ADOPTION OF CREDIT REFERENCE BUREAUS AS A STRATEGIC RESPONSE TO LOAN DEFAULTING AMONG COMMERCIAL BANKS IN KENYA

BY

MAUREEN WAMBUI WAMAHIU

A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS,

UNIVERSITY OF NAIROBI

SEPTEMBER, 2015

DECLARATION

This research project is my original work and has not been submitted for a degree in any other university.

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

MAUREEN WAMBUI WAMAHIU

This research project has been submitted for examination with my approval as the University supervisor.

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

ELIUD O. MUDUDA
LECTURER,
DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF BUSINESS
UNIVERSITY OF NAIROBI

DEDICATION

This work is dedicated to those who helped me carry out this research and to the Almighty God for the wisdom and gift of life that has made me realize and see the conclusion of this research.

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to the following people for their support that made this research paper a success.

To my academic Supervisor, Eliud O. Mududa for his great contribution and support offered that enabled this research project to take its present form, without his guidance and persistent help, this research would not have been successfully completed.

I am sincerely grateful to God for the gift of serenity throughout my studies from the beginning of the course to its completion. I must admit humbly that the success of this research has been largely due to collaborative efforts and devotion of many people to who I owe a lot of gratitude.

Thank you to you all.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

CBK Central Bank of Kenya

CRB Credit Reference Bureau

FSD Financial Sector Deepening

GDP Gross Domestic Product

KBA Kenya Bankers Association

NPL Non-Performing Loan

NSE Nairobi Stock Exchange

ABSTRACT

Commercial banks in Kenya have had a high rate of loan default from the borrowers which have caused significant losses to the banks. This is attributed to existence of information asymmetry where commercial banks have varied credit information and credit history about their borrowers. The credit seekers have taken this shortfall to get loans from different commercial banks which increases their rate of default because they might fail to service back all the loans. This study determines the effect of adopting credit reference bureaus (CRBs) as a strategic response to loan defaulting among commercial banks in Kenya. The population of the study consisted of all the commercial banks in Kenya. Information collected was by use of a questionnaire which made use of both open and closed ended questions. The questionnaire used a five point Likert scale which ranged from strongly agree to strongly disagree. Data was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation for final analysis. The results revealed that the credit information sharing increase in confidence of commercial banks while giving loans unlike before the CRB became operational. The study established that more and more commercial banks and other lending institutions have turned to CRB for credit information to minimize the loan defaulting. The results revealed that the strategic response strategies increase in confidence of commercial banks while giving loans unlike before the CRB became operational. The study recommends that commercial banks should adopt adequate credit referencing mechanisms as the concept has positive contribution to reduction of loan default, the banks should establish a credit management team that would be responsible and ensure that all customers who may seek to take up a loan with the bank are vetted and checked against the licensed CRBs in Kenya before the approval. Further studies can be performed on other sectors of the economy other than banking industry and research can be done on the positive effect information gathered by CRBs would have on credit scoring and access to credit.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

In lending, the problem of asymmetric information stems from the fact that a lender's knowledge of a borrower's likelihood to repay which represents their 'risk profile' is imprecise and must be inferred based upon available information. This brought about the need to institutionalize credit rating by regulatory agencies in Kenya so as to reduce the magnitude of Non-Performing Loan (NPL) problem, reduce information asymmetry, build information capital and generally enhance affordable credit within the economy. This is a strategic move aimed at avoiding extending loans to individuals possessing high risk profile thus increasing the likelihood of loan repayment. In a theoretical model of information sharing, Miller (2003) shows that exchange of information on borrower type reduces average interest rates. The asymmetric information literature which looks at the impact of financial structure on economic activity focuses on the differences in information available to different parties in a financial contract. Borrowers have an informational advantage over lenders because borrowers know more about the investment projects they want to undertake than do lenders (Akerlof, 1970)

This study was anchored on Information Asymmetry theory which describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah & Essel, 2003). Information asymmetry causes market to become inefficient and forces market participants to take risk because it is assumed that information which is provided is always inadequate, inaccurate,

incomplete and untimely. Managing money and deposit accounts, banks own highly strategic information on firms' receipts and expenditures as well as the way that firms develop (Diamond and Rajan, 2001). The more interesting form of credit rationing is equilibrium rationing, where the market had fully adjusted to all publicly available information and where demand for loans for a certain market interest rate is greater than supply. The second theory is the Adverse Selection Theory which rests on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are subjects to limited resources if project returns are less than debt obligations, the borrower bears no responsibility to pay out of pocket.

Kenya has experienced banking problems since 1986 culminating in major bank failures (37 failed banks as at 1998) following the crises of; 1986 - 1989, 1993/1994 and 1998, the crises were mainly attributed to NPLs (Kalani and Waweru, 2009). In order to manage the level of NPL, Credit Reference Bureau (CRB) Regulations were issued in 2008 by the regulator and operationalized effective 2 February 2009. Credit Reference Bureaus complement the central role played by banks and other financial institutions in extending financial services within an economy. This has since been used to evaluate the credit risk profile of loan applicants hence assisting in credit worthiness evaluation.

1.1.1 Concept of Strategy

Strategy is the direction and scope of an organization over the long term, which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations (Pierce & Robinson, 2007). Thompson and Strickland (2005) define strategy as management's action plan for running the business and conducting operations. They note that a strategy represents a managerial commitment to pursue a particular set of actions in growing the business, attracting and pleasing customers, competing successfully, conducting operations and improving the company's financial performance. They further argue that the best indicators of a company's strategy are its actions in the market place and the statements of the managers about the company's current business approaches, future plans and efforts to strengthen its competitiveness and performance.

