DETERMINING THE CAUSES AND IMPACT OF LOANS DEFAULT ON THE OPERATIONS OF CREDIT UNIONS; A CASE STUDY OF ST JOSEPH THE WORKER COOPERATIVE CREDIT UNION.

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DECLARATION

I hereby declare that this submission is my own work towards the KNUST School of Business Masters in Business Administration and contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

I humbly dedicate this project to my Maker, Savior and Redeemer – The Lord Jesus Christ, for His unfading love, and extravagant grace towards me. Again to my husband and children.

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ABSTRACT

Credit Unions in Ghana currently provide significant financial services including microcredit facilities particularly to the rural and semi-urban areas across the country.

Granting of microcredit facility (Loan) is a major activity of St Joseph the Worker Co-Op Credit Union and the loan portfolio constitute a significant proportion of the assets of the union. Undoubtedly, the union derive most of its interest incomes from loans, however, not all loans granted to beneficiaries perform well and earn the expected returns and this tend to have adverse effect on the quality of the loan portfolio. The study therefore analyses the socio-economic characteristics of clients, the factors accounting for loan default assess the rate of growth and impact of loan default on the general operations of St Joseph the Worker Co-operative Credit Union. Stratified and Purposive sampling techniques were used to select hundred loan clients and two Loan Officers respectively for the study. Questionnaire and interview guide were used to collect data for the study. Business failure, lack of monitoring of loans, Low level of income, inadequate marketing avenues were identified as the principal causes of the default loans in the organization. Measures to control default were found to include the provision of collateral to cover loan amount especially to those in the informal sector, need for training on how to use the loans, effective and regular monitoring of the loan from the time of disbursement till the final repayment, loan officers should be resourced sufficiently at all times in terms of vehicle and other logistics to support the monitoring activities. It was concluded that the government and hence Bank of Ghana should regularly monitor and supervise the credit unions and also try and formalize most of the informal sector.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

Globally, it has been established that Micro Finance Institutions are principal and one of the most efficient ways put in place especially in poverty reduction projects which has at heart the needs and interest of the poor (Okumadewa, 1998). As said by Chossudovsky (1998), the World Bank Sustainable Banking with the Poor Project (SBP) in some where June, 1996 projected that over one thousand (1000) microfinance institutions were established in over one hundred (100) countries , each with at least three (3) years working experience and also consisting of about one thousand (1000) membership enrolment. The one thousand (1000) microfinance consisted of seventy-three per cent (73%) of NGOs, Thirteen and six per cent (13.6%) credit unions, seven and eight per cent (7.8%) banks and the others described as savings unions as established by a survey in 2006. This clarify that poverty alleviation in any development, credit facility plays a major role.

All financial institutions; Commercial Banks, Savings and Loans companies, Rural Banks, Financial Non-Government Organisations, Credit Unions, only to name a few has credit facility available as one of their core objectives. This can be witnessed in the large percentages of their total annual budget allotted to credit facilities. Debtors are considered vital in financial institutions in areas of cash inflows, loans availability and net surplus of the MFIs.

Pricewaterhousecoopers outcome of a survey between 2007 to 2009 and released 2010, stated that the MFIs increased its income by a hundred per cent (100%), that is from seven hundred and ninety-three million Ghana cedis (Ghc793,000,000) in 2007 to one billion five hundred million Ghana cedis (Ghc1,500,000,000) in 2009. Same period however, the loan repayment deteriorated rapidly and hence affected profit margins, that is bad debt charges increased from sixty million Ghana cedis (Ghc60,000,000) in 2007 to two hundred and sixty-six million Ghana cedis (Ghc266,000,000) in 2009. Loan default ratio, which takes into consideration the ratio of loan losses to gross loan advances, worsened from 16.2% 2009 December, to 17.5% as of December, 2010. This was the reason why the market share of the top five (5) banks in the country decreased from 49.5% in 2009 to 45% in 2010 as declared by The Central Bank of Ghana . (Bank of Ghana report 2010).

The non-banking institution Micro-finance and Small Loans Center (MASLOC) also presented names of their many default loan members throughout parts of the country to the various courts for legal actions to be taken against such members. This reveals that loan default turns out to be a major problem in the financial industry worldwide. Furthermore the Obama led Administration set up the Toxic Assets Recovery Program (TARP) to purchase delinquent loans or "toxic assets" as it was referred, so the banks could resume lending at a time where the height of credit crunch in America was reached.

Though Ghana has not witnessed such high crises levels as witnessed in America, nevertheless a loan default ratio of 17.6% in the Ghanaian banking industry is still a nationwide worry. As clearly stated by Dan Mensah, the Executive Director of the Association of Ghanaian Bankers this year, 2015, as he shares his worry and concern of high loan delinquency in the books of commercial banks as a contributing factor to the worries among Bankers and Industry watchers. The financial sector (Banking and non-banking sectors) plays a very important role in every economy. There is evidence to suggest that wellfunctioning lending institutions help to quicken economic growth and conversely, poorly functioning ones slow down progress and intensify poverty (Barth et al., 2004). A key function of most Banking and Microfinance institutions is lending with interest incomes on loans and advances constituting a large source of revenue for these financial institutions.

Some of the loans given out by the lending institutions unfortunately become delinquent and eventually result in bad debts with adverse consequences on the overall financial performance of the institutions. The causes of the problem are multi-dimensional and non-uniform among different literatures. Loan delinquencies are always a source of misery for lenders because if a Microfinance institution has too much of it on its balance sheet, it can adversely affect its operations in terms of liquidity, profitability, debt- servicing capacity, Lending capacity and ability to raise additional capital.

One Micro finance institution which has also been heavily affected by loan default is Credit Unions. Credit Unions normally provide financial services to low-income households, micro enterprises, small farmers, and others who lack access to the formal banking system (Aryeetey, 1996).

St Joseph the Worker Co-Op Credit Union, among other members of Credit Unions is also on the frontline with the challenge of loan default portfolio and its consequences on the operations of the union of recent times and this calls for an urgent solution to the financial cancer. The study therefore focuses on examining the influential factors of loans default, the rate of growth and impact of loan default on the general operations of the institutions and remedy to mitigate further occurrences in terms of loans default. Specifically, the research would examine underlying reasons for loans default at St Joseph the Worker Co-operative Credit Union, the impact of loans default on Interest income, the impact of loans default on operating income and the impact of loans default on loanable funds. The reasons accounting for these loan defaults and its impact on the general operations of St Joseph the Worker Cooperative Credit Union therefore needs to be assessed.

Table 1: Loan default chart of St Joseph the worker co-operative credit union

Default period	1 to 30 days	31 to 90 days	121 to 180 days	210 to 270 days	300 to 360 days	Over 360 days	Number of clients
2013/2014 financial year	88.46	8.49	0.37	0.31	0	2.37	462
2014/2015 financial year	61.48	30.82	3.89	0.33	1.76	1.73	452

Source: field survey, 2015

Though, the number of clients with loan scheme dropped from 462 to 452 between the 2013/2014 accounting year and 2014/2015 accounting year, loan default risen by 263 percent in the first three months of 2014/2015 accounting year as compared to the first three months of 2013/2014 financial year; thus, from 8.49 percent to 30.82 percent. 951 percent between four to six months comparing the two financial years; thus, from 0.37 percent to 3.89 percent and by 574 percent from the seventh month to the twelve months; thus, from 0.31 percent to 2.09 percent as shown in the table above. This is very alarming and therefore needs to be investigated.

1.1 STATEMENT OF THE PROBLEM

The life span of every credit union is solely dependant of her members' ability to reliably pay their loans on time. This simply means that every credit union view her loan repayment as a major source to her lifeline, at most 100% loan repayment or a marginal default.

Unfortunately, credit unions all over the country are worried and complain bitterly about members' loan default, which is at the moment exceeding the international accepted standard for loan portfolio, pegged at a rate of 3%. This actually has turn to be one of the most major concerns and worries of the unions. Concern and worries to credit unions because the consequences of loan default to businesses, individuals and the economy as a whole is unbearable. Aside credit unions been a risky business, other dangers involve fraudulent in operations and opportunistic behaviours, hence has entangled credit unions rather to depend mostly on loan repayment to enable a financial sustainability in this respect and hence meet their objective of poverty alleviations.

Ghana is experiencing loan delinquency in her credit unions. Accepted standard loan portfolio at risk is 5% in Ghana which majority of the Credit Unions including St Joseph the Worker Co-operative Credit Union is not achieving. It is in this regard that this study is designed to investigate factors influencing loan repayment default in St Joseph the Worker Co-operative Credit Union and the impact of the loan delinquency on its operations. .

1.2 OBJECTIVES OF THE STUDY

1.2.1 GENERAL OBJECTIVES

The study generally will investigate the causes of loan default and its impact on the financial growth of St Joseph the Worker Co-operative Credit Union.

1.2.2 SPECIFIC OBJECTIVES

Obviously, the aims of the thesis as follows;

1. To examine the socio-economic characteristics of St. Joseph The Worker Cooperative Credit Union clients.
2. To examine the factors accounting for loan default/delinquency in St Joseph the Worker Co-operative Credit Union.
3. To assess the rate of growth and impact of loan default on the general operations of St Joseph the Worker Co-operative Credit Union.

1.3 RESEARCH QUESTIONS

My thesis seeks to address and analyse the following questions:

1. What are the socio-economic characteristics of St Joseph the Worker Co-Op Credit Union clients.
2. What are the factors accounting for loan delinquency/default in St Joseph the Worker Co-operative Credit Union?
3. What is the impact of loan default on the operations of St Joseph the Worker Cooperative Credit Union?

1.4 SIGNIFICANCE OF THE STUDY

Micro Financing is very vital in most economies including Ghana, in that they contribute a lot in helping to revive Small and Medium Businesses. This is mostly done through the giving of loans to these Small and Medium businesses.

St Joseph the worker Cooperative Credit Union is a microfinance institution which offers loans to its clients in large amounts and as a result has been experiencing loan default in recent times. The study will seek to address and clarify reasons attributing to the factors that lead to loan default in St Joseph the Worker Cooperative Credit Union. This will bridge the knowledge gap by assisting with useful current- state insights into the factors that account for loan repayment default. It will also aid the financial institutions in general both in the private and public sectors to strategies policies to support the development of credit unions in Ghana.

My thesis seeks to provide information on the impact of loan default in the general operations of St Joseph the Worker Co-operative Credit Union. The research will also improve literature on why clients default on loan repayments and its impact on the institution’s operations.

Thus, the findings of the study will be relevant to future research.

1.5 SCOPE OF THE STUDY

My research is considering clients seeking credit facility in St Joseph the Worker Cooperative Credit Union as well as the loan officers. One major reason of choosing St Joseph the Worker Cooperative Credit Union is easy accessibility of data because the researcher works there.

1.6 LIMITATION OF THE STUDY

The research is likely to encounter certain challenges given the limited scope and explanatory nature of the study and they are as follows: respondents consider some information sensitive and inaccessible to the public. Furthermore, an attempt to carry out the study in all credit unions in the whole of the Ashanti region will not be possible given the limited time available to the researcher.

Also, because only one credit union has been selected for the study, it will be difficult to generalize the results of the study to cover the whole of Ghana. The researcher recommends that similar exercise is conducted in all regions and districts which may have peculiar difficulties. Besides, it can still be argued that the study will yield reliable results in describing the phenomenon not yet existent in the literature.

1.7 ORGANISATION OF THE STUDY

The research is grouped under five headings. The first heading generally is classified as introduction, and is made up of research background, problem statement, objectives of the research, research questions, scope of the research, importance of the research, limitations of the research, and the organisation of the research. More so the second heading identifies literature reviews which seek to review the works of others on the topic under study. Thirdly is the methodology of the study which includes data collections, population, sampling, data analysis technique. The fourth heading also involves the data presentation, analysis and discussion. Lastly, summarises findings, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This part of the research deals with the theoretical framework in the field of study. The views, thoughts, and perception of various scholars on loan default. The research seeks to find and collect views of organisations and individuals and their opinions on loan defaults. This chapter forms the learned framework of the study. Examining loan default constituents and defining them and the accounts that leads to them are vividly studied. Lastly the various advances by the writers for controlling loan defaults are also looked at among financial institution.

2.1 THE CONCEPTS OF LOAN DELINQUENCY/DEFAULT

A debt also known as a loan is termed delinquent when loan recovery is not made on due time (CGAP, 1999). Delinquent loan is also considered default loan when its ability for recovery becomes difficult. Delinquency is considered very important as it serve as an indicator to an increased risk of loss, warnings of operational flaws, and may help to also predict how much of the loan portfolio will eventually be lost or becomes a bad debt.

Out of the lot of forms of default indicators, only three major forms will be considered: the ratio of collected rates of amounts paid actually to expected amount; the ratio of debtors amounts delinquent to the outstanding amounts.; and risk portfolio which rates overdue amounts to that of total debt outstanding. (CGAP, 1999).

Murray defines a loan default as a borrower, who fails to fulfil his or her obligation according to the loan contract or when one party that is the debtor does not observe his or her part as started in the agreement of the loan documentation. For instance when an individual or a group fails to meet their expectance loan schedule repayment plan, such a borrower is said to have not abide by the by-laws of the loan contract (Ameyaw-Amankwah, 2011). From the above, loan default is defined as failure to meet loan repayment plan on time. This happens when a borrower or debtor consciously or unconsciously decides not to meet up with a loan as scheduled. Failure on the part of a borrower or debtor to keep to loan repayment plan as documented is referred to as loan default (Murray, 2011).

Moreover, when a three to four instalment payment within twenty-four (24) months period is missed, such a risk threshold as described by Pearson and Greeff is a default of loan. Pearson and Greeff (2006). This implies and indicates that such a signal throws more light on the fact the borrower by all standards will default in the loan repayment if all other repayments are ceased. This is a global accepted standard and is considered vital due to the fact that a general description was needed for loan default. This also does not refer to debtors who by all standards have ceased servicing the loan and hence necessary measures taken against the borrower or financially as described, as the loan has been written off as bad debt. That is the whenever a borrower is not able to meet the amount required on stipulated time is loan default (Balogun and Alimi, 1990).

