value = 0.1411 and p-value = 0.707. This supports the finding of Fikirte (2011) which stated that business experiences had no significant effect on the probability of being defaulter.

To summarize, this result implies that though there is an association between loan repayment performance and business experience, the association is statistically insignificant because the group may fail to acquire the required knowledge and skills in business management (especially in cost effective service delivery, marketing and financial management during their stay in business).

LOAN REPAYMENT BY PEER MONITORING AND INTERNAL RULE AND REGULATION, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The next Table 5 presents the comparison of credit worthy and non-credit worthy group borrowers by using peer monitoring, and internal rule and regulation.

Table 5: Distribution of Group Borrowers by Peer Monitoring and Internal Rule and Regulation

Variables	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)		Freq.	Percent		
	Freq.	Percent	Freq.	Percent				
Peer monitoring								
Have peer monitoring	17	60.71	7	31.82	24	48	4.1214**	0.042
Have no Peer monitoring	11	39.29	15	68.18	26	52		
Total	28	100	22	100	50	100		
Internal rules and regulation								
Have internal rule and regulation	8	28.57	7	31.82	15	30	0.0618	0.804
Have no internal rule and regulation	20	71.43	15	68.18	35	70		
Total	28	100	22	100	50	100		

** Significant at 5 percent level.

Source: Own Computation (2014)

The above Table 5 presents that 24(48 percent) of the total respondents had peer monitoring system but the rest 26(52 percent) had no peer monitoring system. 17(60.71 percent) of those who have peer monitoring are non-defaulter borrowers while 7(31.82 percent) of those who have peer monitoring are defaulters. Thus, the association between peer monitoring and loan repayment performance is positive and statistically significant ($\text{Chi}^2 = 4.1214$, at $p = 0.042$).

This result is in line with the finding of Ghatak and Guinnane (1999) who declared that peer monitoring is the act in which members are incited to exercise the appropriate effort and to allocate funds in the more productive ways in order to solve problem of loan default and joint liability among group members are important principles that can lower losses of MFIs as a loan default. Besides, it is in line with the theories of peer monitoring which say groups are motivated by the fact that group members have an incentive to take remedial action against a partner who miss-uses his/her loan because of joint liability. With group lending, individual borrowers are made to bear liability for themselves and for others in their group, but the savings in the form of better project choice allows the bank to pass on some benefits to the borrowers in the form of reduced interest rates (Ghatak & Guinnane, 1999). Thus, group lending increases welfare and repayment rates.

Thus, this study proves that the existence of peer monitoring among group members proves to be positive and meaningfully contribute to improve the group loan repayment performance.

As shown in Table 5 above, 15 (30%) of sample respondents have internal rule and regulation but 35 (70%) of the sample respondents have no internal rule and regulations. 8(28.57 percent) of non-defaulter and 7(31.82 percent) of the defaulters have internal rules and regulations. Thus, the association between internal rule and regulation, and loan repayment performance is not statistically significant with the chi-square value of ($\text{Chi}^2 = 0.0618$ at $P=0.804$).

This result is contrary to the finding of Zeller (1998) which stated that group borrowers that have internal rules and regulations shows better loan repayment performance as compared to those group

borrowers that has no internal rules and regulations.

Therefore, this study entails that there is no significant association between internal rules and regulations, and loan repayment performance because the existing internal rules and regulations may not be practical upon those group members who fail to fulfill their responsibilities.

6.2.2.2. LOAN REPAYMENT AND ECONOMIC FACTOR

There are different socio-economic factors that can affect group loan repayment. But this study took one of those socio-economic factors that affect group loan repayment, i.e., saving.

LOAN REPAYMENT BY SAVING, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The following Table 6 shows the comparison of non defaulter and defaulter group borrowers by using saving.

Table 6: Distribution of Group Borrowers by Saving

Variable	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)					
	Freq.	Percent	Freq.	Percent	Freq.	Percent		
Saving								
Save	14	50	9	40.91	23	46	0.4099	0.522
No save	14	50	13	59.09	27	54		
Total	28	100	22	100	50	100		

Source: Own Computation (2014)

Regarding to saving, out of the total observation 27(55 percent) of the respondents replied that they did not save where as 23(46 percent) said that they have an account and save. 14(50 percent) of the non-defaulters and 9(40.91 percent) of the defaulter respondents replied that they exercise saving. The expectation was those who save were predicted to have a good loan repayment performance. It shows slight association between saving and loan repayment performance but statistically insignificant with the chi-square statistics ($Chi^2 = 0.4099$, $p = 0.522$).