Johnson and Scholes (2008) observe that Strategy is concerned with the long-term direction of the firm, scope of an organizations activities, how to achieve some advantage for the organization over competition, search for strategic fit with the business environment and creating opportunities by configuring an organization's resources and competences with the aim of fulfilling stakeholder expectations. The strategy is affected not only by the environmental forces and strategic capability but also by the values and expectations of those who have power in and around the organization. Mintzberg, Lampel, Quin and Ghosal (2002) describe strategy as the pattern or plan that integrates an organization's

major goals, policies, and action sequences into a cohesive whole. A well formulated strategy helps to marshal and allocate an organization's resources into a unique and viable posture based on its relative internal competencies and shortcomings, anticipated changes in the environment, and contingent moves by intelligent opponents.

1.1.2 Strategic Response

Strategic responses refer to a set of decisions and actions that result into formulation and implementation of plans designed to achieve a firm's objectives (Pearce and Robinson, 1988). Pearce and Robinson (2003) indicated that modern executives must respond to the challenges posed by the firm's immediate and remote external environments. Remote environment involve factors that originate beyond any single firms operating environment. Strategic response is the set of decisions and actions that result in the formalization and implementation of plans designed to achieve a firm's objectives (Pearce and Robinson 1997). Porter (1998), views operational responses as part of a planning process that coordinates operational goals with those of the larger organization. Hence operational issues are mostly concerned with certain broad policies and policies for utilizing the resources of a firm to the best support of its long term competitive strategy (Pearce and Robinson 2007). Reengineering, downsizing, self-management and outsourcing are some of the dominant strategies that have been used for restructuring in the 1990's.

In order to effectively achieve the firm's objectives, these set of plans and actions must strategically fit to the complexities and dynamism of a rapidly shifting

environment so as to position the organization strategically. Ansoff and McDonnell (1990) asserts that the management system used by a firm is a determining component of the firm's responsiveness to environment changes because it determines the way that management perceives the environment, diagnosis their impact on the firm, decides what to do and implements the decisions.

1.1.3 Credit Reference Bureaus

A credit reference bureau is an organization that compiles credit information, public record data, and identity information, and makes them available to lenders in the form of a credit report of individuals and organizations (FSD Trust Kenya, 2012). Credit Referencing is a typical response to information asymmetry problems between lenders and borrowers (Olegario, 2003). A credit reference bureau is either a publically or privately owned entity that consolidates information on borrowers from lenders. Many studies have illustrated how comprehensive information helps lenders better predict borrower default. Kallberg and Udell (2003) found that historical information collected by a credit bureau had powerful default predictive power.

Credit Reference Bureaus complement the central role played by banks and other financial institutions in extending financial services within an economy. CRBs help lenders make faster and more accurate credit decisions. They collect, manage and disseminate customer information to lenders with in a provided regulatory framework in Kenya, the Banking (Credit Reference Bureau) Regulations, 2008 which was operationalized effective 2nd February 2009.

The Central Bank of Kenya Act was amended through the Finance Act 2012, to provide for sharing of both negative and positive credit information among banks. This amendment paved the way for the adoption of full file reporting (sharing of both negative and positive information). Various public organs in the country incorporated credit reports as a tool for vetting/determination of suitability for officers wishing to hold public office. This development has highlighted the growing importance of the credit information sharing mechanism in Kenya. It is envisioned that credit information sharing will continue to be instrumental in the decision making process of credit providers in Kenya as they seek to mitigate risks associated with information asymmetry.

1.1.4 Loan Defaulting

Loan portfolio which constitutes a large portion of assets in most banks is relatively illiquid and exhibits the highest credit risk (Koch and MacDonald, 2000). Lending is the principle activity of commercial banks and the loan portfolio is the largest asset and the predominant source of revenue for the lending institutions (Morsman, 1993).

The question of loan default is related with non-recovery or repayment of loans. When a borrower cannot repay interest and/or installment on a loan after it has become due, then it is qualified as default loan or non-performing loan (Chowdhury & Adhikary, 2002). It is known as non-performing, because the loan ceases to "perform" or generate income for the bank (Hamberger and Diehm, 2004). In the industry there is a general distinction between a narrow definition of NPLs and a broad definition of the expression. The narrow approach equals to the

6

criterion stated in the regulations of the New Capital Accord of Basel II and understands NPLs as loans that are past due and unpaid for more than 90 days (usually equally to three dates of payment) (Bundesbank, 2003). This classification approach resembles to the standard used in most G-10 countries (see Cortavarria et al., 2000).

The broad definition of the term "non-performing loans" is also encompassing sub-performing loans. That loan type is already defaulted but has not met the Basel II criterion. Furthermore, the broad approach contains watch list loans which are still performing but have a certain probability of default in the near future and an internal bank rating of B− and worse (see Kroll and Mercer Oliver Wyman, 2005, p. 6).

1.1.5 Banking Industry in Kenya

The economic growth of a country and the development of banking are correlated. The banking sector is an indispensable financial service sector supporting development plans through channelizing funds for fruitful purpose, mobilizing and controlling flow of funds from surplus to deficit units and supporting financial and economic policies of government.

The success of banking is assessed based on profit and quality of assets it possesses. Even though bank serves social objective through its priority sector lending, mass branch networks and employment of many people, maintaining quality asset book and continuous profit making is important for banks continuous growth. A major threat to banking business is nonperforming assets. NPA

represent bad loans, the borrowers of which failed to satisfy their repayment obligations. Michael et al (2006) emphasized that NPA in loan portfolio affect operational efficiency which in turn affects the profits of the bank, liquidity position and solvency position of banks. Batra (2003) noted that NPA also affect the psychology of bankers in respect of their disposition of funds towards credit delivery and credit allocation.