2.2 LOAN POLICIES

Loan committees usually streamline a lay down procedures, which help them make only reliable loans accessible. Among such procedure is the loan recovery procedure, this procedure is so because majority of clients fail to credit the institution duly as scheduled. The policy therefore centres most on clients whose payments usually delays and such eliminate or minimise delinquency of the loan. This brings to the fore constant and unbeatable sales of working capital, delinquency leading to bad debt and extra incurred cost as a result of engaging other agencies to help in the collection of given loans to the minimum and also attaining 100%

goal achievements neglecting other factors. The policy also clearly lay down methods which should be adopted and their short falls, thereby sidling all hindrances from loan recovery periods, amounts and loan make-ups (Pandey, 2004). This procedure takes into consideration the weakness and strength of the would-be business and the loans committee also sees to it the expenditure and income of a prospect loan candidate, the well-being of the organisation and the business associates of the clients and the committee also scrutinise to find the flaws of the prospective organisation. It is viewed as dangerous to the committee to make credit facility accessible when is realised the variables contributing to the finances of the organisation is below the expected average (Weston, 1982). Furthermore, the committee also sets loans target to be accessed or loan ceil which are eventually revised from time to time, it brings to light the dangers that lie as a client is allowed to access a loan facility and the ceiling also serve as a reveller of the clients instincts as eager or not to service the facility. More other factors can be employed to test a client's credit faithfulness, that is using previous loan instalment schemes or if no such a history, then the business associates of the borrower can be used, as they can testify about the borrower's integrity and the borrowers neighbours too as they can point the borrower's ability to keep to the borrower's promises and one other factor is the borrower's inflow and outflow projections of cash. All these contribute to making the loan accessible to the borrower. Batar in the year, 2008, said a financial expertise should be employed to access the clients` MFI's financial service's needs, by evaluating the client's needs, character and ability to repay and also classify the deem fit credit facility. Ad hoc approach of numerical credit scoring can also be used to create a total credit score to identify the credit reliability of clients by identifying attributes in order of importance thereby assigning them due weights by the loans committee. Other discriminates such as savings and withdrawals can also be used to distinguish between good and bad clients can be used by the union. For instance, earnings ratio before depreciation, interest and taxes (EBDIT) to amount receivables, also identifies bad clients from good clients, that is what is referred to us the Empirical analysis. A bench line is set and clients whose EBDIT falls above the bench line are the only clients allowed to access credit facilities.

Two heads they say is better than one, EBDIT to cash receivables and sales as against cash inflows, can also be other factor to be considered in respect to a client financial stands to classify the bad from the good one. This will be more reliable than solely depending on a single ratio. A graph of payers as against non-payers can be plotted using both ratios. There will be an indicator which is a straight line and this straight line separates the good from the bad clients. Other discriminants factors can also be used by the union, when these multiply factors analysed interact with each other based on the analogy in order of importance given to the factors, will be able to classify and identify good clients among bad ones.

2.3 PERFORMING LOANS

Lawfully, a credit facility is defined to mean a contractual promise between two parties where one party, the creditor agrees to provide a sum of money to a debtor, who in turn promises to return the said amount to the creditor either in one lump or in instalments over a specified period of time. The stipulated time may be spread over a particular period, where by the debtor will be required to make the financial assistant available in instalments or whole depending on the said contract. Other charges referred to as rentals may be added to the debtor as an advanced payment for the financial assistant given to the debtor for such periods, others also include processing fees, loan application form cost, insurance cost are a few of the lots listed are also added to the financial assistant also known as the capital to be paid in accordance to the contract. All these sum up to the income of the creditor. Loans are said to be a good loan when

both the loan capital and other extra charges are paid duly on time as described in the loan agreement by both parties by the debtor. A healthy loan portfolio is described as an up to date loans in terms of both capital and interest settled duly as per the contract on time or simply good loans as identified by the Bank of Ghana's (BoG)
classification, which also refer to the latter as current loans. (BoG, 2008).

2.4 DELINQUENT/BAD LOANS

The word delinquent can also be known as non-performing loans as stated in Fofack (2005). Berger and De young (1997) explains this forms of debt as problematic debts in a wider option when both the capital and interest charges when a loan is unpaid with a speculated period in the loan agreement form, that debt or loan is regarded delinquent or due payment. Some literature or books describe various forms of delinquency, some use quantities that is the total number of days the loan pass due, while other groups use qualities to determine delinquency. For example, the clients or borrowers' faithfulness. (Bloem and Gorter, 2001).

Three months or long overdue debts that are no more adding interest are considered as default debts by Alton and Hazen (2001). Caprio and Klingebiel (1990) deduced from Fofack (2005), as delinquent loans being non yielding income in at least three months and over.

2.5 INFLUENTIAL FACTORS OF LOAN DEFAULT

Ahmad, (1997), stated clearly that the influential factors of loan default are; wilful noncompliance of loan repayment by the borrower in addition to misapplication of funds and incorrect credit assessment by the loans committee and loan officers. Hurt and Fesolvalyi (1998), seen by Kwakwa, (2009) detected that when the country's gross domestic products reduces, default rates rises. Due to that, debtors are not able to pay their loan because foreign currency as against the country's depreciation currency immensely affects them. Balogun and

Alimi (1988) also examined the factors affecting loan defaults as borrowers not getting required or sufficient funds, too much time lag between application and disbursements of loans, higher charges of loans, customers' age, inadequate monitoring and business failure by customers. Moreover, Akinwumi and Ajayi (1990) brought to the fore that business size, number of dependants, daily spending by dependants and bad managerial activities and skills are most of the influential factors hindering loan repayment. Berger and De Young (1995) sought the main attributes to failure to pay back loans in the organisational set up as; bad choice of business, improper feasibility, inappropriate securities as collaterals for the debts, bad repayment plan, insufficient monitoring, and unpredicted circumstances. So was also identified by Okorie when a research was made on such in 1986. Also were class of debts, conditions of the debt, additional charges, bad debt records of client and clients income as compared to the loan's processing cost factors that influence bad loans and indicated by Okpugie in studies in the thesis in 2009 and also verified by Vandel in 1993 and calling a high additional charges as the main skeleton behind loan default. Gorter and Bloem in the year, 2002 published that factors influencing bad loans include improper business planning in an organisation or an individual business set ups and other unpredicted natural factors such currency drops against major currencies, world fuel prices, non performing governments, weather and others. Provisions such as loan insurance package can be purchased to write off all bad debts and hence minimising the risk to the stake holders. Such were same contribution made by Nishimura, Kazuhito and Yukiko in 2001 when they side-lined why bad loans were widely spread across Japan. They also referred to all loans that went bad in companies, institutions and individuals in Japan in the era of bubbles as natural.

Warue 2012 in Kenya, advised that, some factors of loan delinquent are external and none of the stakeholders have no control over and hence the various committees should put good and profitable guidelines which both stakeholders will adhere to since they have the power to control such which are internal and count the rest as luck. With this, when fully observed, both stakeholders will help reduce bad loans and hence control their impacts.

The upheaval, an external factor that fell on financial organisations and their markets, the impact and continues to be felt all over the world in microfinance institutions as a general economic difficulty that affected microfinance institutions (MFIs). Earlier instances saw MFIs losing liquidities but when the rises of the recovery of the markets were witnessed, great thoughts were shifted from funding to quality asset (CGAP, 1999). In sub-Sahara countries a research was conducted by Fofack in 2005, this brought to light the link between natural factors and loan defaults, which also team up the edicts of business to that of loan quality.

Sheila in 2011 noticed in her country, Uganda, that insufficient study on the debtor is one common factor that influences bad loans. When loan committees and credit officers are incompetent or deliberately fail and hence fail to apply the necessary procedures for the debt on clients and also outline insufficient debt grants as also a call for defaults. And suggested that proper consideration and critical assessment should be done on the client and the necessary amount must be made available to the client. Contrary to that, rather what the union considers appropriate becomes the strength of the support they offer and there by leading businesses into failure and therefore defaulting in their loans repayment. Greater proportions of clients assessing loan facilities at the various credit unions are illiterates in terms of funds management and the unions also fail to educate their members on fund management, hence have no business plan and technical know-how in managing the credit facility they accessed and to the above, most cannot interpret common foreign sentences and vocaburies used in the unions and on the field of business, money counting to the simplest transaction on the field, leads to so much fund losses, there by collapsing the business and making their loans go bad.

Some debtors also vanish into thin air, as well as other creditors too. This comes about when both parties to the agreement fail or one part fails to observe their part of the contract. Emphasis must be made on business management, lackadaisical business behaviours. For instance most debtors' keeps no record of loan repayment and most unions also fail to find permanent habitats of clients, these were what was observed by Kasozi in the year, 1998 and witnessed some loop holes in debtors that creditors can no more trace them. These make monitoring difficult and hence leading to bad loans.

Field challenges and robbing shoulders such as competitions also leads to bad loans. When many MFIs are located and found within a geographical area at a time, this may lead the MFIs to be making loans facilities accessible without even asking for securities, all in the name of attracting clients. Such loans might fall in the hands of bad debtors, causing the unions bad loans by failing to observe their part of the contract and when the going becomes tough for MFIs, they turn to the seizure of clients' properties. Bichanger and Aseya said in the year, 2013 most influential factors leading to bad loans include; over burden of unions supervisors, process delays, funds diversion, poor decision making as a result of stress, and personality counts, especially when all loans are handles and monitored by a single individual as area heads or officers in charge.

2.6 REMEDIES TO BAD LOANS

In the year, 2009, Kohansal and Mansoori listed facts such as mortgages for loans, assured guarantors, rating of loans, and recovery agents to be adopted by unions to help reduce bad loans. Kay Associates Limited in the year 2005 referred to Aballey 2009 was of the opinion that delinquency could be controlled by granting loan facilities to those who have proven beyond doubts that they can service their loans.

After an adequate credit proceedings are observed on clients and all other risk factors must be figured out with the client, before concluding the loan documentation. Diverse actions should be spilled out and ensured that those sanctions are melted out to defaulters as a deterrent to others and also strict supervision must be adhering to by the unions. Ameyaw-Amankwah, in the year, 2011 suggested the various unions' should impede dangerous loans, give a close marking to given loans and reframes the structures when conditions become unbearable to repay. Before it gets out of control, systematic approaches must be assumed to check loans before it slips from its rightly order or form by MFIs. (Warue, 2 012).

Sheila also in 2011 was of the notion that the main key to prevent bad loans was proper loan processing, this is the principal fundamental needs of every loan; this will prevent or reduce bad loan to the least. Anjichi in 1994 described this stage as the bloodline of quality portfolio. This includes assessing both borrower and the institutions. Specified information must be listed to adhere to, such should include, loan purpose, targeted credit limits, a guarantor to secure the loan. The loan committee and their officers should have access to all these information without any impediment.

Information derived from the interaction between both parties, the loans committee can use such and squeeze more of such information from the client which will be helpful in the loan process at the time and even beyond. Permanent residence, occupational habitat, and other key permanent information should be sought and witnessed because some borrowers will hide some vital information from the committee and their officers, which in turn will make the loan process non-realistic and unachievable and hence failure in the scheme . Hunte in the year 1996, edges that those longer periods of clients assessment is worthier because short periods are not worth for vital information. Because of non-verification of information assessed by the union, clients turn out with false and unworthy information. Another thing to be considered in loan processing is credit risk. Borrowers' credit history should be considered if any, how the borrower kept his loan sheet without a motgage used as a guarantor for the loan is vital. The borrowers screening should emphasis more on the borrowers yesterday so as to predict the borrowers tomorrow. Assessing credit facility should be characterised on funds, personality, and aim of the credit, target of credit, retrieval terms and guarantors. In line with the above, every know-how about the borrower should be considered to the latter and valued as compared to the standard set.

When a number of individuals come together with a common objective, and works hand in hand to help maintain the health of its individuals, is known as a group, these groups' supports, mentor, and educate each other. When such groups go in for a loan, such loans are termed group loans. Group loans are one way to control loan delinquency because the impact the loan has on the group is nowhere near to that of an individual. Woodlock in the year, 2001 concluded from a research that group loans perform better than individual loans. Due to the reputation of individual members of the group, each individual is obliged to observe the contract. Saloner in 2007 had the faith that group loans will reduce bad loans. Joint liability is when members of each group are selected by themselves and choose their repayment schedules. Better rate of loans repayment performance by borrowers in operating their business as a result of group loans.

Members of a group are generally from same vicinities, hence each member is well known to all. Hence every member with bad reputation is removed and serves a signal to others. Islam in 1995 puts to the fore the consequences of group loans in respect to the microfinance institutions. He advised in his study that group loans should ensure a strong system of members monitoring and also makes the unions relax in their finances by reducing interest rates and minimising the repayment rates with less dangers. Contrarily to scholars, whom all their studies have proven that group loans have only positive effects, an empirical study prove otherwise, and concluded that group loans have no significant effects by Kaboski and Townsend in the year, 2005.

2.7 IMPLICATION OF LOANS DELINQUENCY ON THE OPERATIONS OF MICROFINANCE INSTITUTIONS

Major parts of profits made by microfinance are usually derived from given loans. Loans serve as a strong contributor to the microfinance organisations. However, when loans go bad, the effects are very disturbing in the operations of the microfinance organisation. Bank of Ghana has a policy that the microfinance organisation must make provisions for bad loans which causes reduction in profit margins.

The microfinance organisation capital or loop sum reduces and hence its strength to grant other loans reduces when majority of their clients fails on their part in the loan agreement by delay or unable to pay back granted loans.

Loans default also leads to loss of trust on the part of members and investors, which in turns leads to liquidity crises and its growth affected immensely because profit generated is injected back into the organisation to grow. The capital is minimised because of bad loans and also dividend payables are negatively affected because credit losses are deducted before dividends are declared. Other effects of bad loans on microfinance institutions are the large portions of loans that are written-off.