This result is against the study of Wolday (2000) who stated that saving can play a significant role in increasing levels of institutional sustainability and enhancing levels of outreach. Therefore, MFIs that offer saving facilities have a cheap source of funds for further lending to more sustainable operations. On the other side, voluntary saving builds the equity of poor households and protects them against unforeseen economic and personal crisis. Zeller (1996) also agreed with the importance of saving to influence the repayment rate. It is expected that saving services offered by the program improves the repayment rate of the group. Saving may increase the financial discipline of group members and can also serve as loan collateral.

Thus, this study shows that there is no significant association between saving and loan repayment performance because the size of saving may not be as significant as the size of the loan so as to serve as loan collateral. In addition, the saved amount may not be for loan repayment (i.e., may be for personal consumption, education or any other obligations).

6.2.2.3. LOAN REPAYMENT AND INSTITUTIONAL FACTORS

Institutional factors are factors that affect the group loan repayment. These are suitable loan repayment period (loan term), loan size, loan supervision and training. Their association with loan repayment performance is, thus, discussed below.

LOAN REPAYMENT BY SUITABLE LOAN REPAYMENT PERIOD AND LOAN SIZE, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The following Table 7 presents the comparison of credit worthy and non-credit worthy group borrowers by using suitable repayment period (loan term) and loan size.

Table 7: Distribution of Sample Group Borrowers by Loan Term and Loan Size

Variables	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)					
	Freq.	Percent	Freq.	Percent	Freq.	Percent		
Loan term								
Suitable	26	92.86	8	36.36	34	68	18.0696*	0.000
Not suitable	2	7.14	14	63.64	16	32		
Total	28	100	22	100	50	100		
Loan size								
Sufficient	5	17.86	12	54.54	17	34	7.3900*	0.007
Not sufficient	23	82.14	10	45.46	33	66		
Total	28	100	22	100	50	100		

* Significant at 1 percent level.

Source: Own Computation (2014)

Loan terms such as the repayment period might affect the loan repayment by the borrower. In this study it is hypothesized that as suitable loan repayment period is set for borrowers, the probability of loan repayment increases. It means that group borrowers that have suitable loan repayment period make good repayment performance as compared to borrowers that have not suitable repayment period.

As indicated in the Table 7 above, the survey result shows 34(68 percent) of the respondents believe that the repayment period set by DECSI is suitable. But 16(32 percent) of the respondents believe that the loan term set by DECSI is not suitable. 92.86 percent of the non-defaulters perceive suitable loan repayment, which is greater than the corresponding figure for the defaulter group borrowers (36.36 percent).

This reveals that suitable loan repayment period is positively associated with repayment performance. The remaining 2(7.14 percent) non-defaulter respondents believe that the repayment period set by DECSI is not suitable in which 14(63.34 percent) defaulter respondents are unable to settle the loan as per the established repayment schedule. Furthermore, the Pearson chi-square value ($\text{Chi}^2 = 18.0696$ at $P = 0.000$) reveals that there is significant positive association between loan repayment period and loan repayment performance.

This result is in line with Woolcock (2008) which stated that if the loan term is too short, the borrowers fail to generate revenue to enable them make repayments while a longer loan term may make the client extravagant and the client may in the end fail to pay back. For successful results, the loan terms should match the cash patterns to help the client's cash flows.

As presented in Table 7 above, 17(34 percent) of borrowers responded that they received sufficient loan from DECSI microfinance institution whereas the remaining 33(66 percent) of borrowers responded that they did not receive enough loan that match their intended purpose.

Regarding to sufficiency of loan amount 5(17.86 percent) of the non-defaulters and 12(54.54 percent) of the defaulter respondents believe that the loan amount allowed is sufficient. Even though 5(17.86 percent) of non-defaulter borrowers responded that they received sufficient loan from DECSI microfinance institution, 23(82.14 percent) of non-defaulter borrowers responded that they have not received enough loan that can match to their intended purpose. Here majority of the borrowers perceived that the loan amount received from DECSI microfinance institution is not enough to accomplish their project. However, the chi-square statistical result ($\text{Chi}^2 = 7.3900$, at $p = 0.007$) shows that loan repayment performance is significantly inversely associated with the loan size.

This result is inconsistent with the theory of dynamic incentives said repayment performance increased as loan size increases (Sharma & Zeller 1997). Besides, Natukunda (2010) reported that small loan size is often advanced by the micro finance institutions as a way of minimizing risks. However, when the clients are not given adequate funds to cater for their business needs, they tend to resort to multiple borrowing. This in turn affects their repayment and increases the risks of the loan repayment. Besides, it contradicts with the findings of Onyeagocha and Chidebelu (2012) which stated that the higher the loan size given by the institution, the lower is the repayment rate of the clients.