The high level of non-performing loans in the banking sector has been a hindrance to economic stability. According to CBK bank supervision annual report (April 2009), the stock of NPLs expanded by 7.8%to Kshs 64.9 billion by March 31st, 2009 from Ksh 58.3 billion in 2008. In the year 2006, the NPLs were Kshs 56.4 billion from Ksh 68.6 billion in 2005. In 2003 and 2004, the average non-performing loan to total loans for the industry was 25% and 24% respectively (Market Intelligence 2004.) NPLs in Kenya stood at Kshs 107.4 billion at the end of 2001. This represented 38% of total loan of Ksh 281.7 billion in the banking sector (Oloo, 2003). Therefore when loans become nonperforming, banks liquidity and its earnings are adversely affected.

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The banking sector was liberalised in 1995 and exchange controls lifted. The CBK, which falls under the Minister for Finance's docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The CBK publishes information on Kenya's commercial banks and non-

banking financial institutions, interest rates and other publications and guidelines (CBK, 2014).

The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and also addresses issues affecting its members. There are forty-six bank and non-bank financial institutions, fifteen micro finance institutions and forty-eight foreign exchange bureaus. Thirty-five of the banks, most of which are small to medium sized, are locally-owned. The industry is dominated by a few large banks most of which are foreign-owned, though some are partially locally-owned. Six of the major banks are listed on the Nairobi Stock Exchange (CBK, 2015).

The commercial banks and non-banking financial institutions offer corporate and retail banking services but a small number, mainly comprising the larger banks, offer other services including investment banking (KBA, 2015). Key issues affecting the banking industry in Kenya are: changes in the regulatory framework, where liberalisation exists but the market still continues to be restrictive; declining interest margins due to customer pressure, leading to mergers and re-organisations; increased demand for non-traditional services including the automation of a large number of services and a move towards emphasis on the customer rather than the product; and Introduction of non-traditional players, who now offer financial services products.

1.2 Research Problem

The problem of loan defaulting is one that drags on the economy in that it disintermediation of bank-system lending caused by the erosion of banks' profitability, causes stagnation of economic resources and cautious behavior of corporations and consumers due to a decline in confidence in the financial system. Non-performing loans has been a persistent problem among Kenyan commercial banks, leading to the collapse of 37 banks as at 1998. Bad borrowers with knowledge that banks have been operating in isolation exploited the information asymmetry to create multiple bad debts in the banking industry in Kenya, distorting the lending business in the credit market thus adversely affecting bank performance, threatening banking sector stability and curtaining growth of the credit to the private sector due to the high interest charged on facilities to compensate on the credit risk. According to the banking survey by Central Bank of Kenya (2012), the high interest regime witnessed in the first half of 2012 impacted negatively on the quality of loans and advances. As a result, non-performing loans (NPLs) increased by 16.8 percent from Ksh. 53.0 billion in December 2011 to Ksh. 61.9 billion in December 2012. Similarly, the ratio of gross NPLs to gross loans increased by 2% percent in December 2012.

Several studies have addressed the issue of CRB and loan default in Kenya. For instance, Ocharo (2013) looked at the effect of credit information sharing on the non performing loans among commercial banks in Kenya and established that non performing loans tended to reduce with increase in credit information sharing. This study ignored how the credit information sharing can be used as a strategic response instead looked at the relationship. Nyagweso (2013) examined the relationship between credit information

sharing and loan performance using a case of commercial banks in Kenya and established that credit information sharing in credit appraisal process to be of great significance. Ngugi (2012) studied the impact of credit information sharing on credit risk for commercial banks in Kenya, Bonaya's (2012) study measured loan performance using default rate while Gitahi (2013) studied the effect of credit reference bureaus on level of non-performing loans in Kenyan commercial banks. These studies mainly concentrated on the financial aspects of credit information sharing and not as a strategic response. The current study sought to address the strategic response angle by seeking answers to one research question: what is effect of adopting credit reference bureaus as a strategic response to loan defaulting among commercial banks in Kenya?

1.3 Research Objectives

The objectives of this study were;

i. To determine the extent to which commercial banks in Kenya have adopted CRBs as a strategic response among commercial banks in Kenya.

ii. To determine the influence of CRB adoption on the level of non-performing loans among commercial banks in Kenya.

1.4 Value of the Study

The findings of this study would be of benefit to the management of commercial banks in the development of credit risk management strategies that would enable them achieve their long-term goals in the process of financial intermediation.

This would inform their credit policies to ensure that keep the level of NPL within acceptable ranges.

The findings of this study would be used by policy makers especially the Ministry of Finance and specifically the Central Bank of Kenya in the development of policies and regulations governing issuance of credit in Kenya among commercial banks. These policies would go a long way in ensuring a stable financial sector in Kenya.

The findings of this study would also be valuable to customers who form the loan applicants pool among commercial banks in that it would inform them on the importance of maintaining a clean credit reference record. This would also encourage them to pay up their credit repayment installments on a timely basis

This study would also serve as a source reference material for future researchers and scholars. In addition, this study would suggest areas for further research where they can further knowledge on issues concerning credit referencing and loan default in Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is exploring the various studies and publications relating to the research problem and what various scholars and authors have said about the effect of credit reference bureaus on non-performing loans. This chapter critically reviews theoretical models explaining information sharing: adverse selection theory and moral hazard theory as well as interest rates. Also critical review of empirical studies undertaken and an effort to evaluate contributions is made and pertinent knowledge gaps identified.

2.2 Theoretical Foundation

The study is premised on the information asymmetry theory, adverse selection theory and moral hazards theory all of which explain the various ways of mitigating risks arising from credit transactions. These theories are explained in details below:

2.2.1 Information Asymmetry Theory

Information asymmetry describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah & Essel, 2003). It causes market to become inefficient and forces market participants to take risk because it is assumed that information which is provided is always inadequate, inaccurate, incomplete and untimely. The asymmetric information literature which looks at the impact of financial structure on economic activity focuses on the differences in information available to different parties in a financial contract.

