

UNIVERSITY OF CAPE COAST

CREDIT RISK MANAGEMENT PRACTICES OF AMANTIN AND KASEI
COMMUNITY BANK LIMITED

BY

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DECLARATION

Candidate's Declaration

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

Geoffrey Owusu Boateng

Signature:..... Date:.....

Supervisor's Declaration

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

Dr. Anokye Mohammed Adam

Signature:.....Date:.....

ABSTRACT

The study set out to examine the credit risk management practices of the Amantin and Kasei Community Bank Limited. A mix of qualitative and quantitative research approaches was adopted in a cross-sectional research design. The General Manager, as well as the 15 loan officers for all the loan schemes, the Internal Auditors, Head of Operations and Accounts Department staff were purposively sampled for the study because of their direct involvement in credit management. Primary data on the effectiveness of recovery of defaulted loans and the management challenges of credit risks were also collected from the sampled employees. Secondary data on the non-performing loans ratios from 2009 to 2014 were accessed for the analysis on the trends in credit risk exposure. Questionnaires were used to collect data from the loan officers for quantitative analysis. Interview guides were used to collect data from the General Manager, and the Internal Auditors for qualitative analysis. The quantitative data were analysed using correlation matrices, percentages and frequencies. The qualitative data was discussed and quotes were made to support salient issues.

The first conclusion drawn by the study is that, the bank performed comparatively well with the general credit default rates in the Ghanaian banking industry from 2009 to 2014 accounting years. However, the rate of default was fast increasing and that raises concerns for the bank's operations. The study also concludes that the credit management practices are in line with general banking practices. The study recommended investing further in training of loan officers in loan recovery practices and investing into data management technology for managing client information.

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DEDICATION

This is dedicated to my father, Mr. Joseph Kwame Boateng, my wife, Mrs. Kate Owusu Boateng, and children, Papa Owusu Agyenim Boateng, Yaa Benewa Boateng, Achiaa Manu Boateng, Oduro Agyenim Boateng and Abenaa Dwomoh Boateng

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CHAPTER ONE

INTRODUCTION

Background to the study

An important function of banks, in the process of financial intermediation, is making loans or credit available and accessible to individuals, enterprises and sovereign states for investment (Gardener, 2007). The concept of credit in this context refers to deferred monetary payment, which involves a contractual agreement in which a borrower agrees to repay the bank at some date in the future, generally with interest (Ingham, 2004).

Theoretically, Innes' (1914) credit theory of money postulates that credit results from a financial obligation of one party towards another party. Thus, the credit holder expects the debt holder to fulfil a financial obligation, which is determined by the agreement under which the obligation is held (Bernanke & Blinder, 1989). Credit risk or default risk, therefore characterises a situation in which the customer or counterparty is unable or unwilling to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions (Gardener, 2007; Hull, 2007). Credit risk can, thus, be conceptualised as the potential for loss due to failure of a borrower to meet its contractual obligation to repay a debt in accordance with the agreed terms (Basel Committee on Banking Supervision, 2004; Conford, 2000).

For most banks, loans are the most prominent source of credit risk (Gorton & Pennachi, 1995). Cebenoyan and Strahan (2002) add that banks are

increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transactions. Therefore, credit risks exist throughout the activities of a bank, including in the banking book and in the trading book, and both on and off the balance sheet (Greuning & Bratanovic, 2003).

The goal of credit risk management is, therefore, to maximise a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Padmalatha, 2011), in relation to the entire portfolio and the risks involved in individual credits or transactions (Hosna, Bakaeva & Juanjuan, 2009; Padmalatha, 2011).

In line with this, the basic principles underlying credit risk management have also been outlined by various authors like Santomero and Babbel (1997), Dowel, Binner and Mullineux (2008), and Lindergren (1987) as the establishment of a clear risk policy and a reporting structure; underwriting authority and loans limit; allocation of responsibility and accountability; prioritization of the lending process and systems; and the timely communication of risk information to top management.

According to Santomero and Babbel (1997, p.5) these principles are set up “to measure risk exposure, define procedures to manage these exposures, limit exposure to acceptable levels and encourage decision-makers to manage risk in a manner consistent with the firm's goals and objectives”. However, credit risk

management practices differ among banks depending upon the nature and complexity of their credit activities (Duffie & Singleton, 2003). Van Gestel and Baesens (2009) also add that all the various practices follow a particular process of establishing an appropriate credit risk environment, operating under a sound credit-granting process, maintaining an appropriate credit administration, measurement and monitoring process, and ensuring adequate controls over credit risk.

The Basel Committee (1999) maintains that credit risk management practices, are often geared towards the management of credit concentrations, credit process issues, as well as market and liquidity-sensitive credit exposures. An effective credit management system, in this context, refers to one which minimises single-obligator exposure, practices due diligence of debtors and counterparties and thoroughly tests and validates new lending techniques (Basel Committee, 1999, 2004). The Basel Committee also adds that an effective credit risk management system would disallow subjective decision-making in lending, encourage unbiased credit review, monitor borrowers and collateral values, and also detect credit-related fraud.

According to Greenspan (2004), the possible options for recovering a defaulted unsecured loan include credit derivatives such as credit default swaps, whereas Duffie and Singleton (2003) maintain that legal action should be taken against the defaulter. Van Gestel and Baesens (2009), however, contend that the level of credit risk or exposure must be known in order to devise appropriate risk management strategies. They therefore indicate that the expected loss from the

credit exposure must be measured, as much as the economic capital needed to cover unexpected risks must be estimated.

The management techniques of default risk are, however, practiced to commensurate the scope and sophistication of the bank's activities. For smaller or less sophisticated banks, such as rural or community banks, more stringent approaches to credit risk management may be adopted because these banks often do not have adequate reserves to cover huge credit defaults (Macaver & Ehimare, 2008). Moreover, smaller banks tend to be less diversified in their income sources, thus, relying to a great extent on lending (Jain, 1996; Macaver & Ehimare, 2008) and further making effective credit risk management more important.

High credit default is a general problem for banks in Ghana. According to the Bank of Ghana (2013), the percentage of non-performing loans to total loans amounted 11.4%, 18.2%, 16.4%, and 13.4% in 2009, 2010, 2011, and 2012, respectively. According to Stein (2002), the global non-performing loans ratio was 3.2 percent, which indicates that the default rate in Ghana's banking industry is very high and also indicative of ineffective credit risk management practices.

Nair and Fissaha (2010) revealed that the loan default rate in rural banks in Ghana was 16 percent, which is higher than the global average of 3 percent for the worldwide micro-banking industry (Microfinance Information Exchange, 2008). In addition the proportion of loans in default for more than one year was 3.5 percent, compared with 1.5 percent for the global micro-banking industry. Afriyie and Akortey (2012) also found from a study of 20 rural banks in Brong Ahafo

region that rural banks do not have effective institutional measures to deal with credit risk management. Based on these statistics and empirical conclusions, this study analyses the effectiveness of the credit risk management system in the Amantin and Kasei Community Bank Ltd, which is also situated in the Brong Ahafo region.

Statement of the problem

In Ghana, rural banks are important for economic development, given that the population is mostly rural. Rural banks are, therefore, keen to the financial needs of rural-based enterprises (Bank of Ghana, 2012). Thus, the credit risk management practices of rural banks are important for both the banking sector and rural enterprise development.

However, Nair and Fissha (2010) indicated that Ghanaian rural banking industry has a high degree of loan delinquencies or impaired loans which is often considered the best leading indicator of the institution`s financial performance. Afriyie and Akortey (2012) also found that rural banks do not have effective institutional measures to deal with credit risk management. Community banks therefore require very efficient system of credit risk management in order to prevent and recover defaulted loans. The examination and assessment of credit risk management practices are thus important for the sustenance and growth of community/rural banks, such as the Amantin and Kasei Community Bank Limited.

Objectives of the study

The main objective of the study is to explore the credit risk management practices of the Amantin and Kasei Community Bank.

The specific objectives are to:

1. Explore the trends in credit exposure of the bank's various loan schemes over the past five years;
2. Explore the processes for assessing credit worthiness of borrower;
3. Examine the challenges in the management of credit risk by the Bank.

Research questions

The following research questions will be answered in line with the specific objectives of the study to explore the credit risk management practices of the Amantin and Kasei Community Bank Limited.

1. What are the trends in credit exposure of the Bank's various loan schemes over the past five years?
2. How does the bank verify the credit worthiness of borrowing entities?
3. What are the challenges confronting the Bank in managing credit risks?

Significance of the study

The overriding importance for this study is the sensitiveness of credit risk management to the banking sector and particularly to smaller banks that rely heavily on loans as their source of income. By studying the trends in the credit exposure of the bank, inferences can be made on the credit risk management of the bank which can help to improve the credit risk management system. The

customer due diligence practices explored will highlight the fundamental oversights of hints of low credit worthiness in order to make suitable recommendations to the Bank. This study is also justified by the fact that assessing the effectiveness of credit default recovery rates and the challenges involved in the credit risk management of the Bank could help the management of the Bank to adjust its practices for further improvements.

Delimitations of the study

With respect to this study, the definition of credit risk will be limited to the probability that a borrowing client will default on loan payment. Similarly, the measure of credit exposure will be limited to the rate of non-performing loans as a proportion of total loans. In geographical terms, only the Amantin and Kasei community bank in the Brong Ahafo region will be covered. Within the Bank credit scheme manager, the general manager, finance and accounts staff, loans officers and internal auditors will be included in the study. All secondary data will cover the period from 2009 to 2013 accounting years. The study is also limited to discussions relating to credit risk, credit risk management, loan repayment, default recovery and theoretical underpinnings related to these concepts.

Organisation of the study

The study will be organised into five chapters. Chapter One provides an introduction of the study, the statement of the problem, objectives of the study, the research questions, scope, significance, and organisation of the study. Chapter Two provides a review of related literature on the theories, empirical evidence

and concepts underlying the study. It also attempts to synthesise these concepts and theories into a framework, which is diagrammatically presented. Chapter Three discusses the methodology of the study. It will also describe the study area, the research design, the study population and the sample size. Sampling procedures, instruments for data collection, pre test, field challenges, and the methods for data analysis are also described. Chapter Four presents results and discussion from the analyses of data. Chapter Five focuses on summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter extensively discusses the various theories, as well as conceptual and empirical issues pertaining to credit risks and credit risk management. The chapter also discusses the conceptual framework for the study.

Theoretical review

The study is hinged on two major concepts, namely credit and risk. The theories adopted for the study therefore attempts to link the two concepts from a conceptual perspective, into the term credit risk. The study adopts the perspective of the credit theory of money that credit is money held in account of debt (Innes, 1914) and which is repayable at a future date.