Generally, this result entails that suitable loan repayment period couple with small loan size leads to good loan repayment performance because an extended loan term enables borrowers' to secure sufficient cash flows in order to settle installment payments of the small loan size. In addition, the negative sign of the loan size

may be due to the borrowers' difficulty in repaying a larger amount over a given period and also larger amount may be excess to finance the proposed project and divert the excess amount to other consumption.

LOAN REPAYMENT BY TRAINING AND LOAN SUPERVISION, AND COMPARISON OF NON DEFAULTERS AND DEFAULTERS

The Table 8 below reveals the comparison of credit worthy and non-credit worthy group borrowers by using training and loan supervision.

Table 8: Distribution of Sample Group Borrowers by Loan Training and Supervision

Variables	Loan repayment performance of respondents				Total		Chi ²	p-value
	Non-defaulters (28)		Defaulters (22)		Freq.	Percent		
	Freq.	Percent	Freq.	Percent				
Training								
Trained	20	71.43	14	63.64	34	68	0.3438	0.558
Not trained	8	28.57	8	36.36	16	32		
Total	28	100	22	100	50	100		
Supervision								
Supervised	22	78.57	8	36.36	30	60	9.1450*	0.002
Not supervised	6	21.43	14	63.64	20	40		
Total	28	100	22	100	50	100		

* Significant at 1 percent level.

Source: Own Computation (2014)

With respect to before loan and after loan training to group borrowers from DECSI, Table 8 above revealed that out of the total 50 group borrowers included in this study, 34(68 percent) of them have got training related to saving, recording, loan utilization and the overall rules and regulation of the institution while 16(32 percent) of group borrowers did not get training.

As it is indicated on the above Table 8, 20(71.43 percent) of the non-defaulter respondents and 14(63.64) of the defaulter respondents have got training. This shows that there is a positive association between training and loan repayment performance though the Pearson chi-square statistics ($\text{Chi}^2 = 0.3438$, $P = 0.558$) shows that there is positive but statistically insignificant association.

This is consistent with the finding of Statham (2008) which stated that one of the important requirements for the success of microfinance institutions is to create awareness to potential clients by giving appropriate training to borrowers about loan utilization, loan terms and obligations. In addition, Admassie (2005) agreed on the loan utilization and technical training should be given to improve the skill of potential and actual clients. Technical support is important to increase the productivity of borrowers.

Thus, this study reveals that there is statistically insignificant association between training and loan repayment performance because the training may not be continuous, relevant, timely and not catering the borrowers requirement.

With regard to supervision, most of the sample respondents 30(i.e., 60 percent) were supervised but the rest 20(40 percent) were not supervised. The Table 8 above indicated that 22(78.57 percent) of the non-defaulters and 8(36.36 percent) of the defaulter borrowers were supervised. So, there is significant positive association between loan supervision and loan repayment performance with the statistical result ($\text{Chi}^2 = 9.1450$, $P = 0.002$). This result implies that loan supervision may help borrowers get regular consultations for strengthening their income generating business as well as better assistance with regard to loan repayment period, loan size, and training.

This result confirms the finding of Retta (2000) which stated that supervision has found to encourage repayment and Jemal (2003) also supported that supervision is positively and significantly related to loan repayment performance.

To summarize, the chi-square result indicates that group formation, peer monitoring, loan term and supervision have a positive and statistically significant association with the loan repayment performance. But, loan size has inverse and significant association with the loan repayment performance.

7. CONCLUSION AND RECOMMENDATION

7.1. CONCLUSIONS

The status of group loan repayment revealed that about 56 percent of group borrowers were non defaulters and about 44 percent of them were defaulters. This result shows that there is high default rate which in turn adversely affect the financial liquidity and sustainability of the DECSI.

According to the chi-square test, the factors which had direct and statistically significant association with loan repayment performance are loan supervision, group formation (screening), peer monitoring, loan term; but loan size had inverse and statistically significant association with loan repayment performance. Moreover, group size, social ties, business experience in years, internal rules and regulations, saving, and training had no statistically significant association with loan repayment performance.

Supervision affects the loan repayment performance positively and statistically significant, i.e., is those who supervised showed good performance to settle their loan because supervision may avoid the moral hazard problem arises when lenders are unable to ensure that customers are making the full effort required for their investment projects to be successful.