Borrowers have an informational advantage over lenders because borrowers know more about the investment projects they want to undertake than do lenders (Akerlof, 1970). This informational advantage leads to adverse selection and a classic "lemons" problem first described by Akerlof (1970).

A lemons problem occurs in the debt market because lenders have trouble determining whether a lender is a good risk or alternatively is a bad risk, if the lender cannot distinguish between the borrowers of good quality and bad quality (the lemons) he will only make the loan at an interest rate that reflects the average quality of the good and bad borrowers. The result is that high quality borrowers will be paying a higher interest rate than they should because low-quality borrowers pay a lower interest rate than they should. One result of this lemons problem is that some high-quality borrowers may drop out of the market and so profitable investment projects that should be undertaken will not be. According to He and Wang (2007) a reasonable bank would try to eliminate asymmetric information by incurring search costs to acquire reliable information on the borrower requesting a loan. This theory helps explain the high interest rates charged by commercial banks whenever they do not have sufficient information about loan applicants.

2.2.2 Adverse Selection Theory

Pagano and Jappelli (1993) show that information sharing reduces adverse selection by improving banks information on credit applicants. In their mode of doing business, each banking institution has private information about local credit

applicants, but has no information about foreign applicants. If banks exchange information about their clients' credit worth, they can assess also the quality of foreign credit applicants and lend to them as carefully as they lend to local customers. By reducing information asymmetry between lenders and borrowers, credit registries allow loans to be extended to safe borrowers who had previously been priced out of the market, resulting in higher aggregate lending.

Padilla and Pagano (2000) show that if banks exchange credit information on defaults, borrowers are encouraged to apply more energy in their projects. In both models non-payment is a sign of bad quality for outside banks and carries the penalty of higher interest rates or no future access to credit facility and a high chance of default.

The adverse selection problem signals that when lenders cannot distinguish good from bad borrowers, all borrowers are charged an normal interest rate that reflects their pooled experience. If this rate is higher than worthy borrowers deserve, it will push some good borrowers out of the borrowing market, forcing in turn to banks charging even higher rates to the remaining borrowers. Through sharing of the credit information, the lender is able to distinguish bad borrowers from good borrowers in the market. Better access to information helps lenders measure borrower risk more accurately and to set loan terms and conditions accordingly. Good borrowers with low risk would be given more attractive prices, stimulating credit demand, and fewer higher-risk borrowers would be rationed out of the market because of lenders inability to offer these borrowers accommodating rates (Barron and Staten, 2008).

2.2.3 Moral Hazard Theory

The moral hazard problem implies that a borrower has the incentive to default unless there are consequences for his future applications for credit. This result from the difficulty lenders have in assessing the level of wealth borrowers will have accumulated by the date on which the debt must be repaid, and not at the moment of application. If lenders cannot assess the borrower's wealth, the borrower will be tempted to default on the borrowing. Forestalling this, lenders will increase rates, leading eventually to the breakdown of the market (Alary and Goller, 2001)

According to Rajan (1992), after extending a loan to a borrower a bank can exploit its private information on his quality and threaten to withhold credit to extract rents from him (hold up). Anticipating that the returns of his effort will be (partially) appropriated by the bank, the borrower has then a reduced incentive to exert effort ex ante. In turn, this worsens his repayment performance. Banks can tackle this incentive problem by committing ex ante to sharing one with another their proprietary information about borrowers' quality. Expecting that this information pooling will promote competition among lenders, borrowers will be reassured that no hold up will be possible and will step up their effort, lowering delinquency rates (Padilla and Pagano, 1997)

Lenders' Moral Hazard- Padilla and Pagano (1997) developed a model in which the performance of a loan depends on the quality of the borrower and on her effort. Initially, each bank possesses private information on the quality of a borrower.

Borrowers' Moral Hazard -A channel through which a credit bureau can affect lending outcomes is by imposing discipline on borrowers. In Padilla and Pagano (2000), lenders' information sharing induces borrowers to exert effort because they "perform for a broader audience", that is, if they are delinquent on their contractual obligations, their misconduct will be disclosed to more lenders. Thus in this context information sharing mitigates borrowers' moral hazard. However, Padilla and Pagano (2000) also underscore that this effect weakens if lenders pool information on borrowers' characteristics in addition to information on delinquencies. In this case, a high quality borrower knows that anyway his high quality will be disclosed to lenders, regardless of whether his credit history is good or bad.

2.3 Strategic Credit Risk Management Strategies

Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organisation. Experimental evidence by Brown and Zehnder (2007) shows that a public credit reference bureau can motivate borrowers to repay loans, when they would otherwise default. The impact of information sharing on the level of non-performing loans has been tested by two cross-country studies. Based on their own survey of credit reporting in 43 countries, Jappelli and Pagano (2002) show that bank lending to the private sector is larger and default rates are lower in

countries where information sharing is more solidly established and extensive. These cross-sectional relations persist also controlling for other economic and institutional determinants of bank lending, such as country size, GDP, growth rate, and variables capturing respect for the law and protection of creditor rights.

Djankov et al. (2007) confirm that private sector credit relative to GDP is positively correlated with information sharing in their study of credit market performance and institutional arrangements in 129 countries for the period 1978–2003. Firm-level data suggest that information sharing may indeed have a differential impact on credit availability for different firm types. Love and Mylenko (2003) combine cross-sectional firm-level data from the 1999 World Business Environment Survey with aggregate data on private and public registries collected in Miller (2003). They find that private credit bureaus are associated with lower perceived financing constraints and a higher share of bank financing (while public credit registries are not), and that these correlations are particularly strong for small and young firms.

Galindo and Miller (2001) also provide evidence that information sharing reduces credit constraints at firm level. Examining balance sheet data of large companies in 23 countries they find a positive relation between credit access and an index of information sharing. Evidence also supports the theory that information sharing reduces moral hazard. Doblas-Madrid and Minetti (2009) find that if lenders enter credit information sharing institution, their borrowers improve their repayment performance –delinquent payments on leases and loans decrease.

