

UNIVERSITY OF CAPE COAST

CHALLENGES AND PROSPECTS OF GROUP LENDING IN
MICROFINANCE SERVICE DELIVERY: EVIDENCE FROM WOMEN
GROUPS WITH THE BONZALI RURAL BANK IN TAMALE.

ABDULAI ABDALLAH

2018

UNIVERSITY OF CAPE COAST

CHALLENGES AND PROSPECTS OF GROUP LENDING IN
MICROFINANCE SERVICE DELIVERY: EVIDENCE FROM WOMEN
GROUPS WITH THE BONZALI RURAL BANK IN TAMALE.

BY

ABDULAI ABDULLAH

Dissertation submitted to the Department of Finance of the School of Business,
College of Humanities and Legal Studies, University of Cape Coast in Partial
Fulfillment of the Requirements for the Award of Master of Business
Administration Degree in Finance.

DECEMBER 2018

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature.....Date.....

Name:

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature.....Date.....

Name:

ABSTRACT

Globally, microcredit has risen to prominence at a rapid speed after its large-scale success in the 1970s in Bangladesh with Grameen Bank. Its central idea is that traditional banks find the poor too costly to serve due to their lack of steady income and collateral. To address the issue of a lack of collateral to secure loans, some rural banks and microfinance companies have taken to group guarantees as a form of social collateral to provide loans. This study delves into the group lending model of the Bonzali Rural bank in Tamale. It aimed at obtaining data on the forms of social collateral, borrower benefits, challenges and the prospects of the group lending approach in microfinance services delivery. A sample of 201 women was used for the study. Structured Survey questionnaires were the main data collection instrument used. Tables were used in the presentation of data. SPSS has been used in producing the charts and Tables and to carry out a paired sample analysis. Group guarantee was the singular collateral security base upon which women were granted loans. The benefits of group lending to the borrower were found to include; improvements in personal finance, easy access to credit, and so on. The paired sample results indicated a statistically significant impact of loans to the beneficiary women through profit increment. Borrower challenges were found to include; peer pressure, conflict among members, etc. Majority of the women were positive about their future relationship with the bank. Based on the findings of this study, it recommends among others that, the Bank of Ghana should adopt a discriminatory policy rate in order to lessen the cost of borrowing to MFIs that support women groups and entrepreneurs.

KEYWORDS

Group Lending

Micro-finance

Borrowing

Credit

Women groups

Rural Banks

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my Supervisor, Dr Samuel Kwaku Agyei of the Department of Finance, School of Business, for his professional guidance, advice, encouragement and the general support he has given me.

Also, I wish to thank my family and friends for their support, especially, my wives, Muhib Muhammed Ruzainah and Adam Hibatullah.

DEDICATION

To my wives, Muhib Muhammed Ruzainah and Adam Hibatullah

TABLE OF CONTENT

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENT	vii
LIST OF TABLES	xi
LIST OF ACRONYMS	xii
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	5
Purpose of the Study	7
Research Objectives	7
Research Questions	7
Significance of the Study	8
Research limitations	8
Delimitations	9
Organization of the Study	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	10
Theoretical Review	11

Theory of Sustainability and Efficiency	11
The Adverse selection Theory	14
Moral Hazards	17
Strategic Default Model	17
Empirical Review	30
Micro-Finance, Gender and Development	19
The Group lending approach	25
Benefits of Group Lending	32
Forms of collateral Security used in microfinance service delivery	30
Challenges associated with the group lending approach	33
Prospects of the group lending approach	35
Background of Rural Banks	41
CHAPTER THREE: RESEARCH METHODS	
Introduction	42
Study area	42
Location	42
Population	43
Socio-economic structure	43
Markets and financial institutions	44
Research type and design	45
Sample and sampling techniques	45
Research instruments	45
Validity and reliability evidence	46

Data collection procedure	46
Data analysis plan	47
Ethical consideration	47
CHAPTER FOUR: FINDINGS AND DISCUSSION	
Introduction	48
Demographic characteristics of respondents	48
Age distribution of respondents	49
Gender distribution	50
Educational levels of respondents	50
Marital status	51
Religious affiliation	51
Types of businesses	52
Family size	52
Forms of collateral	52
Collateral	53
Benefits of group borrowing	54
Loan distribution	56
Impact of loans	56
Estimation of monthly profits before loan	57
Estimation of monthly profits after loan	58
Paired Samples Statistics	59
Challenges of group borrowing	60
Prospects of group borrowing	62

Discussion	65
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
Introduction	70
Summary	70
Conclusion	73
Recommendations	73
Suggestions for further Research	74
REFERENCES	75
APPENDIX A: (Map of Tamale)	86
APPENDIX B: Sampling Table	87
APPENDIX C: [Questionnaire 2017]	88

LIST OF TABLES

Table	Page
1: Demographic Characteristics of Respondents	48
2: Social Collateral	53
3: Group Borrowing	54
4: Uses of Micro-credit Loans by Respondents	55
5: Distribution of August Loans Received by Respondents	56
6: Profits before Loan	57
7: profits after Loan	58
8: Mean Difference	59
9: Paired Sample Test	60
10: Challenges of Group Borrowing	62
11: Prospects of Group Borrowing	63
12: Continuation with Group Borrowing	63
13: Requirements for Group Borrowing	65

LIST OF ACRONYMS

ACCION	Americans for Community Cooperation In Other Nations
FINCA	Foundation for International Community Assistance'
SUM	Special Unit for Microfinance (SUM) of the UNDP
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme.
UNIFEM	United Nations Development Fund for Women
BRB	Bonzali Rural Bank

CHAPTER ONE

INTRODUCTION

Background to the Study

The terms 'microfinance' has become a common household word in recent years in Ghana. It is an age long tradition of people saving and/or sourcing small loans from individuals and groups within the context of self-help to start a business including farming ventures. Available evidence suggests that the first credit union in Africa was established in Northern Ghana in 1955 by Canadian Catholic missionaries. However, susu, which is one of the microfinance schemes in Ghana is thought to have originated from Nigeria and spread to Ghana in the early twentieth century (Asamoah, 2005).

Microfinance encompasses the provision of financial services and management of small amounts of money through a range of products and a system of intermediary functions that are targeted at low-income clients. According to (Attanasio, Augsburg, De Haas, Fitzsimons, & Harmgart, 2013), microfinance creates access to productive capital for the poor and enables people to move out of poverty. By providing material capital to a poor person, their sense of dignity is strengthened and this can help to empower the person to participate in the economy and society (Otero, 1999).

Micro-credit (or microfinance) institutions refers to a wide range of organizations dedicated to providing micro financial services, including non-governmental organizations, credit unions, cooperatives, private commercial banks, non-bank financial institutions and some state-owned banks. Although

most countries have had long experience with informal community-based financial systems, the commercial provision of financial services to poor populations has expanded rapidly only in recent years.

In the words of the former UN Secretary-General, Kofi Anan “microfinance is an integral part of our collective effort to meet the Millennium Development Goals. Sustainable access to microfinance helps alleviate poverty by generating income, creating jobs, allowing children to go to school, enabling families to obtain health care, and empowering people to make the choices that best serve their needs. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector. Together, we can and must build inclusive financial sectors that help people improve their lives”.

Microfinance is broadly defined as the provision of small-scale financial services such as credit, savings and other basic financial services to poor and low-income people. Micro-credits are usually secured through the mutual guarantee of solidarity groups. Such loans were used for various purposes, including investments in micro enterprises and petty trading activities and agricultural production. Most micro-credit clients are female heads of households, pensioners, displaced persons, retrenched workers, small farmers, and micro-entrepreneurs (Asamoah, 2005).

Micro-credit schemes may take three different forms or a composite of all the three forms namely, the capacity building approach, the channelling approach and the institutional approach. The capacity building approach focuses on the very poor, the landless, the powerless, the voiceless or the ‘assetless’, especially

women. The aim is to raise awareness, organize the clients and build their confidence to enable them to believe in their own ability to transform their lives and to develop savings culture. The channelling approach may be used by rural banks and nongovernmental organizations to assist the 'not-so-poor' or productive poor. These groups may have the courage to take some minor risks but may lack financial support because of the lack of collateral security.

Microfinance is conceived to be an alternative to the formal financial sector and some informal sources such as moneylenders which serves less than 20% of the population in most developing countries (Gallardo, Ouattara, Randhawa, & Steel, 2005). The 1970s represented a turning point in the history of microfinance after the failure of the formal sectors and government subsidized credit. Bangladesh, Brazil and other countries started giving small loans to the poor based on group guaranteed repayments method. After the 1970s, many banks and financial institutions like the Grameen Bank formed by Muhammad Yunus adopted the group lending method.

Micro Finance Institutions (MFIs) have two major lending methodologies; group lending and individual lending. Group lending involves lending to a group of borrowers who are jointly liable for a loan. Group lending creates its own type of collateral and has received a lot of attention from economic theorists and policymakers. Group lending uses joint liability to secure high payments rates. Joint liability helps to overcome adverse selection, moral hazard and enforcement that impedes lender from providing credit to borrowers since group members are jointly liable for a loan. Joint liability, inducing borrowers to carefully select their

group members provide a solution to adverse selection faced by lending institutions (Armendariz Aghion De & Gollier, 2000; Ghatak, 1999; Van Tassel, 1999). At the same time, peer monitoring mitigates moral hazard (Armendariz De Aghion, 1999; Banerjee, Besley, & Guinnane, 1994; Stiglitz, 1990; Wydick, 1999). Equally, group lending facilitates enforcement of penalties on defaulters when borrowers have close ties (Besley & Coate, 1995; Wydick, 2001).

Group lending creates incentives for individual group members to screen out risky borrowers, monitor each other's' action and enforce payment. The incentives to get a large loan size and the threat to cut off any future lending if loans are not repaid can improve repayments. Group lending received a great attention from economic theorist and policymakers for its ability to solve asymmetry of information and enforcement problems that face the financial institutions in developing countries. In the developed world, larger loans are necessary to accommodate a relatively high cost of business operations. Group lending has proven to be effective in ensuring high repayments rates for MFIs abroad by providing peer support and a form of loan collateral.

However, due to the absence of adequate collateral, conventional lending to the poor has been considered not feasible because of the riskiness of loans. In such instances, group lending; where the entire group is considered responsible for default by any member have had some success in lending to the poor. The results have been mixed according to existing literature.

As stated by (Conning, 2005), referring to (Pitt & Khandker, 1998), “group lending programs have been quite successfully implemented in the United

State of America(USA), Cameroon, Malawi, South Korea, Malaysia and Bangladesh. But similar schemes have had problems in India, Egypt, Venezuela, Kenya and Lesotho”.

The Bonzali Rural Bank was formed in 1990 in response to the needs of hundreds of rural populations in the north who did not have access to the main commercial banking services. Among other things, the bank was established to provide general banking services to the people of the northern region. Since its formation, the bank’s main branch has been located in Kumbungu with 2 branches in Tamale and 1 branch in Yendi.

In 2005, the Bank started a lending service modelled on the idea of a group liability. The Bank’s target group for its group lending service has been mainly women. These women engage in mainly petty trading with a few others engaging in farming and shea butter extraction.

Statement of the Problem

The Northern region of Ghana has been found to have a higher concentration of poverty. Out of the 18.2% total population that live in extreme poverty in Ghana, 53.7% live in northern Ghana, which commands only 17.2% of the total Ghanaian population, an indication that the poor in Ghana continue to be concentrated in the northern savanna ecological belt. In 2007, five out of ten in the Northern Region was said to be poor (Ghana Statistical Service, 2007). Among the population in the north, women are the greatest victims of poverty (Emmanuel, 2012). Poverty in Ghana has been reducing since 1991, but the northern region had not received a commensurate share of the reduction in

poverty. The development disparities between the North and the Southern half of Ghana continued to manifest in all spheres of life, including business, human capital development, health and education, and investment portfolios. As a result of these, many non-governmental organizations (NGOs) and MFIs have designed programs and policies that are meant to fight poverty among the people of the north. One of such MFIs is the Bonzali Rural Bank (BRB). There has been a significant expansion in the activities of microfinance companies in recent times. While some industry players find this development to be positive, others are sceptical. There has always been the question of the effectiveness of micro-credit in empowering the poor.

Giving credit to individuals require some level of collateral security to guarantee repayment. This tendency of microfinance companies demanding collateral before giving credit has always been a challenge to accessing credit especially by the extremely poor. In the past few years, a new model called group borrowing is being employed by the Bonzali Rural Bank in giving credit to their customers in some parts of the Northern Region. This model does not require collateral from individual members but rather demands the formation of groups as a condition to accessing credit. Even though the group borrowing model has operated for some time now, there have been no studies to examine its effectiveness or otherwise in delivering credit to its targeted clientele i.e. the extremely poor or the not-so-poor. This study intends to close that gap by providing an investigation into the new group borrowing model of the Bonzali

Rural Bank and to provide a practical recommendation to enhance credit delivery to the poor.

Purpose of the Study

To analyze the prospects and challenges of group lending among women groups with the Bonzali Rural Bank in the Tamale Metropolitan area of the Northern Region of the Republic of Ghana.

Research Objectives

Specifically, the study seeks to:

- i. Identify the existing forms of social collateral used by women groups under the Bonzali Rural Bank;
- ii. Assess the benefits of the group lending method used by the Bonzali Rural Bank to women groups in Tamale;
- iii. Determine the challenges facing borrowers with the Bonzali Rural Bank's group lending scheme; and
- iv. Assess the prospects of the group lending method in delivering credit to women groups in Tamale.