Innes (1914) observed that money has been widely understood to represent debt, and credit results from a financial obligation of one party towards another party. Thus, the credit holder expects the debt holder to fulfil a financial obligation, which is determined by the agreement under which the obligation is held (Bernanke & Blinder, 1989). The creditor has the right to payment and the debtor has the obligation to pay his/her debt. Moreover, the theory indicates that the creditor has the obligation to release the debtor by the tender of an equivalent debt owed by the creditor, and the obligation of the creditor to accept this tender in satisfaction of his credit (Graeber, 2011).

The credit theory of money suggests that when an entrepreneur borrows from a bank, two obligations come forth. First, the entrepreneur has the obligation to pay the debt owed to the bank according to the stipulated and signed contract terms and second, the bank has an obligation to hold the entrepreneur in debts and to clear the entrepreneur of all debts after the debt has been paid (Diamond & Rajan, 2006). The theory also suggests that lending to an SME is a contractual agreement between the bank and the SME. It is an agreement requiring the fulfilment of obligations on both parties and a default in those obligations by either party may have negative consequences on the relationship between the parties, such as refusal to grant future loans to a defaulter (Graeber, 2011).

The contractual relation between the lender and the borrower can be defined in terms of the principal-agent theory (Eisenhardt, 1989). Traditionally, the theory states that a contractual relationship exists between a principal (the bank) and the agent (the borrower). Berger and Udell (1990) emphasise that one of the most fundamental applications of agency theory to the relationship between lender and borrower is the derivation of the optimal form of the lending contract. This problem is traditionally considered in the framework of costly state verification, which was introduced in path breaking article by Townsend (1979).

The essence of the principal-agent theory is that the agent, who has no wealth of his own, borrows money from the principal to run a one-shot investment project. The outcome of the project is freely observed only by the agent. Therefore, the agent is faced with a moral dilemma to either announce or conceal the true outcome of the project. According to Townsend (1979), this situation

describes ex-post moral hazard, as opposed to the situation of ex-ante moral hazard, where the exercise of unverifiable effort by agent during the project realisation may influence the result of the project. This problem also forms the fundamentals of credit risks, which is caused by the challenge of monitoring and information asymmetry between the bank and the borrower, thus creating an avenue for moral hazard (Schmidt-Mohr, 1997).

As long as the principal has no mechanism available for rewarding or punishing the agent, the rational agent would always announce that the project failed (Border & Sobel, 1987; Townsend, 1979). Therefore, the agent would never repay back to principal. Rational principal would predict this outcome and he would never lend the money to the agent. In reality, however, Townsend (1979) assumes that usually possible for the principal to find out what the result of the project was. According to this assumption, the principal may incur fixed verification costs, which enable him to find out the exact true outcome of the project. In contrast, several empirical studies indicate that there are other factors, such as information symmetry, databases quality and staff competence, that determine effective verification (Eva & Jaroslav, 2012), other than monitoring costs.

The principal-agent theory suggests that as long as the agent repays the loan, the principal is satisfied and it does not need to verify the outcome of the project. In case of a loan default, the principal imposes the bankruptcy procedure on the agent, in which case the principal takes all results of the project and agent is left with nothing. Townsend (1979) proves that under this mechanism the agent

has no incentive for moral hazard, therefore, the agent always truthfully announces the outcome of the project.

Several empirical studies, however, establish that in practice, the case of microfinance institutions (MFIs) is dissimilar to conventional commercial banks, such that MFIs often offer unsecured loans, which makes the verification process more difficult and costly (Allen, DeLong & Saunders, 2004; Armendáriz & Morduch, 2005; Edward & Saunders, 1998). Thus, the agent of the MFI has higher propensity for moral hazard, given that the agent has higher incentive not to disclose the outcome of the project.

The concept of credit risk

Credit risk, or the risk that money owed is not repaid, has been prevalent in banking history. It is a principal and perhaps the most important risk type that has been presented in finance, commerce and trade transactions from ancient cultures till today (Andreau & Lloyd, 1999). This is probably due to the fact that lending has been, by far, the mainstay of monetary and financial institutions.

Generally, the concept of credit risk is conceived of as the chance that a debtor or issuer of a financial instrument, whether an individual, a company, or a country, will not repay principal and other investment-related cash flows according to the terms specified in a credit agreement (Greuning & Bratanovic, 2009). Credit risk can therefore be defined as the potential that borrower or counterparty will fail to meet its obligations in accordance with the terms and conditions of the contract (Dowd, Bartlett, Chaplin, Kelliher & O'Brien, 2008; Duffie & Singleton, 2003).

In the banking sector, credit risk typically refers to delayed or defaulted payments, which often causes cash flow problems and affect a bank's liquidity (Cebenoyan & Strahan, 2002). Bessis (2010) also defined credit risk as the losses incurred in the event of the bank's counter party or in the event of deterioration in the client's credit quality. In Bessis' (2010) definition, losses range from temporary delay of payments to chronic counterparty's inability to meet its financial obligations, which often ends in formal bankruptcy. Rose and Hudgins (2008), on the other hand, defined credit risks in terms of the probability that some financial institution's asset, especially its loan will decline in value and perhaps become worthless.

Edward and Sunders (1998), however, assert that a broader definition of credit risk covers the risk of default by other financial institutions, which have payment obligations to another bank. According to Hull (2007), such payment obligations may come about as a result of MFIs using other financial institutions as depository institutions, investment outlets, or for money transfers. In additions, such risks can arise as a result of the agency cost arising from services that a bank has provided to other financial institutions. Banks, therefore, incur losses when these institutions are unable or unwilling to meet their payment obligations. However, this element of credit risk tends to be overlooked by financial institutions as evidenced by (Pike & Neale, 2006).

The various concepts of credit risk, therefore, agree that credit risk is risk of loss to a bank through default by an obligor, in which a counterparty of a transaction is unable to meet the agreed upon obligation of principal and interest

repayment (Duffie & Singleton, 2003; Dowd et al., 2008). The degree of impact of the default is however dependent on whether the default occurs before the value date or on the value date of the contract.

Types of credit risk

Derban, Binner and Mullineux (2005) established that microfinance institutions (MFIs) are often at a high exposure to credit risk, since most loans advanced by MFIs are unsecured. Studies have shown that banks are exposed to one or a combination of different types of credit risks. On one hand, Culp and Neves (1998) categorised credit risks into default risk and resale risk, whereas Hennie (2003) emphasised that credit risks include consumer risk, corporate risk and sovereign or country risks. From another perspective, Horcher (2005) defined six types of credit risks, including default risk, counterparty pre-settlement risk, counterparty settlement risk, legal risk, country or sovereign risk and concentration risk.

Gardener (2007), however, argues that legal risk is more likely to be considered as independent or belonging to operational risk and concentration risk. Adverse selection as well as moral hazard is more reasonably considered as an important issue in managing credit risk rather than a type of the risk itself. Thus, Horcher's (2005) four other classifications are discussed in the subsequent sections.

According to Horcher (2005) traditional credit risk relates to the default on a payment, especially lending or sales where the likelihood of the default is termed the probability of default. Default risk, therefore, refers to a situation

where the lenders are unable to recover the loans that have been extended or the borrowers fail to fulfil their financial obligations at the stipulated time due to various reasons (Hull, Nelken & White, 2004). Xiuzhu (2007) explains that when a default occurs, the amount at risk may be as much as the whole liability, which can be recovered later, depending on factors like the creditors' legal status. However, later collections are generally difficult or even impossible in that huge outstanding obligations or losses are usually the reasons why organisations fail.

Default risks can be associated with Hennie's (2003) concept of consumer risk, corporate risk and sovereign or country risks, because retail and corporate clients, as well as government agencies, in theory can default on loans. However, credit default risk is often associated with consumers (retail clients) and corporate clients and thus most banking institutions device strategies targeting the reduction or possible elimination of default risk among retail and corporate clients (Greuning & Bratanovic, 2003).

Credit risks can also take the forms of pre-settlement risk or settlement risk. Pre-settlement risks are the probability that one party of a contract will fail to meet the terms of the contract and default before the contract's settlement date, prematurely ending the contract (Horcher, 2005). Settlement risk, on the other hand, refers to the situation where one party to a contract fails to pay money or deliver assets to another party at the settlement time, which can be associated with any timing differences in settlement (Casu, Girardone & Molyneux, 2006).

Horcher (2005) also points out that these risks are often related with foreign exchange trading, where payments in different money centres are not

made simultaneously and volumes are huge. In this sense, settlement risk is the risk that a counterparty does not deliver a security or its value in cash as per agreement when the security was traded after the other counterparty or counterparties have already delivered security or cash value as per the trade agreement (Arsov & Gizycki, 2003).

The different types of credit risks can be measured in quantitative and qualitative terms which make the concept of credit risk practically measurable (Andersson, Uryasev, Masusser & Rosen, 2000). The importance of measures of credit risk is to be able to transverse an abstract idea of credit risk to a format that lends itself to computational analysis, showing trends, allowing comparison, and testing for hypothetical and theoretical assumptions about credit risks, as they apply to a particular institution (D'Vari, Yalamanchili & Bai, 2003). In this sense, D'Vari, Yalamanchili and Bai (2003) assert that concentration risk, they classify as a type of credit risk is better described as a measure of credit risk. Allen and Powell (2008) buttress the argument that concentration risk represents the overall spread of a bank's outstanding accounts over the number or variety of debtors to whom the bank has lent money. This risk is calculated using a concentration ratio which explains what percentage of the outstanding accounts each bank loan represents.

Higher concentration ratios depict lesser levels of diversification of a bank's loan portfolio, which in turn represents a high level of credit risk. Two forms of concentration risks may result, which are name concentration risk and sectoral concentration risk (Crosbie & Bohn, 2003). Name concentration risk

results from uneven distribution of exposures (or loan) to its borrowers, whereas sectoral concentration risk can arise from uneven distribution of exposures to particular sectors, regions, industries or products.

In general terms, however, credit risk can be analysed in terms of non-performing loans expressed as a ratio of assets, core earning, or to common equity and loan loss. In this context non-performing loans refer to a sum of borrowed money upon which the debtor has not made his or her scheduled payments for at least 90 days (Mauser & Rosen, 1999). As a percentage of total gross loans, the non-performing loans represent the value of non-performing loans divided by the total value of the loan portfolio (including non-performing loans before the deduction of specific loan-loss provisions). The loan amount recorded as non-performing represents the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue (Crosbie & Bohn, 2003). Higher non-performing to total gross loans ratio indicates higher levels of credit default risk for the bank.

According to the World Bank statistics for the average non-performing to total gross loans ratio for banks around the globe, Ghana's non-performing to total gross loans ratio has steadily decreased from 16.2 percent in the year 2009 to 12 percent in 2013 (World Bank, 2014). However, some countries such as Luxembourg, Sweden and Singapore have average non-performing to total gross loans ratio as low as 0.2 percent, 0.6 percent and 0.9 percent, respectively. In Africa, Lesotho, Morocco and Nigeria's non-performing to total gross loans ratio,

as at the year 2013, were respectively, 4.1 percent, 5.4 percent and 3.2 percent (World Bank, 2014).