Brown and Zehnder (2007) find empirical evidence that the lending market would collapse due to credit risk in the absence of information sharing institution and reputational banking. However, their study also showed that establishing credit reference bureaus encouraged borrowers to repay their loans by allowing lenders to identify borrowers with a good payment history. The study showed that an information sharing institution positively impacted the credit market in the following ways: Without credit reference bureaus, borrowers had a tendency to repay loans only when they planned to maintain their current lending relationship. However, in economies with a credit information institution, borrowers had a higher chance of repaying their loans regardless of whether they were planning to continue their current lending relationship or not. Thus, it can be implied that credit sharing institutions, by documenting borrower behaviour, can positively impact borrower repayment and reduce NPLs.

The presence of CRBs reduces the information monopoly of a lender on its borrowers, thus reducing the extra rents that lenders can charge their clients. According to Jared Getenga (2007), one of the features that banks deliberate when deciding on a loan credit application is the estimated chances of recovery. To arrive at this, credit information is required on how well the applicant has honored past loan obligations. This credit information is important because there is usually a definite relationship between past and future performance in loan repayment. Very often, this history is not within the bank's reach because the potential borrower's repayment records are scattered in the various archives of the other financial institutions where the customer has previously borrowed. Whenever a

borrower has credit information that the lender cannot access, this is officially referred to as information asymmetry. Kalberg and Udell (2003) also point out that information exchange from multiple sources improves the precision of the signal about the quality of the credit seeker. As a result, the default rate reduces. In contrast, the effect on lending is vague, because when banks exchange credit information about borrowers' categories, the implied increase in lending to good borrowers may fail to compensate for the reduction in lending to risky borrowers.

Banking competition for borrowers strengthens the positive effect of information sharing on lending: when credit markets are competitive, information sharing reduces informational interest charged and increases banking competition, which in turn leads to increased lending. Information sharing can also create incentives for borrowers to perform in line with banks' interests. Klein (1992) shows that information sharing can motivate borrowers to pay their loans, when the legal atmosphere makes it difficult for banks to implement credit agreements. In this model borrowers repay their loans because they know that defaulters will be blacklisted, reducing external finance in future.

Some papers analyze the effectiveness of credit bureaus, and generally find that credit reports are an important tool to assess consumer default risk (Chandler and Parker, 1992; Barron and Staten, 2003). This is confirmed by Kalberg and Udell (2003), who document that trade credit history in Dun & Bradstreet's reports improves default predictions relative to financial statements alone. Also Cowan and De Gregorio (2003) find that in Chile positive and negative information in

credit reports contributes to predict defaults. This improved assessment of credit risk appears to translate into higher lending. Galindo and Miller (2001) find a positive relation between access to finance (debt) and an index of information sharing in the Worldscope database, using the firm-level sensitivity of investment to cash flow as a proxy of credit constraints. They find that well-performing credit reporting systems reduce the sensitivity of investment to cash flows.

Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs in these countries. The author attributes the strong association between the macroeconomic factors and non-performing loans to the undiversified nature of some African economies.

2.4 Strategic Credit risk management and Loan Defaulting among Banks

Commercial banks and financial institutions are now exposed to non performance of loans caused by high default rates by borrowers. Studies show that the management of default risk and ultimate reduction of NPLs has become essential for the survival of banks. The focus of good risk management is the identification and treatment of these risks and objective is to add value to all the activities of the commercial banks. The effect of such management from the studies shows that it increases the probability of success, and reduces the probability of NPLs and hence the profitability of the banks.

The presence of CRBs from the studies carried out depicts that there is a reduction the information monopoly of a lender on its borrowers, thus reducing the extra rents that lenders can charge their clients. A number of studies have been carried out about many aspects of information sharing in other parts of the world outside Africa and little focus has been laid to African and more so Kenya. This study therefore was done to fill this knowledge gap by establishing the effects of CRBs on level of NPLs in commercial banks in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used to carry out the survey, what informed the selection of the research design, why the population was selected, the sampling method used, the data collection instrument, how data was analyzed and data presentation.

3.2 Research Design

This study used descriptive, cross-sectional research design. Descriptive research is adopted in order to observe, describe and document aspects of a situation as it naturally occurs (Polit & Hungler 1999). This involves the collection of data that will provide an account or description of individuals, groups or situations. Descriptive design addresses the "what" question of the population under study. Cross sectional survey is a type of descriptive research design involving the collection of information from any given sample of the population element once (Ngechu, 2004). Mugenda and Mugenda (2003) noted that a survey attempts to collect data from members of a population and describes phenomenon by asking individuals about their perceptions, attitudes, behaviour or values.

Cross-sectional research design has been chosen because it appeals for generalization within a particular parameter. The data obtained was able to be standardized to allow easy comparison. Moreover, it explores the existing status of two or more variables at a given point in time. This design would enhance a systematic description that is accurate, valid and reliable as possible the adoption

of credit reference bureaus as a strategic response to loan defaulting among commercial banks in Kenya.

3.3 Population of the Study

According to Bryman and Bell, (2003) a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. It comprises of all potential participants that can make up the study group. The target population of the study was 43 commercial banks operating in Kenya as at December, 2014. All these banks have head offices in Nairobi which makes them easily accessible. Therefore, a census study was conducted where all the banks will be included in the study.

3.4 Data Collection

The study used primary data which was collected using a questionnaire. The questionnaire made use of both open and closed ended questions. For the closed ended questions, the study adopted a five point Likert scale where the target respondents would indicate the extent of their agreement/disagreement with each statement. The questionnaire was subdivided into distinct sections including: section A which covered demographic information about the respondents; section B covered strategic response strategies while section C covered the effect of credit reference bureau on loan default.