Research Questions

This research will seek responses to the following questions:

- i. What are the existing forms of social collateral used in microfinance services delivery by Bonzali Rural Bank?
- ii. What are the benefits to the borrower in microfinance group lending?
- iii. What are the challenges facing borrowers in microfinance group lending?

- iv. What are the prospects of the group lending approach in microfinance services delivery in Tamale metropolis?

Significance of the Study

This study will provide relevant data on finance and microfinance in particular. It seeks to unearth the prospects and challenges of group lending especially women groups. The study will also proffer relevant strategies aimed at improving the business of microfinance. The research will be highly relevant to government, civil society groups, policy think tanks, State agencies, policymakers and researchers in dealing with issues of finance, access to credit and group lending. Most importantly, this research will be particularly useful to the Bonzali Rural Bank and other Microfinance institutions around the country.

The findings can generally enhance the general understanding of credit access in Ghana. In addition, it would add to scientific knowledge and aid teaching and learning.

Limitations

The study is limited to the experiences of women groups dealing with the Bonzali Rural Bank in the Tamale Metropolis. Various women groups were selected based on their present activities with the Bonzali Rural Bank to take part in the enquiry. A non-probability sampling procedure was adopted to select women's groups needed for the study. The research was done only with women groups in the Tamale Metropolis. Chances are that the results may not hold valid in other geographical settings. It is anticipated that some members of beneficiary

women groups may feel reluctant to give information about themselves and their businesses. These limitations were overcome through transparency in the data collection process.

Delimitations

This study shall cover issues of social security in lending, prospects and challenges of group lending among women groups with the Bonzali Rural Bank in the Tamale Metropolitan area of the Northern Region of the Republic of Ghana. The variables to be investigated are microfinance issues, group lending and its viability.

Organization of the Study

The research report was organized into five (5) chapters. Chapter one consists of the general introduction of the report, containing the background of the study, problem statement, research questions, research objectives, the significance of the study and limitations of the study. Chapter two consisted of the literature review carried out under this work. Chapter three focused on the methodological framework and profile of the study area. Chapter four covered the data presentation and discussion of findings. Chapter five is the final chapter of the research and contains the summary of the principal findings, conclusions and recommendations for government and policymaking.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter contains a review of relevant related literature. Both theoretical and empirical literature has been reviewed. It can be observed that the group lending model encourages a culture of financial responsibility where peer-support leads to a higher rate of repayment. The groups also serve as a social network of voluntary mutual support, as members are individually responsible for their own loans; they are expected to voluntarily provide assistance to their peers where necessary.

The main attribute of group-lending in finance is the use of social rather than material collateral. Loans are made to small groups or cooperatives, and peer pressure is used for ensuring that repayments are made. In most parts of the world, women are the primary beneficiaries of group lending schemes—not necessarily out of a feminist impulse but because there is evidence that women are more sensitive to peer pressure and so are more reliable debtors. In the absence of material collateral and credit-rating systems, the group-lending model makes use of information ‘impacted’ in the village or community about who is a reliable borrower, and community members reveal such information by using their judgment to select fellow debtors for their groups.

Theoretical Review

Theoretical and empirical literature on group lending addresses the central problem of designing mechanisms in a way that borrowers have an incentive to repay their loans as well as an enforcement mechanism (Egli, 2004). This section looked at the various theories that have been advanced relating to loan repayments. The theoretical literature on micro-lending addresses the central problem of designing mechanisms in a way that borrowers have an incentive to repay their loans. It provides a comprehensive overview about the mechanism of joint liability, in particular how it alleviates the difficulties of adverse selection, moral hazard, and repayment enforcement (strategic default), problems which have to be solved in any loan contract. This research aims to analyze how the typical problem of loan default can be solved by employing the individual and group lending models.

Theory of sustainability and efficiency

Several arguments have been made for and against targeting women on the grounds of efficiency and sustainability. Proponents of targeting women on the grounds of sustainability cite women's' repayment records and cooperativeness (Susy, Reed, Salib, Voorhies, & Copestake, 2000). A collective wisdom has emerged that women's' repayment rates are typically far superior to those of men. Lower arrears and loan loss rates have an important effect on the efficiency and sustainability of the institution. Many programs have also found women to be more cooperative and prefer to work with them for that reason as well. The experience of Sinapi Aba Trust, Opportunity International's partner in

Ghana and Nigeria, demonstrates a clear difference in men and women's repayment records in its Trust Bank program, a group-lending methodology similar to village banking (Mike, 2000). In spite of a large number of institutions serving exclusively or predominantly women, while maintaining high levels of financial sustainability, some people argue that institutions that place a priority on serving women also have a tendency to place social goals ahead of efficiency, leading to poorer financial performance.

Based on his experience at MicroRate, Damian von Stauffenberg offers one hypothesis along these lines: "In our experience, on average 60–70% of borrowers of MFIs are female. We sometimes see higher percentages of women borrowers but in those cases, portfolio quality tends to suffer. Why this is so is not entirely clear, but one hypothesis is that MFIs which concentrate exclusively on women may place ideological goals ahead of technical competence (Susy et al., 2000).

Although it is true that some socially driven institutions may choose to offer additional social services to their clients who may make them less profitable than those institutions focusing solely on profitable financial service delivery, there appears to be no reason that portfolio quality should have to suffer or that social objectives and technical competence cannot go hand in hand. In fact, a deeper understanding of the social context and forces in which microfinance operates can allow for more effective risk management and more appropriate product and process design that may improve portfolio quality in the long run (Susy et al., 2000). In its survey, however, SUM/UNCDF did not find any clear

correlation between outreach to women and financial self-sufficiency. The report states, “If anything, in this very limited pool, the institutions with higher levels of self-sufficiency served proportionally more women than institutions less self-sufficient.”(Deshpanda, 2001). A related belief is that group-lending programs that reach women and poorer clients are less sustainable than institutions reaching higher-level clients with individual loans, yet this concern has been thoroughly addressed by Gary Woller in his comparative analysis of village banking institutions and individual lending institutions for the Micro-Banking Bulletin. His conclusion is that the answer to the question ““Can village banking institutions become self-sufficient?” is ‘Yes!’ Not only that, VBIs [village banking institutions] can reach levels of self-sufficiency achieved by solidarity group and individual lenders.”(Woller, 2000).

Programs that serve a significant number of men are more likely to use methodologies that require collateral and more extensive monitoring procedures to help reduce the risk of default, while programs designed to serve primarily women tend to replace formal monitoring procedures with social guarantees (Susy et al., 2000). Generally, MFIs are able to balance more costly procedures with larger loans, while many institutions targeting women have relied on client capacity for self-monitoring and cooperation to reach out to women who otherwise might have been excluded because of the small amount of capital they require.

The adverse selection theory

According to (Ghatak & Guinnane, 1999), adverse selection arises when borrowers have characteristics that are unobservable to the lender but affect the probability of being able to repay the loan. A lender can try to deal with this information problem directly, by trying to assess these characteristics, or indirectly by offering loan terms that only good risk taker will accept. The typical method for separating good risks from bad risks is to ask the borrower to pledge collateral. Risky borrowers are likely to fail more often and lose their collateral. If the bank offers two different contracts, one with high-interest rates and low collateral and the other with the opposite, risky borrowers will select the former and safe borrowers the latter. But poor people by definition do not have assets that make useful collateral, meaning that lenders have no effective way to separate good risks from bad.

Group lending deals with adverse selection by drawing on local information networks to achieve the equivalent of gathering direct information on borrowers and using differences in loan terms to separate good from bad borrowers. Many researchers have examined the effect of group-liability on the selection of members (Armendariz Aghion De & Gollier, 2000; Ghatak, 2000; Varian, 1990). Most of these studies use an adverse-selection framework where borrowers know the characteristics of each other's projects relevant to their creditworthiness, but the bank does not (Ghatak & Guinnane, 1999).

While all borrowers prefer to have safe partners because of lower expected joint-liability payments, safe borrowers value safe partners more than risky

borrowers because they repay more often, and as a result more likely to realize the gain of having a safe partner (Ghatak & Guinnane, 1999). This implies that in equilibrium, borrowers end up with partners of the same type. As a consequence, the bank can screen borrowers by varying the degree of joint liability. This is because risky borrowers have risky partners and, hence, will prefer a contract with less group liability than will a safe borrower. (Ghatak & Guinnane, 1999) formalize this idea and examine various implications of it (Laffont & N'Guessan, 2000). The idea is illustrated using a simple model. Assume borrowers are risk-neutral and of two types; safe (a) and risky (b). With a project of type I , the output takes two values, Y_i^H and 0 , and the probability of high output is P_i , $i = a, b$. It is assumed that $p_b < p_a$. If the bank does not know a borrower's type, and if standard screening instruments such as collateral are not available, then the bank has to offer loans to all borrowers at the same nominal interest rate. Under such a contract, safe borrowers have to cross-subsidize the risky borrowers because both types of borrowers repay the same amount when they succeed, but safe borrowers succeed more often (Ghatak & Guinnane, 1999).

The presence of enough risky borrowers can push the equilibrium interest rate high enough to drive the safe borrowers away from the market (as in the lemons model (Akerlof, 1970). Alternatively, the presence of safe borrowers subsidizes some undeserving risky projects. If borrowers know each other's types, a joint-liability contract can restore full efficiency. Under a joint-liability credit contract, a borrower must repay her loan r whenever her project yields high returns, and in addition, if her partner's project yields low returns, she must pay

an extra amount $c > 0$. The expected payoff of a borrower of type i when her partner is type j from a group-liability contract is:

$$EU_{ij}(r, c) = P_i P_j (Y_i^H - r) + P_i (1 - P_j) (Y_i^H - r - c).$$

The net expected gain of a risky borrower from having a safe partner is $EU_{ba}(r, c) - EU_{bb}(r, c) = P_b (p_a - p_b) c$. Similarly, the net expected loss for a safe borrower of having a risky partner is $EU_{bb}(r, c) - EU_{ab}(r, c) = p_a (p_a - p_b) c$. If $c > 0$, the latter expression is larger than the former since $p_a > p_b$. Hence, a risky borrower will not find it profitable to have a safe partner. A borrower of any type prefers a safer partner, but the safer is the borrower herself, the more she values a safe partner. A risky borrower, in theory, could pay the safe borrower to accept her as a partner, but the expressions above imply that such payments would have to be so large that the risky borrower would not want to make them (assuming borrowers have no assets). As a result, group formation will display positive assortative matching under a group-liability contract.

Ghatak (1999) showed that this assortative matching property allows the bank to screen borrowers 'by the company they keep' because risky borrowers are less willing than safe borrowers to accept an increase in the extent of joint liability. If the bank offers two contracts, one with high group liability and low-interest rates and the other with low group liability and high-interest rate, safe borrowers will select the former contract and risky borrowers the latter. Thus, the repayment rate and efficiency are higher under group-liability contracts as compared to conventional one person-liability contracts because the former

exploits a useful resource that the latter does not: the information borrowers have about each other (Ghatak & Guinnane, 1999).

Moral hazards

When a borrower takes a loan, the project's payoff depends in part on the borrower's actions, including the levels of labour and other inputs (Ghatak & Guinnane, 1999). Ordinarily, we would expect the borrower to choose these actions such that the marginal benefit of each action equals its marginal cost. That is not necessarily the case with asymmetric information. In the absence of collateral, the lender and borrower do not have the same objectives because the borrower does not fully internalize the cost of project failure.

Moreover, the lender cannot stipulate perfectly how the borrower should run the project, in part, because some of the borrower's actions are not costlessly observable. Theories of peer monitoring are motivated by the fact that group members have an incentive to take remedial action against a partner who misuses 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. Thus, group lending increases welfare and repayment rates (Besley & Coate, 1995).

Strategic default model

The problem of strategic default arises when borrowers are able but unwilling to meet their obligations. The lender's enforcement capacity is created through the termination threat. (Besley & Coate, 1995) analyze the borrowers'

decision regarding whether to repay the loan or not after the project returns are realized. This decision depends on the cost of repayment (i.e. the gross interest rate) and the severity of the penalties imposed by the lender and the group or community. The (Besley & Coate, 1995) model of strategic default or limited enforcement is different from the others in that there is no moral hazard and no adverse selection problem. According to (Ghatak & Guinnane, 1999), an enforcement problem arises not from informational asymmetries but from the lender's limited ability to apply sanctions against a delinquent borrower. Even if the borrower's project succeeds so that she/he is able to repay, she/he may still refuse to repay if the legal system does not work very well and if the poverty of the borrower restricts the number of effective sanctions.

The lender's enforcement capacity is created through the termination threat (Armendariz De Aghion, 1999; Besley & Coate, 1995; Kritikos & Vigenina, 2005). With joint liability, if a borrower rejects to repay his share of the loan, the whole credit group is considered as being in default losing access to subsequent loans. This induces the group either to repay for the delinquent partner or to exert social pressure on him. As a consequence of these incentives, lenders are able to achieve the repayment of all loans with high probability.

When it comes to the enforcement of loan contracts (if a borrower rejects loan repayment), the loan officers again plays the main role by warning and if necessary sanctioning defaulting clients. Except for the threat of selling the collateral within a few days, they can cut off borrowers from further access to loans. The effects of non-refinancing threats were first formalized in (Bolton &

Scharfstein, 1990) as cited by (Kritikos & Vigenina, 2005). Borrowers with satisfactory repayment records may receive access to further loans of increasing volume. This gives sufficient incentives to all entrepreneurs who expect positive utility out of future investments (financed by future loans) to repay their current loan as scheduled.

Microfinance, gender and development

Globally, microcredit has risen to prominence at a rapid speed after its large-scale success in the 1970s in Bangladesh with Grameen Bank. Its central idea is that traditional banks find the poor too costly to serve due to their lack of steady income and collateral. Small amounts of affordable credit provided by microfinance institutions are assumed to give the poor an opportunity to develop small businesses and lift themselves out of poverty.