Another measure for operationalising the concept of credit risk is the ratio of charge-offs to loans and leases, which represent the proportion of loans and leases which are written off as bad debts. Higher ratios of charge-offs to loans indicate that high proportions of loans and leases result in bad debts (Stein, 2002). According to Andersson, Uryasev, Mausser and Rosen (2000), this indicator shows trends in the credit quality of a bank. In the event of a charge-off, some proportion of the bank's capital is signed off as bad-debt, and the credit risks posed in this situation can be measured by the proportion of non-performing loans to loan loss reserve or tangible equity. Allen and Powell (2008) emphasise that it is a conservative ratio that measures the extent of capital erosion in the event that a bank has to charge off all of its non-performing loans and leases.

Conversely, Stein (2002) noted that the earn-out ratio or the non-performing loans to core earning is accurate measure of credit performance because it illustrates the relationship of nonperforming loans to pre-provision loan-loss earnings, measuring the payout ratio of future loan losses from internally generated cash flow. Bharath and Shumway (2004) also indicate that these measures of credit risks and credit performance reflect the credit risk management performance of a bank. Thus, banks have the responsibility to their shareholders and to their clients to effectively control and minimise credit risks. The measures of credit risk performance, according to Chan, Faff and Koffman

(2008), are quite unique for microfinance institutions, given that their credit schemes are often unsecured.

Mechanisms for managing credit risk in microfinance institutions

According to Churchill (1999), the failures of formal banks in rural sector especially the bad repayment of unsecured micro-loans and subsidised agric loans to rural farmers have given rise to the innovative credit risk management practices in the microfinance sector. According to Armendariz and Morduch (2005) microfinance institutions implement multiple mechanisms that overcome the screening and enforcement problems, which reduce the default risk and improve repayment rates, by permitting the lender to bypass adverse selection and moral hazard.

Kono and Takahashi (2010) argue that different elements of microcredit, such as group lending solve the problems of asymmetric information in the credit market. However, they acknowledged that most MFIs do not offer group but just individual loans. This gives rise to a very important question regarding how MFIs manage their credit risk when they offer unsecured loans to individuals. In this regard, Armendariz and Morduch (2000) have highlighted several important mechanisms that allow MFIs to generate high repayment rates of unsecured loans without using group lending contracts. These mechanisms include the use of non-refinancing threats, regular repayment schedules, collateral substitutes, and the provision of nonfinancial services, as discussed in the subsequent sections.

One of the major mechanisms that most effective credit risk management mechanisms, which MFIs employ is by making arrangements with individuals without collateral who get together and form groups with the aim of obtaining loans from a lender. According to Kono and Takahashi (2010), in the typical group lending scheme, each member is jointly liable for each other's loan, so that if any members do not repay, all the members are punished (often in the form of denial of future credit access). Moreover, the prospective borrowers are required to form groups by themselves (Gine, Jakiela, Karlan & Morduch, 2010).

Several studies have proven that group lending enforces joint liability mechanisms, involves borrowers in sharing information and then reduces asymmetric information (Besley & Coate, 1995; Ghatak, 1999; Kono and Takahashi, 2010; Stiglitz, 1990; Van Tassel, 1999). Zeller (1998) also studied 168 credit groups in Madagascar and showed that the group effectively generates insurance, transfer screening and monitoring costs from the bank to borrowers, providing an effective way for MFIs to overcome adverse selection, moral hazard, and enforcement problems, which leads to a better repayment performance. However, Kono and Takahashi (2010) advance that group lending alleviates the problem of moral hazard only if the group can coordinate its members' decisions and achieves higher repayment rates only if the returns are sufficiently high.

On theoretical ground and drawing on contract theory, group lending is an innovative credit contract that essentially allows each borrower to act as a guarantor for another in the same group (Kono & Takahashi, 2010). In a group lending contract, borrowers are required to form groups and the entire group is

responsible for repaying the loan of any member who is unable to pay. Each borrower obtains a loan for her individual project but the liability is joined, which induces group members to self-select each other and provides incentive for peer monitoring, such each borrower in the group will have information about the other's actions. However, group lending in practice suffer from some disadvantages such as domino effect or risk of contagion if one of the members is unable to meet repayments (Armendáriz & Morduch, 2000; Churchill, 1999).

Lenders may also use dynamics incentive as an important incentive mechanism (Besley, 1995; Morduch, 1999). Although group lending mechanism manages credit risk only in group loans, the mechanism of dynamics incentive or progressive lending, as named by Armendariz and Morduch (2005), can manage credit risk both in group and individual loans. Ghatak (1999) as well as Cebenoyan and Strahan (2002) indicate that dynamics incentives mechanism boils down to the threat not to refinance a borrower who defaults on her debt obligations. This incentive has a large effect on microfinance borrowers' behaviour because they have considerable needs for future loans to develop their business.

Morduch (1999) notes that the repeated nature of the interactions and the credible threat to cut off any future lending when loans are not repaid can be exploited to overcome information problems. Indeed, this mechanism allows lenders to build a long-term relationship with borrowers over time, to generate reputation mechanisms and screen out the worst prospects before expanding loan scale. However, as noted by Morduch (1999), competition and increasing

mobility of borrowers will diminish the power of this mechanism against moral hazard since borrowers will have the opportunity to take a loan elsewhere. Another limitation of progressive lending is related to the ‘finite repeated games’ problem. If the relationship has a clear end, the customer will have an incentive to default in the final period, whether in group or individual loans (Macaver & Ehimare, 2008).

Individual loans, in classic financing theory, uses a guarantee to reduce the risk attached to the loan, but MFIs often do not require their clients to provide any physical collateral that traditional commercial banks do. However, in order to maintain high repayment rate, MFIs can use important mechanism that is collateral substitutes (Padmalatha, 2011). A common collateral substitute used by many MFIs especially during their initial years of operation is to require borrowers to pay a percentage of every unit borrowed (beyond a given scale) in order to collect an emergency fund, which serves as insurance against loan default, death or disability (Hull, 2007; Morduch, 1999; Jain, 1996). Other banks also request that the borrowers pay an additional five percent of the loan that is taken out as a ‘group tax’, which may be deducted from the members’ loans or which may form part of weekly contributions as forced savings. These forced savings can be withdrawn upon leaving, but only after the banks have taken out what they are owed (Padmalatha, 2011).

Babu and Singh (2007) also presented the case of banks in Indonesia using accepting the borrower’s degree certificate, driver’s license, marriage certificate and such other documents as collateral substitutes in individual lending. In Russia

and rural areas of Albania, household items may be considered as collateral if they have sufficient personal value for borrowers (Armendariz & Morduch, 2000; Churchill, 1999; Zeitinger, 1996).

In addition, MFIs providing individual microcredit may require guarantor agreeing to guarantee the borrower's loan. However, Godquin (2204) cautions that the essential role of a guarantor is to be a decisive factor for granting the credit and not a secondary repayment source. The presence of a guarantor primarily acts as an ex-ante signal that can reduce adverse selection problem, given that the request for guarantors requires costly efforts for the potential borrower to find one or more guarantors and hence bad borrowers will be discouraged (Ibtissem & Bouri, 2013). Ibtissem and Bouri (2013) also indicate that the presence of a guarantor is also an ex-post sanction mechanism, such that, in case of default of payment, the co-signer who may lose his reputation to the same extent as the borrower can put pressure on the borrower to meet its obligations.

In the absence of collateral, there are other disciplines that can ensure regular repayment of loans. The idea is to commence repayment almost immediately after disbursement and then occurs on a weekly or monthly basis. Morduch (1999) argues that regular repayment schedules screens out undisciplined borrowers at an early stage and also gives early warning to loan officers and peer group members about potential future problems. In addition, the banks to get hold of cash flows before they are consumed or otherwise diverted

and also requires that the borrowers have an additional income source on which to rely since the repayment process begins before investments mature.

Field and Pande (2008) further noted that regular payment schedule provide clients a credible commitment device, which enables them to form the habit of saving regularly. They note also that frequent meetings with a loan officer may improve client trust in loan officers and their willingness to stay on track with repayments. However, this early regular repayment schedules may exclude potential borrowers who have a single source of income from the market (Ibtissem & Bouri, 2013).

Regular payments may also be underscored by the provision of nonfinancial services (Edgcomb & Barton, 1998). In this sense, microfinance institutions usually use nonfinancial services also named Business Development Services (BDS) as a form of adult literacy or training that go beyond financial services. Edgcomb and Barton (1998) further observed that the provision of nonfinancial services as a complement to credit and saving services not only develops the economic ability of the borrower to repay but also makes the relationship with the MFI more valuable to him. Some other studies, including Godquin (2004) and McKeman (2002) found that the provision of nonfinancial services was positively correlated with repayment performance and may be an important component of the success of microcredit programmes.

Although in principle the various credit risk strategies could work, the effectiveness of a bank's credit risk measurement process is highly dependent on the quality of management information systems (Stiglitz & Weiss, 1981). The

information generated from such systems enables the board and all levels of management to fulfil their respective oversight roles, including determining the adequate level of capital that the bank should be holding. Vogelgesang (2003) mentions that information on the composition and quality of the various portfolios should permit management to assess quickly and accurately the level of credit risk that the bank has incurred through its various activities and determine whether the bank's performance is meeting the credit risk strategy.

Loan recovery strategies

Loan recovery forms one of the most essential duties of banks, since lending remains the most critical source of earnings for banks in general. Fernando (2008) indicates that several methods exist for the effective collection of loans, which include borrower education, establishing mutually-agreeable payment dates, using positive reinforcement, improving internal productivity of the collections area, determining the appropriate collections procedures, establishing internal methodological control units, and ensuring quality of client information.

According to Derban, Binner and Mullineux (2005), borrower education involves training the client and guarantor about the implications of obtaining a loan, how the product works, the benefits of paying on time and the payment schedule, while also providing information about the closest and easiest way for this particular client to make loan payments. Churchill and Frankiewicz (2006) maintain that a critical factor during the client-education stage is establishing client awareness of both the benefits received due to punctual payments as well as

the costs incurred by the client for late payments. In many cases MFIs communicate this as a reward for punctual payment, offering discounts (Jain, 1996). In other situations, such as in India where the predominant method of “on-time collections” involves payment at the client’s place of work or home (Jain, 1996), it becomes important to provide incentives or other rewards to clients who actually do make payments at the branch or via payment agents.