The study targeted one credit department managers in each commercial bank because of their role in credit risk management in the banks. The questionnaire

was administered through a drop and pick later method to allow the target respondents time to respond to the questionnaire.

3.5 Data Analysis

The data collected from the field was first edited to identify and remove errors made by respondents. Edited data was then coded in order to translate responses into specific categories. Code numbers was assigned to each answer of research question and from this a coding list or frame was obtained. Coding was expected to organize and reduce research data into manageable summaries easy for report writing. Descriptive statistics including: means, percentages and frequency distributions was used to describe the responses as it is a better method of presenting the findings of the study. Presentation of data was done using tables,

CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the data collected, analysis and interpretation. The study sought to establish the effect of adopting credit reference bureaus as a strategic response to loan defaulting among commercial banks in Kenya**.** To achieve this, the study was guided by two objectives: determining the extent to which commercial banks in Kenya have adapted CRBs as a strategic response among commercial banks in Kenya; and to determine the influence if CRB adoption on the level of non-performing loans among commercial banks in Kenya. Data was collected using questionnaires as the data collection instruments whose presentation and interpretation is given below through the use of a frequency distribution tables, mean and standard deviation.

4.1.1 Response Rate

The study targeted 43 commercial banks operating in Kenya as at December, 2014. Out of the 43 distributed questionnaires, 32 were filled and returned. This translated to a response rate of 74%. This response was good enough and representative of the population and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 70% and above is excellent.

4.2 General Information

The respondents were requested to give their demographic information and the findings are clearly illustrated below.

4.2.1 Years Worked with the Bank

The respondents were asked to indicate the number of years they had worked with their respective banks. The findings are well illustrated in the Table 4.1

Table 4.1 Years Worked with the Bank

Years	Frequency	Percentage
Below 3 years	5	16%
4-6 years	6	19%
7-9 years	11	34%
10 years and above	10	31%
Total	**32**	**100%**

Majority 34% of the respondents had worked with their current bank for a period of between 7-9 years followed by those who had worked for between 10 years and above at 31% and those who had worked for 4-6 years were at 19%. The least period was below 3 years at 16% each. These findings show that the respondents had worked with their current banks long enough to understand credit reference bureaus as a strategic response to loan defaulting in their banks.

4.2.2 Nature of operations for the Banks

The study sought to establish the nature of operations for the banks. The findings are well illustrated below in the Table 4.3:

Table 4. 2 Nature of operations for the Banks

Nature of Operations	Frequency	Percentage
Regional	11	34%
Multinational	8	25%
Local	7	22%
Other	6	19%
Total	**32**	**100%**

From the findings in table 4.3 above the majority 34% of the banks were operating regionally, 25% were multinationals, 22% were local banks and 19% had specified other operations. This shows that the banks had adopted credit reference bureaus as a strategic response to loan defaulting due to their nature of operations.

4.3 Strategic Response Strategies

Several strategic responses were identified against which the respondents were requested to indicate the extent to which they applied them in their banks. A five point Likert scale was provided ranging from: 1- no extent, 2- little extent, 3= moderate extent, 4= great extent, 5= very great extent. From the responses, descriptive measures of central dispersion: mean and standard deviation were used for ease of interpretation and generalization of findings. The findings are clearly illustrated below.

Table 4. 3 Strategic response strategies

	Mean	Std Dev
We use credit referencing bureau in assessing the credit score of loan applicants	4.3056	0.71641
We apply credit scoring mechanism in appraisal	3.9444	0.86287
We share the credit scores of our customers with the credit reference bureau	3.5278	1.03633
Our lending rates are based on customers risk profile / credit scoring	4.0463	0.56674
CRB has increased the ability of the Bank to capture information about loan applicants	4.1111	0.65049
All our loans are secured	4.5093	0.60224

From the findings in table 4.3 above, use of credit referencing bureau in assessing the credit score of loan applicants had a mean of 4.3056 with a standard deviation of 0.71641; lending rates are based on customers risk profile / credit scoring had a mean of 4.0463 with a standard deviation of 0.56674; CRB has increased the ability of the Bank to capture information about loan applicants had a mean of 4.111 with a standard deviation of 0.6504 and loans are secured had a mean of 4.5093 with a standard deviation of 0.60224. This shows that to a great extent these strategic responses were applied by the banks in order to deal efficiently with the loan applicants.

On applying credit scoring mechanism in appraisal, had a mean of 3.9444 with a standard deviation of 0.86287 and sharing the credit scores of our customers with the credit reference bureau had a mean of 3.5278 with a standard deviation of 1.03633.The results shows that to a moderate extent the banks were using credit score mechanism and sharing credit scores with credit reference bureau as their strategic response to loan defaulting among their customers.

4.4 Effect Of Credit Reference Bureau on Loan Default

Several statements on how credit reference bureau affects loan default rates in commercial banks were identified against which the respondents were requested to indicate the extent to which they applied them in their banks. The findings are clearly illustrated below.

Table 4. 4 Effect of Credit Reference Bureau on Loan Default

	Mean	Std Dev
The level of nonperforming loans has reduced	4.509	0.602
The level of nonperforming loans has increased	2.268	1.250
CRB reduced information monopoly among banks	4.314	0.790
CRB has enabled differentiated lending	4.194	0.613

From the findings in table 4.4 above, the level of nonperforming loans has reduced had a mean of 4.509 with a standard deviation of 0.602, CRB reduced information monopoly among banks had a mean of 4.314 with a standard deviation of 0.790 and CRB has enabled differentiated lending had a mean of 4.194 with a standard deviation of 0.613. To a large extent the level of nonperforming loans had reduced due to adoption of credit revenue bureaus and monopoly among banks, also it enables differentiated lending among commercial banks. The level of nonperforming loans has increased had a mean of 2.268 with a standard deviation of 0.602 to a little extent it had affected the level of nonperforming loans.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of key findings of the study, conclusion, limitations of the study and recommendations for future research. The study findings are presented on the effect of adopting credit reference bureaus as a strategic response to loan defaulting among commercial banks in Kenya. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study.