Some foreign books talks about failing banks and non-banking institutions have large records of bad loans because of the large amounts of bad loans due to failure and that of asset quality is an important predictor of insolvency (Berger and De Young (1997). Most of the MFIs have fallen apart due to bad loans. Examples of such MFIs in Ghana are Noble Dream financial services, Eden financial services, supreme savings and many more.

2.8 THE GENESIS OF THE ESTABLISHMENT OF CREDIT UNIONS WORLDWIDE.

The genesis of the credit unions can be linked to Germany's movement of pioneer's movement. Two major organisations in the 19th century came up, and these were Schulze- Delitzsch and Raiffeisen credit societies. These societies are recognised as ancestors to today's credit unions. Hermann Schulze-Delitzsch, a judge and a political figure, 1850 established the first modern day credit union. Also in the year, 1864, Raiffeisen Wilhelm Friedrich, a major in the western Rhineland area, also developed the first rural credit cooperative. First cooperative venture by Raiffeisen was a little bit same as that of Schulze-
Delitzsch, meanwhile, Schulze-Delithzsch's credit union assisted urban craftsmen and entrepreneurs and Raiffeisen also developed and channelled his help to farmers. The overall purpose for both Schulze-Delithzch and Raiffeisen credit unions was financial liberation to the poor as a result socio-economic difficulties in the 19th century in Germany.

Isbister in 1994 believes that the main reason for the establishment of those credit facilities was to generate funds to localities that were in dire need for such opportunities, as loans to be repaid but not as charitably grants. These German organisations came to deem light after it was believed that the formal financial organisation had failed woefully. The cooperatives worked at areas where formal banks could not as argued by Proponents. Some group of individuals believe that the cooperatives have diverse merits over that of the urban banks. Guinnane in

1994 stated the merits of the unions were directed to that of the economic conditions of the locality which allowed the unions to effectively target members and hence enable quick identification to default members. The cost of credit to the banks was raised because of such low-cost information enabled cooperatives.

These ideas from Germany soon spread to other European countries and the financial institution grew promptly. Luigi Luzzatti, a scholar from Italy directly applied the ideas of Schulze-Delitzsch to develop and assist people establish banks as he has observed in

Germany. Such as b Luzzatti's peoples' banks of liability limited was one of such fundamentals as adopted from the German's model of cooperative institutions. And Austrians also organised same as their first Schulze-Delitzsch society in the year, 1858. In Great Britain, the research by Robert Owen at New Lanark and the establishment of Rochdale Pioneers Formation in the year, 1844, was a major source of inspired development in that particular century, that is the 19th century.

Encouraged by other concerned humanitarians for the lee privileged caused by poor service conditions by Revolution Industries, urban factories were established in Lanark by Robert Owens, where self-contained and eventually independent societies were also established by Robert Owen. A cooperative ideology was made known when the stalk holders of Lanark embarked on a social research after conceding with the idea of using the profit of an investment of their capitals to develop the whole society. Though New Lanark did not succeed, the research spread widely and had a great influence and endured.

Rochdale Cooperative store in Great Britain in 1844 set up was one practical and enduring that affected the cooperatives idea. Rochdale Society was established by a group of workers who were Equitable Pioneers subscribed to shares sustainable by weekly payments. Funds raised was used to purchase goods cheaper than retailing price and sold to members at a savings. At the end of each accounting year, shareholders were paid dividends on their shares and a 5% interest also paid on member's savings. The fundamentals of Rochdale cooperatives involved: open and free membership, member ownership, elected board of directors by members, not profit oriented, and gives an account to all transactions to members. This lead to other cooperatives development over the world.

2.9 HISTORY OF CREDIT UNIONS IN GHANA

Jirapa a suburb of the Upper West Region, the then north-west, witnessed the first credit union in Ghana and Africa as a whole in the year, 1955, month of September with Rev Father John McNulty, an Irish Canadian citizen. Bishop Derry after his appointment as the Bishop of Wa, in 1960 by Pope John XXIII, he ensured that other credit unions were formed all across the parish which had Tumu, Lawra, Wa, Kaleo, Nandom and ko as members. The president of Ghana then, Dr Kwame Nkrumah said to Bishop Derry, 'You are doing a good service to Ghana and I encourage you to continue', after the Bishop had a discussions on credit unions with him. This lead to the wide spread of the unions through the entire nation. Obtaining membership was a joy and honour since the president of the land had encouraged it.

Coming together of the various credit unions to form a chapter came to light in the year, 1967 in the north because of the foreign priest who served as consultants to the unions. Like wisely, other credit unions in the south also formed a chapter, enable them share common goals and expertise. CUMA of Lesotho, an international organisation, in January, 1968 organised a meeting for all credit unions in Ghana in Tamale, out of the meeting the desire to establish National Association in Ghana. Eventually the association was born out of another meeting in April same year and same venue and the association was known as the Ghana

National Union and Thrift Association, now the Ghana Cooperative Credit Unions Association(CUA) Limited. CUA limited was to elevate members from poverty, and also to evaluate, encourage, mobilised and help the Credit Union Movement locally and globally.

FIGURE 2.1: CONCEPTUAL FRAMEWORK

Influential factors of loan default

- Delay in time of loan disbursement
- High interest rate
- Educational background of clients
- poor supervision
- non-profitability of client's businesses
- undue government intervention
- natural factors

Source: Researcher's own work, 2015

Loan delinquency

Negative impact on the institutions' operation

- Reduce profit level
- Inability to grant more credit.
- Liquidity challenges
- Negative growth of shareholders wealth
- Loss of investors confidence

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This section describes how the thesis is undertaken and provides the reason for each step taken. This section gives the preferred thesis approach and method to see to the end of the research. The section gives the choice of research approach and research design that have been conducted to the study. The chapter explains the study population, the data collection methods, sampling techniques and analyzation of data. Research methodology is the systematic and scientific ways of reaching your goals and findings of a study against the claims for knowledge are measured and always directed towards the scope of study (Cooper and Schindler, 2006).

3.1 PROFILE OF THE STUDY AREA

St. Joseph The Worker Co-operative Credit Union is located in the Ashanti Region of Ghana, prescisely in the Kwabre East, formerly a member of Kwabre Sekyere District in 1988, located in the mid portion of the Ashanti region. Lies within latitudes 60 44’ North and longitudes 10 33’ to 1044’ West. The District shares common boundaries with Afigya Sekyere District to the North; Kumasi Metropolitan Area to the South; Ejisu-Juaben Municipal to the Southeast; Atwima District to the West and Offinso Municipal to the Northwest. The District has a total land area of 246.8 square kilometres constituting about

1.01% of the total land area of Ashanti Region.
St Joseph the Worker Co-operative Credit Union can be found in Mamponteng, the Kwabre East district capital, and the institution is directly opposite to the Assemblies of God church. Trading in general goods is the main occupation in the area.

3.2 RESEARCH APPROACH

The research adopts both qualitative and quantitative research approaches aimed at getting the needed information that are aligned with the objectives it aims to realize. Cooper and Schindler (2006) explains quantitative research as composer of measurement of variables and the determination of outcomes in numerical form in which research findings are described by texts of significance, confidence gaps and mathematically certified relationships whiles Qualitative research is a kind of studies conducted to find out what are the minds of people, their thought, know-how and their feeling. Such methods targets the valuation and clarification of a phenomenon that focuses on ‘why’ questions. The quantitative technique have a lot of advantages. First, it is highly built, also allows for the cost efficient and less frustrating data analysis (Schutt, 2006). Closed ended questions are used in the survey questionnaire which is the instrument through which the quantitative approach is undertaken. Such questions are directed and offer concrete option which the respondent may choose from to represent his view and thought on the issue (Creswell, 1994). Also, the quantitative approach allows for the sumation of statistics, from whose interpretations are derived for conclusions of the research. The findings that are put forth by the researcher are tested through statistical outcomes, and the choice of statistical test are based upon the level of measurement of the data; the validity of the instrument utilized for measuring the variables of interest; the power of the statistical test selected; and the methodological limitations of the research (Teddie and Tashakkori, 2008).

Statistics are the major tool that forms the basis for inferences that are resulted from a quantitative research. The method involves the distribution of a build survey, a questionnaire to a sample. The numbers produced from statistical analysis are then interpreted to arrive at significant insights about the phenomenon being probed (Creswell, 1994). There are disadvantages as well to the quantitative approach. The quantitative approach does not allow for in-depth probing of responses or the reasons behind respondents’ answers. The qualitative approach allows for responses which emanate from the knowledge and experience of the participant (Denzin and Lincoln 2003). Open ended questions are used in the survey questionnaire which is the instrument through which the qualitative approach is undertaken. In the context of the present research, both closed and open ended questions are administered to the sample population for their responses. This will enable the researcher to undertake strong analysis from the responses to achieve the research objectives. The main intent is to determine why clients default on loans and the impact of loan default on the general operations of St Joseph the Worker Co-operative Credit Union from the perspective of the clients and the loan officers. This necessitates the need for the researcher to adopt both quantitative and qualitative approaches for the study.

3.3 RESEARCH DESIGN

Research design helps in planning, structuring and executing the research to maximize the "validity of the findings" (Bryman and Stephens 1996). It gives directions from the underlying theoretical assumptions to research design, and data collection. Yin (2003) adds further that "research design is an action plan for moving from here to there, where "here" may be defined as the initial set of questions to be answered and "there" is some set of

(inferences) answers". The research design used by the researcher in the study is basically descriptive in nature. In descriptive research, there is revelation of what actually transpire on the ground without the intervention from the researcher (Robson, 2002).

Research design is a scheme that enables the researcher to construct a research question in a way that the result becomes valid in satisfying the objective of the research, (Robson, 2002). A descriptive research aims to administer an accurate description of the use of questionnaire of phenomena (Yin, 2003). The objective of descriptive research is to show an exact accounts of the persons, events or situations (Robson 2002).

3.4 POPULATION

There are four hundred and fifty two (452) clients who have loan with St Joseph the Worker Co-operative Credit Union according to the current records from the institution. The population the researcher intends to use for this study constitutes the entire clients who have credit facility with St Joseph the Worker Co-operative Credit Union.

Population is putting together a likely and same characteristics of a group of persons or things in particular locations at a particular time. According to Saunders (2009), a population is the totality of cases or items under consideration. Bryman and Bell (2007) suggest that a population is the whole group that the research concentrates on. The population of the study is the entire customers who have loan with St Joseph the Worker Co-operative Credit Union. Accessible population is the population to which the researcher can apply conclusion. The researcher because of time consumption and cost relies on sample to represent the population.

3.5 SAMPLE AND SAMPLING TECHNIQUE

The sample size for this research is made up of 100 clients who have credit facility with St Joseph the Worker Co-operative Credit Union. Sampling techniques give the researcher various options to minimize data needed by collecting in consideration, only data from a subgroup (sample data) rather than all possible cases or elements (Saunders, 2009). Stratified random sampling technique was used to select the clients for this study. Stratified random sampling is a probability sampling technique where the entire population of clients of the credit union is divided into strata or groups (defaulters and non-defaulters). This means that if an element belongs to one stratum cannot belong another also. The strata (defaulters and nondefaulters) are collectively exhaustive if all elements of various strata put together completely cover all elements of the population. It is more reliable as compared to other methods. Dividing the population into various strata increases the representativeness of the sampling. Purposive sampling was used to select loan officers who have experience in the credit union more than five (5) years. Two loan officers were purposively selected.

Structured questionnaires comprising of both closed and open ended questions were administered to the clients for their responses. Sampling is a portion or subset of the population to represent the whole population.

Table 3.1 Summary of sampling size and sampling technique for clients

Population	Sample size	Sampling Technique
Defaulters	58	Stratified random Sampling
Non-defaulters	42	Stratified random Sampling
Total	**100**	

Table 3.2 Summary of sampling size and sampling technique for loan officers

Population	Sample size	Sampling Technique
Loan officers	2	Purposive sampling
Total	**2**	

3.6 DATA COLLECTION TECHNIQUES

Self-administered questionnaire comprising of both open and closed ended questions and interview guide were used to gather information to help meet the objectives of this research. Questionnaire is a form of data collection in which the mind of individuals are tested for their opinions by asking them for their response on same set of questions in a prearranged form (DeVaus, 2002). Questionnaire tends to be used for descriptive or explanatory research. There is face-to-face interaction between the researcher and the loan Officers in St Joseph the Worker Co-operative Credit Union to respondent to questions based on the interview guide. The researcher reads the questions while the loan officer responds to it.

Secondary and primary data collections are the two data collections method used in this research. Validity and reliability of the research is checked by the use of the secondary data. Reliability takes into an account where an instrument remains unchanged anytime used under same conditions provided the variables are the same. Validity checks the extent to which an instrument measures what its meant for. The researcher focuses on the extent to which the content of the instrument corresponds to the concept it is designed to measure and consults the customers who are involved in the union's loan portfolio.

The secondary sources used in this research include Loan Delinquency Chart and Annual Financial Statements. Bryman (1989) describes secondary data as information collected previously for other purposes and is not case specific; however, it can be vital to the studied problem. Primary data gathering is conducted through the use of a questionnaire. In administering the questionnaires, the clients who have credit facility with St Joseph the Worker Co-operative Credit Union are given the same set of questions. Explanations are given to the respondents who need clarifications on the questionnaire. The selection of these set of questions, therefore, makes it possible for views to be collated from the people who are directly involved in the loan portfolio.

3.6 METHOD OF DATA ANALYSIS

Objective 1: To analyse the socio-economic characteristics of St Joseph the Worker CoOp. Credit union clients.

This objective was achieved through interviewing sampled client of St Joseph the Worker Co-Op. Credit Union. Percentages, frequencies, cross tabulation; chi square statistics, Cramver's V and Phi co-efficient were used in analyzing this objective. In addition, the researcher adopted Lorenz curve and Gini co-efficient to calculate income inequality among clients. This approach adopted from Melkamu and Bannor (2015) and Bannor and Madhu (2015).

The empirical model can be analysed according to the above mentioned authors approach as follows;

LORENZ CURVE

The Lorenz Curve is a tool used to represent wealth distributions as proposed by Lorenz (1905); it tells us which proportion of total wealth is in the hands of a given percentage of population. The shape of the Lorenz Curve is a good visual indicator of how much inequality exist in income, land distribution among kinnow growers and quantity of kinnow handled by wholesalers.