Client education, in practice, is believed to encourage early and punctual payment, but the issue of moral hazard among clients may counter the aims and goals of client education. According to Fernando (2008), borrowers can be classified into four categories, namely, clients willing and able to pay; clients willing but unable to pay; clients able but unwilling to pay; and client neither able nor willing to pay. With the exception of the first category of clients, all the other clients are at risk of moral hazard, which may defeat the purpose of client education.

The educational process can be reinforced by another approach in which the lender and the client establish mutually-agreeable payment dates. Generally this date must match the date on which the client experiences peaks in revenue or liquidity. At the same time, it should be far enough away from payment dates for other important obligations, such as rent, school fees, and other debts. The payment dates, according to Elahi and Rahman (2006), can be reinforced whereby the lending institution recognises and rewards clients who pay on time by offering them immediate access to renewals, larger loan amounts, preferential (lower) interest rates, certificates of good payment, training, and prizes.

Santomero and Babbel (1997) maintain that these actions are best implemented with the support of the marketing department and integrated into the sales strategy. This will also require effective staff who tend to a well-designed collection strategy. The staff could be internally trained collector or the staff of a collection agency to which collection responsibilities are outsourced (Nair & Fissaha, 2010). The decision to outsource would, however, require an evaluation of the strengths and weaknesses of the institution, addressing general questions such as whether collections should be handled internally or externally through a third party as well as considering what measures should be in place to ensure staff are properly trained, motivated, and measured (Ibtissem & Bouri, 2013).

In collections, Macaver and Ehimare (2008) assert that client contact is essential and MFIs often train personnel to handle issue concerning how to approach clients, what product to offer, how to deal with broken promises, how to deal with lost or missing clients, what to do in cases of tragedies or natural disasters, and many other decisions that cannot be entirely delegated onto the experience of a loan officer. Hosna, Bakaeva and Juanjuan (2009) also indicate that just as regular client contact is essential to an effective collections process, so is the collection of quality client information necessary for successful client location.

During the initial application process, most MFIs could request several pieces of information, including the client's full name, address and clear instructions on how to locate the client (map of location), telephone number and personal and commercial references. Gorton and Pennacchi (1995), however,

argue that most MFIs fail to update client information in order to facilitate seamless contact with the client. However, MFIs are required to develop tools and strategies for updating client information in the database, without compromising secure access controls or quality of information. Schmidt-Mohr (1997) adds that one possible way to ensure integrity of the information is through the development of an incentive system for staff to encourage timely and accurate database updates.

The database supports internal methodological control units, or methodological audit units, which are created within MFIs as monitoring and control systems for the specific products and services (Danhel, 2002). According to Armendáriz and Morduch (2005), traditional banking-sector audit systems have proven to be inadequate for the microfinance industry, thus increasing the motivation for internal audit departments to monitor not only the collections process, but address all sub-processes of the lending cycle.

In Ghana, the active database which supports credit management are the Hudson Price Database, which was developed by Hudson Price Solutions Ghana, and the XDS database, which was developed in 2004 by XDS Data Ghana (Bank of Ghana, 2011). These are credit referencing hotspots where details about borrowers' credit history are tracked, monitored, and scored. Owing to legal and technical challenges which confronted the XDS database, its operations were delayed until 2011, when it became fully operational. As at end-December 2011, all Deposit Money Banks (DMBs) had signed up for credit reference services and were sharing data, while twenty-seven NBFIs submitted data to the bureau. The

total number credit checks made by financial institutions increased from 13,490 in 2010 to 79,200 in 2011.

Methodological control is an important tool for obtaining ongoing feedback and assessment (Allen, DeLong & Saunders, 2004). It is used to keep management informed regarding the quality of operations in the branches and the correct application of credit policies and processes. Methodological control should then prevent deviations from the established methodology that could potentially have a negative impact on portfolio quality (Armendáriz & Morduch, 2005).

In Ghana, Gyamfi (2012) found that rural banks usually review the creditworthiness of borrowers by their net worth in terms of cash and cash equivalents, other business assets, guarantors, shops/business premises, household appliances and stocks and their stock of mortgages. Takyi (2011) and Gyamfi (2012) have also found that the credit worthiness of borrowers in rural banks in Ghana have been based on some basic issues as the applicant possessing a national identity card, being in business for not less than six months, being an active account holder for at least 3-6 months depending on the organisation. Past credit history with financial institutions, account operation, and in some cases, the applicants' behaviour towards other debt obligations, such as light bills, school fees. Employees from the rural banks also visit the business premises of the applicants to assess the client's stocks (inventories), sales books, the business operation cycle (stock – cash replenishment cycle), the viability and permanency

of the location and the financial statements. Other relevant information was also gathered from the client's business partners and/or neighbours.

Challenges to credit risk management

Credit risk management involves several challenges which counteract approaches to effective loan recovery strategies. According to Cebenoyan and Strahan (2002), these challenges can be categorised to defining customer relationship, credit complexity, managing credit complexity, monitoring and reporting challenges, and maximisation of customer relations value. Customer relationship relates to distinguishing line between treating the borrower as a client and as friend to the business. The relationship between defaulters and the bank also counts, as word-of-mouth also serves as an important tool for corporate image. Maintaining relationship that encourage repayment and also makes the customer comfortable may therefore be a challenge.

Bessis (2010) explains credit complexity in that there are different business lines within the same organisation targeting the same customer with different products and services. Moreover, the credit granted gets very complex with multiple forces acting at the same time. A single company can be targeted by various business lines within the bank with each business line targeting specific products and services (Gine, Jakiela, Karlan & Morduch, 2010). The complexity of the credit origination comes from the complexity in the information required and the complexity in the process of origination. Information gathering can be complicated for the credit origination and involves gathering the financial

information on the company and the group and doing the spreading to capture the movements and prediction of key ratios (Kono & Takahashi, 2010). This also creates the need for continuous monitoring of the credit exposures.

According to Allen and Udell (1990), monitoring can be a challenging process, since the exposures emanate from different transactional systems and the limits are taken by different business lines within the bank. Another related challenge is maintaining a unified reporting system and devising early warning signals, which would reduce credit risk and enhance efforts across the key areas of transparency, operational risk and compliance with regulatory process and policy objectives. Derban, Binner and Mullineux (2005) add that unified reporting on the credit risk remains a big challenge for most banks to overcome because data warehouse does solve this problem but most of the times the data warehouse takes a long time to build and is not nimble enough to cater to all types of credit risk reporting.

Some studies in Ghana, including Takyi (2011), as well as Afriyie and Akotey (2012), have identified liquidity problems, high overdue rate, inadequate information about the customers, lack of appropriate security, poor house numbers, delay in granting loans, board and staff influence, as the major problems with credit risk management. For example, Takyi (2011) indicated that many rural banks are faced with issues of over-lending as loan officers focus more on giving out loans with less regard for repayment and retrieval avenues. This creates problems of liquidity for such banks. Moreover, problems of incomplete or incorrect client information make it a challenge to be accurate on the credit

worthiness of customers and thus, this contributes to high overdue rates. Identifying defaulters and retrieving loans is also challenged by poor national database on residents, including poor house numbering system and national database identification (Afriyie & Akotey, 2012; Gyamfi, 2012). Absconders therefore have several avenues to avoid repayment of their loans.

Conclusion

The chapter discussed the theoretical and practical underpinnings of credit risks and credit risks management. The literature shows that credit risks result from moral hazard on the part of a lender which influences default of credit. Risks management for MFIs presents unique challenges because MFIs often offer unsecured loans. Most of the studies, particularly on Ghana, assessed credit risks without much focus on the rate of defaults in the banks they studied. The severity of credit default is therefore not much stressed on. In assessing the trends in credit default rates in the Amantin and Kasei Community Bank Limited, this study takes a further step to stress on the severity of default rates in rural or community banks. The next chapter describes the methodological approaches used for the study.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the methods used to conduct the study. It covers the description of the study area, the study design, population, sample size determination and sampling procedure used, as well as the sources of data. The instruments used to collect the data and the data analysis methods are also discussed. The subsequent section briefly discusses issues under each of the mentioned sections.

Study organisation

The study institution was the Amantin and Kasei Community Bank Limited. The Bank was incorporated as a Limited Liability Company in 1995, received its Certificate and Banking License to commence business in 1996 and started operation at Amantin in 1997. The Bank has its head office at Amantin and has seven branches at Amantin, Ejura, Kwame Danso, Atebubu, Yeji, Ahwiaa and Kajaji. The Bank offers several banking products, but loans and deposit constitute the majority of their operations. The loan services include microfinance loans, susu loans, inventory loans, business loans, agric loans and salary loans and overdraft.

Study design

The study adopted a mix of qualitative and quantitative research approaches. According to Creswell (2003), such an approach provides complementarities between the research approaches whereby the strengths of one approach complements the weakness of the other. Thus, the statistical approach of quantitative research will be supported with the narrative approach of qualitative research in this study. This allowed for generalisability and inferences to be made in the same study. In that respect, the study design was a cross-sectional design, which refers to the type of study which involves a one-time interaction with a group or groups of people (Babbie, 2005).

Sample size and sampling procedure

The General Manager as well as the 15 loan officers for all the loan schemes, the Head of the Audit team, and two additional auditors were purposively sampled for the study. The total sample size was therefore 19 employees of the Bank.

Sources of data

The study elicited primary data from the sampled employees. Primary data on the verification of customer credit worthiness were solicited from the respondents. Primary data on the effectiveness of recovery of defaulted loans and the management challenges of credit risks were also collected from the sampled employees. Secondary data on the non-performing loans ratios from 2011 to 2014 were accessed for the analysis on the trends in credit risk exposure.

Instruments for data collection

Questionnaires were used to collect data from the loan officers for quantitative analysis. It is assumed that literacy is a condition for employment in the bank and thus all the loan officers can read, understand and appropriately respond to a questionnaire. Interview guides were used to collect data from the General Manager, and the Head of Audit and Audit Departments for qualitative analysis. Interview guides were used in order to gain an in depth understanding of the credit risks management practices, and reasons behind the statistics provided through quantitative analysis.

Field work

The fieldwork was conducted from 11th to 28th May, 2015. A letter of introduction was sent to the bank for approval of the study to be conducted in their institution. After obtaining the necessary approval, researcher reached the respondents at their work place. The purpose of the study was explained to all participants who gave their consent to respond to the instrument. After the distribution of the instrument, subsequent visits were made to retrieve the answered questionnaires. Respondents who had problems grasping the meaning of some of the items were assisted by the researcher in order to clarify the issues and obtain appropriate responses to the items in the questionnaire. The interviews were also conducted during the same period.