5.2 Summary of Key Findings

The results showed that most respondents indicated they use CRB in assessing the credit score of loan applicants to a great extent. It was revealed that commercial banks apply credit scoring mechanism in appraisal. The respondents indicated that due to the credit reference, they share the credit scores of their customers with the credit reference bureau. Most of the respondents indicated that lending rates are based on customers risk profile / credit scoring. The findings revealed that CRB has increased the ability of the Banks to capture information about loan applicants. The study also established that all the loans offered by the commercial banks were secured.

The study findings revealed that most of the respondents indicated that their banks level of nonperforming loans has reduced. However, to a little extent level of nonperforming loans had increased. The results showed that according to most of

the respondents, CRB reduced information monopoly among banks. The respondents also indicated that CRB has enabled differentiated lending.

5.3 Conclusion

The results revealed that the strategic response strategies increase in confidence of commercial banks while giving loans unlike before the CRB became operational. The study established that more and more commercial banks have turned to CRB for credit information to minimize the loan defaulting. This is evident when the CRB reports are used for the loan applications.

Study concludes that CRBs offers credit scoring and information sharing that can facilitate the building of information capital that will guide the pricing of loans by commercial banks. Banks at the appraisal stage can price loans thus enhanced information set as compared to the current situation. Customers are armed with their credit histories and will also be empowered to negotiate better terms for credit with banks.

5.4 Limitations of the Study

The target population used for this study was all commercial banks in Kenya only whereas all lending institutions may require the services of CRBs; only banks have access to this service thus limiting the study of the adoption of CRBs as a strategic response to loan defaulting in commercial banks in Kenya only.

The fact that the study only used primary data limited the scope of the study. Secondary data may have been collected to determine factors like the loan and advances awarded and if the banks CRBs had an effect on the level of NPLs.

5.5 Recommendations

The study recommends that commercial banks should adopt adequate credit referencing mechanisms as the concept has positive contribution to reduction of loan default. Credit referencing should be encouraged as one way of sustaining the central role played by banks and other financial institutions in extending financial services within an economy as it help lenders make faster and more accurate credit decisions.

Based on the findings, the researcher would recommend that the banks should establish a credit management team that would be responsible and ensure that all customers who may seek to take up a loan with the bank are vetted and checked against the licensed CRBs in Kenya before the approval. Other sectors in the industry may make use of customer information system by asking their customers, employees and suppliers for their credit reports which are readily available from the CRBs before transacting, employing or doing business with them as this will go a long way in enhancing a culture of credit worthiness.

5.6 Suggestions for further studies

Further studies can be performed on other sectors of the economy other the banking industry on the factors that may affect the level of nonperforming loans which may result in different findings.

Further research on the change of the level of nonperforming loans can be carried out by institutions that furnish CRBs with defaulter's information such as Higher

Education Loan Board so as to determine if there is an effect of CRBs on their non performing portfolios.

Further research can be done on the positive effect information gathered by CRBs would have on credit scoring and access to credit. Currently, CRBs only share negative information of borrowers.

REFERENCES

Akhtar, S. (2007). Pakistan: changing risk management Paradigm, Perspective of the regulator, ACCA Conference- CFOs: *The Opportunities and Challenges*. Ahead: Karachi.

Alary, D. & Goller, C. (2001). Strategic default and penalties on the credit market with   potential judgment errors. *EUI working paper*.

Allen, L. Delong, G. & Saunders, A. (2003). Issues in Credit Risk Modeling of Retail Markets. *Journal of Banking and Finance*, Vol 28(4).

Asian Development Bank, (2001). *Financial Sector Development in the Pacific Developing Member Countries*. Manila: Asian Development Bank.

Auronen. L. (2003). Asymmetric Information: Theory and Applications. Paper presented in the Seminar of Strategy and International Business Helsinki University of Technology.

Barber, B., & Lyon J. (1996). Detecting abnormal operating performance: The empirical power and specification of test statistics. *Journal of Financial Economics* 41: 359-399

Bundesbank (2003). The New Basel Capital Accord, part 2: the first pillar – minimum capital requirements.

Central Bank of Kenya (2010). Credit Information Sharing in Kenya, Nairobi Kenya.

Central Bank of Kenya (2006). Prudential Guidelines for Institutions Licensed under the Banking Act, Bank Supervision Department.

Central Bank of Kenya (2014). Bank Supervision Report, Nairobi Kenya

Collins, N. J. & Wanjau, K. (2011). The Effects of Interest Rate Spread on the Level of Non-Performing Assets: A Case of Commercial Banks in Kenya, International *Journal of Business and Public Management,* 1(1): 58-65

Cooper, R.D., and Schindler, P.S. (2003). *Business Research Methods* (8th Edition) New Delhi; Tata Mc Graw-Hill Edition.

Fofack, Hippolyte (2005). Non-performing loans in sub-Saharan Africa: Causal Analysis and Macroeconomic Implications. World Bank Policy Research *Working Paper No. 3769*.

FSD (Financial Sector Deepening) (2012). *Kenya Credit Information Sharing Initiative progress Report 2008-2011*: Challenges and Opportunities, Nairobi Kenya

Hamberger, K. &Diehm, A. (2004). Veräußerung von Non-performing Loans: Motive, Auswirkungen, Lösungsansätze. *Die Bank,* 3(182-5)

Japelli, T & Pangano, M. (2000). Information sharing in credit markets. *The European Experience. Centre for Studies in Economics and Finance, WP* 35.

Japelli, T & Pangano, M. (2002). Information sharing, lending and defaults; Cross Country evidence. *Journal of Banking Finance*, 33(3), 2001.