The Lorenz Curve is obtained as follows:

The X-axis represents the cumulative proportions of income ranked populations. Its range is (0, 1). The Y-axis also represents the cumulative proportions of income for a given proportion of a given population. That is the income of clients handled (wealth) share is calculated by taking the cumulated (income) of a given share of the population, divided by the (total income, land and quantity handled by wholesalers) Y, as follows:

$$L\left(\frac{k}{p}\right) = \sum_{i}^{k} y_i$$

Where $k = 1 \ldots\ldots\ldots\ldots n$ is the position of each individual in the wealth distribution; $i=1 \ldots\ldots\ldots\ldots k$ is the position of each individual in the wealth distribution $P \ldots\ldots\ldots\ldots$ is the total number of individuals in the distribution $y_i \ldots\ldots\ldots\ldots$ is the wealth of the i^{th} individual in the distribution

$\sum_i^k y_i$ ………………is the cumulated wealth up to the k^{th} individual

It is obvious that $\sum_i^k y_i$ ranges between 0, for k=0, and Y, for $k = n$, therefore the equation value Ranges between 0 and 1.

A 45° line represents absolute equality and the Lorenz curve represents the current distribution of the income, as the Lorenz curve reaches farther away from the 45° line more inequality dominates the distribution. A natural instrument for graphically depicting the Gini coefficient is the Lorenz curve.

THE GINI-COEFFICIENT

Gini (1912), is by far the most widely used measure of inequality; the reason for this may be the fact that it is straight forward, easy to understand and not at all complicated to calculate (Melkamu and Bannor, 2015; Bannor and Madhu, 2015). Its value ranges from 0 to 1, (Although it is commonly multiplied by 100 in empirical studies) being 0 the value of perfect equality and 1 of maximum inequality (i.e. one individual holds all the income or wealth and the rest hold no income or wealth).

Gini coefficient can be calculated as the ratio of the area between the Lorenz curve and the absolute equality line, divided over the total area under the 45^{o} line,

$$\text{Gini} = \frac{\text{Concentration Area(A)}}{\text{Maximum Concentration area(A + B)}}$$

$$Gini = \frac{A}{(A+B)}$$

Since, A+B equals 0.5(Area of equality triangle), the Gini - coefficient will be:

$$\text{Gini} = \frac{\text{A}}{0.5} \text{ or } \quad \text{Gini} = 1 - 2\text{B}$$

Objective 2: To examine the factors accounting for loan default/delinquency in St Joseph the Worker Co-operative Credit Union.

This objective was analysed by the determination of the various factors that could influence loan default. The various factors were identified through literature review. Based on this the researcher adopted the logistic regression model which was the best fit model for data from the field to analyse the factors affecting loan default in St Joseph the Worker Co-Op. Credit Union.

Logit regression can be defined as:

$$log\left[\frac{pi}{1-pi}\right] = logit\ of\ being\ defaulter\ or\ non\ defaulter$$

Logit (pi) scale compresses of both negative and positive numbers and is symmetrical around the Logit of 0.5 (which is zero). The formula below shows the relationship between the usual regression equation (a + bx … etc.), is a symmetric formula in a logical regression equation used in deducing a data according to Bannor and Madhu (2015) as below:

$$\text{logit}[\text{Pi}] = log\left[\frac{pi}{1-pi}\right] = a + b_1x_1 + b_1x_2 + b_3x_3 \ldots\ldots + b_kx_k + U_t$$

Pi = Probability one to default loan

1-Pi = Probability of one not to default loan

Where P_i = (defaulted respondent) if $P_i \geq 0$

P_i = (respondent has not defaulted loan) if $P_i < 0$

The probability of one defaulting loan from St Joseph the Worker Co-Op. credit union or not defaulting is based on the explanatory variables that are summed in the equation below which is another form of the formula above:

$$\text{p} = \frac{exp^{a+b_1x_1+b_1x_2+b_3x_3\ldots\ldots+b_kx_k}}{1 + exp^{a+b_1x_1+b_1x_2+b_3x_3\ldots\ldots+b_kx_k}}$$

Objective three: To assess the rate of growth and impact of loan default on the general operations of St Joseph the Worker Co-operative Credit Union.

This objective was analysed by the determination of the various operations of the credit union that could be influenced loan default. The various factors were identified through literature review. Based on this the researcher adopted the rate growth model and simple Ordinary regression model to analyse the objective. The same OLS was use to forecast the loan default in 2016.

Rate of Growth of loan default model was specified as follows;

$LnY_j^* = \beta_o + \beta_1 X_1 + U_t$

Where

LnY_j^* = Log of amount of loan defaulted $\beta_o =$ The constant term of the model $\beta_1 =$ The slope of the regression or the coefficient of the variable year $X_1 =$ Years

$U_t =$ Error term

On the other hand, in forecasting the rate of loan default for 2016 the model was specified as follows;

$DY_j^* = \beta_o + \beta_1 DX_1 + U_t$ Where

DY_j^* = first difference of amount of loan defaulted from 2011-2015

$\beta_o =$ The constant term of the model $\beta_1 =$ The slope of the regression or the coefficient of the variable year

$DX_1 =$ First difference of number years from 2011-2015

$U_t =$ Error term

The time series variable that is amount of loan defaulted and number of years were differenced to prevent spurious regression.

On the impact of loan default and also interest of investment on operations of the institution, the same simple OLS approach was adopted after first differencing the time series variables to remove non stationarity.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.0 INTRODUCTION

This chapter presents the results and findings of the study. A detailed description of demographic and socioeconomic characteristics of clients interviewed. Further, results on income inequality among clients, determinants of default among clients, growth rate, forecasting of default amount in 2016 and effects of loan default on operations of St Joseph the Worker Co-op credit union are also presented.

4.1 SOCIO-ECONOMIC CHARACTERISTICS OF SURVEYED CLIENTS

This section discusses socio-economic characteristics of clients interviewed. The characteristics discussed are age, gender, marital status, number of years of education, and primary occupation. It also includes annual income of clients and income inequality among clients. The results of these are presented in the following table.

Table 4.1 Socio Economic Characteristics of sample clients

Socio Economic Characteristics	Frequency	Cumulative Frequency	Mean	Standard Deviation	Minimum	Maximum
Age						
20 - 30	8.00	8.00	43.00	8.50	26.00	69.00
31 - 40	31.00	39.00				
41 - 50	48.00	87.00				
Above 50	13.00	100.00				
Gender						
Male	65.00	65.00				
Female	35.00	100.00				
Income GH¢						
Below 1000	53.00	53.00	1989.40		200.00	18000.00
1000 - 2000	32.00	85.00				
Above 2000	15.00	100.00				
Dependents						
0 - 3	45.00	45.00	4.00	2.42	0.00	9.00
4 - 7	43.00	88.00				
8 - 11	12.00	100.00				

Education						
Primary	49.00	49.00	9.28	4.05	6.00	21.00
MSLC	31.00	80.00				
SHS	2.00	82.00				
Diploma	11.00	93.00				
Degree	6.00	99.00				
Post Graduate	1.00	100.00				
Occupation						
Formal	22.00	22.00				
Informal	78.00	100.00				

Source: Author's own computation, 2015

4.1.1 AGE DISTRIBUTION OF SAMPLE CLIENTS

Table 4.1 shows the age distribution of sample clients interviewed. The age distribution revealed of sample clients of St Joseph the Worker Co-op. Credit Union ranges from 26 to 69 years

The age group with the highest frequency is 41-50 years representing 48 percent of the sampled clients. The age group of 31-40 years is the next highest representing 31 percent of clients interviewed. The mean age group of the sampled clients is 43 years. The least age group is those between 20-30 years representing 8%. The results indicate majority of the clients are in their midlife. It also shows the credit union does attract enough young ones thus 39 percent of the clients interviewed are between the ages of 25-40 years. This represents middle age group clients who are capable of working very hard to increase productivity in their businesses. The results further show that the credit union targets all age groups in its loan disbursement which is very good as credit union.

4.1.2 GENDER OF SAMPLE CLIENTS

Table 4.1 shows the gender distribution of sample clients interviewed. The results reveal that majority of those who access loans from the credit union are males compared to females. Male has the highest frequency which is represented by 65 percent whereas females are 35 percent. This is results is surprising as many microfinance institutions tend to give loans to women more than men. The situation could be because of the quantum amount of loans that are taken by men and also because they are household heads, there is enormous pressure on them to access loans to for other activities which could bring income into the family.

4.1.3 INCOME DISTRIBUTION OF SAMPLE CLIENTS

Table 4.1 indicates income distribution of clients sampled. The results shows majority of the clients have income below one thousand Ghana Cedis (*GH₵* 1000). This clearly indicates that the microfinance institution is living up to its aim of serving those who are not in the middle class or upper class of the society.

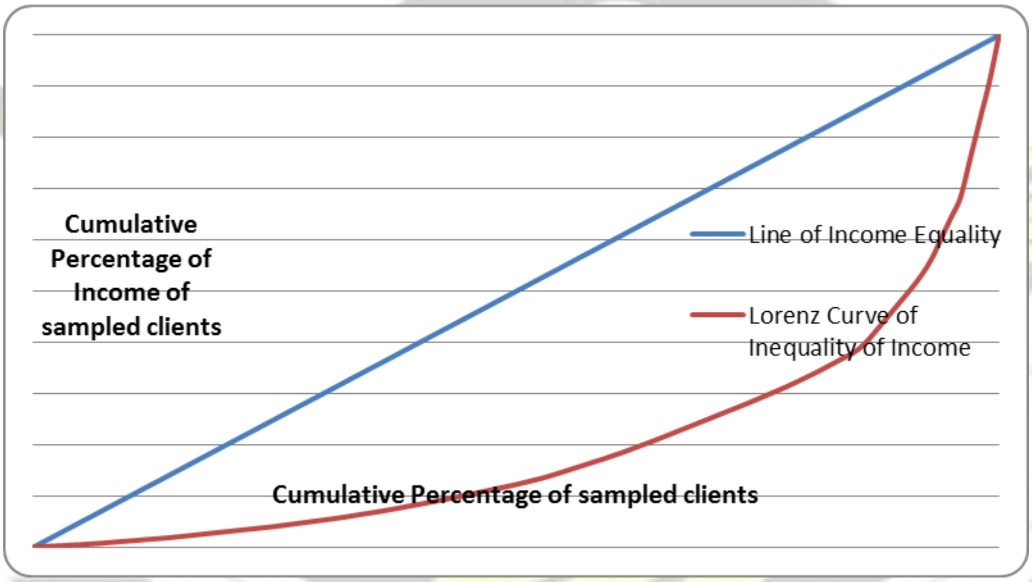
Clients with income level below one thousand Ghana Cedis (*GH₵* 1000) are represented by fifty three (53) percent in the sample. The results further indicate that from one thousand Ghana Cedis to two thousand Ghana Cedis (1000-2000) income level clients are the chunk of the people that the microfinance institution serves. The mean income of the respondents is one thousand nine hundred and eighty nine Ghana Cedis and forty pesewas (*GH₵* 1989.40) whereas the minimum income of sampled respondents is two hundred Ghana Cedis (*GH₵ 200).* On the other hand the highest income of the respondents interviewed is eighteen thousand Ghana Cedis (*GH₵18,000).* In other to understand the income distribution of the sampled respondents, the Gini coefficient was employed as used by Bannor and Madhu (2015). The Gini coefficient value 0.608 indicates that there exists about 60.8 percent inequality in income among surveyed clients of the credit union. The result is not surprising as the nation still battles with about 28.5

percent of the population below poverty line. Such scenario confirms the need for microfinance to help boost activities of the poor and below middle income workers so as to bridge the gap of income inequality.

4.1.4 LORENZ CURVE SHOWING INCOME INEQUALITY AMONG CLIENTS

To determine or confirm the calculation from the Gini coefficient the researcher drew the Lorenz curve to show income inequality of the respondents. This approach was adopted from Malkamu and Bannor, 2015; Bannor and Madhu, 2015.

Figure 4.1 Lorenz curve of income inequality



Source: Author's own computation, 2015

The curve clearly confirms the Gini coefficient value of 0.608 or 60.8 percent. The inequality line is very far from income equality line hence high income inequality exists among clients.

4.1.5 NUMBER OF DEPENDANTS OF SAMPLE CLIENTS

The results from table 4.1 show that the number of dependants according to sample clients ranges between zero (0) and nine (9) with the mean value of four (4) dependants. The results indicate that majority of client have dependants. This could be a contributing factor of most clients accessing loans. This because one dependants have to work extra hard and also invest in their businesses so as to have enough to cater for the family, pay bills and save.

About eighty eight (88) percent of the clients have dependants between zero to seven (0-7). The highest frequency of dependants ranges between four to seven (4-7) which is represented by forty three (43) percent. The dependants group with the least frequency is eight to eleven (8-11) which is represented by twelve (12) percent of the sampled clients.

4.1.6 LEVEL OF EDUCATION OF SAMPLE CLIENTS

The results from table 4.1 indicate the level of education of sample clients of St. Joseph The Worker Co-operative Credit Union. The results show all the clients have at least basic education; which is good for normal banking procedures. This makes it easy in terms of filling of documents and signing or thumb printing of documents to access loans.

About forty nine (49) percent of the sample clients had primary education whereas thirty one (31) percent had Middle School Leavers Certificate. Cumulatively, primary and MSLC gives a frequency of eighty (80) percent of the education level of sample clients.

4.1.7 TYPE OF OCCUPATION OF SAMPLE CLIENTS

Table 4.1 indicates the type of occupation the sampled clients are involved. The table indicates about seventy eight (78) percent are involved in informal jobs. This really shows that, the credit union is access mostly by the informal sector. This agrees with Kwasi and Seini, 2014 who argue that most small scale poultry farmers in the Atwima Nwabiagya district of Ashanti region had loans access from the informal sector with the highest percentage sixty percent (60%). This shows that, most informal sector workers prefer taken loans from credit unions and other informal sector compared to the formal sectors hence not surprising majority of clients of St. Joseph The Worker Co-operative Credit Union are from the informal sector.