Microfinance is largely directed at women borrowers, due to both social and financial considerations. Namely, poor women are generally the most disadvantaged social group in the context of credit availability. Also, they direct more of their income towards improving life for their whole family compared to men, which translates into stronger overall social impact. In addition, microfinance is commonly seen as a way to empower women within their families and communities.

In the financial aspect, it has been shown that women's repayment rate is higher than men's, and they are therefore more trustworthy customers for microfinance institutions (Cheston & Kuhn, 2002). One of the prominent characteristics of the Grameen Bank was the use of group lending, which has been

celebrated as a major innovation (Sengupta & Aubuchon, 2008), enabling to borrow without material collateral. In that model, groups of approximately five people are formed voluntarily and the members are given loans in a consecutive order. Having accepted the Bank rules, the first two group members receive a loan. If they successfully repay their loans four to six weeks later, the next two receive loans; after another four to six weeks, the last person is offered a loan (Sengupta & Aubuchon, 2008).

A very important aspect of the model is a joint liability, which implies that if one member of the group does not repay, others have to pay for her, or otherwise all will be denied further financing (although originally only the latter clause was used by Grameen Bank) (Armendáriz & Morduch, 2010). Voluntary group formation reduces the risks of adverse selection and joint liability decreases moral hazard through peer monitoring, as group members are interested in having others repay on time. The group is also a part of a larger village group and repayments are made public for everyone, which significantly adds social pressure to repay. Thus, the model largely rests on using local information, peer support and peer pressure (Armendáriz & Morduch, 2010), exploiting social capital in the community (Zephyr & Yunus, 2004).

On the background on its rapid expansion, a number of problems have been voiced in relation with microfinance and group lending. Firstly, empirical studies have had mixed results as to its socioeconomic impact on the borrowers (Armendáriz & Morduch, 2010). In fact, many have been concerned with the poor entering a circle of debt as a result of microfinance programs, and suffering

negative social impacts within their families and communities. Also, the real effect of microfinance on women's empowerment is questioned. Further, the strong shift from subsidized non-profit microcredit to for-profit microfinance institutions has been viewed with criticism, as their interest rates are often very high – along with their steep profits (Armendáriz & Morduch, 2010; Bateman, 2010; Dichter & Harper, 2007). The model of group lending has also attracted criticism in connection with its reliance on social capital, which may not always work as planned, and varies greatly between different regions and contexts. This will be discussed further in the next section.

International development practitioners, governments, scholars, and other development experts have paid much attention to microfinance as a strategy capable of reaching women and involving them in the development process. The microfinance industry has made great strides toward identifying barriers to women's access to financial services and developing ways to overcome those barriers.

A 2001 survey by the Special Unit on Microfinance of the United Nations Capital Development Fund (SUM/UNCDF) of 29 microfinance institutions revealed that approximately 60 percent of these institutions' clients were women. Six of the 29 focused entirely on women. Among the remaining 23 mixed-sex programs, 52 percent of clients were women. The study also showed, however, that those programs offering only individual loans or relatively high minimum loan amounts tended to have lower percentages of women clients (UNCDF,

2005). These findings affirm the importance of designing appropriate products for women (world bank, 1995).

According to USAID's annual Microenterprise Results Report (USAID, 2000), approximately 70 percent of USAID-supported MFIs' clients were women. Considerable variation among the regions was seen, however, with percentages of women clients ranging from 27 percent in the Near East to 87 percent in Asia. In Eastern Europe, where USAID has traditionally supported individual-lending programs, the percentage of women clients dropped as low as 48 percent in 1999 before rising to 54 percent in 2000, when USAID began to support more group-lending programs offering smaller loans.

Although the UNCDF study found that larger programs tended to have lower percentages of women clients, data collected by the Microcredit Summit Campaign found no statistically significant correlation between the number of very poor clients served by each institution and the percentage of those clients who were women. Microfinance institutions around the world have been quite creative in developing products and services that avoid barriers that have traditionally kept women from accessing formal financial services such as collateral requirements, male or salaried guarantor requirements, documentation requirements, cultural barriers, limited mobility, and literacy (Canadian International Development Agency, 2011).

Nevertheless, in a number of countries and areas, few or no institutions offer financial services under terms and conditions that are favourable to women (Susy et al., 2000). Together, these findings confirm that the type of products

offered, their conditions of access, and the distribution of an institution's portfolio among different products and services affect women's access to financial services. They also suggest that much more can be done to serve poor women in certain cultural and economic contexts. Research done by UNDP, UNIFEM, and the World Bank, among others, indicates that gender inequalities in developing societies inhibit economic growth and development (Susy et al., 2000).

For example, a recent World Bank report confirms that societies that discriminate on the basis of gender pay the cost of greater poverty, slower economic growth, weaker governance, and a lower living standard of their people (WHO, 1995). The UNDP found a very strong correlation between its gender empowerment measure and gender-related development indices and its Human Development Index. Overall, the evidence is mounting that improved gender equality is a critical component of any development strategy (Susy et al., 2000).

Microfinance has come to play a major role in many of these donors' gender and development strategies because of its direct relationship to both poverty alleviation and women. As CIDA recognizes in its gender policy, "Attention to gender equality is essential to sound development practice and at the heart of economic and social progress. Development results cannot be maximized and sustained without explicit attention to the different needs and interests of women and men." (CIDA's Policy on Gender Equality, 2011). As part of its poverty reduction priority, CIDA supports programs that provide "increased access to productive assets (especially land, capital, and credit), processing, and marketing for women." By giving women access to working capital and training,

microfinance helps mobilize women's productive capacity to alleviate poverty and maximize economic output. In this case, women's entitlement to financial services, development aid, and equal rights rests primarily on their potential contribution to society rather than on their intrinsic rights as human beings and members of that society (CIDA's Policy on Gender Equality, 2011). It is generally accepted that women are disproportionately represented among the world's poorest people. In its 1995 Human Development Report, the UNDP reported that 70 per cent of the 1.3 billion people living on less than \$1 per day is women (UNDP, 1995 Human Development Report).

According to the World Bank's gender statistics database, women have a higher unemployment rate than men in virtually every country (World Bank, genderstats.worldbank.org). In general, women also make up the majority of the lower paid, unorganized informal sector of most economies. These statistics are used to justify giving priority to increasing women's access to financial services on the grounds that women are relatively more disadvantaged than men.

Although many scholars and development agencies have noted an apparent trend toward the "feminization of poverty," measuring the extent to which this is occurring presents many challenges. Because most methods of measuring poverty assess the level of poverty of the household as a whole, it is likely that poverty experienced by women as a result of discrimination against them within their households is underreported to a great extent (Susy et al., 2000). In addition, Baden and Milward note that "Although women are not always poorer than men, because of the weaker basis of their entitlements, they are

generally more vulnerable and, once poor, may have less option in terms of escape.” (Baden & Milward, 1997). By providing access to financing for income-generating activities, microfinance institutions can significantly reduce women’s vulnerability to poverty. A reduction in women’s vulnerability can sometimes also translate into empowerment if greater financial security allows women to become more assertive in household and community affairs (Susy et al., 2000).

The group lending approach

Key differences between the group lending and individual lending programs have been discussed by (Dellien, Burnett, Gincherman, & Lynch, 2005). First, because time and effort are invested in building social networks that enable groups to select members who are creditworthy under group lending. The role of loan officers is to provide structure, training on loan processes and administrative support. Under individual lending, loan officers bear principal responsibility for loan decisions; they screen, and monitor their clients as well as come up with mechanisms of enforcing repayment.

Second, the principal incentives for repayment of group loans are a joint liability, group reputation, credit rating and future access to credit for each member, all of which are directly contingent on each member upholding their obligations. On the other hand, individual lending programs use a variety of incentives such as collateral requirements, co-signers and guarantors to promote repayment and repayment discipline is created by strict enforcement of contracts. Each of the two lending programs has its strengths and weaknesses. (Armendáriz de Aghion & Morduch, 2000) observed that group meetings facilitate education

and training useful for clients with small experience and improve the financial performance of their businesses. Other researchers (Godquin, 2004; Madajewicz, 2011) argue that group lending helps mitigate the risks associated with information asymmetry: for instance, because group borrowers are linked by joint liability, if one of them switches from safe to risky project (moral hazard), the probability that her partner will have to pay the liability rises. This gives group members the incentive to monitor each other. The reduction in group members' default through peer pressure and social ties has also been discussed (Al-Azzam, Heracleous, & Sarangi, 2013; Dixon, Ritchie, & Siwale, 2007; Guttman, 2007). However, (Maria, 2004) points out that group monitoring may be rendered ineffective where social ties are loose, and the cost of monitoring each other high.

Group lending is not without setbacks. (Savita, 2007) argues that group lending is associated with additional costs including group formation costs, training borrowers on group procedures, a higher degree of supervision and a higher frequency of instalment payments. These costs increase interest rates of such microcredit loans leading to enhanced repayment risk. Other researchers argue that joint liability in group lending penalizes good credit risk customers (Giné & Karlan, 2014), could hinder optimal utilization of borrowed funds by clients (Madajewicz, 2003) and might even jeopardize repayment since the incentive of future credit is no longer present in the event that one member fails to pay (Besley & Coate, 1995).

Individual lending programs also present several benefits. For instance, (Armendáriz de Aghion & Morduch, 2000) find that the guarantor exerts

sufficient social pressure on the client to repay MFI loans in Russia and Eastern Europe. However, (Laure & Baptiste, 2007) argue that the guarantee mechanism, especially personal guarantees, is only meaningful if the borrower has assets that can be pledged as surety, if the institutional framework permits the actual transfer of ownership of the pledge from the borrower to the creditor easily and if the pledged assets are not very liquid. The duo contends that these three conditions are not met in many developing countries. In particular, Kenya has a rigid judicial system with a large number of pending cases which may hinder the timely transfer of pledge and most MFI borrowers may not even have “that small collateral”. Another benefit of individual lending is that it spares borrowers the negative effects such as time spent in group meetings and loss of privacy when they discuss their financial situation and investment projects with the peers who could oppose such projects (Maria, 2004) in the process impeding their individual growth (Giné & Karlan, 2014).

Given the strong arguments advanced in favour of both individual and group lending, MFIs find it confusing making a choice between the two lending programs. We believe that the choice should be informed, in principle, by each firm's philosophical orientation. The provision of microcredit services has been explained by three philosophical arguments (Armendáriz de Aghion & Morduch, 2000).

First is the institutional approach, which argues that institutional sustainability is paramount so that MFIs should be able to cover their operating and financing costs with program revenue. The opposing view is the welfare

approach, which argues that MFIs can attain sustainability without achieving financial self-sufficiency. Then there is the middle ground view, known as the win-win approach, which argues for balancing the goals of poverty alleviation and financial self-sustainability.

However, (Hermes & Lensink, 2007) have observed that a majority of MFIs are now focusing on financial sustainability and efficiency (the institutional approach) due to increasing competition. Given this observation, it can be argued that the risk of delinquency should play a key role in informing the preference for either group lending or personal lending by MFIs. Empirical investigations have pointed out a number of factors that may affect the likelihood of delinquency on microcredit obligations. In their work, (Mokhtar, Nartea, & Gan, 2012) found that training to an MFI borrower, the loan amount advanced and age are significant factors affecting loan default in Malaysia. Similarly, (Laure & Baptiste, 2007) find loan amount a significant variable affecting default in microcredit programs. The interest rate has also been found to be an important factor affecting microcredit loan delinquency (Pereira & Mourao, 2012; Warue, 2012).

A key feature of MFIs that are often linked to delinquency risk is the frequent collection of loan instalments. According to (Field & Pande, 2008), frequent repayments provide clients with a commitment device that helps them form a habit of saving (this facilitates loan repayment) and improves their trust in loan officers and their willingness to stay on track with repayments. However, frequent repayments increase transaction costs and increase default risk when clients graduate to larger loans since this increases the amount of their cash

outlays. Default risk has also been found to increase when loan officers fail to undertake their key roles – screening and encouraging clients, and training them on financial discipline – properly (Dixon et al., 2007).

Another factor that influences delinquency risk is gender. Studies have shown that women often demonstrate stronger willingness to pay than men (Armendáriz & Morduch, 2010; Phillips & Bhatia-Panthaki, 2007) largely because they have lower credit opportunities than men and hence must repay their loans to ensure continued access to credit and are easier to monitor since they tend to stay close to their homes than men.

The research was designed to examine the two key microfinance programs with a view to evaluating the effectiveness of group lending in addressing the financial needs of the target beneficiaries (women groups). Consequently, it sought to evaluate the challenges and prospects of group lending approaches as used by the Bonzali Rural Bank in the Northern Region of the Republic of Ghana.

Warue (2012) documents an increasing trend in the level of loan delinquency among MFIs in Kenya. This may be a pointer to increased ineffectiveness of the institutions' various lending programs. Although many studies (Al-Azzam et al., 2013; Aniket, 2010; Dixon et al., 2007; Guttman, 2007) have analyzed the pros and cons of the group and individual lending, data sets are often insufficient to draw meaningful inferences about the most suitable microcredit program.

Empirical Review

Forms of collateral security used in microfinance service delivery

Collateral is a contractual device used by borrowers and lenders around the world. Collateral has also been around for a long time. In one famous example, a pound of Antonio's flesh collateralized Shylock's loan to Bassanio in Shakespeare's "Merchant of Venice." Generally, the term collateral refers to assets pledged by a borrower to secure a loan. The lender can seize these assets if the borrower does not make the agreed-upon payments on the loan, so the lender has some protection if the borrower defaults. Therefore, the use of collateral can make it easier for firms to obtain loans to finance their investments.