Japelli, T and Pangano, M. (2005). Role of Credit Information sharing. *Centre for studies in Economics and Finance, WP* 136

Kabiru J. M. G. (2002). The Relationship between Credit Risk Assessment Practice and the level of Non-performing Loans of Kenyan Banks, Unpublished MBA Project University of Nairobi.

Kashyap, A.K., Rajan, R., Stein, J.C. (2002). Banks as liquidity providers: an explanation for the coexistence of lending and deposit-taking, *The Journal Finance,* 57(1):33-73.

Kothari, C.R. (2008). *Research methodology, Methods and Techniques.* New Delhi New Age International (P) Limited Publishers.

MacKinlay, A. C., (1997), Event studies in economics and finance, *Journal of Economic Literature* 35(4), 13-39.

Maina, T. (2003). *Risk Based Capital Standards and Riskiness of Bank Portfolios in Kenya.* An empirical investigation.

Mugenda, A.G. (2008). *Social Science Research*; Theory and Practice, Nairobi; Applied Research and Training Services.

Olegario, R. (2003). *Credit Reporting Agencies*: A Historical Perspective. Margaret J. Miller, Ed. Cambridge, Massachusetts: MIT Press.

Padilla, A. J. & Marco, P. (1996). Sharing Default Information as a Borrower Discipline Device, *Industry Study Program Discussion Paper* No. 73, Boston University,

Padilla, A. J. & Marco, P. (1997). Endogenous Communication among Lenders and Entrepreneurial Incentives. *The Review of Financial Studies*, 10(1), 205-236.

Padilla, A.J. & Pagano, M., (2000). Endogenous Communication among Lenders and *Entrepreneurial Incentives, Papers* 9407

Pagano, M. & Tullio, J. (1993). Information Sharing in Credit Markets. *The Journal of Finance*, 43(5), 1693-1718.

Pauly, M. V. (1968).The Economics of Moral Hazard: Comment. *American Economic Review* 58(2), 531 – 537.

Richard, E. (2006). *Credit Risk Management Policy and Strategies; The case of a Commercial Bank in Tanzania,* BA Publications

Vives, X. (1990). Trade Association Disclosure Rules, Incentives to Share Information and Welfare. *Rand Journal of Economics* 21, 409-430.

Von Thadden, E.L. (2004). Asymmetric information, bank lending, and implicit contracts: The Winner's Curse. Finance Res. Letters 1: 11–23.

APPENDICES

APPENDIX I: QUESTIONNAIRE

AN EVALUATION OF THE ADOPTION OF CREDIT REFERENCE BUREAUS AS A STRATEGIC RESPONSE TO LOAN DEFAULTING AMONG COMMERCIAL BANKS IN KENYA

SECTION A: DEMOGRAPHIC INFORMATION

1. Name of the bank (optional) _____

2. Your position in the Bank _____

3. How long have you been working in this Bank?

    Below 3 years [   ]   4-6 years   [   ]

    7-9 years   [   ]   10 years and above   [   ]

4. Nature of operations for the Bank

    Regional   [   ]   Multinational [   ]

    Local   [   ]   Other   (Specify)

    _____

SECTION B: STRATEGIC RESPONSE STRATEGIES

5. Below are several strategic responses adopted by commercial banks in managing loan defaulting. On a scale of 1-5 kindly indicate the extent to which each of these strategies has been applied by your bank. Use the scale 1- no extent, 2- little extent, 3= moderate extent, 4= great extent, 5= very great extent.

Strategic response strategies	1	2	3	4	5
We use Credit Referencing Bureau in assessing the credit score of loan applicants					

We apply credit scoring mechanism in appraisal					
We share the credit scores of our customers with the credit reference Bureau					
Our lending rates are based on customers risk profile / credit scoring					
CRB has increased the ability of the Bank to capture information about loan applicants					
All our loans are secured					

6. In what other ways has your bank dealt with loan default?

_____

_____

___

SECTION C: EFFECT OF CREDIT REFERENCE BUREAU ON LOAN DEFAULT

7. Below is a list of several statements on how credit reference bureau affects loan default rates in commercial banks. Kindly indicate the effects it has had on the level of loan default in your bank.

	1	2	3	4	5
The level of nonperforming loans has reduced					
The level of nonperforming loans has increased					
CRB reduced information monopoly among banks					
CRB has enabled differentiated lending					

APPENDIX II: LIST OF CREDIT REFERENCE BUREAUS

1. Credit info Credit Reference Bureau Limited

2. Metropol Credit Reference Bureau Limited

3. Trans Union Credit Reference Bureau

Source: (Central Bank of Kenya, 2015)

APPENDIX III: COMMERCIAL BANKS IN KENYA

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank
6. CFC Stanbic Bank
7. Chase Bank Kenya
8. Charterhouse Bank
9. Citibank
10. Commercial Bank of Africa
11. Consolidated Bank of Kenya
12. Cooperative Bank of Kenya
13. Credit Bank
14. Development Bank of Kenya
15. Diamond Trust Bank
16. Dubai Bank Kenya
17. Ecobank
18. Equatorial Commercial Bank
19. Equity Bank
20. Family Bank
21. Fidelity Commercial Bank Limited
22. Fina Bank
23. First Community Bank
24. Giro Commercial Bank
25. Guardian Bank
26. Gulf African Bank
27. Habib Bank
28. Habib Bank AG Zurich
29. I&M Bank
30. Imperial Bank Kenya
31. Jamii Bora Bank
32. Kenya Commercial Bank
33. K-Rep Bank
34. Middle East Bank Kenya
35. National Bank of Kenya
36. NIC Bank
37. Oriental Commercial Bank
38. Paramount Universal Bank
39. Prime Bank (Kenya)
40. Standard Chartered Kenya
41. Trans National Bank Kenya
42. United Bank for Africa
43. Victoria Commercial Bank

Source: (Central Bank of Kenya, 2015)