Those groups who seek suitable repayment period (loan term) were found to be good performers in loan repayment as compared to those groups who do not found suitable repayment period. As loan term of DECSI extends according to the business nature, the ability of borrowers to generate cash increases which in turn enhances the repayment performance of the clients. So, loan term should match the cash patterns to help the client budget cash flows.

Group formation based on self-selection of members showed good loan repayment performance as compared to those groups initiated by other than member themselves (by outside agent or promoters). Groups that directly screened members according to their local reputations, or that had adopted a written internal constitution, experienced significantly fewer problems with loan delinquency. In general, screening and selecting of creditworthy group member is more effective with groups that are formed by the members themselves because they know the behavior of one another.

Peer monitoring has a direct relationship or association with the loan repayment performance because peer monitoring is the act in which members are incited to exercise the appropriate effort and to allocate funds in the more productive ways in order to solve problem of loan default.

However, loan size has an inverse association with loan repayment performance. This may be due to the borrower's difficulty in repaying a larger amount over a given period. It could be that, for a given duration, large loans do not meet the borrower's needs and are not suited to the local economy. It might be also mismatch of the loan size and scope of the business activities.

7.2. RECOMMENDATIONS

Based on conclusion of the research findings, the following recommendations are forwarded in order to reduce significantly loan default and make DECSI is sustainable.

- ✓ One reason for low loan repayment by MSEs is that same loan term for all sectors and does not consider the nature of business. Sectors return or productive period may differ. So, DECSI should set the loan term accordingly.
- ✓ The screening and selection criterion in place should be revised and DECSI should have to play major role directly in screening and selection of applicants according to borrowers' interest that is borrowers can screen honor partner if they form themselves because they know one another.
- ✓ DECSI should consider and set the repayment period based on the nature of the sector and expected optimal time that the sector will start generating income (grace period) and set the loan term. Thus, the borrowers will become successful and sustainable which in turn make DECSI financially sustainable.
- ✓ DECSI should make continuous follow up and guidance to borrowers on how to use loan in general and pay regular visits to evaluate the loan utilization and repayment. Such continuous supervision
 - Makes borrowers to discharge their obligation and improve the proper utilization of the loan there by improving repayment performance.
 - May bridge the lack of borrowers' business experience.
 - Also may source information and avoid the adverse selection and moral hazard which is the most important problems in the functioning of credit market which arises from imperfect information.
- ✓ DECSI should advice its borrowers to have peer monitoring system to allocate the loan to its intended investment and protect against misuse of loan and check the matching of loan size and scope of business activities because if the loan size is greater than the scope of business,

the excess may be diverted to personal consumption, i.e., unproductive and in turn result in loan repayment default.

7.3. LIMITATION AND SUGGESTION FOR FURTHER RESEARCH

These study findings may not be used to generalize about the determinants of the MSEs group loan repayment performance because the study has focused on only the MSEs service sector and confined only to the Mekelle city. The study has only throw a light on the factors that determine group loan repayment performance. Thus, comprehensive and comparative studies are recommended in order to have holistic picture on the MSEs group loan repayment performance by considering wide area and all the sectors such as construction, urban agriculture, and manufacturing, and trade.

Within the service sector, there are many factors which are not considered in this study. Factors include group harmony, initial capital, loan frequency, interest rate, access to working premises, and infrastructure. Hence, more fruitful finding may be reached by taking the above mentioned factors in to consideration.

Moreover, this study has employed chi-square test to test the association among the dependent and independent variables. Thus, further research may be conducted by considering optional statistical tools such as mean difference test (t-tests), correlation, and regression models.

7.4. MANAGERIAL IMPLICATIONS

MFIs have immense contribution towards poverty reduction by creating employment opportunity especially in developing countries like Ethiopia. One of the key factors for profitability and sustainability of MFI is good loan repayment performance rate. Analyzing this loan repayment performance and setting appropriate solutions is essential to expand the activities of MFI in a sustainable manner.

Thus, the study provides information for a better understanding on the determinants of loan repayment performance of DECSI and the primary advantage of this study is to establish a knowledge base that enables to makes a sound decision and take corrective action. In addition, the study will be useful for policy makers, other lending institutions and Stakeholders. Specially, the study benefits;

- MFIs to have a clue about the association and effect of each explanatory factor on loan repayment performance.
- Borrowers may get awareness on how to use and allocate loan in productive investment, i.e., it supports borrowers to be viable and feasible in their investment and pay their obligation.
- MFIs will exist financially sound.
- Finally, this study will have a contribution to academicians or researchers who will conduct their studies on similar areas.

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