The widespread use of collateral has taken a lot of theoretical considerations. The contractual relationship between borrowers and lenders is subject to asymmetric information, adverse selection and moral hazard which usually lead to credit rationing. Therefore, one way banks manage credit risk is by requesting collaterals from the borrower. Collateral may serve as a signalling device for borrower quality (Besanko & Thakor, 1987; Bester, 1985; Boot, Thakor, & Udell, 1987; Chan & Kanatas, 1985), may lower the agency costs of debt by preventing the problem of asset substitution (Jensen & Meckling, 1976) and mitigate (Myers, 1977), underinvestment problem (Stulz & Johnson, 1985). In general, when moral hazard risk shows up in the lending relationship, collateral may play a disciplinary role in the behaviour of the borrower. Consequently, stronger creditor protection from collateral would lead to better credit terms or even the approval of credit that otherwise would not be granted. The collaterals

can be of different types, forms but they must fulfil certain conditions. Although banks try to be selective in accepting collaterals, the test of their validity will only be realistic in times of crisis.

Understanding collateral is important because it is a characteristic feature of bank loans, which help to channel resources to their best use (Yaron, 2006). While early research focused mainly on how collateral affects the borrower's behaviour, recent research has also incorporated lenders' behaviour, for example, how collateral affects lenders' incentives to take care in evaluating a business's prospects. Economists have also examined the relationship between collateral and risk, empirically verifying bankers' common wisdom that collateralized loans are riskier for the bank than no collateralized loans (Yaron, 2006).

While microcredit is an indigenous solution to local poverty, many international actors are instrumental in its growth and expansion, including Chicago's South Shore Bank, the Ford Foundation, and the World Bank. The many different donors have brought different priorities and ideologies, reporting procedures, and indicators that have shaped the practice of microcredit.

Collateral securities play a vital role in ensuring the repayment of loans. In some rural areas, tangible assets such as livestock, land, and housing are put up (in addition to any assets purchased), and efforts are made in enforcing agreements if clients fail to repay. In urban areas, a borrower's home or business is typically required as collateral (Benjamin & Ledgerwood, 1999).

Benefits of group lending

In group-based lending programs, monitoring, screening and the enforcement of repayment are transferred from credit agents to members of a group. The financial intermediary reduces recurrent lending transaction costs by replacing a multiple of small loans to individuals with a larger group loan (Adams, 1988; Bhatt, 1988). In their findings, (Stiglitz, 1990) and (Varian, 1990) argue that the involvement of clients in the screening of loan applicants and monitoring of borrowers enables group members to utilize, at a lower cost, their information regarding the reputation, indebtedness, and wealth of the loan applicant and about his or her efforts to ensure the repayment of the loan than when it is been done solely by MFIs.

According (Zeller, 1994), the indebtedness of peers in the informal market serves as a major determinant of credit rationing for members of formal groups and informal lenders. This, therefore, makes group members stress sensitive information the same as informal lenders. Furthermore, groups may also have a comparative advantage in the enforcement of loan repayment. In addition, most rural communities in developing countries have limited legal systems in rural areas. This, therefore, gives formal lenders limited options to ensure that borrowers failing to pay to repay back loans. MFIs agents that do not live within the same vicinity with borrowers have little leverage and perhaps also a little incentive in actually going to a village and seizing collateral.

Group members can easily employ social sanctions or seize physical collateral from the defaulters (Besley & Coate, 1995). Group members also

appear to be in a much better position to assess the reasons for members default and to offer insurance services and assistance to members who are experiencing shocks beyond their control.

A research conducted by (Ghatak, 1999) and (Van Tassel, 1999) showed how group lending can take advantage of the “inside” information that only borrowers have about each other to draw in relatively safer borrowers and thus mitigate the problem of adverse selection. A study by (Varian, 1990) revealed that borrowers in groups mutually monitor each other’s projects to ensure the success of financed projects, while (Stiglitz, 1990) showed that monitoring in group lending helps alleviate the moral hazard issues involved in lending to clients with no collateral.

A study conducted by (Banerjee et al., 1994) revealed that in group-based lending members are held responsible for repaying the defaulting member’s loan. This, therefore, makes the burden of the moral hazard problem between borrowers and the lender fall on members. The study also showed that with an increasing cost of monitoring, a group monitored can impose higher penalties on the borrowing member creating stronger incentives for choosing a safer project.

Challenges associated with the group lending approach

According to (Susy et al., 2000), the shift from individual liability loans to group liability has accelerated as the microfinance community learns about some of the pitfalls of individual liability lending. Despite this, group liability lending is also characterized by a myriad of challenges. Firstly, clients dislike the tension caused by group liability. Excessive tension among members is not only

responsible for voluntary dropouts but worse still can also harm social capital among members which are particularly important for the existence of safety nets.

Secondly, bad clients can “free ride” off good clients causing default rates to rise. In other words, a client does not repay the loan because she believes that another client will pay it for her, and the bank is near indifferent because it still gets its money back. Thirdly, group liability is more costly for clients that are good risk takers because they are often required to repay the loans of their peers. This may lead to higher dropout and more difficulty in attracting new clients. Finally, as groups mature, clients typically diverge in their demand for credit (Ghatak & Guinnane, 1999).

Heterogeneity in loan sizes can result in tension within the group as clients with smaller loans are reluctant to serve as a guarantor for those with larger loans. In sum, while repayment may improve under group liability, the client base may be smaller, so it remains unclear whether group liability improves the lender’s overall profitability and the poor’s access to financial markets (Ghatak & Guinnane, 1999). Another factor affecting the success of group lending is the high cost of implementation. Studies of the Grameen Bank, the bulk of Chinese programs, and poverty-focused programs of Eastern Europe found that they are not fully covering costs (Morduch, 1999).

Another set of theoretical papers focuses on strategic default by group members. One of such, (Besley & Coate, 1995) focused on group lending under limited contract enforcement and the threat of seizure of assets and social sanctions. This strand of the literature argues that without the threat of social

sanction, group lending may add little if any superiority over individual lending. According to (Armendáriz & Morduch, 2010) group-based lending can induce moral hazard or more risk-taking behaviour instead of reducing it. Moreover, improving the information flows between members can make matters even worse. In their study, (Giné & Karlan, 2014) examined two periods of mass defaults in southern India and conclude that strict adherence to joint liability led to strategic default.

More importantly, the situation of the women groups working with the Bonzali Rural Bank in Tamale is unknown; and this is a reason behind the desire to carry out this study.

Prospects of the group lending approach

The theoretical literature on group liability builds on an earlier contract theory literature from the early 1990s that studies when a principal should contract with a group of agents to encourage side-contracts between them as opposed to contracting individually with each agent (Holmström & Milgrom, 1990; Stiglitz, 1990; Varian, 1990).

In a survey article, (Ghatak & Guinnane, 1999) summarize the literature on group liability by identifying four channels through which this contract feature can help institutions improve repayment: (i) adverse selection: ascertaining the riskiness of borrowers (Ghatak, 1999; Laffont & N'Guessan, 2000; Sadoulet, 1999) or by the insurance effect that results from diversification even if borrowers do not know each other well (Armendariz Aghion De & Gollier, 2000) (ii) ex-ante moral hazard: ensuring that the funds will be used properly (Laffont & Rey, 2000;

Stiglitz, 1990) (iii) monitoring: ensuring that the borrower tells the truth in case of default about her ability to pay, (iv) voluntary default, or ex-post moral hazard: enforcing repayment if the borrower is reluctant to pay (Besley & Coate, 1995).

Group liability contracts, in theory, can lead to higher repayment because borrowers have better information about each other's types, can better monitor each other's investment and may be able to impose powerful non-pecuniary social sanctions at low cost.

However, there are other theories that suggest that group liability may instead jeopardize repayment. For example, (Besley & Coate, 1995) point out those borrowers who would repay under individual liability may not do so under group liability. This situation may arise if members realize that they cannot repay as a group. In this situation, since no further loans will be granted (if rules are adhered to); members that could otherwise repay decide to default because the incentive of future credit is no longer present. However, (Sadoulet, 1999) argues that "social collateral" induced by group liability is not sufficient to ensure high repayment rates. In his work, (Chowdhury, 2005) developed a model that abstracts from adverse selection but shows that group liability alone cannot mitigate an ex-ante moral hazard problem. In his model, either sequential lending as introduced by the Grameen Bank, where borrowers in a group do not all get the loan at the same time but sequentially, or monitoring by the lender combined with group liability, makes group-lending contracts feasible.

Even if group liability does not jeopardize repayment, the theory also suggests it may do no better than an individual liability. Both individual and

group liability alone can be dominated by a contract that elicits truthful revelation about the success of the peers' project (Rai & Sjöström, 2004). In their setup, high repayment is triggered by the ability of banks to impose nonpecuniary punishments to members according to their reports about their success and that of others. More importantly, if borrowers can write contracts with one another (i.e., side-contract), the effectiveness of group liability contracts will be limited.

The emergence of innovative group lending models in the field of microfinance is celebrated as a contractual innovation that has achieved the perceptible miracle of enabling previously unbankable or marginalized borrowers to lift themselves up by their own bootstraps by creating "social collateral" to replace the missing physical collateral that excluded them from access to more traditional forms of financial services, like credit, savings, and so on (Conning, 2005). According to (Ledgewood, 2000) group based lending involves the formation of groups of people who have a common wish to access financial services and are frequently build on or imitate existing informal lending and savings group. He further states that group lending approaches have adapted the model of rotating savings and credit associations to provide additional flexibility in loan size and terms and generally to allow borrowers to access funds when needed rather than wait for their turn.

Better known group lending models include the Grameen Bank in Bangladesh and ACCION International's solidarity group lending both of which facilitate the formation of relatively small groups (of 5 to 10 people) and make individual loans to group members. Other models such as Foundation for

International Community Assistance (FINCA) village banking model utilize larger groups of between 30 and 100 members and lend to the group itself rather than to individuals.

Lending is a risky enterprise because repayment of loans can seldom be fully guaranteed. The capability of borrowers to repay their microcredit loans is an important issue that needs attention. Borrowers can either repay their loan or choose to default. Borrower defaults may be voluntary or involuntary (Brehanu & Fufa, 2008). According to (Brehanu & Fufa, 2008) involuntary defaults of borrowed funds could be caused by unexpected circumstances occurring in the borrower's business that affect their ability to repay the loan. Unexpected circumstances include lower business revenue generated, natural disasters and borrowers' illness. In contrast, the author further argues that voluntary default is related to morally hazardous behaviour by the borrower. In this category, the borrower has the ability to repay the borrowed funds but refuses to because of the low level of enforcement mechanisms used by the institution.

Repayment performance refers to the total loans paid on time as stated in the loan agreement contract. repayment performance is defined by (Godquin, 2004) in terms of the binary variable; based on an arbitrary definition of what constitutes repaying "on time" (a given maximum "grace period" is allowed). However, (Guttman, 2007) measures repayment performance based on the degree of arrears. While, the term delinquency is defined as a failure to meet the repayment obligations at the date complete repayment was promised (Nannyonga,

2000). And delinquent loans are loans that have been written off by an MFI (Norell, 2001).

According to (Kassim & Rahman, 2008), the causes to default risk are mainly from: the lack of post- disbursement supervision, which lead to moral hazard and; the lack of training on basic business skills and knowledge. They further argue that the absence of post-disbursement supervision regarding how funds are being used, can lead to a situation when borrower tend to use the funds for other purposes rather than investing in new or existing businesses. When borrowers use the loans for other purposes than for business investments, they might fail to repay their loans. The second cause of loan default is the lack of business knowledge. The authors further posit that the lack of knowledge on how to drive business can lead to excessive debts.

Lack of basic business skills such as bookkeeping of sale transactions can also cause repayment default. The success of the microfinance industry is largely attributable to product simplicity, standardization, and the capacity to stimulate clients' payment discipline (Armendáriz & Morduch, 2010). The most widespread product, microcredit, has standardized features: short-term duration, small weekly instalments starting right after loan disbursement, compulsory savings, progressive lending, and zero tolerance policy toward default. These features are indeed effective for enhancing clients' discipline.

Poor and low-income individuals lack formal credit because lenders have little means to screen clients, monitor the use of funds, or enforce repayment. In recent years many development organizations have used group lending to deliver

credit to these individuals. Furthermore, group loans help formal lenders overcome the prohibitively high fixed cost of delivering small loans. Monitoring and enforcement are distinct, although difficult to distinguish empirically.

According to (Karlan & Zinman, 2011) monitoring itself does not guarantee repayment, but it allows a lending organization to know whom to punish for not repaying. Although a commercial bank can attempt to monitor business and life outcomes for individuals, it is both difficult and costly to do. So Group lending mechanisms provide incentives to the borrowers to monitor each other to see who can pay and who cannot pay. Monitoring can take on several forms, such as observing repayment of the loan, visiting another's business to verify that it is in operation, showing receipts to demonstrate that inventory was purchased with the loan proceeds, and talking to others in the community to confirm negative shocks like illness.

Among the guiding principles of individual microcredit, recourse to (the) guarantor(s) or to non-conventional guarantees seems to be frequently used by MFIs. Nonetheless, the individual guarantee mechanism used in micro-financing has few points in common with the traditional concept developed in financial theory. In particular, it is not generally a question of finding an alternative source of repayment but of integrating the social sanction mechanism into the individual loan agreement. The purpose of these mechanisms is primarily to limit overdue repayment (Churchill, 1999).