The results further shows about twenty two (22) percent of clients are from the formal sector. This shows there is a potential of encouraging those in formal sectors to access loans from the credit union as their monthly salary can be used as collateral. This will assist in decreasing the rate of default of loans in the credit union.

4.1.8 RELATIONSHIP BETWEEN MONTHLY INCOME AND NUMBER OF DEPENDANTS OF SAMPLE CLIENTS

Table 4.2a depicts the relationship between monthly income and number of dependants of sample clients. The results show that clients with income level below one thousand Ghana cedis (1000) have the highest percentage in the number of dependants. In the dependants group of zero to three (0-3), clients with less than one thousand Ghana cedis a month has the highest number of twenty four (24) out of forty five (45) represented by 53.3 percent.

Table 4.2a: Cross tabulation between monthly income and number of dependants of sample clients

Monthly	**Income/ Number of Dependants**			**Total**
GH₵	**0-3**	**4-7**	**8-11**	
Below 1000	24 53.3%	23 53.5%	6 50.0%	53 53.3%
Above 1000-2000	20 44.4%	11 25.6%	1 8.3%	32 32.0%
Above 2000	1 2.2%	9 20.9%	5 41.7%	15 15.0%
Total	**45 100%**	**43 100%**	**12 100%**	**100 100%**

Source: Author's own computation based on field data, 2015

Again on the dependent group of four to seven (4-7) the clients with income less than one thousand Ghana Cedis (1000) have the highest frequency of twenty three (23) out of forty three (43) which is represented by 53.5 percent. Generally out of the total number of dependants, the clients with income of less than one thousand Ghana cedis has fifty three (53) dependants represented by 53.3 percent of the total number of dependants in the sample. The results clearly shows those with income level about two thousand Ghana cedis (2000) paradoxically have fewer dependants with less percentages in the dependants group of zero to three (0-3) and four to seven (4-7). The result is a clear case of the less income has more dependants compared to the high income group of people.

4.1.9 STATISTICAL TEST OF THE RELATIONSHIP BETWEEN MONTHLY INCOME AND NUMBER OF DEPENDANTS OF SAMPLE CLIENTS

The results from the table 4.2b indicate the statistical test of significance between the relationship of income and number of dependants of clients. Clearly, the results show there is statistical significance relationship between monthly income and number of dependants at five (5%) percent level.

Table 4.2b: Chi square and Cramer's V statistics of monthly income and number of dependants by sample clients

Statistics	Value	Approximate Significant
Pearson Chi-Square	17.516	0.002
Likelihood Ratio	13.089	0.001
Cramer's V	0.406	0.002
Phi	0.287	0.002

Source: Author's own computation based on field data, 2015

The Cramer's V and Phi coefficient value shows the strength of relationship or the test of strength of association between monthly income and number of dependants of respondents is 40.6 percent (40.6%) and 28.7 percent (28.7%) respectively.

4.2 DETERMINANTS OF DEFAULT IN ST. JOSEPH THE WORKER CO-OPERATIVE CREDIT UNION

This section discusses the determinants of loan default in St. Joseph The Worker Cooperative Credit Union. The characteristics discussed are number of defaulters and nondefaulters, amount of loan taken by clients, length of repayment period, collateral security advanced, client having other loans and cross tabulation between defaulters and nondefaulters and other factors. It also includes logistic regression estimates of the empirical factors or determinants of loan default in St. Joseph The Worker Co-operative Credit Union.

The results of these are presented in the following table.

Table 4.3 Determinants of Loan default in St. Joseph the worker Co- Op Credit Union

Determinants of Loan Default	Frequency	Cumulative Frequency	Mean	Standard Deviation	Minimum	Maximum
Type of Client						
Defaulters	58.00	58.00				
Non-defaulters	42.00	100.00				
Amount of Loan GH¢						
Below 1500	33.00	33.00	10521.00		600.00	60000.00
1501 - 3000	10.00	43.00				
3001 - 4500	10.00	53.00				
4501 - 6000	6.00	59.00				
Above 6000	41.00	100.00				
Repayment Period/ months						
1 - 6	22.00	22.00	12.09		3.00	24.00
7 - 12	46.00	68.00				
13 - 18	27.00	95.00				
Above 18	5.00	100.00				
Collateral Security	28.00	28.00				
No collateral	72.00	100.00				
Take collateral						
Another Loan						
No	72.00	72.00				
Yes	28.00	100.00				
Interest Rate %						
1 - 10	17.00	17.00	21.59		5.00	38.00
Above 10 - 20	8.00	25.00				
Above 20 – 30	75.00	100.00				

Application to disbursement/ Days 1 - 20 21 - 40 41 - 60 Above 60	38.00 37.00 10.00 15.00	38.00 75.00 85.00 100.00	30.57		6.00	90.00

4.2.1 NUMBER OF DEFAULTERS AND NON-DEFAULTERS OF SAMPLE CLIENTS

The results in table 4.3 show the frequency of defaulters and non-defaulters. The number of non-defaulters of loans from the sample clients is forty two (42) represented by forty two percent.

The number of defaulters is represented by fifty eight percent (58%). This clearly shows that majority of the client interviewed have defaulted their loans either in months as per schedule to pay or their loans have written off as bad debts.

4.2.2 AMOUNT OF LOANS TAKEN BY SAMPLE CLIENTS

Table 4.3 indicates the amount of loan taken by sample clients. The results show that about forty three (43%) of the sample clients take loans between six hundred (600) Ghana cedis and three thousand (3000) Ghana Cedis. The results show that majority represented forty one (41%) take loans above six thousand Ghana cedis (6000).

The probability of most of those who access loans from the credit union to default is very high looking at the amount they access parri passu their monthly incomes. The results further indicate that the mean amount of loan accessed by clients is ten thousand five hundred and twenty one (10,521) Ghana cedis. The highest amount of loans accessed is sixty thousand Ghana Cedis given a range of fifty nine thousand four hundred Ghana Cedis.

4.2.3 LENGTH OF REPAYMENT PERIOD BY SAMPLE CLIENTS

Table 4.3 shows the extent of length of repayment of loans given to sample clients. The repayment period ranges from three months to twenty four (24) months i.e. depending on the type of loan.

The repayment period is very short looking at the amount of loans that is taken by clients considering their monthly salaries. The highest loan repayment period is seven to twelve (712) which is represented by forty six percent. The least frequency is repayment period above eighteen months. Clearly the result shows the repayment period is very short which could be a contributing factor of the loan default among clients.

4.2.4 COLLATERAL SECURITY OF SAMPLE CLIENTS

Table 4.3 shows the number of clients that submitted collateral before accessing loans. The results indicate about twenty eight (28) percent did not submit collateral before accessing loans. However, about seventy two (72) percent of the clients accessed loans from the credit union by submitting collateral. Collateral security is good in ensuring loan repayment. However looking at the number of people who submitted collateral security and still defaulted on loans accessed indicates collateral security alone is not enough to ensure loan repayment by the credit union.

4.2.5 OTHER SOURCES OF LOANS ACCESS BY SAMPLE CLIENTS

The results from table 4.3 indicates sample clients who had other loans apart from the one accessed from St. Joseph The Worker Co-operative Credit Union. The results indicate about seventy two (72) percent of the client did not have another form of loans from other sources. This is good for the credit union. This is because it reduces the multiple loan repayment pressure that normally engulfs those who are in the informal sector thereby forcing delay in repayment or default.

However the results indicate about twenty eight percent of the clients do access loans from other sectors. This should critically be looked by loan officers so as to minimise the rate of default in the credit union as such clients have the highest probability to default.

4.2.6 INTEREST RATE ON LOANS OF SAMPLE CLIENTS

The results from table 4.3 indicate the interest rates on loans given to sample clients. The results shows interest rate of above 20-30 is the highest interest rate given to clients. This represents about forty six (75%). Interest rate between 10-20 percent has the least frequency.

The results clearly indicate that the interest rate on loans are averagely high though low compared to other interest rate from other sources both informal and formal sectors. The mean interest rate on loans is about 21.59 percent with maximum interest rate as thirty eight (38) percent. Looking at the interest rates given above and the amount of loans that is accessed by the majority of the clients parri passu their repayment period, it is not surprising that majority of the clients who accessed loans are defaulting.

4.2.7 DAYS FROM LOAN APPLICATION TO DISBURSEMENT OF SAMPLE CLIENTS

Table 4.3 indicates that, the days one has to wait till one loan is granted after application ranges from six to ninety (6-90) working days. The mean number of days is about 31 working days. The number of days from application to disbursement is very high looking at the number of days even formal banking sectors currently takes to give loans. This long period could be of disadvantage in competition for clients.

Table 4.4 Cross Tabulation between Determinants of Loan Default and Loan Status

Educational Level	**Loan Status**		**Total**
	Non-defaulters	**Defaulters**	
Primary	14.00	35.00	49.00
MSLC	16.00	15.00	31.00
SHS	1.00	1.00	2.00
Diploma	7.00	4.00	11.00
Degree	3.00	3.00	6.00
Post graduate	1.00	0.00	1.00
Total	**42.00**	**58.00**	**100.00**
Number of Dependents			
0 - 3	25.00	20.00	45.00
4 - 7	12.00	31.00	43.00
8 - 11	5.00	7.00	12.00
Total	**42.00**	**58.00**	**100.00**
Primary Occupation			
Formal	15.00 27.00	7.00	22.00
Informal	**42.00**	51.00	78.00
Total		**58.00**	**100.00**
Monthly Income/ GH¢			
Below 1000	12.00	41.00	53.00
Above 1000 - 2000	18.00 12.00	14.00	32.00
Above 2000	**42.00**	3.00	15.00
Total		**58.00**	**100.00**
Amount of Loan/ GH¢			
Below 1500	8.00	25.00	33.00
1501 - 3000	2.00	8.00	10.00
3001 - 4500	2.00	8.00	10.00
4501 - 6000	3.00	3.00	6.00
Above 6000	27.00	14.00	41.00
Total	**42.00**	**58.00**	**100.00**
Repayment Period/ Months			

1 - 6 7 - 12 13 - 18 Above 18 **Total**	6.00 18.00 15.00 3.00 **42.00**	16.00 28.00 12.00 2.00 **58.00**	22.00 46.00 27.00 5.00 **100.00**

Collateral Security	**Loan Status**		**Total**
	Non-defaulters	**Defaulters**	
No collateral Take collateral **Total**	3.00 39.00 **42.00**	25.00 33.00 **58.00**	28.00 72.00 **100.00**
Application to Disbursement/ Days			
1 - 20 21 - 40 41 – 60 Above 60 **Total**	17.00 13.00 6.00 6.00 **42.00**	21.00 24.00 4.00 9.00 **58.00**	38.00 37.00 10.00 15.00 **100.00**
Interest on Loans/ %			
1 - 10 10 - 20 20 – 30 **Total**	6.00 6.00 30.00 **42.00**	11.00 2.00 45.00 **58.00**	17.00 8.00 75.00 **100.00**
Client assessing other loans			
No Yes **Total**	35.00 7.00 **42.00**	37.00 21.00 **58.00**	72.00 28.00 **100.00**
Supervision during repayment period No Yes **Total**	20.00 22.00 **42.00**	56.00 2.00 **58.00**	76.00 24.00 **100.00**

4.2.8 ASSOCIATION BETWEEN EDUCATIONAL LEVEL AND LOAN STATUS OF

SAMPLE CLIENTS

Table 4.4 shows the association between educational level and loan status of sample clients. The results indicates that about fifty (50) of the clients out of fifty eight (58) defaulters are those who education levels are between primary and MSLC. Whereas those with education level from Diploma to post graduate have less defaults.

This scenario can be attributed to the fact that, the credit union fails to monitor and also educate clients whose educational level is low on simple financial techniques that could help them increase the profitability of their businesses.

4.2.9 ASSOCIATION BETWEEN NUMBER OF DEPENDANTS AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 show that respondents with zero to three dependants have higher frequency compared to respondents with eight to eleven dependants. Out of 12 respondents with dependants of eight to eleven (8-11) about seven (7) of them are defaulters compared to five which are not defaulters. When you compare the same to those with dependants between zero to three (0-3), out of forty five (45) respondents only twenty of them are defaulters which is less compared to non-defaulters which twenty five (25).

On the other hand respondents with four to seven (4-7) dependants have twelve nondefaulters compared to thirty one (31) defaulters.

4.2.10 ASSOCIATION BETWEEN PRIMARY OCCUPATION AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 indicates that out of the seventy eight sample clients from the informal sector, about fifty one (51) of them default in loans compared to twenty seven (27) who do not default in loans. The results clearly indicate that most people from the informal sector are prone to default in loans than those who are in the formal sector.

However out of the twenty two (22) respondents from the formal sector, fifteen (15) of them are non-defaulters compared to seven (7) who are defaulters.

4.2.11 ASSOCIATION BETWEEN MONTHLY INCOME AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 indicates that those with income level who are represented by fifty three (53) percent of 100 sample clients, about forty one (41) of them are prone to default compared to only twelve (12) who do not default. The results clearly show how low income earners are prone to default than high income earners.

On the other hand, those with income levels above two thousand Ghana cedis which are fifteen out of the hundred sample clients, only three of them are defaulters compared to twelve who are non-defaulters.

4.2.12 ASSOCIATION BETWEEN AMOUNTS OF LOAN ACCESSED AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 show the association between amount of loans accessed by sample clients and loan status.

It can be seen that those who take loan above six thousand Ghana cedis which is represented by forty one (41) of the clients interviewed, about fourteen of them are defaulters compared to twenty seven who are none defaulters. However those who take loans below one thousand five hundred Ghana cedis mostly default. That is represented by twenty five out of the thirty three sample clients with only eight as non-defaulters. It could be that the money is not used for the right purposes or diverted for other purposes or the loan amount is not enough to enable them to repay. Also the lack of education of such people in simple financing techniques by loan officers is also a factor as most of these people under the category do not have much education coupled with high number of dependants.