Data management and analysis

The completed questionnaires were coded and subsequently entered into the statistical analysis software called the Statistical Product and Service Solutions (SPSS) Version 21 for data processing. The data were statistically analysed using descriptive statistics, such as frequencies and percentages to represent the prevalence of the practices. The trends in the credit risk exposure over the selected years were shown in line graphs to depict the possible fluctuations. Correlation matrix was also used to show the relationships and significance of those relationships in the study variables for credit risks. Data presentation of questionnaire analysis included frequency tables, percentages and graphs. The qualitative data were discussed and quotes were made to emphasise salient issues raised by the respondents.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results and discussion of the study in relation to the credit risk management practices of the Amantin and Kasei Community Bank Ltd. The significant results and their practical implications are presented and discussed in relation to the specific objectives of the study. The subsections of the chapter include the analysis of the trend in credit default in the bank over a five-year period (2010-2014) and the analysis of the credit management practices adopted by the bank.

Trends in credit default in Amantin and Kasei Community Bank Ltd

This section analyses the credit default rates of the Amantin and Kasei Community Bank Ltd, with branches at Amantin, Ejura, Kwame Danso, Atebubu Yeji, Ahwiaa and Kajaji. The data used for this section was obtained from the annual reports of the bank covering the year 2009 through to 2014 accounting years. The credit default rate, in this context, is adapted to the mathematical definition of the ratio of non-performing loans (provision for bad debt) to total loans.

The study first analyses the disaggregated data in terms of the monthly loans advanced to customers. Figure 1 shows that in every year, the loans advanced to customers increase over the previous year. This is shown in the line graphs, such that the line for 2009 lies below that of the 2010 accounting year for all the months of the year. This is repeated for each year and its preceding year

(see Appendix 1 for detailed statistics). Highlights of the statistics show that in January 2009, the loan advanced to customers was GH¢1,600,955.38, but GH¢1,837,801.89, GH¢3,007,412.73, GH¢4,078,859.22, GH¢6,784,447.89 and GH¢8,182,487.53 for the 2010, 2011, 2012, 2013 and 2014 accounting periods respectively. Using 2009 as the base year, the statistics showed a percentage increase of loans advanced in the month of January alone of 12.89 in the year 2010, and further increment of 38.89 percent, 26.27 percent, 39.88 percent and 17.09 percent, respectively, in the same month for 2011, 2012, 2013 and 2014 accounting years. This trend was similar across all the months studied over the accounting years under consideration.

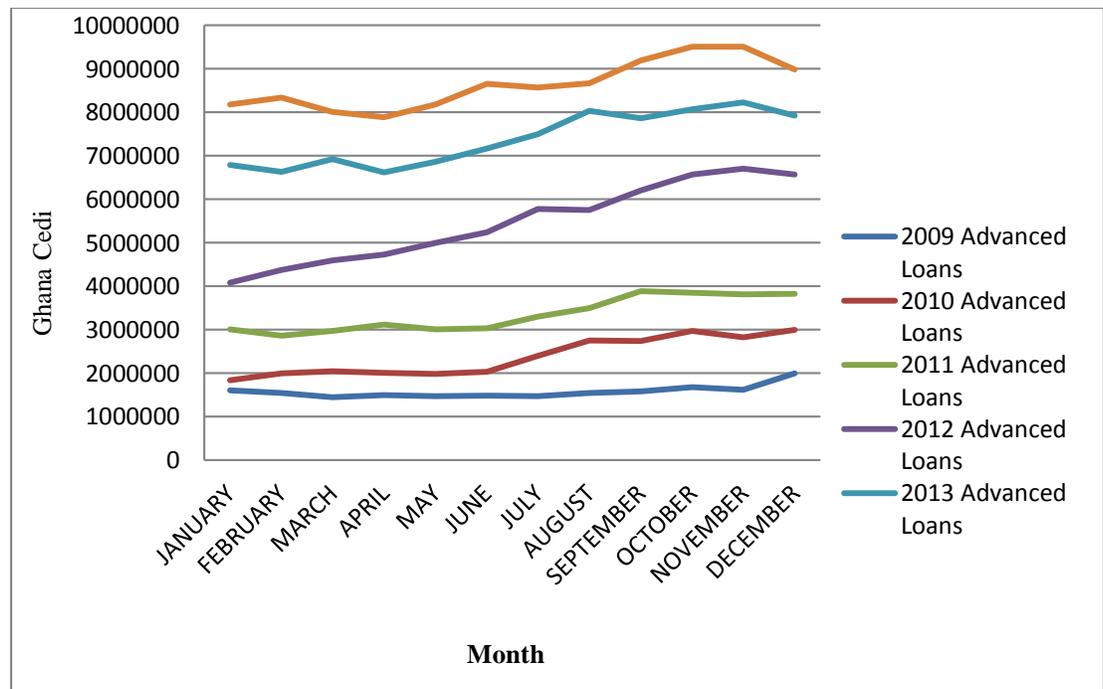


Figure 1: Trend in loan advancement to customers from 2009 to 2014

Source: Amantin and Kasei Community Bank Ltd Annual Reports (2009 to 2014)

Within the specific accounting years, the loans advanced to customers fluctuated in magnitude from January, through to December. According to the

study, the loans advanced by mid-year of 2009 accounting year decreased by 8.08 percent but had increased by 19.84 percent by the end of the year. Between January and December, the percentage increase of loans of the 2010, 2011, 2012, 2013 and 2014 accounting years were respectively 38.68 percent, 21.36 percent, 37.94 percent 14.44 percent and 8.96 percent. The results therefore showed that while the loans advanced increased from year to year, it also increased from month to month in any particular accounting year. In further analysis, the increment in loan advanced per month or year, was found to be related to the customer base that increased within the months, and across the years. For example, the customer base grew by a margin of 7.9 percent between 2009 and 2010, and by 31.37 percent between 2010 and 2011, 2011 and 2012, respectively, but reduced by 0.56 percent between 2012 and 2013.

The data indicated that at the end of the 2011 accounting year, the total loans and overdrafts advanced to customers was GH¢3,824,226.71 with a provision of GH¢68,655.15 made for bad debts. The default rate for the accounting year was therefore 1.80 percent, which meant that at the end of the 2011 accounting year, 1.80 percent of all loans that were advanced to customers in the same accounting year had elapsed their payment dates by a minimum of 540 days, per the lending policies of the bank.

Furthermore, it was shown that, at the end of the 2012 accounting year, the total loans and overdrafts advanced to customers was GH¢6,572,934.49, which was 41.82 percent above the loans advanced in the 2011 accounting year. This showed that the bank heavily increased its loans advancement in the 2012

accounting year, or had a broader customer base for that year. The provision made for bad debts was GH¢173,702.63, which was 153.01 percent higher than the provision made in the 2011 accounting year, and also amounted to a default rate of 2.64 percent. This showed that at the end of the 2012 accounting year, 2.64 percent of all loans that were advanced to customers in the same accounting year had elapsed their payment dates by a minimum of 540 days, per the lending policies of the bank. The analysis indicated that although the bank's provision for bad debts was higher for the 2012 accounting year, the loan default rate for that year was equally higher than the preceding year.

Further analysis revealed that, at the end of the 2013 accounting year, the total loans and overdrafts advanced to customers was GH¢7,929,647.01 which was 20.64 percent above the loans advanced in the 2012 accounting year and 51.77 percent more than the advanced loans in the 2011 accounting year. The provision made for bad debts was GH¢257,941.13, which was 48.50 percent lesser than the provision made for the 2012 accounting year, and 20.66 percent higher than the provision made for the 2011 accounting year. The results therefore depicted that the increment in the advanced loans was also matched by a rise in the provision made to cover bad debts. Over three accounting periods, the advanced loans increased by a margin of 51.77 percent, but rather matched by a decrease of 20.66 percent in the provisions for bad debts. This revealed a disproportionate increment in loans, vis-a-vis the provisions made for bad debts.

Table 1: Analysis of loan default rate

Period	Loan advanced		Bad debt		Default rate	
	GH¢	%Change	GH¢	%Change	Annual	%Change
2009	1,997,158.15		26,896.03		1.35	
2010	2,996,998.05	50.06	43,309.73	61.03	1.45	7.41
2011	3,824,226.71	27.60	68,655.15	58.52	1.80	24.14
2012	6,572,934.49	71.88	173,702.63	153.01	2.64	17.50
2013	7,929,647.01	20.64	257,941.13	48.50	3.25	23.11
2014	8,987,822.27	13.34	682,498.53	164.59	7.59	133.54

Source: Amantin and Kasei Community Bank Ltd Annual Reports, 2009 – 2014

The loans advanced to customers increased by a margin of 13.34 percent in the 2014 accounting year, bringing the total advancement to GH¢8,987,822.27 at the end of the period. The provisions made for bad debts, however, increased by a margin of 164.59 percent over the figures for the 2013 accounting year and 64.44 percent over the figures recorded for the 2011 accounting year. The loan default rate as at the end of the 2014 accounting year was 7.59 percent. This was an indication of an increasing loan default rate over the years, as the loan advancement expanded. The analysis indicated that although bank's provision for bad debts was higher for the 2012 accounting year, the loan default rate for that year was lesser than the preceding year.

Figure 2 shows the rate of increment in the credit default rates over the accounting periods under consideration. It is shown that the credit default rate increased by a margin of 7.41 from 2009 to 2010, and also increased sharply by 24.14 percent between 2010 and 2011, and fell to 17.50 percent, from the 2011 to 2012 accounting years. Since then, the loan default rate increased by a margin of 23.11 percent and then highest increase by 133.54 percent at the end of the 2013 and 2014 accounting years, respectively. Thus, over six accounting periods, the loan default rate increased by 64.61 percent. The study indicated that, although the annual default rates in every accounting year analysed fell below the general average default rates of 13.4 percent (Bank of Ghana, 2013), the rate of increment is high.