Background of rural banks

Rural banks (RBs) operate as commercial banks under the banking law of Ghana. However, they cannot undertake foreign exchange transactions and their operations are the University of Ghana limited to specific geographical areas. RBs were first established in 1976 to mobilize savings in rural areas not served by commercial and development banks. RBs, which operate as unit banks, is owned by members of the community through the purchase of shares (Gallardo et al., 2005).

Majority of rural banks in Ghana implement microfinance activities, usually with the assistance from donors and the government. It can also be said that in recent times many RBs have established Susu schemes which have been quite successful (Andah, 2005).

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter contains two sections. The first section presents the geographical and socio-economic characteristics of the study area. The demographic characteristics of the area are shown in this section as well. The second section deals with the methodology. This examines the process of fieldwork and why some methods were used. The methods used herein are partly responsible for the findings.

Study Area

The Tamale Metropolitan area has been selected for this study. One of the reasons for the selection of this area is the fact that the majority of the clients of the Bonzali Rural Bank are in the Metropolis. It is without a doubt that the largest branch of the Bank is to be found in Tamale. More importantly, the study targets women groups in the Metropolis as it's of relevant data.

Location

The Tamale Metropolis is one of the 26 districts in the Northern Region. It is located in the central part of the Region and shares boundaries with the Sagnarigu District to the west and north, Mion District to the east, East Gonja to the south and Central Gonja to the south-west. The Metropolis has a total estimated land size of 646.90180sqkm (Ghana Statistical Service, 2010). Geographically, the Metropolis lies between latitude 9°16 and 9° 34 North and

longitudes 0° 36 and 0° 57 West. See Figure 3. Map of the Tamale Metropolis (appendix a).

Population

The population of Tamale Metropolis, according to the 2010 Population and Housing Census, is 233,252 representing 9.4 percent of the region's population. Males constitute 49.7 percent and females represent 50.3 percent. The proportion of the population living in urban localities (80.8%) is higher than that living in rural localities (19.1%) of the metropolis. The metropolis has a sex ratio of 99.1. The population of the metropolis is youthful (almost 36.4% of the population is below 15 years) depicting a broad base population pyramid which tapers off with a small number of elderly persons (60 years and older) representing 5.1 percent. The total age dependency ratio for the district is 69.4, the age dependency ratio for rural localities is higher (86.5) than that of urban localities (65.7) (Ghana Statistical Service, 2010).

Socio-Economic Structure

The economically active population is 63.3 percent of which 92.6 percent are employed and 7.4 percent are unemployed. The proportion of economically active males is 65.5 percent of which 92.8 percent are employed and 7.2 percent are unemployed. For females, the economically active population is 61.1 percent with 92.3 percent employed and 7.7 percent unemployed.

The economically not active population is 36.7 percent with those in full-time education recording the highest percentage of (56.0%) and pensioners or retirees constituting 2.0 percent. The sick or disabled accounted for, 2.2 percent.

The proportions of males and females who are in the economically not active population for the Metropolis are 34.5 percent and 38.9 percent respectively, with (67.9%) of males and (45.7%) of females in full-time education. For the population considered to be too young or too old to work, 9.3 percent are males and 15.1 percent are females.

Markets and Financial Institutions

There are four major markets in the Metropolis namely: Central Market, Aboabo, Kukuo and Lamashegu. In addition to these, there are satellite markets in other communities. The Central market comprises of mini shops and stalls.

The Central Business District (CBD) is also fast developing with new business ventures. There are sanitation facilities ranging from a 24-seater water closet (WC), 10-seater KVIP and aqua privy in some of the markets. The Lamashegu and Kukuo markets are yet to be provided with sanitation facilities. The Assembly has an abattoir located at Shishiegu in the Tamale South-Sub Metro. This abattoir has the capacity of generating waste for biogas production.

There are many international, national and local financial institutions in the metropolis. Prominent among these are the Bank of Ghana (the Regulator), Barclays Bank, Standard Chartered Bank, Stanbic Bank, Ghana Commercial Bank, Agricultural Development Bank, Zenith Bank and Unibank amongst others. Also, there are hundreds of savings and loans companies and rural banks dotted around the city but the most prominent among the rural banks is the Bonzali Rural Bank (Ghana Statistical Service, 2010).

Research Type and Design

This is an applied research conducted using a cross-sectional survey design. Primary data was collected from a cross-section of women groups in the Tamale Metropolis. Forty (40) women groups in the Metropolis were contacted and their ideas used for this study.

Sample and Sampling Techniques

A sample has been chosen for the study because it would be virtually impossible to study the entire population due to constraints of time and costs. However, the sample must be representative of the population from which it is drawn. In order to determine the sample size, the researcher used Krejcie-Morgan sample size table (Krejcie & Morgan, 1970). See figure 4 in appendix b. A total number of women in all 40 women groups were 423. Therefore 201 were selected as the sample size. Therefore, data were collected from 201 women belonging to 40 different women groups. The selection of women groups for the study was based on purposive sampling but the individual women selected to complete the sample size has been based on a convenient sampling process. Women who were available and willing to answer the research questionnaires were considered.

Research Instruments

Having regard to the complexities involved in microfinance studies, a single data collection method cannot be used (Cochran, 1963). The most effective approach to the study is to employ a combination of methods which have been extensively described and employed elsewhere by known finance researchers (Ghatak & Guinnane, 1999).

In his study, (Morduch, 2000) used questionnaires to study microfinance schemes in China and his results were considered valid. In the case of (Asamoah, 2005), the researcher also used a similar method to study microfinance schemes in the Eastern Region of Ghana. Also, (Attanasio et al., 2013) used questionnaires including the examination of relevant documents in a comparative study of group lending verses individual lending in Mongolia.

Considering the above, the research employed the following research instruments:

1. Survey Questionnaires: Structured Survey questionnaires will be administered to selected women and staff of the Bonzali Rural Bank in the Tamale Metropolis.
2. Unstructured interviews will also be used to close gaps in the data collection process.
3. Examination of records at Bonzali Rural Bank.

Validity and Reliability Evidence

To ensure the reliability and validity of the study outcome, greater care will be taken in selecting a research design and data collection instruments. The survey questionnaires will first be designed and pre-tested. After this pre-testing, modifications will be made to a number of questions to enhance clarity and consistency. Also, Instrument triangulation; such as the use of more than one method has been applied; resulting in the use of both survey questionnaires and unstructured interviews.

Data Collection Procedure

The survey questionnaires were divided into two major parts; Part A and Part B. Part A questions were used to get information on the characteristics of the

respondents. Part B questions were centred on the research objectives. After all these, unstructured interviews will be used to ask relevant and probing questions in the collection more data.

Data Analysis

The data were analyzed using the following:

(i) Tabulation and charts will be used to analyze and categorize the data. Information on the characteristics of the respondents; such as age, educational attainments, gender etc will be analyzed by means of tabulation and charts.

(ii) SPSS was used to analyze most of the data.

In presenting the data both qualitative and quantitative methods will be used. According to (Hoy & Miskel, 2008; Kanchebe Derbile & van der Geest, 2012), there has been the polarization along the lines of qualitative and quantitative methods of data presentation in any discipline, either in natural or social science. Proponents of quantitative method argue that human behaviour in the social science, like the physical phenomena in the natural science, can be quantified in attributes (Bacho, 2004; Hoy & Miskel, 2008; Kanchebe Derbile & van der Geest, 2012).

Ethical Consideration

No persons or person will be harmed as a result of this work. Data collected from individuals and officers were presented in aggregates and the privacy of respondents was respected.

CHAPTER FOUR

FINDINGS AND DISCUSSION

Introduction

This chapter presents the findings of this work. It contains the demographic characteristics of the respondent's such as age distribution, gender, educational levels etc. The objectives of the study are to identify the existing forms of social collateral, assess the benefits and challenges associated with the group lending approach and to examine its prospects. Also, the chapter contains the answers to the research questions put out under chapter one of this report. In analyzing the data collected, tables were used in the presentation of data. SPSS has been used in producing the charts and Tables and to carry out a paired sample analysis.

Demographic characteristics of respondents

Table 1: Demographic Characteristics of Respondents

Demographic characteristics	Frequency	Per cent
<i>Sex (Female)</i>	201	100.0
<i>Age</i>		
20-30	2	1.0
31-40	92	45.8
41-50	98	48.8
51-60	9	4.5
<i>Marital Status</i>		
Married	168	83.6
Single	8	4.0
Divorced	16	8.0
Widow	7	3.5
Separated	2	1.0
<i>Number of children</i>		
One	2	1.0

Table 1 continued

Two	12	6.0
Three	109	54.2
Four and Above	76	37.8
Missing System	2	1.0
<i>Level of Education</i>		
No formal education	102	50.7
Primary	47	23.4
Secondary	52	25.9
<i>Religious affiliation</i>		
Islam	100	49.8
Catholic	45	22.4
Protestants	31	15.4
Other	25	12.4
<i>Type of Business</i>		
Farming	12	6.0
Petty trading	182	90.5
Food vendor	5	2.5
Shea-butter processing	2	1.0
<i>Family size (Number of children)</i>		
One	2	1.0
Two	12	6.0
Three	109	54.2
Four and Above	76	37.8
Missing System	2	1.0

Source: Field survey, Abdallah (2018)

Age Distribution of Respondents

Most of the respondents contacted for this study were between the ages of 41-50. They consisted of 48% of the total sample. See Table 1. About 45% fell between the ages of 31-40 and 4.5% were between 51-60 years. A very low percentage of 1% was found to be between the ages of 20-30. This means up to 93% of participants were aged 31 and above. The data shows that very few young women actually take part in accessing micro-credit from the Bonzali Rural Bank. Most customers for the group lending activities are aged.

Gender Distribution

The study target women groups; as a result, all members constituting the sample were women. Therefore, 100% of the respondents were women. The bank specifically targets only women for its group lending products. The bank operates on the belief that women are more creditworthy and are more likely to use credit facilities economically. Women also share the burden of poverty disproportionately. As noted by (Baden & Milward, 1997), although women are not always poorer than men, they are generally more vulnerable and have fewer options to escape from poverty.

Educational Levels of Respondents

Majority of the women had no formal education. About 50.7 % indicated that they had no formal education. However, 23% had primary school level education and another 25% had secondary school education as their highest educational attainment. Education often plays a key role in people's ability to apply and access credit facilities from Banks. The seemingly complex process of filling forms and proving accurate information that can convince bankers to grant a loan facility often required that the customer be formally educated or seek the support of a formally educated person. However, rural banks often understand the predicaments of non-formally educated women and provide officers to undertake documentation on their behalf and to support them perform various banking activities.

Marital Status

A large number of women (83.6%) were married and were living with their husbands. About 8% were divorced, 4% were single, 3.5 % were widows and 1% got separated from their husbands. These means the majority of women participating in group lending activities in the Tamale Metropolis are married women. In most households, married women play double roles - as in family care and economic production. They have to work economically to earn income to support their families despite their work in maintaining the home. As a result, there is a growing number of women small-scale businesses across the metropolis. These women entrepreneurs take advantage of the products offered by the Banks to access credit to establish or expand their businesses.

Religious Affiliation

Majority of the women were followers of the Islamic region making up to 49.8% of the total sample. Another 22% were Catholics, 15% were Protestants and 12.4% represented others. The others consisted of adherents of African traditional religions and non-religious people. Religion plays an essential role in shaping peoples values, believes and social practices. Some religious groups often frowned on taking loans generally while others do not like to pay interest on loans taken. However, in the case of my study, most religious women contacted believe that it is essential and a religious duty to pay back loans when collected. This religious conviction can be useful in ensuring effective collection of paybacks.

Types of Businesses

Petty trading is the work most of the women are doing. Also, the main types of activities that attracted micro-credit were petty trading. This consisted of more than 90% of the total sample. About 6% engaged in a farming activity, 2% were food vendors and 1% was into shea-butter processing. Operating a business enterprise is a key determinant of individual member qualification to join a group. Petty traders that sell basic products like sugar, milk, cosmetics, clothing and cooking ingredients are more likely to earn money weekly and are able to make savings.

Family Size

Majority of the women had only 3 children. They consisted of 54% of the total sample. Also, about 37% had four (4) or more children, 6% had only two (2) children and 1% had only one (1), child. Family size plays a role in determining a family's ability to meet their basic needs. People with large family size mostly experience challenges in paying school fees and providing for the family. The increasing cost of quality education has pushed most mothers to opt for small family units and to work to bring up their children in the best ways possible. Knowing the family size of the respondents in this study was essential in examining the possible benefits that beneficiaries do derive from micro-credits.

Forms of Collateral

Research question one seeks to find out the existing forms of social collateral used in microfinance services delivery by Bonzali Rural Bank. Women only needed to belong to groups and to have savings with the bank. Group

guarantee was the singular collateral security base upon which women were granted loans. All women contacted agreed that their form of security was a group guarantee. About 99% of the participants ticked group guarantee as for the only form of security the bank considers in advancing loans to women. This finding coincides with the findings of (Banerjee et al., 1994) who found that membership of groups is often accepted as a form of collateral and a qualification to accessing micro-credit. In such situations, group members are held responsible for the activities of defaulting members. However, I couldn't find a situation where tangible assets such as livestock or land were used as collateral for micro-credit as suggested by (Benjamin & Ledgerwood, 1999; Besley & Coate, 1995; Ghatak, 1999; Susy et al., 2000; Yaron, 2006). The Bonzali rural bank largely relies on the group guarantee, after a member has made an amount of savings with the Bank.

Collateral

Table 2: Social Collateral

		Frequency	Percent
Valid	Group guarantee	198	98.5
Missing	System	3	1.5
Total		201	100.0

Source: Field survey, Abdallah (2018)

Benefits of Group Borrowing

Research question two asked to find out the benefits associated with group borrowing. Participants were questioned as to whether borrowing in groups does benefit them. About 77% accepted that borrowing in groups does benefit them.