4.2.13 ASSOCIATION BETWEEN REPAYMENT PERIOD AND LOAN STATUS OF SAMPLE CLIENTS

Table 4.4 shows the results of repayment period association with loan status of sample clients. It is evidently clear that those whose repayment period is between one to twelve months default high. Twenty two sample clients who have repayment periods between one to six months default at high rate than those with repayment period above eighteen months. Table 4.4 clearly indicates that out of the twenty two respondents whose repayment period is between three to six months has sixteen sample clients defaulting compared to only six who are none defaulters. In the same way out of forty six sample clients whose repayment period is between seven to twelve months, about twenty eight of them defaulted compared to only eighteen who did not default. Repayment period has association with default or non default of sample clients hence the company should find ways of increasing the repayment period but at the same time will not lose time value of their money.

4.2.14 ASSOCIATION BETWEEN COLLATERAL SECURITIES PRESENTED AND LOAN STATUS OF SAMPLE CLIENTS

Table 4.4 indicates the association between collateral security presented by respondents during the time of applying for loans and the loan status. The results shows that, about twenty eight of those who did not present collateral, about twenty five (25) of them defaulted in loans compared to three (3) of them who did not default.

About seventy two of the people who presented collateral only thirty three defaulted in loans compared to thirty nine (39) which are non-defaulters.

4.2.15 ASSOCIATION BETWEEN DAYS OF LOAN APPLICATION TO DISBURSEMENT AND LOAN STATUS OF SAMPLE CLIENTS

Table 4.4 shows the relationship between days from loan application to disbursement and loan status. The results show that those with loans advance with less days for disbursement have higher number of defaulters compared to those with higher number of days taken to do due diligence. It is a problem if the credit union takes a longer time to disburse loans especially in this age of competition however the results indicate otherwise. There is need therefore to decrease the number of days from application to disbursement but at the same time will not compromise due diligence of background checks of clients.

The result from table 4.4 indicates that the days from loan application to disbursement of one to twenty days had thirty eight (38) respondents. However twenty one were defaulters compared to seventeen of them who are non-defaulters.

4.2.16 ASSOCIATION BETWEEN INTERESTS ON LOANS GRANTED AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 indicate that loans with interest rates between ten to twenty percent have client with less number of default compared loans with interest rate of twenty to thirty. The results further shows that, out of the seventy five clients who accessed loans at interest rate of twenty to thirty, about forty five clients were defaulters compared to thirty of them who were non-defaulters. It shows clearly that among other things, high interest rate can lead to default of loans among clients.

4.2.17 ASSOCIATION BETWEEN SAMPLE CLIENTS ACCESSING OTHER

LOANS AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 indicates that about 28 of sample clients who are accessing other loans when applying for loans from the credit union, about twenty one (21) of them defaulted whereas about only seven did not default. Meaning that, clients accessing other loans can easily default in loans as they have several loans to service.

On the other hand, clients who were not servicing other loans at the time of accessing loans, about thirty seven defaulted compared to thirty five who did not default.

4.2.18 ASSOCIATION BETWEEN SUPERVISION DURING REPAYMENT PERIOD AND LOAN STATUS OF SAMPLE CLIENTS

The results from table 4.4 indicate the number of defaulters and non-defaulters who acknowledge the receipt of supervision after accessing loans from St. Joseph The Worker Cooperative Credit Union. About twenty four of them who received supervision, two defaulted whereas twenty two did not default.

On the other hand, out of the seventy six sample clients who did not receive supervision, about fifty six of them representing about 65.68 percent defaulted compared to only twenty represented by 26.31 percent who did not default.

4.2.19 DESCRIPTION OF VARIABLES USED IN LOGISTIC REGRESSION ANALYSIS

In other to determine the factors or determinants affecting loan default, the researcher adopted logistic regression. However in other to use the model, the researcher used descriptive statistics to analyse those factors as seen from table 4.2 to 4.4. The descriptive statistics gives enough information of the variables to be imputed into the probability model. Moving further, table 4.5

represents which variables were put into the logistic probability model and the description and the type of measurement used in measuring each of the variables. The expected sign shows the hypothesis the researcher is expected accept or reject after the analysis. In all, there are eleven independent variables put in the model. The dependent variable which is ear marked status of loan is dummied. Where one (1) is equal to default and zero (0) means non-defaulters. 'To empirically determine the real factors affecting loan default the logistic regression was employed.

Table 4.5: Description of variables used in the Logit regression model

S/No	Variable	Description	Measurement	Expected Sign
	Status of loan	Loan defaulted or not	Dummy(1=default, 0=non default)	
	Independent Variables			
1	Gender	Male or Female	Dummy(1=Female, 0=Male)	(-)
2	Education	Level of Education	Level of Education	(-)
3	Monthly Income	Monthly income from all sources	Ghana Cedis(***GH₵***)	(-)
4	Amount of loan	Amount of loan disbursed to client	Ghana Cedis(***GH₵***)	(+/-)
5	Length of repayment period	Number of months given to client to pay back loan	Number of Months	(-)
6	Primary Occupation	Type of occupation client is involved	Dummy(1=informal, 0=otherwise)	(-)
7	Collateral security	Clients who use collateral to access loan	Dummy(1=collateral, 0=otherwise)	(-)
8	Other loan	Clients who already have loans elsewhere	Dummy(1=Yes , 0=otherwise)	(-/+)
9	Supervision of loan repayment	Clients who were and are supervised during repayment period	Dummy(1=Supervised, 0=otherwise)	(-)
10	Number of dependants	Number of people who are dependent on client	Number of people	(+)
11	Interest rate	Interest rate on loan given to client	Percentage	(+)

Source: Author's own computation, 2015

Table 4.6: Logit regression estimates of determinants of loan default

Variable	Average marginal effect(dy/dx)	Delta method std. error	Z value	P >(z)
Gender	0.225000	0.122802	1.83	0.067*
Education	-0.025442	0.013958	-1.81	0.071*
Monthly Income	-0.000065	0.000023	-2.79	0.005***
Amount of loan	-0.000033	8.56e-06	-3.83	0.000***
Length of repayment period	-0.007784	0.009584	-0.81	0.417
Primary Occupation	0.335665	0.113541	2.96	0.003***
Collateral security	-0.484314	0.068642	-7.06	0.000***
Another loan	0.152408	0.090774	-1.68	0.093*
Supervision of loan repayment	-0.465191	0.043264	-10.75	0.000***
Number of dependants	0.036276	0.020018	1.81	0.070*
Interest rate	0.014035	0.006342	2.21	0.027**
Wald Chi 2(11)	45.02			
Prob>Chi2	0.000			
Pseudo R^2	0.5432			
Log likelihood	-31.075			
Number of Obs.	100			

Source: Authors computation based on field data, 2015, NB: Significance; 1%=, 5%=**,10%****

From table 4.6, the results shows that a female client has 22.50 percent probability to default in loans forwarded by the credit union compared to male clients. Also the results show that as education level increases the probability of defaulting loans decreases. The results show that a year increase or one added year to the level of education of client will reduce the probability to default in loans by 2.54 percent. It means as the level of education increases of client the probability of the client defaulting in loans decreases.

Furthermore, from the table, a one Ghana cedis increase in the income of a client decreases the probability of defaulting loans by 0.0065 percent. Meaning that, those with high incomes are less likely to default in loans compared to those with low incomes. It is therefore not surprising that the formal banking sector sees low income earners or poor people as noncredit worthy. Similarly, a one Ghana cedis increased in the amount of loans disburse to clients decrease the probability of the client defaulting in loans by 0.00332 percent. This is because most of the client complained the loan amount is not enough to take care of intended businesses hence not able to recoup the necessary benefits or take advantage of opportunities as anticipated before accessing the loans. In additions, most people who take smaller loans end up diverting the loans for other purposes compared to those who take huge amount of money. Again, most of clients who take smaller loans are not experienced in their line of business compared to those who take huge sums of money.

Again, the results indicate that those clients who are informal jobs have 33.7 percent probability to default in loans compared to those in the formal sector. This could be attributed to the highly secured nature of the jobs of those in formal sector with constant salary compared to those in the informal sector which sometimes have bad businesses or businesses are more seasonal.

Moving further, the results indicate that, those who present collateral before accessing loans from the credit union are about 48.43 percent less probable to default compared to those who do not present collateral security. Also those clients servicing other loans during the time of application are 15.24 percent probable to default in loans compared to those who are not servicing other loans.

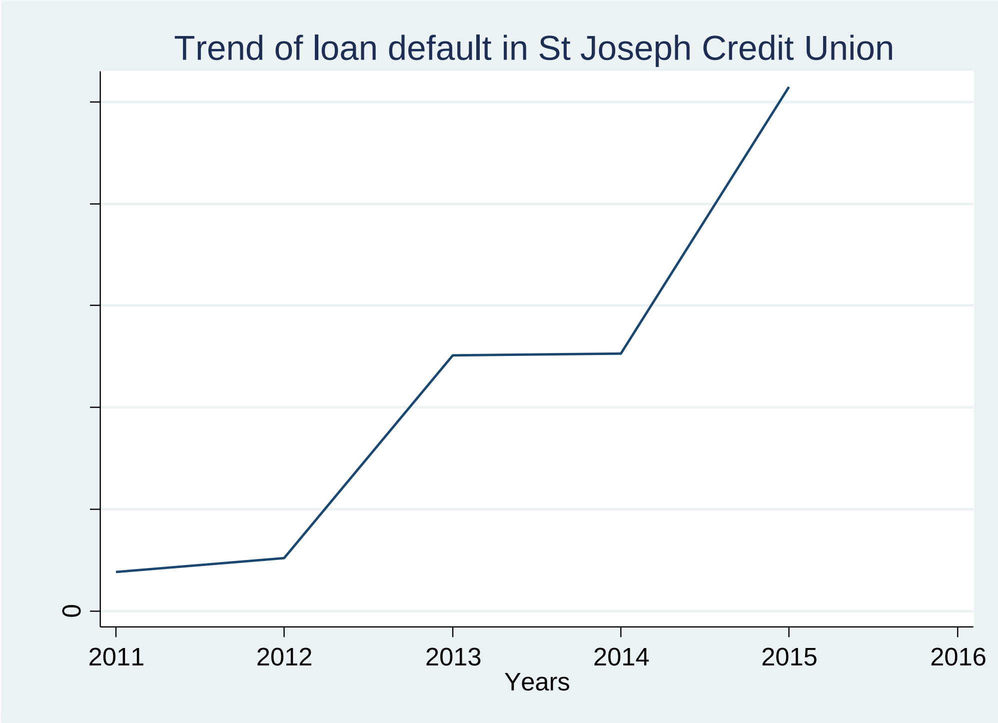
Moreover, those clients who had supervision during the repayment period of their loans have a probability 46.5 percent not to default compared to those who are not supervised. In addition, a one person added to the number of dependants of a client increases the probability to default the loans accessed by 3.63 percent. Meaning that, the higher number of dependants the higher the chances of the client to default his or her loan repayment.

Lastly, a one percent increase in the interest rate of the organization increases the probability of a person defaulting the loan advance to him or her by 1.40 percent. It is obvious high interest rate increase the amount to repay by clients whom poses a threat to repayment subsequently default of the loan.

4.3 THE GROWTH OF LOAN DEFAULT AND IMPACT ON OPERATIONS OF ST JOSEPH THE WORKER CO-OP CREDIT UNION.

This section discusses the effect of loan default on the operations of the St. Joseph The Worker Co-operative Credit Union. The characteristics discussed include trend analysis of loan default, growth rate of loan default, forecasting of loan default amount. It also includes relationship between loan default and other operations, and relationship between interest on liquid investment and other operations. The results of these are presented in the following tables and figures.

Figure 4.2 Trend of loan default in St Joseph the Worker Co-Op Credit Union



Source: Author's own computation, 2015

Figure 4.2 shows the trend of loan default in St. Joseph The Worker Co-operative Credit Union. The figure reveals that from the year 2011 to 2015. Loan default in the institution is growing at very high rate. Apart from the year 2013-2014, loan default has been growing tremendously in the institution which is not good for a young credit union like St Joseph the Worker Co-Op credit union.

4.3.1 RATE OF GROWTH OF LOAN DEFAULT IN ST JOSEPH THE WORKER CO-OP CREDIT UNION

Using log linear or rate of growth of regression model the researcher calculated the rate of growth of loan default in the institution from 2011-2015.

Table 4.30: Rate of growth of loan default

Ln.amount of loan defaulted	Coefficient	Std Error	T value	P>/t/
Time	0.6749872	0.1213124	5.56	0.011
Constant	-1346.859	244.2019	-5.52	0.012
R squared	0.9117			
Adj R squared	0.8822			
Prob>F	0.0115			

Source: Author's own computation, 2015, where Ln=natural log

The results from table indicate that, from the year 2011- 2015, the rate of growth of loan default in St Joseph the worker Co-Op. credit union has increased at yearly rate of 67.5 percent. The compound rate of growth over the same period is (anitlog (0.675)-1) = 1.168*100=116.8 percent. Thus the compound rate of growth of loan default in St Joseph the worker co-op credit union over a period of 2011-2015 is 116.8 percent per annum.