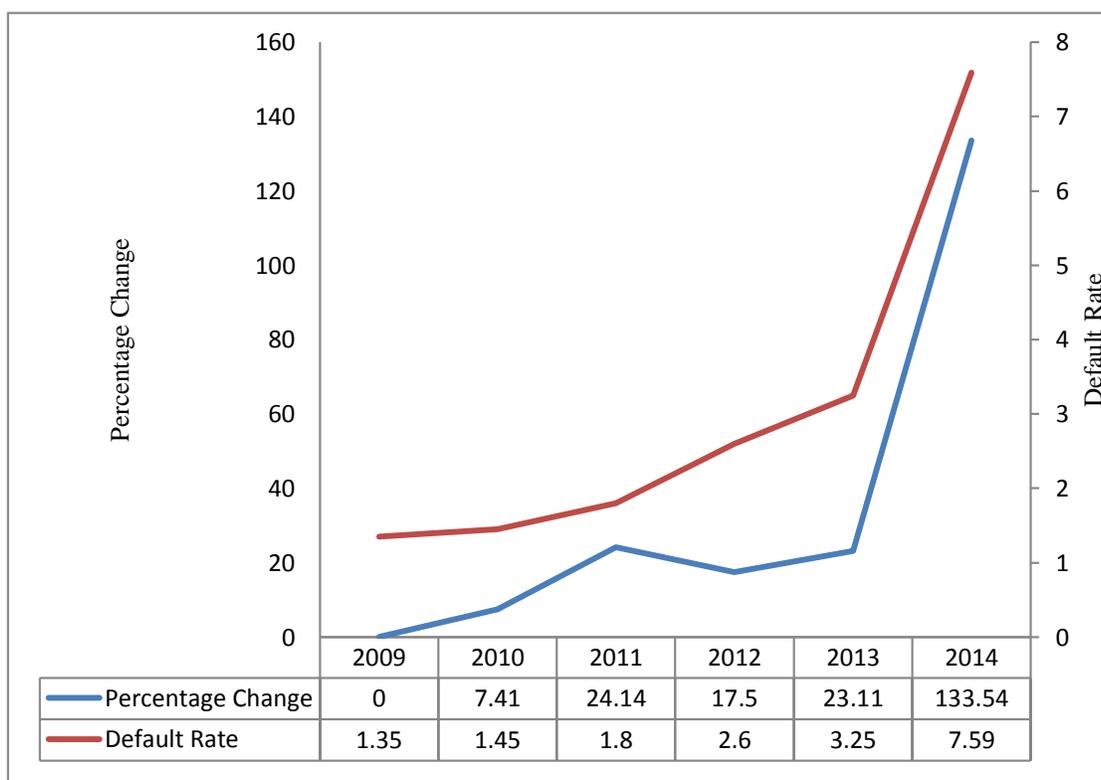


Figure 2: Loan default rate and percentage change in default rate

Source: Source: Amantin and Kasei Community Bank Ltd Annual Reports, 2009 - 2014

Inferential analysis, using a correlation matrix was adopted to analyse the relationships that exist among the advanced loans, the provision for bad debt, the default rate, and the percentage increments in the variables. This was to help determine the statistical significance of the association in the variables, following the description of the variables and possible relationships in the previous paragraphs under this section.

The results showed that the provision made for bad debts was strongly and positively related with the total amount of loans advanced in any accounting year. This was indicated by a Pearson Correlation (r) of 0.831. Thus, an increment in the loans advanced to customers was associated with increment in the provision made for bad debts, and vice versa. At 95 percent confidence level, this association was statistically significant, given a p-value of 0.040, which is greater than the default alpha of 0.05. This showed that, in general, more loans were associated with higher percentages of loans that were expected to result in bad debts.

The results in Table 2 also revealed that, the total amount of loans advanced in any accounting year had a positive and strong association with the loan default rates ($r = 0.731$). At an alpha of 0.05, the p-value of 0.099 depicted that although increasing loans is related to a rise in defaults, and vice versa, this was not a significant association. The final association that was analysed was between the number of customers and loan default. It was found that the number of customers and loan default rate were very weak but positively associated ($r = 0.306$). The co-efficient of determination (R^2) of 0.0936 indicated that only 9.36

percent of the variations in loan default were explained by the number of borrowing customers. This indicated that several factors account for the loan defaults which are not a factor of customers' numbers.

Table 2: Relationships among loans, debts, default rates

Variables	Statistic	Loan Advanced	Provision for bad debt	Loan default rate	Number of customers
Loan Advanced	Pearson	1			
	Correlation				
	Sig. (2-tailed)				
Provision for bad debt	N	6			
	Pearson	.831*	1		
	Correlation				
Loan default rate	Sig. (2-tailed)	.040			
	N	6	6		
	Pearson	.731	.981**	1	
Number of customers	Correlation				
	Sig. (2-tailed)	.099	.001		
	N	6	6	6	
	Pearson	.627	.327	.306	1
	Correlation				
	Sig. (2-tailed)	.183	.527	.555	
	N	6	6	6	6

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Source: Amantin and Kasei Community Bank Ltd Annual Reports, 2009– 2014

The association between the provision for bad debts and the loan default rates were not analysed as part of the study, as there were significant covariates among those variables. Thus, the high degree of association between these variables indicated the influence of covariates.

The purpose of this study was also to acknowledge the performance of the Amantin and Kasei Community Bank Limited in terms of the acceptable default rates established by the Central Bank and internally. The results in Table 3 compares the bank's default rates to three measures; namely, the acceptable target by Amantin and Kasei Community Bank Limited (at 10% default rate), the Bank of Ghana's default threshold for other Commercial Banks (at 13%) and for Community and Rural Banks (at 5%). The one-sample t-test was used to test for the statistical significance by comparing the mean default rates with the aforementioned standards. The mean default rate over the years under consideration is 3.01 percent, which is significantly lower than the Amantin and Kasei Bank's acceptable rate of 10 percent. Thus, in the past six years, the bank has been able to maintain a default rate which is statistically lower than the bank's threshold of 10 percent. This was indicated by a p-value of 0.001, which is lesser than the alpha of 0.05. With 95 percent confidence level, it can be said that the bank has been able to sustain an average default rate within the acceptable margins.

Similarly, the study showed that the bank has maintained an average default rate, which is lower than the threshold for commercial banks, set at 13 percent. With a p-value of 0.000, it was affirmed that at an alpha of 0.05, Amantin and Kasei Community Bank Ltd maintained a lower default rate than the acceptable threshold for commercial banks. However, the difference between the mean default rates of the bank from 2009 to 2014 accounting years was not statistically significant from the default rate of 5 percent which is the threshold set

for Community Banks, by the Central Bank. At five degrees of freedom and with a confidence level of 95 percent, a p-value of 0.94 indicated that the average default rate of 3.01 percent over the six year period was not significantly lower than the threshold of 5 percent for Community Banks. This could be due to high default rate of 7.59 percent record in 2014.

Table 3: Comparison of A&KCB’s default rates to standardized rates

	t	df	Sig. (2-tailed)	Mean Difference	Confidence Boundaries	
Standards					Lower	Upper
A&KCB at 10%	-7.255	5	.001	-6.98667	-9.4623	-4.5111
Commercial Banks at 13%	-10.370	5	.000	-9.98667	-12.4623	-7.5111
Community Banks at 5%	-2.063	5	.094	-1.98667	-4.4623	.4889

Source: Amantin and Kasei Community Bank Ltd Annual Reports, 2009 – 2014

Credit Management measures being used by Amantin and Kasei Community Bank Limited

Credit management is integral to managing risk related to credit. According to Kono and Takahashi (2010), the management of credit conforms to several mechanisms and measures to improve credit recovery. This section analyses the credit management employed by Amantin and Kasei Community Bank Ltd to reduce credit default and improve recovery rates of loans. The Loan Officers, General Manger and the Internal Auditors were covered for this purpose.

One of the important credit management measures is verifying the credit worthiness of the borrower. According to the General Manager, the process of

verifying the credit worthiness of potential borrowers include enquiring the client's credit history from, XDS database, Hudson Price database, confidential Inquiry from other banks in the operational areas of the bank's branches and a Quick Loan Search from the Bank of Ghana database. It also involved enquiring directly from the client if he/she has contracted credit facility from any financial institution and how the repayment was done. Moreover, the client's economic venture and returns on investment were important for corporate clients. In terms of previous clients, the Manager indicated that their credit worthiness was verified through the status of the operational accounts of the clients and also the repayment of the previous facilities of previous clients served as grounds for verifying the credit worthiness of previous clients.

The responses given by the General Manager conformed with literature that, the credit worthiness of borrower is fundamental to credit management. Dowd, Bartlett, Chaplin, Kelliher and O'Brien (2008) found that performing background checks on borrowers remain the most effective form of establishing the credit worthiness of potential clients. Credit verification tools, such as database of creditors and their repayment patterns have also been widely used (Culp & Neves, 1998; Churchill & Frankiewicz, 2006), as noted by the General Manager.

The Loan Officers also mentioned that some personal information of borrowers is requested to authenticate their identity, which reinforce their credit worthiness. In Figure 3, all the loan officers mentioned that the credit worthiness of the client was verified by collecting information about the borrower, including

name, occupation, and salary. Moreover, 75 percent of the respondents noted that the expenditure of the clients are sought in order to devise their net incomes and if their incomes minus their expenditure can cover the loan repayment schedule. Others also mentioned that they assess the character of the client informally.

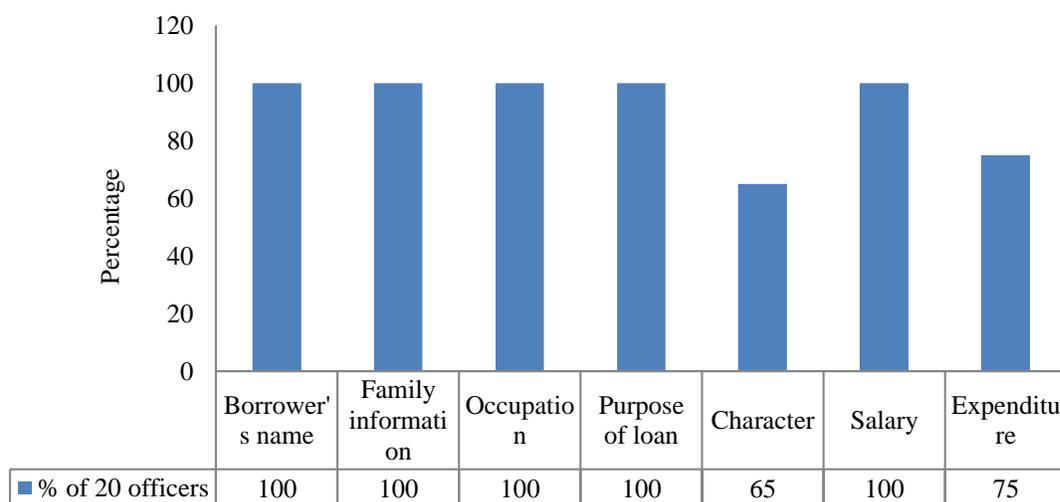


Figure 3: Client information sought by the Bank
Source: Field survey, 2015

Studies, including Berger and Udell (1990) and Babu and Singh (2007) have noted that indicators like business turnover, tax returns of an individual and of firms, and documents including passports, driver's license, and residential address verification documents have been used by some banks to authenticate the identity of potential borrowers. The results of the study therefore confirm the methods used by other banks to verify the creditworthiness of borrowers in their credit management practice.

The loan officers were also asked to indicate the measures put in place to verify the credit worthiness of corporate borrowers. In Table 3, the respondents noted that the managerial quality of applicants, ability to repay principal with

interest, and the influence of the micro and macro economy are reviewed to inform the creditworthiness of corporate borrowers.