Does borrowing in a group benefit you?

Table 3: Group Borrowing

		Frequency	Percent	Cumulative Percent
Valid	Yes	155	77.1	77.1
	No	46	22.9	100.0
Total		201	100.0	

Source: Field survey, Abdallah (2018)

Again, participants were asked to spell out the specific benefits they derive from group borrowing. The specific benefits were found to include improvements in personal finance, easy access to credit, less documentation for credit, easy access to business information, low instalment payments and others such as improvement in their ability to feed their families and pay school fees of their children. Bonzali Rural Bank's credit schemes do not tie their loans to any specific economic activity. Participating women are already engaged in various economic activities that made them eligible for loans. Members also make savings with the bank. This finding agrees with research findings of (Besley & Coate, 1995; Ghatak, 1999; Susy et al., 2000; Yaron, 2006). Ghatak argues that

borrowers have insider information about each other and are able to greatly minimize the risk associated with defaulting members.

Table 4: Uses of Micro-credit Loans by Respondents

Type of Activity	Percent of Respondents
Business start-up capital	36
Expand/improve business	59
Expand/maintain farm	1.2
Multiple purposes (including school fees, feeding, health, funeral expenses).	3.8
Total	100

Source: Field survey, Abdallah (2018)

About 36% of the women used loans from Bonzali Rural Bank as start-up capital for their business. Another 59% of the women used their loans to expand their business. These took a form of increasing their working capital and stock of goods they deal in. About 1.2% used their loans to expand or maintain their farms. The major farming activities recorded among women in this study was largely food crop production with maize, rice and groundnut as the major crops farmers cultivate. Also, 3.8% used their loans for multiple purposes including the payment of school fees, feeding of the family, seeking health care and attending funerals, weddings and naming ceremonies. This means there are numerous benefits that are driven from these microcredit loans. The benefits range from economic to social issues such as being able to attend social functions such as funerals and naming ceremonies.

Loan Distribution

The women take loan amounts ranging from 500 to 2000 Ghana cedis. In August 2017, about 33% of the respondents took loans within the range of 500 to 1000 Ghana cedis. About 32% took loans below 500 Ghana cedis. Another 22% took loans between 1000 to 1500 Ghana cedis, 9% took loans between 1500 to 2000 Ghana Cedis and only 1.9% took loans of above 2000 Ghana cedis.

Table 5: Distribution of August Loans Received by Respondents

Loan Size (in (Ghana Cedis)	No. Of Respondents	The share of Total (Percent)	Cumulative Percentage
Below 500	66	32.84	32.84
500+ to 1000	67	33.33	66.17
1000+ to 1500	45	22.39	88.56
1500+ to 2000	19	9.45	98.01
Above 2000	4	1.99	100.00
Total	201	100	

Source: Field survey, Abdallah (2018)

Impact of Loans

Attempts were made to do ‘before’ and ‘after’ profit analysis of business that benefits from microcredit from the Bonzali Rural bank. These involved the estimation of profits. The comparison was made between the profits made before the loan and profits after the loan. This analysis indicates that there is a significant increment in profits after loans. Before loans, about 58% of the women were making monthly profits of only 100 Ghana cedi and below, 24% made between

101 to 200 Ghana cedi monthly, 4% made between 201 to 300 Ghana cedis and 3 % made a monthly profit of 301 Ghana cedis to 400 Ghana cedis (see Table 4.3 a). After the loans, these numbers showed some marginal but significant changes; 34.8% begin to make a monthly profit of between 101 to 200 Ghana cedis compare to 24.9 % monthly profits before loans in the same category (see Table 6).

Estimation of monthly profits before the loan

Table 6: Profits before Loan

		Frequency	Percent	Cumulative Percent
Valid	>100GH¢	117	58.2	58.2
	101GH¢-200GH¢	50	24.9	83.1
	201GH¢-300GH¢	8	4.0	87.1
	301GH¢-400GH¢	6	3.0	90.0
	401GH¢-500GH¢	7	3.5	93.5
	501gh¢-600GH¢	5	2.5	96.0
	601GH¢-700GH¢	3	1.5	97.5
	701GH¢-800GH¢	2	1.0	98.5
	801GH¢-900GH¢	3	1.5	100.0
	Total	201	100.0	

Source: Field survey, Abdallah (2018)

After joining a group and taking the loans, the profitability of most businesses showed an enhancement. The percentage of women who were making a monthly profit of 101 to 200 Ghana cedis increased to 34.8% from 24.9 %. Also, 31.3 % started making a monthly profit of 201 to 300 Ghana cedis compare to only 4% before loans. The data in Table 7 gives the details of monthly profit estimation after loans.

Estimation of monthly profits after the loan

Table 7: Profits after Loan

		Frequency	Percent	Cumulative Percent
Valid	>100GH¢	32	15.9	15.9
	101GH¢-200GH¢	70	34.8	50.7
	201GH¢-300GH¢	63	31.3	82.1
	301GH¢-400GH¢	11	5.5	87.6
	401GH¢-500GH¢	12	6.0	93.5
	501GH¢-600GH¢	7	3.5	97.0
	601GH¢-700GH¢	1	.5	97.5
	701GH¢-800GH¢	2	1.0	98.5
	801GH¢-900GH¢	1	.5	99.0
	900GH¢ >	2	1.0	100.0
	Total	201	100.0	

Source: Field survey, Abdallah (2018)

A sample test conducted shows that there is significant differences in the profit before loan (M=1.96, SD=1.71) and profit after loan (M=2.78, SD=1.59); $t(200)=-12.15$, $p= 0.000$ (Tables 8 and 9). The statistical difference between the profit before loan and the profit after loan indicate how beneficial the group lending approach of Bonzali Rural Bank is to the beneficiary women.

Paired Samples Statistics

Table 8: Mean Difference

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Estimation of monthly profits before loan	1.9602	201	1.71126	.12070
	Estimation of monthly profits after loan	2.7811	201	1.59745	.11268

Source: Field survey, Abdallah (2018)

Table 9: Paired Sample Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Estimation of monthly profits before loan - Estimation of monthly profits after loan	.82090	.95800	.06757	-.95414	-.68765	-12.148	200	.000

Source: Field survey, Abdallah (2018)

Challenges of Group Borrowing

Research question three sought to find out the challenges associated with the group borrowing approach from the side of the borrower. The challenges were found to include peer pressure, conflict among members, high defaults rates of members, high dropout rates of members, high repayment amounts/interest and delay in accessing credit, heavy paperwork, and pressure from bank officials among others (see Table 10 below). This agrees with the findings of (Morduch, 1999; Susy et al., 2000). They both found conflicts among group members, peer pressure and high dropout rates as challenges facing borrowers in the group lending model. However, challenges such as delays in accessing credit, heavy paperwork and pressure from bank officials to make payments could not be found in literature and might be unique to the Bonzali group. Other researchers such as

(Al-Azzam et al., 2013; Dixon et al., 2007; Guttman, 2007) all found peer pressure as a challenge to borrowers in group lending.

About 130 out of the 201 women sampled agreed that peer pressure is a challenge to them. This peer pressure comes in a form of a member or members mingling in the activities of another member or members. It also includes the assessments and disclosure of a colleagues business and trade secrets. This happens during meetings and during payback periods. Petty disagreements among the women also do happen, 42 out of 201 women agreed that conflicts among members are a challenge to group borrowing. Again, the rate at which women drop out of the groups is said to be high. Out of 201 members, 145 accepted that dropout rate is high; however, the bank officials could not provide data to buttress this idea. Other challenges include high repayment amounts/interest and delay in accessing the credit. About 165 of the participants points to the repayment amounts required from them has been on the high side and 77 of them also indicated that accessing credit do take much of productive time. This finding agrees with the work of (Savita, 2007) who found that interest rates for group borrowers are often high. Group lending comes with an additional cost in the areas of group formation, training borrowers on group procedures and a degree of supervision which all contributed to the interest rate charged. This was particularly the case with the Bonzali Rural Bank groups.

Table 10: Challenges of Group Borrowing

Challenges	Frequency
Peer Pressure	130
Conflict among members	42
High dropout rates of members	145
High repayment amounts/interest	165
Delay in accessing credit	77

Source: Field survey, Abdallah (2018)

Prospects of Group Borrowing

Research question four (4) sought to assess the prospects of the group borrowing approach. Most of the women were positive about their future relationship with the bank. Up to 54 % sees a bright future, 40% were not sure and only 5% answered in a negative. Researchers such as (Armendáriz de Aghion & Morduch, 2000; Godquin, 2004; Madajewicz, 2011) argues that group lending has a future in micro-credit delivery stating that it effectively mitigate the risks associated with information asymmetry because group borrowers are linked by a kind of joint liability. Respondents were asked to respond to a question on their future activities with the Bonzali Rural Bank. Their response is captured in Table 11 below.

How do you foresee the future of your group in borrowing from the BRB?
Table 11: Prospects of Group Borrowing

		Frequency	Percent	Cumulative Percent
Valid	Bright	10	54.4	54.4
	Bad	49	5.0	59.4
	Not sure	142	40.6	100.0
	Total	201	100.0	100.0

Source: Field survey, Abdallah (2018)

Also, the women were questioned as to whether they will like to continue their activities with the Bank in the next 10 years. About 92% answered “yes” and 8% answered “No”.

Will you like to continue with your group for the next 10 years?

Table 12: Continuation with Group Borrowing

		Frequency	Percent	Cumulative Percent
Valid	Yes	185	92.0	92.0
	No	16	8.0	100.0
	Total	201	100.0	

Source: Field survey, Abdallah (2018)

Participation in the Bonzali Rural Bank’s micro-credit scheme also allowed the poor women to develop savings culture through personal and group savings. The results indicate that members of each group are required to

accumulate savings for four and five weeks respectively before participants could receive the first loan. The views of participants were sought as to what needs to be done to make group borrowing better. Various ideas came up. Among them includes the need to demand for individual collateral security, giving equal credit amounts to all members in a group and also, basing credit amounts on the amount an individual's saves in her savings account with the Bank. However, the majority wanted credit amounts to be based on the savings amounts each person has with the Bank. For instance, if Mma Bintu saved 1000 Ghana cedis in her savings account at the Bank, her credit amount should be higher than a person who saved only 100 Ghana cedis. This finding agrees with the work of (Besley & Coate, 1995) and (Brehanu & Fufa, 2008) in Ethiopia; they both argued that microfinance institutions support women business owners only if they agree to make savings with them.

Going forward, 69% wants credit amounts to be tied to an individual's savings at the Bank, 17% preferred and equal amounts to all members and 11% wants collateral security to be demanded from individual borrowers.

What should be done to make the group borrowing better?

Table 13: Requirements for Group Borrowing

		Frequency	Percent	Cumulative Percent
Valid	Demand individual collateral	24	11.9	12.0
	Give equal amounts of credit to all members	36	17.9	30.0
	Base credit on individual savings	140	69.7	100.0
	Total	200	99.5	
Missing	System	1	.5	
Total		201	100.0	

Source: Field survey, Abdallah (2018)

Discussion

Organizations such as UNDP, UNIFEM, and the World Bank, among others, indicate that gender inequalities in developing societies inhibit economic growth and development. For example, a recent World Bank report confirms that societies that discriminate on the basis of gender pay the cost of greater poverty and a lower living standard of their people. With this mind, all initiatives that are meant to empower women financially ought to be taken seriously.

On this backdrop, initiatives such as group borrowing undertaken by microfinance institutions and rural banks are serious interventions that need to be monitored and supported. This work was therefore designed to assess the challenges and prospects of group lending in microfinance service delivery among women groups.

Bonzali Rural Bank's credit schemes do not tie their loans to any specific economic activity. Participating women are already engaged in various economic activities that made them eligible for loans.

Women only needed to belong to a group and to have savings with the bank. Group guarantee is the singular collateral security base upon which women were granted loans. This finding coincides with the findings of (Banerjee et al., 1994) who found that membership of groups is often accepted as a form of collateral and a qualification to accessing micro-credit. All women contacted agreed that their form of security was a group guarantee. Attempts were made to do 'before' and 'after' profit analysis of business that benefits from microcredit from the Bonzali Rural bank. These involved the estimation of profits. The comparison was made between the profits made before the loan and profits after the loan. This analysis indicates that there is a significant increment in profits after loans. Before loans, about 58% of the women were making monthly profits of only 100 Ghana cedi and below, 24% made between 101 to 200 Ghana cedi monthly, 4% made between 201 to 300 Ghana cedis and 3 % made a monthly profit of 301 Ghana cedis to 400 Ghana cedis (see Table 6). After the loans, these numbers showed some significant changes; 34.8% begin to make a monthly profit

of between 101 to 200 Ghana cedis compare to 24.9 % monthly profits before loans in the same category (see Table 7).

Majority of the women contacted for this study agreed that group borrowing is of immense benefit to them. About 77% of the total sample accepted that borrowing in groups does benefit them. The specific benefits were found to include improvements in personal finance, easy access to credit, less documentation for credit, easy access to business information, low instalment payments and others such as improvement in their ability to feed their families and pay school fees of their children.