4.3.2 FORECASTING OF LOAN DEFAULT IN ST. JOSEPH THE WORKER COOPERATIVE CREDIT UNION

Using simple Ordinary least Squares regression model, we can predict base on the past defaulted amount from 2011-2014

Table 4.31: Forecasting of 2016 defaulted amount using OLS

Amount of loan	Coefficient	Std Error	T value	P>/t/
Time	115,243.3	23824.16	4.84	0.017
Constant	-2.32e+08	4.80e+07	-4.83	0.017
R squared	0.8864			

Adj R squared	0.8485
Prob>F	0.0168

Source: Author's own computation, 2015

The results shows that a year increased in results in 115,243.3 increases in the loan default in the institution. Using the model $Y_j^* = \beta_o + \beta_1 X_1 + U_t$,the researcher used the predict command in STATA 12. We predict default amount value in Ghana cedis (GH₵***)*** to be expected in 2016 is represented in table 2.32

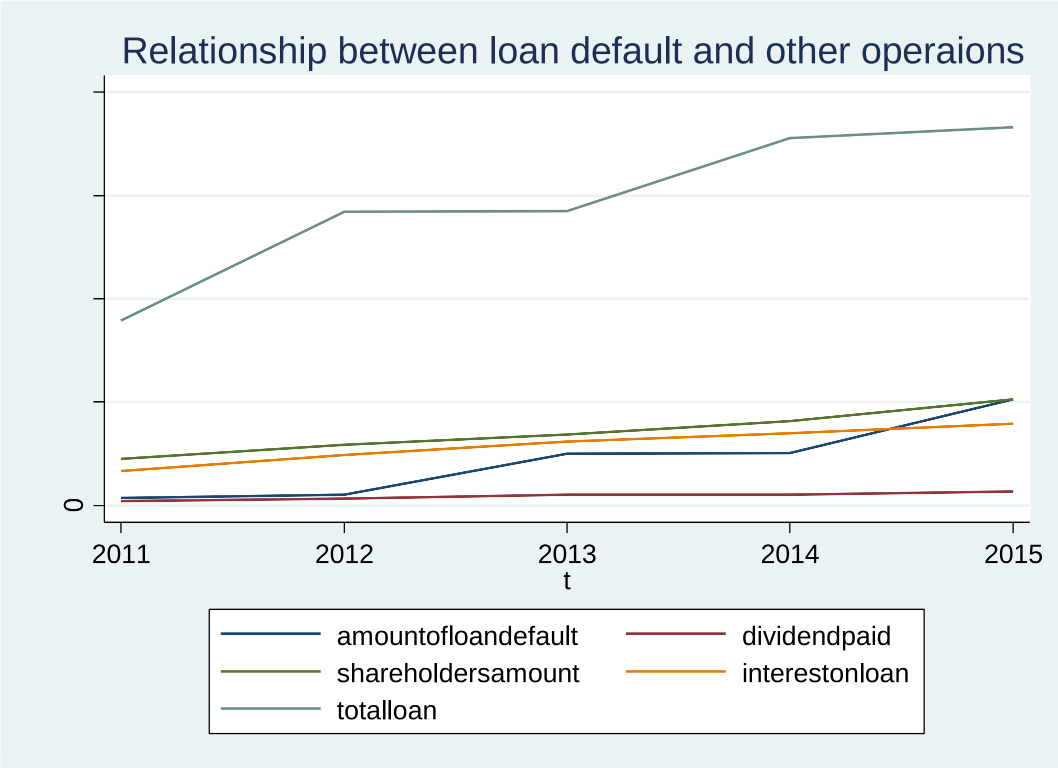
Table 4:32 : Forecasted 2016 loan default

Year	**Amount recorded by the Credit Union (Ghana Cedis(*GH₵*))**	**Amount Predicted by the simple OLS regression model**
2011	38722.60	8,589.177
2012	52303.10	106,654.10
2013	250960.30	221,897.40
2014	252821.00	337,140.80
2015	514680.20	452,384.10
2016	**-**	**567,627.40***

The sign * denotes the predicted value for 2016 based on the regression model

The results from table 4.32 indicate that the forecasted or predicted amount of of loan default in the institution is about *GH₵* 567,627.40. This trend of loan default if care is not taken could bring the institution on its knees as time goes on.

Figure 4.3 Relationship between loan default and other operations



Source: Author's own computation, 2015

The results from figure 4.3 indicate that even though loan defaults have been growing over the years (2011-2015), shareholders amount and dividend paid are also increasing. This clearly shows that, loan default might be growing alright but it is not negatively impacting on the other activities of the organisation significantly.

4.3.3 RELATIONSHIP BETWEEN LOAN DEFAULT AND OTHER OPERATIONS

The result from table 4.33 shows the relationship between loan default and other operations. To undertake this, the research firstly tested the stationarity of the time series data used. After testing for stationarity the researcher saw the data was not stationary hence first difference the data to assume stationarity. After stationarity achieved the researcher then employ simple OLS regression to estimate the impact of loan default on operations of St. Joseph The Worker Co-operative Credit Union.

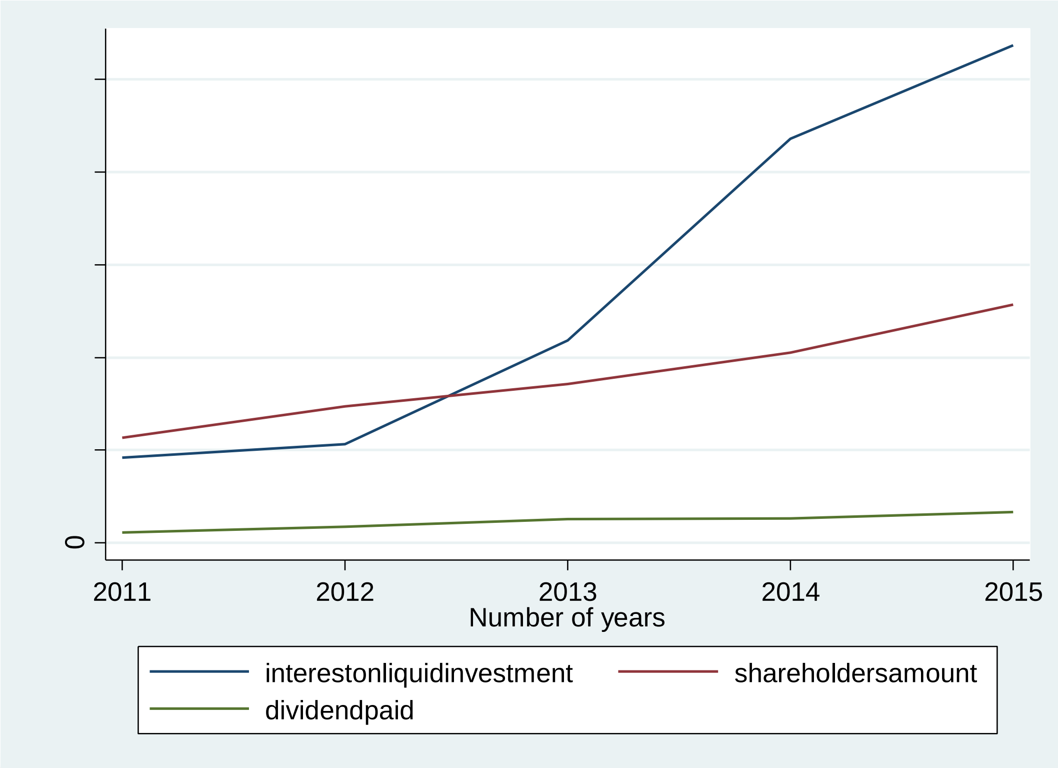
Table 4.33: Relationship between loan default and other operations

Operations	Coefficient	Standard Error	T value	P value	R^2
Interest on loans	-.0251733 (60172.08)	0.0924728 (15210.49)	-0.27 (3.96)	0.811 (0.058)	3.57
Saving amount	-0.5029762 (978200.8)	0.9540228 (156923.6)	-0.53 (6.23)	0.651 (0.025)	12.2
Loans granted	-3.580632 (716283.8)	1.782994 (293277.9)	-2.01 (2.44)	0.182 (0.135)	50.3
Dividend paid	0.0322684 (7193.397)	0.0250496 (4120.307)	1.29 (1.75)	0.327 (0.223)	45.4
Shareholders amount	0.07279 (63121.89)	0.1150485 (18923.9)	0.63 (3.34)	0.592 (0.079)	16.7
	-0.016 (1.016)	0.015 (0.022)	1.05 (46.95)	0.319 (0.000)	9.9

Source: Authors own computation. Figures in parenthesis represent constant term statistics

The results clearly confirms figure 4.3 as there is not significant influence of the various operations i.e interest on loans; savings amount; dividend paid; shareholders amount in the institution even though loan default is increasing at exponential rate and it is forecasted to increase even in 2016 if nothing is done about it.

Figure 4.4: Relationship between interest on liquid investment and other operations



To understand why loan default is increasing at a very high rate but not affecting the operations of the organisation. The researcher looked at the investment structure of the credit union. The results from figure 4.4 clearly indicate that the company has been rigorously investing in other liquid investment than to rely on the profit from loans. Hence the interest on other liquid investment is the one that is cushioning the credit union against the shocks of the loan default. It is clearly seen that interest on liquid investment has been increasing over the year from 2011-2015 and at the same rate and time also shareholders amount is also increasing whereas dividend is increasing but a slow pace. The results reveal that, the company can pay more dividends and increase shareholders amount if they find ways to curtail the factors affecting loan repayment as explain by the researcher in objective two.

4.3.4 RELATIONSHIP BETWEEN INTEREST ON LIQUID INVESTMENT AND OTHER OPERATIONS

To empirically deduce from the graph drawn in figure 4.4, the researcher, regress interest on liquid investment against shareholders amount after first differencing the two series to avoid spurious regression.

Table 4.34: Relationship between interest on liquid investments and shareholders amount

Shareholders amount	Coefficient	Std Error	T value	P>/t/
Liquid investment interest	0.2661297	0.0425432	6.26	0.008
Constant	209674	28088.58	7.46	0.005
R squared	0.9288			
Adj R squared	0.9051			
Prob>F	0.0082			

Source: Author's own computation, 2015

The results clearly show that, one Ghana increase in liquid investment of St. Joseph The Worker Co-operative Credit Union increases the shareholders amount by 0.266 Ghana cedis.

Table 4.35: Relationship between interest on liquid investments and dividend paid

Dividends paid	Coefficient	Std Error	T value	P>/t/
Liquid investment interest	0.0388666	0.0105515	3.68	0.035
Constant	24306.32	6966.464	3.49	0.040
R squared	0.8189			
Adj R squared	0.7586			
Prob>F	0.0347			

Source: Author's own computation, 2015

With the relationship between liquid investments and dividends paid. The results shows that, a one Ghana cedi increase in the interest on other liquid investment by the credit union increases dividend paid to the by 0.039 Ghana cedis.

Table 4.36: Relationship between interest on liquid investments and loans granted

Loans granted	Coefficient	Std Error	T value	P>/t/
Liquid investment interest	0.8159647	0 .2674312	3.05	0.055
Constant	1016794	176568	5.76	0.010
R squared	0.8189			
Adj R squared	0.7586			
Prob>F	0.0347			

Source: Author's own computation, 2015

Furthermore, from table 4.36,the results shows that, a one Ghana cedi increase in the interest on liquid investment by the credit union increases loans granted by 0.816 Ghana cedis. It means that, the company is getting money from their liquid investment whiles leaking it through loans.

4.3.4 LOAN OFFICER'S PERSPECTIVE ON CAUSES OF LOAN DEFAULT AND ITS IMPACT ON THE OPERATIONS OF ST JOSEPH THE WORKER COOPERATIVE CREDIT UNION.

The researcher went further to find out from the Loan Officer on the factors accounting for loan default and its impact on the operations of the organization. It was revealed that members in the informal sector are mostly the victims of loan default. The Loan Officer explained that those in the informal sector are the people who do not have guaranteed monthly income like those in the formal sector. Their income therefore depends on the performance of the market hence their ability to adhere to their loan repayment schedule depends on the success of the market. Market failure therefore makes it difficult for members to pay their loans on time.

The Loan Officer again revealed that most of the members after taking the loan do not actually know how to invest the money. They rely heavily on hearsay of businesses that are profitable and those that are not profitable. They do not actually have any proper business plan before going for a loan scheme. This makes it difficult for them to succeed on their businesses thereby affecting the repayment of their loans. The Loan Officer again explained that most of the members also divert their loans for purposes that make it difficult for them to repay their loans. Purposes such as school fees, funeral and household expenses are some of the things the members usually use the loans for and since majority are in the informal sector, its becomes difficult for them to get the money back to repay the loan hence the loan becoming delinquent. On the issue of monitoring, the Loan Officer explained they do not most of the time monitor their loans and attributed it to limited staff and logistics. They only contact them on phone and to the extreme take legal action after going through their books and realizing that some members have defaulted.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter summarises the findings analysed from the data collected from the previous chapter. It also discusses the conclusion drawn from the findings and recommendations that can help to reduce loans delinquency/default.

5.1 SUMMARY OF MAJOR FINDINGS

The findings from the study show that clients of St Joseph the worker Co-op. Credit Union have different demographic and socio-economic characteristics. The differences in socioeconomic characteristics were in age, income levels, educational levels, gender, primary occupation and number of dependants.

The age distribution revealed of sample clients of St. Joseph The Worker Co-operative Credit Union ranges from 26 to 69 years. The age group with the highest frequency is 41-50 years representing 48 per cent of the sampled clients. The mean age group of the sampled farmers is 43 years. The least age group is those between 20-30 years representing 8%. The results indicate majority of the clients are in their midlife.

The gender distribution of sample clients interviewed reveals that majority of those who access loans from the credit union are males compared to females. Male has the highest frequency which is represented by 65 percent whereas females are 35 percent.

The results further show majority of the clients have income below one thousand Ghana Cedis (*GH₵* 1000). Clients with income level below one thousand Ghana Cedis (*GH₵* 1000) are represented by fifty three (53) percent in the sample. The results further indicate that from one thousand Ghana Cedis to two thousand Ghana Cedis (1000-2000) income level clients are the chunk of the people that the microfinance institution serves. The mean income of the respondents is one thousand nine hundred and eighty nine Ghana Cedis and forty pesewas (*GH₵* 1989.40) whereas the minimum income of sampled respondents is two hundred Ghana Cedis (*GH₵ 200).* On the other hand the highest income of the respondents interviewed is, Eighteen thousand Ghana Cedis (*GH₵18,000).* The Lorenz curve drawn clearly confirms the Gini coefficient value of 0.608 or 60.8 per cent indicating there is high income inequality among sampled respondents.

Furthermore, the studies show that, the number of dependants according to sample clients ranges between zero (0) and nine (9) with the mean value of four (4) dependants. The results indicate that majority of client have dependants. About eighty eight (88) percent of the clients have dependants between zero to seven (0-7). The highest frequency of dependants ranges between four to seven (4-7) which is represented by forty three (43) percent. The dependants group with the least frequency is eight to eleven (8-11) which is represented by twelve (12) percent of the sampled clients.