Table 4: Measures of verifying creditworthiness of individual borrowers

Measures	Frequency	Percentage of total sample
Managerial quality of applicants	18	90%
Ability to repay principal with interest	20	100%
Influence of the micro and macro economy	13	65%

Source: Field survey, 2015

According to Armendariz and Morduch (2005), corporate borrowers are important to lending institutions as they borrow relatively larger amounts than individual borrowers. The methods used by Amantin and Kasei Community Bank Ltd have been well documented in literature by Zeller (1998) and Van Gestel and Baesens (2009).

In further analysis, however, the loan officers indicated that several documents including profit and loss account, cashflow statement, and accounting balance sheet are requested to verify the solvency of the business and thus, their ability to repay loans with the interest within the scheduled time. Further analysis revealed that 75 percent of the loan officers reported that the statement of liability of previous credit is also requested by the bank to verify the credit worthiness of corporate borrowers. Similarly, 30 percent of the loan officers indicated that the auditors' report on the financial status of corporate clients is also requested.

Table 5: Measures of verifying creditworthiness of corporate borrowers

Measures	Frequency	Percentage of total sample
Profit and loss account	20	100%
Cashflow statement	20	100%
Accounting balance sheet	20	100%
Statement of liability of previous credit	15	75%
Auditor’s report on company’s financial situation	6	30%

Source: Field survey, 2015

Studies covering rural banking, such as Stein (2002) and Nair and Fissha (2010), have identified financial statements such as profit and loss accounts, cashflow statements, and balance sheets as popular documents for verifying the credit authenticity of corporate borrowers. The results of this study therefore confirm that these methods employed by Amantin and Kasei Community Bank Ltd are within the general banking practices.

Much of the success of credit risk management rests with the loan recovery strategies employed by the bank. This section therefore analyses the loan recovery strategies adopted by Amantin and Kasei Community Bank Ltd as well as the respondents’ perspective on the success of the strategies. During interviewing, the General Manager indicated that there are different loan recovery mechanisms for the different loan schemes offered by the bank. The manager also indicated that for salary loans, repayment is made at the end of the month directly

from the client's account. With business loans, the clients were made to deposit regular payments towards their commitment at the end of each month. In the case of micro-loans, the clients were visited by the officers weekly to collect their contributions. Clients of agricultural loans are made to contribute to their repayments seasonally depending on main crops.

Nair and Fisssha (2010) have identified that mechanisms used by rural banks are usually different from commercial banks. The results of this study confirm these assertions about the variances in the loan recovery practices between rural banks and commercial banks. The responses of the loan officers were also analysed in relation to the loan recovery practices of the bank. All the loan officers indicated that they used borrower education to reinforce loan recovery. The mechanisms of borrower education included training the client and guarantor about how the loan works, educating the client about benefits of on-time payments and providing information about the easiest payment modes (see Table 6 for details).

Table 6: Client education methods

Methods	Frequency	Percentage of total sample
Training clients and guarantors on loans	20	100%
Information on benefits of on-time payments	20	100%
Information about easiest payment modes	20	100%

Source: Field survey, 2015

Borrower information and education have been noted in literature as a beginning step to initiating customers to the loan repayment schedule (McKeman, 2002). The forms of information offered by the bank to its customers about lending and repayment are typically used by other banks, noted in literature, these are not essentially different from methods used by commercial banks. However, Morduch (1999) have noted that rural banks often have closer associations with their clients than commercial banks.

Loan recovery also involves encouraging clients to pay loans on time. These often include rewarding early and on-time payment and punishing late payment and defaults, as propounded by Jain (1996). The loan officers mostly indicated that the bank adopts punishments and rewards to encourage repayment.

Table 7: Incentives and punishments to encourage loan repayment

Measures	Frequency	Percentage of total sample
Rewards		
Training clients and guarantors on loans	20	100%
Punishment		
Refusal of loans	20	100%
Blacklisting		
Reducing the amount of request made	19	90%

Source: Field survey, 2015

Unanimously, the loan officers responded that the only reward for regular and on-time payment was agreeing to grant the future requests of faithful clients. The

punishments included refusal of requests, blacklisting from the XDS and Hudson Price Databases, as well as from the bank's records (see Table 7 for details).

The General Manager reaffirmed the claim that punitive measure help reduce credit risk default rate. The responses of the manager however, indicated that rewards are less effective in ensuring early payments because good creditors can turn bad, whereas punitive measures cut-loose bad creditors in-time so the bank does not suffer further losses.

Lending in rural banks has also been differentiated from commercial lending on the basis of the differences in the collateral requests. In this study, the General Manager noted that the bank lends on collateral on business loans, but not on susu loans, inventory loans, agric loans and salary loans. The General Manager also responded that 35 percent of the bank's loans are with collateral and in some cases the bank has had to confiscate some assets with proper sanctions given by the court of law. Usually, as noted in literature (Schmidt-Mohr, 1997) all commercial loans are with collateral, and thus, this study confirms that collateral lending is typically a feature of commercial lending. From the General Manager's responses, it could be deduced that 65 percent of the bank's loans are unsecured.

According to Mckeman (2002), credit risks are imminent and some loans do end up as bad debt. The idea of credit risk management is to reduce the fraction of loans that end up unrecovered. Mckeman (2002) also notes that managing defaulted loans is as important as preventing loan defaults. The bank must be able to absorb potential defaults. In this respect the internal auditors of the bank were questioned in relation to the credit risk defaults on the bank. The

auditors noted that the bank is at high risk of credit default because of the constant increase in loan Principal in Arrears (PIA), and loan interest arrears. The auditors further indicated that most of the risks are with micro loans and commercial loans because economic conditions such as inflation, increment in credit premium, and interest rates premiums from Bank of Ghana directly affect them more than the salary loans.

The General Manager indicated that the bank declares a loan as defaulted when the repayment date overlaps for more than 30 days without repayment made to cover the balance in arrears. The manager's indication of what constitutes loan default in Amantin and Kasei Community Bank Ltd is in-line with general literature's indication of a loan default (Hull, 2007; Ibtissem & Bouri, 2005). The General Manager noted that defaulted loans are managed by legal means, writing the loan off as bad debt, and through negotiations with defaulters.

Motivation of loan officers, reward systems for loan officers who are effective in loan recovery and monitoring of clients has been documented by source as a strategy to improve loan recovery. In the case of Amantin and Kasei Community Bank Ltd, 65 percent the loan officers indicated that they were given bonus incentives. Other forms of incentives to encourage effective loan recovery included promotions (15%), good appraisal reports (10%), and commendations (10%). The incentives for the loan officers conform to some of the well documented methods of motivating employees for higher performance (Rose & Hudgins, 2008).

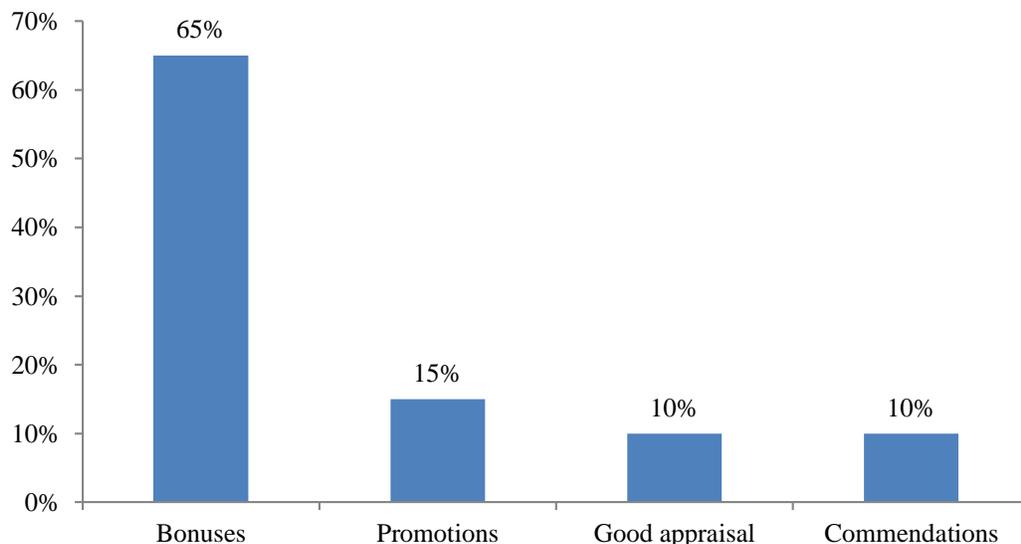


Figure 4: Incentives for loan officers
Source: Field survey, 2015

Challenges in the management of credit risk

The management of credit also involves overcoming challenges that might arise in the loan scheme (Padmalatha, 2011). Thus, in this study, the management challenges that arise in the loan scheme as well as the means or proposed methods for overcoming those challenges were analysed. According to the General Manager, the challenges related to credit risk management include inefficient data management, insufficient risk management tools and technology, cumbersome reporting, as well as expensive and time consuming monitoring of clients.

The Manager's responses indicated that "client data including personal information and business information are not adequately used because of insufficient data management system of the bank. Moreover, the reporting systems are cumbersome which lend themselves to delays and oversights. Tracking down customers is expensive and time consuming. Thus, mostly the

bank relies on the goodwill and trust that the clients would not default. Even when the court gives the permit to indict a defaulter, tracking the person down is often costly and time consuming”.

The internal auditors added that the loan officers tend to focus their attention on signing on more clients than improving on loan recovery. The internal auditors therefore emphasised a ceiling on huge loans, proper appraisal of loan officers, and improving client monitoring as some of the measures to overcome credit risk management shortfalls in the bank. The General Manager also indicated the need for extensive feasibility check on each loan applicant, by the loan officer to reduce the risk of signing on defaulters.

The loan officers were also asked to indicate the challenges they face in the line of their work concerning lending and loan recovery. Table 8 shows that the challenges of credit management according to the loan officers was the time consuming nature of monitoring and the cost related to monitoring of clients. Moreover, 75 percent of the loan officers were of the view that the management of customer relations also posed challenges as well as the time used in interpreting contracts to clients (60%).

Table 8: Challenges of credit risk management

Challenges	Frequency	Percentage of total sample
Time consuming monitoring	20	100%
Costly monitoring	20	100%
Management of customer relations	15	75%
Time consuming contract interpretation	12	60%

Source: Field survey, 2015

These challenges have been documented in literature. For example, Stiglitz (1990) found that monitoring costs including technological updates and updates on client information exercises require large budgets, which may serve as a deterrent to effective monitoring. Similarly, Hull, Nelken and White (2004) also indicated that customers need to understand the terms of the contract as some might sue for deliberate withholding of information from client in case of a misunderstanding. The time spend to get the stakeholders of the loan contract to agree to the terms may be time consuming.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary of major findings of the study. It also presents the conclusions drawn from the study as well as recommendations derived from the conclusions of the study. The first section of the chapter summarises the entire study and also presents the key findings. This is followed by the conclusions and recommendations drawn from the findings. Suggestions for further studies are added in the end.