Research question three sought to find out the challenges associated with the group borrowing approach. The challenges were found to include peer pressure, conflict among members, high defaults rates of members, high dropout rates of members, high repayment amounts/interest and delay in accessing credit, heavy paperwork, and pressure from bank officials among others. This agrees with the findings of (Morduch, 1999; Susy et al., 2000). They both found conflicts among group members, peer pressure and high dropout rates as challenges facing borrowers in the group lending model. About 130 out of the 201 women sampled agreed that peer pressure is a challenge to them. This peer pressure comes in a form of a member or members mingling in the activities of another member or members. It also includes the assessments and disclosure of a colleagues business and trade secrets. This happens during meetings and during payback periods. Petty disagreements among the women also do happen, 42 out of 201 women agreed that conflicts among members are a challenge to group borrowing. Again,

the rate at which women drop out of the groups is said to be high. Out of 201 members, 145 accepted that dropout rate is high; however, the bank officials could not provide data to buttress this idea. Other challenges include high repayment amounts and delay in accessing the credit. About 165 of the participants points to the repayment amounts required from them has been on the high side and 77 of them also indicated that accessing credit do take much of productive time.

Research question four (4) sought to assess the prospects of the group borrowing approach. Most of the women were positive about their future relationship with the bank. Up to 54 % sees a bright future, 40% were not sure and only 5% answered in a negative. This is in tandem with the findings of researchers such as (Armendáriz de Aghion & Morduch, 2000; Godquin, 2004; Madajewicz, 2011) argues that group lending has a future in micro-credit delivery stating that it effectively mitigate the risks associated with information asymmetry because group borrowers are linked by a kind of joint liability. Also, the women were questioned as to whether they will like to continue their activities with the Bank in the next 10 years. About 92% answered “yes” and 8% answered “No”. The views of participants were sought as to what needs to be done to make group borrowing better. Various ideas came up. Among them includes the need to demand individual collateral security, giving equal credit amounts to all members in a group and also, basing credit amounts on the amount an individual’s saves in her savings account with the Bank. However, the majority wanted credit amounts to be based on the savings amounts each person has with the Bank. For instance,

if Mma Bintu saved 1000 Ghana cedis in her savings account at the Bank, her credit amount should be higher than a person who saved only 100 Ghana cedis.

Going forward, 69% wants credit amounts to be tied to an individual's savings at the Bank, 17% preferred and equal amounts to all members and 11% wants collateral security to be demanded from individual borrowers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter is the final chapter of this report. It contains the summary of the major findings. It also contains the conclusions made, recommendations and suggestions for further research.

Summary

This study had four specific objectives. The first was to find out the form of social collateral used by the Bonzali Rural bank in its micro-finance service delivery. A second objective was to assess the benefits of group lending. The study also wanted to find out the challenges associated with group lending from the side of the borrower. Lastly, the study examined the prospects of the group lending approach in proving micro-credit to women groups. The purpose of the study is to generate relevant information on microfinance services for women groups. The data presented here would be useful in improving microfinance activities and group lending to be specific.

The study principally relied on primary data collected from members of women groups that takes micro-credit facilities from the Bonzali Rural Bank. A simple random sampling technique was used to select members to respond to a set of questionnaires. SPSS was used to analyze the data.

A number of theories have been reviewed to give impetus to the study. The said theories included the theory of sustainability and efficiency; which states that

lower arrears and loan loss rates have an important effect on the efficiency and sustainability of a microfinance institution. Another theory reviewed is the adverse selection theory. Adverse selection arises when borrowers have characteristics that are unobservable to the lender but affect the probability of being able to repay a loan. The Tamale Metropolitan area got selected for this study. One of the reasons for the selection is the fact that majority of Bonzali Rural Banks group borrowers are in the Tamale Metropolis.

Group borrowing is of immense benefit to women entrepreneurs dealing with the Bonzali Rural Bank in Tamale. About 77% of the women contacted agreed that borrowing in groups does benefit them. The specific benefits were found to include improvements in personal finance, easy access to credit, less documentation for credit, easy access to business information, low instalment payments and others such as improvement in their ability to feed their families and pay school fees of their children. Bonzali Rural Bank's credit schemes do not tie their loans to any specific economic activity. Attempts were made to do 'before' and 'after' profit analysis of business that benefits from microcredit from the Bonzali Rural bank. These involved the estimation of profits. Comparison was made between the profits made before the loan and profits after the loan. This analysis indicates that there is a significant increment in profits after loans. Before loans, about 58% of the women were making monthly profits of only 100 Ghana cedi and below, 24% made between 101 to 200 Ghana cedi monthly, 4% made between 201 to 300 Ghana cedis and 3 % made a monthly profit of 301 Ghana cedis to 400 Ghana cedis (see Table 6). After the loans, these numbers showed

some marginal but significant changes; 34.8% begin to make a monthly profit of between 101 to 200 Ghana cedis compare to 24.9 % monthly profits before loans in the same category (see Table 7). Women only needed to belong to groups and to have savings with the bank. Group guarantee is the singular collateral security base upon which women were granted loans.

The challenges involved in this scheme were found to include peer pressure, conflict among members, high defaults rates of members, high dropout rates of members, high repayment amounts/interest and delay in accessing credit, heavy paperwork, and pressure from bank officials among others. About 130 out of the 201 women sampled agreed that peer pressure is a challenge to them. Petty disagreements among the women also do happen, 42 out of 201 women agreed that conflicts among members are a challenge to group borrowing. Again, the rate at which women drop out of the groups is said to be high. Out of 201 members, 145 accepted that dropout rate is high; however, the bank officials could not provide data to buttress this idea. Other challenges include high repayment amounts and delay in accessing the credit. About 165 of the participants points to the repayment amounts required from them has been on the high side and 77 of them also indicated that accessing credit do take much of productive time.

Most of the women were positive about their future relationship with the bank. Up to 54 % sees a bright future, 40% were not sure and only 5% answered in a negative. Also, the women were questioned as to whether they will like to continue their activities with the Bank in the next 10 years. About 92% answered “yes” and 8% answered “No”.

Conclusion

The Bonzali Rural Bank has come to play a major role in developing women entrepreneurs and businesses. Group guarantee is the singular collateral security base upon which women were granted loans. Their group borrowing strategy has a direct relationship with poverty alleviation and women empowerment. This study found that group borrowing as practised by the BRB has led to improvements in personal finance, easy access to credit, less documentation for credit, easy access to business information and others such as improvement in their ability to feed their families.

The Challenges facing women beneficiaries of this group borrowing scheme has been found to include peer pressure, conflict among members, high defaults rates of members, high dropout rates of members, high repayment amounts/interest and delay in accessing credit, heavy paperwork, and pressure from bank officials among others. Majority of the women are however positive about their future relationship with the bank.

Recommendations

From the findings, the following are recommended:

1. The Bank of Ghana (BoG) should consider adopting a discriminatory policy rate that will seek to lessen the cost of borrowing to rural banks and micro-finance institutions that supports women businesses and entrepreneurs.
2. Commercial Banks, the Agricultural Development Bank and other rural banks should consider venturing into the group borrowing scheme since it has the tendency of inducing business profitability among small-scale business.

3. The BRB should consider extending the repayment periods beyond one week to lessen the pressure on their clients. Such an action will also reduce the dropout rates among beneficiaries of the scheme.
4. Informal education programmes for beneficiary women should be undertaken periodically. This will improve upon their financial literacy levels and help them manage their finances and business activities.

Suggestions for Further Research

Further research is needed in finding out how group borrowing could be used to support unemployed tertiary graduates who wish to do various business. Also, it will be of help to find out how a similar scheme can be implemented in rural areas around the country.

REFERENCES

- Adams, D. W. (1988). The conundrum of successful credit projects in floundering rural financial markets. *Economic Development and Cultural Change*, 36(2), 355-367.
- Akerlof, G. (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanism (1970) 84. *Quarterly Journal of Economics*, 488.
- Al-Azzam, M., Heracleous, M., & Sarangi, S. (2013). Does the group leader affect repayment performance differently? *Southern Economic Journal*, 80(2), 502-522.
- Andah, D. (2005). Regulation, Supervision and Access to Microfinance: The Case of Ghana. *Ghana Microfinance Institutions Network*.
- Aniket, K. (2010). Beyond Microcredit: Giving the Poor a Way to Save Their Way out of Poverty. *Trinity College, University of Cambridge, mimeo, February*.
- Armendariz Aghion De, B., & Gollier, C. (2000). Peer group formation in an adverse selection model. *The Economic Journal*, 110(465), 632-643.
- Armendáriz, B., & Morduch, J. (2010). *The economics of microfinance*: MIT press.
- Armendariz De Aghion, B. (1999). On the design of a credit agreement with peer monitoring. *Journal of Development Economics*, 60(1), 79-104.
- Armendáriz de Aghion, B., & Morduch, J. (2000). Microfinance beyond group lending. *Economics of transition*, 8(2), 401-420.

- Asamoah, M. (2005). *Empowering women economically through microcredit-prospect and challenges: the case of some selected credit schemes in the eastern region of Ghana*. Retrieved from www.cepa.org.gh/researchpapers/Empowering72.pdf.
- Attanasio, O., Augsburg, B., De Haas, R., Fitzsimons, E., & Harmgart, H. (2013). Group lending or individual lending? Evidence from a randomized field experiment in rural Mongolia. *Discussion Paper Series No.2013-074*. Retrieved from <http://ssrn.com/abstract=2365432>
- Bacho, F. (2004). Can I sell one of my cows? Institutions assets and gender-based poverty. *Ghana Journal of Development Studies*, 1(1), 25-48.
- Baden, S., & Milward, K. (1997). *Gender inequality and poverty: trends, linkages, analysis and policy implications*: Institute of Development Studies. BRIDGE REPORT No. 30, Brighton.
- Banerjee, A. V., Besley, T., & Guinnane, T. W. (1994). Thy neighbour's keeper: The design of a credit cooperative with theory and a test. *The Quarterly Journal of Economics*, 109(2), 491-515.
- Bateman, M. (2010). *Why doesn't microfinance work?: the destructive rise of local neoliberalism*: Zed Books Ltd.
- Benjamin, M., & Ledgerwood, J. (1999). Case Studies in Microfinance: Albania--Albanian Development Fund. *World Bank, Washington, DC, May*.
- Besanko, D., & Thakor, A. V. (1987). Competitive equilibrium in the credit market under asymmetric information. *Journal of Economic Theory*, 42(1), 167-182.

- Besley, T., & Coate, S. (1995). Group lending, repayment incentives and social collateral. *Journal of Development Economics*, 46(1), 1-18.
- Bester, H. (1985). Screening vs. rationing in credit markets with imperfect information. *The American economic review*, 75(4), 850-855.
- Bhatt, V. V. (1988). On financial innovations and credit market evolution. *World Development*, 16(2), 281-292.
- Bolton, P., & Scharfstein, D. S. (1990). A theory of predation based on agency problems in financial contracting. *The American economic review*, 93-106.
- Boot, A., Thakor, A. V., & Udell, G. F. (1987). Competition, risk neutrality and loan commitments. *Journal of Banking & Finance*, 11(3), 449-471.
- Brehanu, A., & Fufa, B. (2008). Repayment rate of loans from semi-formal financial institutions among small-scale farmers in Ethiopia: Two-limit Tobit analysis. *The Journal of Socio-Economics*, 37(6), 2221-2230.
- Canadian International Development Agency. (2011). *CIDA'S policy on gender equity*. Hull, Canada.
- Chan, Y.-S., & Kanatas, G. (1985). Asymmetric valuations and the role of collateral in loan agreements. *Journal of money, credit and banking*, 17(1), 84-95.
- Cheston, S., & Kuhn, L. (2002). Empowering women through microfinance. *Draft, Opportunity International*, 64.
- Chowdhury, P. R. (2005). Group-lending: Sequential financing, lender monitoring and joint liability. *Journal of Development Economics*, 77(2), 415-439.

- Churchill, C. F. (1999). *Client-focused lending-the art of individual learning*: Calmeadows, Toronto.
- Cochran, W. (1963). *Sampling Techniques*, New York, 1953. *Statistical Surveys E. Grebenik and CA Moser*.
- Conning, J. (2005). *Monitoring by delegates or by peers? Joint liability loans under moral hazard*. Paper presented at the international conference 'Does microfinance work?', Groningen, The Netherlands, 1-2 July 2005
- Dellien, H., Burnett, J., Gincherman, A., & Lynch, E. (2005). Product diversification in microfinance: introducing individual lending. *Women's World Banking, New York*.
- Deshpanda, R. (2001). Increasing Access and Benefits for Women: Practices and innovations among microfinance institutions—Survey Results. *New York: UNCDF, 3*.
- Dichter, T. W., & Harper, M. (2007). *What's wrong with microfinance? : Practical Action Pub., Rugby*.
- Dixon, R., Ritchie, J., & Siwale, J. (2007). *Loan officers and loan 'delinquency' in microfinance: A Zambian case*. Paper presented at the Accounting forum.
- Egli, D. (2004). Progressive lending as an enforcement mechanism in microfinance programs. *Review of Development Economics, 8(4)*, 505-520.
- Emmanuel, Y. A. (2012). *An assessment of credit management practices at Agricultural Development Bank (ADB) Branches in the Eastern of Ghana*. Unpublished master's dissertation(Commonwealth executive masters in

business administration), Kwame Nkrumah University of Science and Technology.

Field, E., & Pande, R. (2008). Repayment frequency and default in microfinance: evidence from India. *Journal of the European Economic Association*, 6(2-3), 501-509.

Gallardo, J., Ouattara, K., Randhawa, B., & Steel, W. F. (2005). Microfinance Regulation: Lessons from Benin, Ghana and Tanzania. *Savings and development*, 85-96.

Ghana Statistical Service. (2007). *Pattern and trends of poverty in Ghana, 1991-2006*: Ghana Statistical Service.

Ghana Statistical Service. (2010). *Population and Housing Census. District Analytical Report*. Tamale Metropolis

Ghatak, M. (1999). Group lending, local information and peer selection¹. *Journal of Development Economics*, 60(1), 27-50.