The results show all the sample clients have at least basic education. About forty nine (49) per cent of the sample clients had primary education whereas thirty one (31) per cent had Middle School Leavers Certificate. Cumulatively, primary and MSLC gives a frequency of eighty (80) per cent of the education level of sample clients.

On the type of occupation that the sampled clients are involved, seventy eight (78) per cent are involved in informal jobs. The results further shows twenty two (22) per cent of clients are from the formal sector.

Again, the studies show that a female client has 22.50 per cent probability to default in loans granted by the credit union compared to male clients. Also the results show that as education level increases the probability of defaulting loans decreases. The results show that an increase in the level of education of client will reduce the probability to default in loans by 2.54 per cent. It means as the level of education of client increases the probability of the client defaulting in loans decreases.

Furthermore, a one Ghana cedis increase in the income of a client decreases the probability of defaulting loans by 0.0065 per cent. Similarly, a one Ghana cedi increased in the amount of loans disburse to clients decrease the probability of the client defaulting in loans by 0.00332 per cent.

Again, the results indicate that those clients who are working in the informal sector have 33.7 per cent probability to default in loans compared to those in the formal sector. Moreover, the results indicate that, those who present collateral before accessing loans from the credit union are about 48.43 percent less probable to default compared to those who do not present collateral security. Also those clients servicing other loans during the time of application are 15.24 percent probable to default in loans compared to those who are not servicing other loans.

Again, those clients who had supervision during the repayment period of their loans have a probability 46.5 percent not to default compared to those who are not supervised. In addition, a one person added to the number of dependants of a client increases the probability to default the loans granted by 3.63 percent. A one percent increase in the interest rate of the organization increases the probability of a person defaulting the loan advance to him or her by 1.40 percent.

On the third objective, the trend analysis reveals that from the year 2011 to 2015, loan default in the institution is growing at very high rate. Apart from the year 2013-2014, loan default has been growing tremendously in the institution which is not good for a young credit union like St. Joseph The Worker Co-operative Credit Union. The results indicate that, from the year 2011- 2015, the rate of growth of loan default in St. Joseph The Worker Co-operative Credit Union has increased at yearly rate of 67.5 percent whereas the compound rate of growth of loan default over the same period 116.8 percent per annum.

The results shows that the loan default amount of the union will be increased by 115,243.3 in a year's time. The forecasted or predicted amount of loan default in the institution is going to be about *GH₵* 567,627.40 in 2016.

The results from figure drawn indicate that even though loan defaults have been growing over the years (2011-2015), shareholders amount and dividend paid are also increasing. Empirical evidence using simple OLS regression to estimate the impact of loan default on operations of St. Joseph The Worker Co-operative Credit Union confirms the figures drawn that, there is no significant influence of the various operations i.e. interest on loans; savings amount; dividend paid; shareholders amount in the institution even by loan default

On the other hand, the results reveal the company has been rigorously investing in other liquid investment than to rely on the profit from loans. Hence the interest on other liquid investment is the one that is cushioning the credit union against the shocks of the loan default. It is clearly seen that interest on liquid investment has been increasing over the year from 2011-2015 and at the same rate and time also shareholders amount is also increasing whereas dividend is increasing but a slow pace. To confirm the later, studies have shown that, one Ghana increase in liquid investment of St. Joseph The Worker Co-operative Credit Union increases the shareholders amount by 0.266 Ghana cedis whiles a one Ghana cedi increase in the interest on other liquid investment by the credit union increases dividend paid to the by 0.039 Ghana cedis. On the other hand, a one Ghana cedi increase in the interest on other liquid investment by the credit union increases dividend paid by 0.816 Ghana cedis.

5.2 CONCLUSION

From the findings, it is clear that there are differences in socio-economic characteristics thus in age, income levels, educational levels; gender, primary occupation and number of dependants of clients served by St. Joseph the Worker Co-operative Credit Union.

The causes of loan default in St. Joseph The Worker Co-operative Credit Union includes; poor educational background of clients, low monthly income of clients, inadequate amount of loan received, lack of collateral security advance during the application of loan, poor supervision by loan officers during repayment period, shorter repayment period of loans, high number of dependants and the high interest rate given on loans.

On the third objective, the trend analysis reveals that from the year 2011 to 2015, loan default in the institution is growing at very high rate and it is even forecasted to increase further in the year 2016. However there is no impact of loan default on the operations of St. Joseph the Worker Co-operative Credit Union

On the other hand, interest on other liquid investment is the one that is cushioning the credit union against the shocks of the loan default. Hence increase in interest liquid investment increases shareholders share and dividend paid.

5.3 RECOMMENDATIONS

The research has revealed the impact of loan default on the operations of St Joseph the Cooperative Credit Union in terms of net surplus, cash availability, credit accessibility and customer's confidence. The analysis clearly shows that loan defaults have eaten a chunk of the organization's financial fortunes in the past. In the light of the major role that credit unions such as St Joseph the worker Co-operative Credit Union assisting low income earners and micro enterprises in accessibility of credit facilities in the country, it is crucial for them to put in place strong measures to help in micro financial institutions under the weight of the huge loans delinquencies in their books. Based on the findings, the following recommendations can be drawn.

- Clients who are from informal sector has the high probability to default because there is no constant salary hence the company should be concerned with granting loans to clients who give collateral security as in group guarantors or personal collateral. This suggestion is more critical when the Central Bank at the moment seems to streamline and monitor the activities of microfinance institutions in Ghana. Collateral security such as; buildings, pieces of land, cars, houses, savings, fixed deposits etc. could also be considered as a preferred loan collateral. These will help reduce the risk or losses or dangers that occur from loans default and also assist in mitigating the negative effects and impacts on the union financial performance. Imperatively it can be stated that if a credit granted is secured as mentioned above, it minimises the chances of the borrower wilfully refusing to meet the timely repayment of the loan since the borrower is aware of the consequences on the security. Management and the Board of Directors must consider such securities as a requisite for credit accessibility. This will help minimise bad debt, write off and marginal losses to the union.

- The length of repayment period should be increased in a way that the institution will not lose value of their money advanced but at the same time reduces the probability to default because of short repayment period.

- Females are most likely to default than men and most of these females come from low income bracket hence. Education should be given to these females on how to use the loans and high scrutiny of their application to really understand their capability of using the loans to earn profit and pay the loans.
- The number of dependants of an applicant should be clearly looked at. If the number of dependants of an applicant is above four and also is in low income bracket, the company should not give loan beyond certain threshold to such people.

- There should be effective and regular monitoring of the loan from the time of disbursement till the final repayment. This will help to prevent diversion and misapplication of funds which are identified. This activity also affords the loan officers the opportunity to inspect the books of accounting of the customers and help the customers to keep proper records of their business transactions.

- It is also recommended that management should make a conscious effort to resource the loan officers sufficiently at all times in terms of vehicle and other logistics to support the monitoring activities. Effective monitoring of the loan facility and periodic review of the customer's accounts will help the institution to pick early signals and take remedial measures to prevent further deterioration of the credit facility.

- It is recommended that periodically relevant training programs are organized for loan officers particularly in the area of risk management, management of loan default and financial analysis. This helps improve the knowledge and analytical skills of the credit officers so as to improve their credit appraisal techniques. The training program will assist the loan officers to appreciate the importance of prompt credit delivery in loan default prevention. Through the training, credit officers will be able to better assess and analyse the loan portfolios (using tools such as Portfolio at Risk {PAR} and ageing Analysis) and pick early warning signals much more quickly and take remedial measures to halt any further deterioration of the loan portfolio.

- Appropriate resources should be made available to the loans committee to enhance them do the regular routine check-ups of prospective loan clients and also encourage and educate them maintain a good accounting sheets to ensure further loans accessibility.
- It is also strongly recommended that the Board of Directors should always give a serious attention to the health of loan portfolio and resource the credit officers to prevent loans or credit facilities slipping into adverse classification. For effective training programmes, it is recommended that seasoned and knowledgeable bankers and micro finance experts with practical experience in microcredit be engaged to provide this training services.

- The credit union should reduce the number of loans granted to clients in a year or two whilst rigorously investing in other liquid investment. Thus, instead of advancing loans which result in default, chunk of investment should be in liquid investment for some time and at the same time drastic reduction in the amount of loan advanced.

- It is also recommended for government to intensify family planning advocacy especially among those from the low income groups. This is because most of those from the low income groups have high number of dependants are also at risk of defaulting. Even though microfinance services is supposed to assist them but the problem of high number of dependants ultimately make them default hence exposing them as not credit worthy.
- The Municipal assembly should train most young ones in the Youth employment programmes and other government youth programmes as they are most productive. These ones trained could be linked to the credit union to assist them with loans in their business.

- Government should endeavour to formalize most of the informal sector.

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APPENDIX A

QUESTIONNAIRE FOR CLIENTS

INTRODUCTION

This is an academic research being undertaken by a Student of KNUST on the topic "Why customers default in terms of loans repayment among credit unions". A case study of St Joseph the Worker Co-operative Credit Union. I shall be grateful if you could respond to the understated questions. All information shall be treated as confidential.

RESPONDENT'S PERSONAL INFORMATION

1. What is your age? [ ]

2. Sex: male [ ] female [ ]

3. What is your highest level of Education?

a. Primary [ ] b. Middle school [ ] c. Secondary [ ]

d. Diploma [ ]   e. Degree [ ]   f. Masters [ ]

g. Doctorate [ ]

4. What is your marital status?

a. Single [ ]   b. Married [ ]   c. Divorced [ ]
d. Widowed [ ]

5. How many people depend on you financially? [ ]

6. What is your primary occupation?

7. What is your expected monthly income?

GENERAL INFORMATION

8. Loan Amount taken [ ]

9. How suitable is your loan repayment period

   a. Highly Suitable [ ]   b. Suitable [ ]   c. Normal [ ]

   d. Unsuitable [ ]   e. Highly Unsuitable [ ]

10. What is the length of your repayment period? [ ]

11. Were you asked of collateral when applying for the loan from St Joseph?

    Yes [ ]   No [ ]

12. If yes, what is the approximate collateral value? [ ]

13. What is your loan status now?

a. Fully paid [ ]

b. repayment on schedule [ ]

c. repayment in arrears [ ]

14. If repayment is in arrears as answered in question 6, why?

a. Business not profitable [ ]

b. Sickness [ ]

c. Business failure [ ]

d. Travelled [ ]

e. Other [ ]

If other state reason, ……………………………………….

15. How many days did it take from the time of loan application to disbursement of loan?

[ ]

16. Number of installments for which the loan is due repayment?

[ ]

17. How much per each installment do you pay?

[ ]

18. What is the interest rate on your loan?

[ ]

19. Are you servicing other loans apart from the one from St Joseph the cooperative one?

Yes [ ] No [ ]

20. What forces you to pay your loan in time?

a. Claim against my personal wealth [ ]

b. Claim against my guarantors [ ]

c. Social sanctions (loss of status) [ ]

d. Fear of losing future loan [ ]

e. No reason [ ]

21. Have you been ever supervised on how you use your loan?

a. Yes [ ] b. No [ ]

22. If yes, how many times within a month have you been supervised?
[ ]

23. Have you been ever supervised on your loan repayment?

a. Yes [ ] b. no [ ]

24. Did you get any training before or after taking the loan?

a. Yes [ ] b. no [ ]

25. If yes how helpful was the training

b. Highly Helpful [ ] b. Helpful [ ] c. Normal [ ]

e. Not Helpful [ ] e. Less Helpful [ ]

26. What makes people not to use loans for intended purposes?

a. Underfinancing [ ]

b. Anticipation of higher profit on other business [ ]

c. Lack of proper monitoring [ ]

d. Ignorance of lending terms and conditions [ ]

e. Fear of not getting the loan when actual purpose is stated [ ]

27. Do you think loan from St Joseph Cooperative can be used for the intended purposes?

a. Yes [ ] b. no [ ]

28. How adequate was the loan amount given to you?

c. Highly Adequate [ ] b. Adequate [ ] c. Normal [ ]

f. Inadequate [ ] e. Highly Inadequate [ ]

APPENDIX B

INTERVIEW GUIDE FOR LOAN OFFICERS

The following interview is meant for data collection for academic study. Your response to this interview will be highly appreciated and treated with utmost confidentiality. Please, I will write or record your responses to aid the work.

Name of respondent: ……………………………………………………………………………………

Position of respondent: ……………………………………………………………………………

Educational level: ………………………………………………………………………………………

Age: ……………………………………………………………………………………………………...

1. In your opinion, what are the factors that account for loans default in your organization?
2. Do you make your loan policy available to your clients?

3. If no to the above, why?
4. How will you rank the following factors as causes of loan defaults using a scale of 1 to 10, with 10 being the highest and 1, the lowest.

Factor	Scale
(i) Delayed approval	
(ii) Poor credit appraisal	
(iii) Diversion of funds	
(iv) Business Failure	
(v) Wrong timing of credit	
(vi) Ineffective monitoring	
(vii) Poor weather conditions	
(viii) Inadequate marketing avenues	
(ix) High Interest Rate	
(x) Willful Default	
(xi)Others, please specify…………………………………………………..	

5. Do you monitor your loans? Yes [ ] No [ ]
6. If yes, to question 5, how do you go about it?
7. If no, why?

8. How many times do you undertake monitoring in a month?

9. Do you have delayed loan approval? Yes [ ] No [ ]

If yes, what accounts for that?

10. How do you price your loans/credit facility?

11. Do you have any formal training in credit appraisal?

12. What type of security / collateral are often offered by borrowers to secure loans?

13. What are the types of loans available to your customers?

14. Which of the loan type mentioned above has high default rate and why?

15. In your opinion, which factors account for diversion of funds?

16. What technique do you employ to monitor the health of loan portfolio?

17. How do you deal with problem loans?

18. How does loan default affect the operation of your institution?

19. What are the measures put in place by management to help reduce the incidence of loan delinquency?