Summary of the study

The study set out to examine the credit risk management practices of the Amantin and Kasei Community Bank Ltd. A mix of qualitative and quantitative research approaches was adopted in a cross-sectional research design. The General Manager, as well as the 15 loan officers for all the loan schemes, the Internal Auditors and the Head of Audit were purposively sampled for the study because of their direct involvement in credit management. Primary data on the effectiveness of recovery of defaulted loans and the management challenges of credit risks were also collected from the sampled employees. Secondary data on the non-performing loans ratios from 2009 to 2014 were accessed for the analysis on the trends in credit risk exposure. Questionnaires were used to collect data from the loan officers for quantitative analysis. Interview guides were used to

collect data from the General Manager, and the Internal Auditors for qualitative analysis. The quantitative data were analysed using correlation matrices, percentages and frequencies. The qualitative data was discussed and quotes were made to support salient issues.

Summary of major findings

The first objective of the study was to examine trend in loan default over the past five years. It was found that the credit default rate is low across all the years studied, as compared to figures provided by the Bank of Ghana for the 2012 accounting year. However, the highest default rate for the bank was at the end of the 2014 accounting year which was a consequence of the high annual rise in the default rates of loans. The average default rate over the immediate six year period (2009 to 2014) was found not to be significantly lower than the threshold of 5 percent for community and rural banks.

The second objective was to examine the credit management practices of the bank. The practices included verifying the creditworthiness of the borrower, through direct and indirect access to personal and corporate information. Moreover, the bank used client education as a means of informing clients and encouraging early and/or on-time repayment of loans. Loan recovery practices including providing incentives for on-time repayment and punishments for late payers and defaulters were also used by the bank. Monitoring of clients was also adopted, but some challenges including costs and time of monitoring were key to the success of loan recovery.

The third objective was to examine the challenges in managing credit risks at the bank and the study found that time for monitoring and contracting the client, as well as customer relations management were some challenges faced by the loan officers. In terms of management, the major issue was with the ineffective systems for utilising client information, and the focus of loan officers in advancing loans, rather than on loan recovery.

Conclusions

The first conclusion drawn by the study is that, the bank performed comparatively well with the general credit default rates in the Ghanaian banking industry from 2009 to 2014 accounting years. However, the rate of default has been rising over the years and as a result it was not comparatively different from the threshold of 5 percent. The study also concludes that the credit management practices are in line with general banking practices, but some challenges, including time for monitoring and contracting the client, as well as customer relations management, had to be dealt with to achieve further lowering of the credit default rate.

Recommendations

From the findings, the following recommendations would be useful to the management of the firms and policy makers in general.

1. The bank should further investigate into the rising default rates, especially in the 2014 accounting year. A comprehensive audit for that year is

recommended to identify, which explanation, some of the cause underlying the sudden rise in the default rate.

2. The bank should invest further in training of loan officers in loan recovery practices, as the loan officers were said to focus more on signing the loans than recovery.
3. The bank should invest into data management technology for consolidating and updating client information, so that the clients can be tracked and identified when needed.

Suggestions for further studies

Considering the findings of this study, it would be useful to conduct comparative studies on micro-finance, micro-credit institutions, rural banks and commercial banks, in terms of their credit risks. Specifically, the bank could research into the increasing rates of credit default since the 2011 accounting year. A broader research involving other major banks in Ghana, with a wider scope and covering a longer period can also be considered for future research.

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APPENDIX 1: LOAN ADVANCEMENT STATISTICS FROM 2009 TO 2014

	2009			2010			2011		
	Advanced loans	Customer base	Overdue balance	Advanced loans	Customer base	Overdue balance	Advanced loans	Customer base	Overdue balance
January	1,600,955.38	1,928	38,262.20	1,837,801.89	2,105	31,565.05	3,007,412.73	3,013	32,388.30
February	1,548,249.12	1,864	37,999.35	1,992,984.96	2,232	35,057.74	2,858,560.78	2,838	52,084.23
March	1,451,105.27	1,728	29,496.37	2,049,712.90	2,274	40,637.41	2,977,909.81	3,989	67,367.91
April	1,493,455.24	1,799	32,437.00	2,004,864.27	2,285	41,314.99	3,120,168.11	4,332	51,584.22
May	1,472,623.66	1,888	29,453.52	1,981,761.51	2,367	46,551.65	3,005,049.61	3,325	73,430.01
June	1,481,282.33	1,905	27,988.64	2,027,137.18	2,288	41,076.53	3,038,737.98	3,589	48,198.57
July	1,476,009.49	1,871	26,425.55	2,392,682.53	2,353	43,223.25	3,300,123.56	3,325	71,249.46
August	1,541,889.14	1,811	26,209.52	2,746,416.65	2,365	39,944.51	3,499,982.17	3,186	54,084.87
September	1,575,905.23	1,849	22,226.29	2,736,678.14	2,189	40,571.49	3,882,668.00	4,030	53,695.88
October	1,677,542.56	1,910	21,015.97	2,973,957.96	2,798	38,879.71	3,847,630.70	3,505	55,090.65
November	1,623,643.98	1,898	30,069.29	2,821,789.20	2,202	39,439.02	3,813,237.64	3,144	48,154.06
December	1,997,158.15	2,053	26,896.03	2,996,998.05	2,229	43,309.73	3,824,226.71	3,248	68,655.15

APPENDIX 1: LOAN ADVANCEMENT STATISTICS FROM 2009 TO 2014

	2012			2013			2014		
	Advanced loans	Customer base	Overdue balance	Advanced loans	Customer base	Overdue balance	Advanced loans	Customer base	Overdue balance
January	4,078,859.22	2,974	86,562.85	6,784,447.89	3,306	202,456.35	8,182,487.53	2,948	243,910.56
February	4,370,482.39	3,509	82,962.07	6,632,506.39	3,315	255,593.45	8,339,248.71	2,784	258,597.76
March	4,590,588.78	2,981	75,676.38	6,927,097.43	3,516	253,898.06	8,006,319.04	2,288	257,184.22
April	4,732,905.08	3,024	90,829.64	6,614,439.43	3,070	253,899.38	7,888,273.08	2,801	254,360.61
May	4,995,197.16	2,892	108,338.89	6,860,143.99	3,034	246,024.55	8,185,429.70	2,882	280,624.56
June	5,245,946.05	3,677	96,844.67	7,171,722.31	2,856	212,609.99	8,655,960.61	2,885	257,184.22
July	5,777,202.71	3,570	94,523.72	7,494,574.95	2,992	201,839.47	8,565,104.58	2,839	370,052.08
August	5,756,299.23	3,431	109,765.28	8,038,131.94	2,966	203,339.24	8,666,486.82	2,840	341,752.45
September	6,208,219.92	3,257	108,009.78	7,858,136.53	2,877	192,963.45	9,189,590.41	3,118	367,195.58
October	6,572,305.44	3,328	133,884.87	8,068,174.19	2,963	192,313.49	9,507,442.73	3,134	349,905.46
November	6,700,262.01	3,258	170,382.80	8,226,363.97	2,869	209,756.32	9,514,426.63	3,399	335,853.25
December	6,572,934.49	3,230	173,702.63	7,929,647.01	2,899	257,941.13	8,987,822.27	3,170	682,498.53

APPENDIX 2: INTERVIEW GUIDE FOR BANK MANAGER

The purpose of this questionnaire is to support an academic study aimed at assessing the **Credit Risk Management Practices** of this bank. Please answer as candidly as you can.

1. What are the general processes involved in verifying the credit worthiness of new clients?
2. How does the bank verify the credit worthiness of previous clients?
3. Are there different loan recovery mechanisms for the different loan schemes offered by the bank?
4. If yes, how different are they from each other?
5. How does the bank ensure that the loan offered does not result in a default?
6. When does the bank declare a loan as a default?
7. How does the bank cover its defaults in terms of reducing its losses from defaults?
8. What are some of the challenges related to managing credit risks in the bank?
9. How can these challenges be overcome?

APPENDIX 3: INTERVIEW GUIDE FOR AUDITORS

The purpose of this questionnaire is to support an academic study aimed at assessing the **Credit Risk Management Practices** of this bank. Please answer as candidly as you can.

1. What can you say generally about the credit exposure of this bank in respect to your annual reviews and report?
2. Which loan schemes have been rather more exposed in terms of credit risk?
3. What particular problems have you noticed in the credit risk management of this bank?
4. What would you recommend to tackle these problems?

APPENDIX 3: QUESTIONNAIRE FOR LOAN OFFICER

The purpose of this questionnaire is to support an academic study aimed at assessing the **Credit Risk Management Practices** of this bank. Please answer as candidly as you can.

1. What data does the bank require as a prerequisite for offering loans?
 - a. Name of borrower (s)
 - b. Name of business
 - c. Occupation (s)
 - d. Purpose of loans
 - e. Others, please specify

2. How do these personal data inform the credit worthiness of the borrower?

3. Are there any punitive actions taken against borrowers with low credit ratings?

- a. If yes, what are some of these punitive measures?

- b. If no, how then are these borrowers encouraged to raise their credit ratings?

4. Which of the following are reviewed in the course of granting the loan to a potential client?
 - a. The managerial quality of the loan applicant
 - b. Ability to repay principal and interest
 - c. Influence of micro and macro economy
 - d. Others, please verify

5. Which of the following are requested as a means of verifying the credit worthiness of corporate borrowers?
 - a. Profit and loss account
 - b. Cashflow statement
 - c. Accounting balance sheet
 - d. Statement of liability of previous credit
 - e. Auditor's report on company's financial situation
 - f. Others, specify

6. Does the bank use 'Borrower education' as a loan recovery strategy?
 - a. Yes
 - b. No

7. If yes, please indicate what borrower education entails
 - i. Training the client and guarantor about how the loan works
 - ii. Benefits of on-time payment
 - iii. Information about the easiest payment modes
 - iv. Others specify

8. Does the bank reward clients who pay on time or regularly?
- a. Yes
 - b. No
9. If yes, what rewards and incentives are given to those who pay on time?
-
10. Are there some current loans in threat of default?
- a. If yes, what critical measures are adopted to recover such loans?
-
11. Are loan officers given any incentives or rewards for recovering loans at default risk?
- a. Yes
 - i. What are some of these incentives?
 - b. No
12. Which of the following areas best describe challenges faced by the bank in managing its credit exposure?
- a. Managing customer relations
 - b. Managing credit contract and interpretations
 - c. Monitoring and reporting
 - d. Balancing the customer and corporate value of the loans/credit
 - e. Managing different types of credit
 - f. Managing the size of the clientele
 - g. Others, specify

13. What are some of the challenges related to managing customer relations?

14. What are some of the challenges related to managing credit contract and interpretations?

15. What are some of the challenges related to monitoring and reporting?

16. What are some of the challenges related to balancing the customer and corporate value of the loans/credit?