Ghatak, M. (2000). Screening by the company you keep: Joint liability lending and the peer selection effect. *The Economic Journal*, 110(465), 601-631.

Ghatak, M., & Guinnane, T. W. (1999). The economics of lending with joint liability: theory and practice¹. *Journal of Development Economics*, 60(1), 195-228.

Giné, X., & Karlan, D. S. (2014). Group versus individual liability: Short and long-term evidence from Philippine microcredit lending groups. *Journal of Development Economics*, 107, 65-83.

- Godquin, M. (2004). Microfinance repayment performance in Bangladesh: How to improve the allocation of loans by MFIs. *World Development*, 32(11), 1909-1926.
- Guttman, J. M. (2007). *Repayment performance in microcredit programs: theory and evidence*, Working paper, Networks Financial Institute: IndianaState University, Retrieved from <http://ssrn.com/abstract=985890>.
- Hermes, N., & Lensink, R. (2007). The empirics of microfinance: what do we know? *The Economic Journal*, 117(517).
- Holmström, B., & Milgrom, P. (1990). Regulating trade among agents. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift Für Die Gesamte Staatswissenschaft*, 85-105.
- Hoy, W., & Miskel, C. (2008). The school as a social system. *Educational administration: Theory, research, and practice*, 1-40.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Kanchebe Derbile, E., & van der Geest, S. (2012). Repackaging exemptions under National Health Insurance in Ghana: how can access to care for the poor be improved? *Health policy and planning*, 28(6), 586-595.
- Karlan, D., & Zinman, J. (2011). Microcredit in theory and practice: Using randomized credit scoring for impact evaluation. *Science*, 332(6035), 1278-1284.

- Kassim, S., & Rahman, M. M. (2008). Handling default risks in microfinance: The case of Bangladesh. *MPRA paper* No.16123
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Kritikos, A. S., & Vigenina, D. (2005). Key Factors of Joint-Liability Loan Contracts: An Empirical Analysis. *Kyklos*, 58(2), 213-238.
- Laffont, J.-J., & N'Guessan, T. (2000). Group lending with adverse selection. *European Economic Review*, 44(4-6), 773-784.
- Laffont, J.-J., & Rey, P. (2000). Collusion and group lending with moral hazard. *IDEI Université Toulouse*, 1.
- Laure, p., & Baptiste, j. (2007). Individual Microcredit and Social Pressure.
- Ledgewood, Y. (2000). Microcredit initiatives for equitable and sustainable development: who pays. *World Development*, 27(1).
- Madajewicz, M. (2003). *Does the credit contract matter? The impact of lending programs on poverty in Bangladesh*. Paper presented at the Columbia University invited paper presented at the 2004 European University Institute Conference, "Micro Foundations of Credit Contracts." Available at www.iue.it/FinConsEU/Papers2004/Madajewicz.pdf.
- Madajewicz, M. (2011). Capital for the poor: The effect of wealth on the optimal credit contract. *Columbia University, Draft, June*.
- Maria, U. (2004). Essay on the Dynamics of Microfinance. *Unpublished Master Dissertation, University of Maryland College Park United States*.

- Mike, R. (2000). Group risk and ALM: the job market overview. *Balance Sheet*, 8(3), 46-47.
- Mokhtar, S. H., Nartea, G., & Gan, C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia. *International Journal of business and social research*, 2(7), 33-45.
- Morduch, J. (1999). The microfinance promise. *Journal of economic literature*, 37(4), 1569-1614.
- Morduch, J. (2000). The microfinance schism. *World Development*, 28(4), 617-629.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2), 147-175.
- Nannyonga, H. L. (2000). *Determinants of repayment behaviour in the Centenary Rural Development Bank in Uganda*. The Ohio State University.
- Norell, N. (2001). How to reduce arrears in microfinance institutions. *Journal of Microfinance/ESR Review*, 3(1), 8.
- Otero, M. (1999). Bringing development back, into microfinance. *Journal of Microfinance/ESR Review*, 1(1), 2.
- Pereira, S., & Mourao, P. (2012). Why does the microcredit borrowing rate differ across countries? A cross-country study. *International Journal of Social Economics*, 39(8), 536-550.
- Phillips, C., & Bhatia-Panthaki, S. (2007). Enterprise development in Zambia: reflections on the missing middle. *Journal of International Development*, 19(6), 793-804.

- Pitt, M. M., & Khandker, S. R. (1998). The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter? *Journal of political economy*, 106(5), 958-996.
- Rai, A. S., & Sjöström, T. (2004). Is Grameen lending efficient? Repayment incentives and insurance in village economies. *The Review of Economic Studies*, 71(1), 217-234.
- Sadoulet, L. (1999). *The Role of Insurance in Group Lending*. Retrieved from
- Savita, S. (2007). Transaction costs in group microcredit in India. *Management decision*, 45(8), 1331-1342.
- Sengupta, R., & Aubuchon, C. P. (2008). The microfinance revolution: An overview. *Federal Reserve Bank of St. Louis Review*, 90(January/February 2008).
- Stiglitz, J. E. (1990). Peer monitoring and credit markets. *The world bank economic review*, 4(3), 351-366.
- Stulz, R., & Johnson, H. (1985). An analysis of secured debt. *Journal of financial economics*, 14(4), 501-521.
- Susy, C., Reed, L., Salib, S., Voorhies, R., & Copestake, J. (2000). Measuring Transformation: Assessing and Improving the Impact of Microcredit, Part II: Implementing Impact Assessments and Monitoring Systems: A Practitioner Perspective from Zambia. *Washington, DC: Microcredit Summit Campaign*.

- United Nation Capital Development Fund. (2005). *Core performance indicators for microfinance. United Capital Development Fund*. Survey report, new york
- United State Agency for International Development. (2000). *Microenterprise Development in a changing world*. U.S Agency for International Development microenterprise Results.
- Van Tassel, E. (1999). Group lending under asymmetric information. *Journal of Development Economics*, 60(1), 3-25.
- Varian, H. R. (1990). Monitoring agents with other agents. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift Für Die Gesamte Staatswissenschaft*, 153-174.
- Warue, B. N. (2012). Factors affecting loan delinquency in microfinance institutions in Kenya. *International Journal of management sciences and Business Research*, 1(12), 27-48.
- World Health Organization. (1995). *Women's health: improve our health; improve the world*. WHO position paper, WHO, Geneva.
- Woller, G. (2000). Reassessing the financial viability of village banking: Past performance and future prospects. *MicroBanking Bulletin*, 5, 3-8.
- world Bank. (1995). credit policies, lessons from East Asia. *policy research working paper 1458 Oxford press; New York*.
- Wydick, B. (1999). Can Social Cohesion be Harnessed to Repair Market Failures? Evidence from Group Lending in Guatemala. *Economic Journal*, 463-475.

Wydick, B. (2001). Group lending under dynamic incentives as a borrower discipline device. *Review of Development Economics*, 5(3), 406-420.

Yaron, L. (2006). Using collateral to secure loans. *Business Review*, 9.

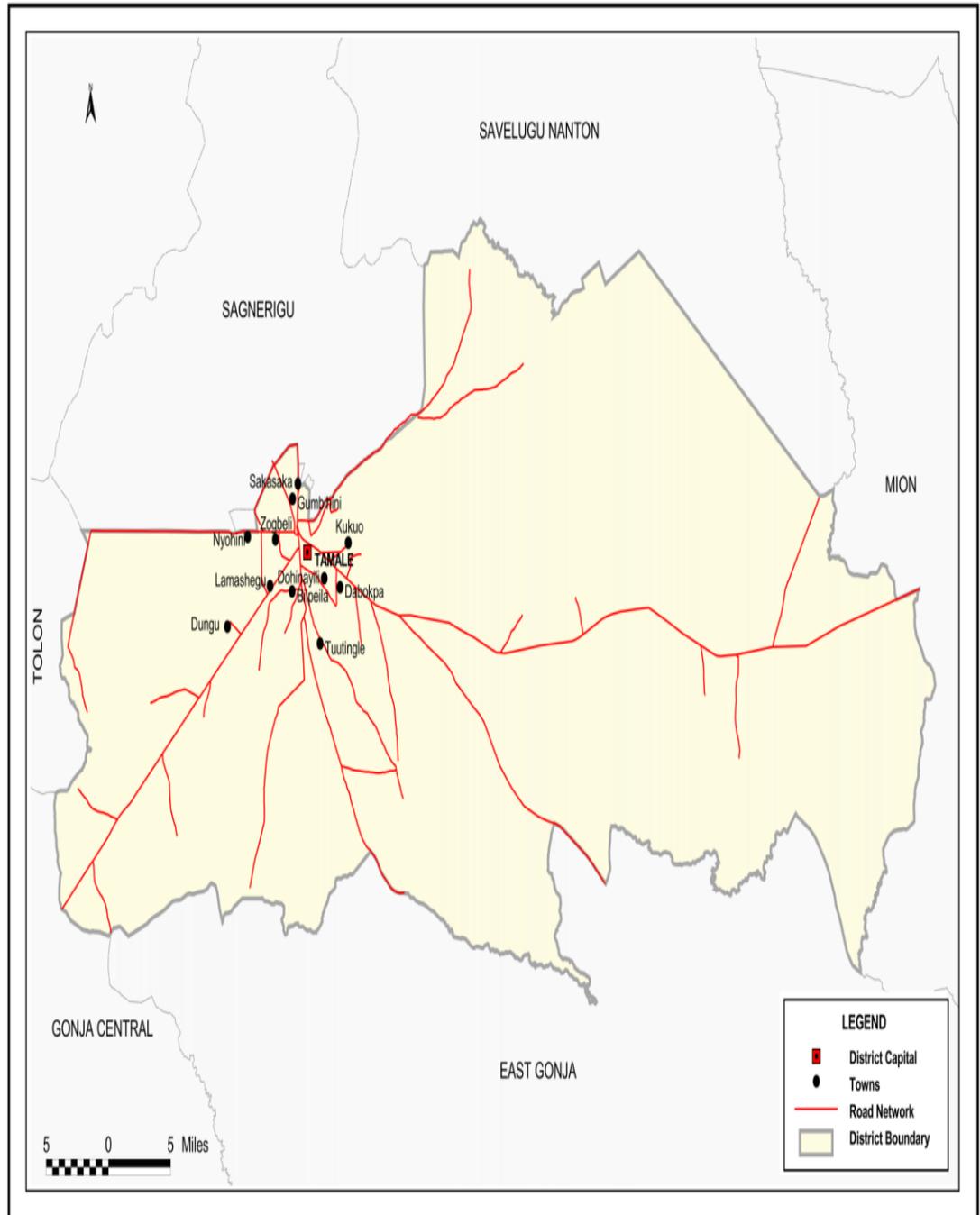
Zeller, M. (1994). Determinants of credit rationing: A study of informal lenders and formal credit groups in Madagascar. *World Development*, 22(12), 1895-1907.

Zephyr, A. M., & Yunus, M. (2004). Money is not enough: Social capital and microcredit. *Issues in Political Economy*, 13, 1-12.

APPENDIX A

(Map of Tamale)

MAP OF TAMALE METROPOLITAN ASSEMBLY



APPENDIX B

Sampling Table

Table 3.1									
<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	830	263	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	283	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	373
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	530	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size

Source: Kishor & Morgan, 1970

APPENDIX C [Questionnaire 2017]

Dear Sir/Madam,

I am a Student at the University of Cape Coast; conducting a study on the challenges and prospects of group lending. I would be grateful if you could take a few minutes of your time to complete this questionnaire for me. Your views will help complete this work.

Please be assured that any information you provide will be confidential and all data will be presented in aggregate form.

Personal details are requested purely for the purpose of this work and will not be used in any other way.

Part A [Characteristics of Respondents]

(CIRCLE AN APPLICABLE CODE IN EACH CASE)

1)

GENDER	CODE
Male	1
Female	2

2)

Age	Code
>20	1
20-30	2
31-40	3
41-50	4
51-60	5
< 60	6

2)

Marital status	Code
Married	1
Single	2
Divorced	3
widow/widower	4
Separated	5

3)

Educational level	Code
No formal education	1
Primary	2
Secondary	3
Tertiary	4
Other	5

4)

Religious Affiliation	Code
Islam	1
Christianity	2
ATR	3
Hinduism	4
Other	7

PART B

5) Which of these serves as your collateral security in borrowing from the Bonzali Rural Bank?

Collateral	code
Livestock	1
land	2
house	3
Personal assets	4
Farm products	5
Group guarantee	6
Other(s) Specify.....	7

6) Does borrowing in a group benefit you?

Response	Code
Yes	1
No	2

7) If Yes to Question 6, what are the benefits?

Benefit	code
Improve financial performance	1
Easy access to credit	2
Less documentation for credit	3
Easy access to business & financial information	4
Low instalment payments	5
Other (s) Specify.....	6

8) What difficulties do you face as a member of your group?

Difficulty/Challenge	Code
Peer pressure	1
Conflicts among members	2
High default rates of members	3
High dropout rate of members	4
High repayment amounts/interest	5
Delays in accessing credit	6
Heavy paperwork	7
Pressure from bank officials	8
Other (s) specify.....	9

9) How do you foresee the future of your group in borrowing from the Bonzali Rural Bank?

Response	code
bright	1
bad	2
Not sure	3

10) Will you like to continue with your group for the next 10 years?

Response	code
Yes	1
No	2

11) What should be done to make the group borrowing better?

Response	code
Demand individual collateral	1
Give equal amounts of credits to all members	2
Others.....	3

Remarks

.....

Thank YOU!!!