

**RELATIONSHIP BETWEEN INFORMATION SHARING AND
LEVELS OF NON-PERFORMING LOANS IN COMMERCIAL BANKS IN
KENYA**

BY

KINYANJUI EDWARD KAMAU

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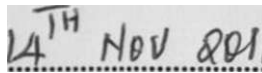
**A Research Project Presented In Partial Fulfillment of the Requirements of
the Master of Business Administration (MBA) Degree, School of Business,
University of Nairobi.**

OCTOBER, 2011

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university for academic credit

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

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DEDICATION

I dedicate this work to my dad and mum David Kamau and Jacinta Njeri for their patient investment into my studies; to my siblings, for their frequent moral and material support.

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My sincere gratitude goes to the Almighty God for His unrelenting grace during my study at the University of Nairobi since the year 2009 and successful completion of my studies.

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To my classmates Martin Migwi and Nishat Shayyida, thank you for helping me walk this journey with courage and determination.

Above all, may God's blessings abound with all who have contributed to my success in this research project and throughout my postgraduate studies.

ABSTRACT

This study set out to establish the relationship between information sharing and levels of non-performing loans in commercial banks in Kenya. In Kenya there exist two licensed Credit Reference Bureaus that facilitate sharing of information. The type of information shared for clients are both negative and positive; however it is not clear on the efficacy of these two bodies in fulfilling their goals. This study thus set out to explore the problem of non-performing loans in commercial banks due to asymmetric sharing of information on clients' specifically, on defaulted loans, total arrears and total loan exposures. Theories predict that information sharing among lenders attenuates adverse selection and moral hazard and can therefore increase lending and reduce default rates.

Limits to information-sharing on the financial history of borrowers exist mainly because of credit institutions fear of competition. Poor loan quality has its roots in the informational challenges which afflict financial markets where developing economies are the worst affected. The study used causal relationship design while the population constituted registered and operational commercial banks as at 31st December 2004 licensed to carry out banking business under the Banking act Cap 488 Part II Sec (4) (5). The research study utilized both secondary and primary data. Quantitative data on non-performing loans for the commercial banks was extracted from annual reports, profit and loss accounts, balance sheets and cash flow statements. A period of one year was considered (2010). These statements were obtained from the commercial banks, published financial statements from local newspapers as well as from Kenya institute of bankers Association offices. These sources were preferred as they were authoritative. Data on information sharing credit was obtained through the use of questionnaires that were directed to commercial banks in Kenya. The questionnaires were administered to staff in credit departments. The questionnaires consisted of both closed and open ended questions and were dropped to be picked later. The questionnaires were coded in the Statistical Package for Social Sciences (SPSS) computer software for analysis of responses and a report on the findings was written. The study concludes that, sharing of clients' information among commercial banks and individuals helps reduce the level of non-performing loans advanced by commercial banks.

ABBREVIATIONS AND ACRONYMS

CRBs	Credit Reference Bureaus
DTMs	Deposit Taking Micro Finance Institutions
FRL	Financial Reconstruction Law
MFC	Mortgage Finance Company
NPLS	Non performing loans
SPSS	Statistical Package for Social Sciences
TAA	Tactical Asset Allocation

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

A large body of literature shows that asymmetric information between borrowers and lenders can prevent the efficient allocation of credit. Lenders are often unable to observe the characteristics of borrowers, including the riskiness of their investment projects, and this induces adverse selection problems. Lenders may also be unable to control the actions that borrowers take after receiving a loan. A borrower may relax his effort to prevent default or hide the proceeds of his investment to keep from having to repay his debts. Even a solvent borrower may try to avoid repayment if the lender cannot observe or sanction his actions. The consequence is that lenders may ration credit or charge high borrowing rates. It is often assumed that the only way lenders can overcome these informational problems is to produce information about their customers via screening and monitoring. For instance, they can interview applicants, visit their business before and after granting the loan, and gather information from public records. If lenders operate on a large scale, these data can be used for statistical risk management to grant and price loans on the basis of past performance (Jappelli and Pagano, 1999)

It is the exchange of information between lenders that distinguishes a credit bureau from other agencies that collect and process valuable information from public sources and private investigators. Credit bureaus often do collect and process such data, but this is not their distinguishing characteristic. Lenders who provide their private information to credit bureaus are granted access to the common database in so far as the data provided are timely and accurate. Credit bureaus are exposed to a potential conflict of interest, especially when they are owned by the lenders themselves: each lender would like to exploit the information provided by other lenders without disclosing his own. This explains why sanctions are invariably threatened to any credit granter who fails to supply data or provides inaccurate information. In other words, credit bureaus are based on the principle of reciprocity, which is generally stated in the contractual agreement between the bureau and credit grantors. Most credit grantors do supply their information regularly, particularly those that have accounts receivable on tape. Around the world, arrangements

of this type are found both in the household credit market and in business lending, in varying degrees and with different institutional features. Information exchange and the economics of information exchange have been the subject of a large body of academic literature, which shows that asymmetric information between borrowers and lenders can prevent the efficient allocation of credit in a market. Academic literature has identified asymmetric information as the defining characteristic of credit markets. These asymmetries cause adverse selection and moral hazard. For some, asymmetric information may eventually act as a barrier to entry. Literature on credit bureaus, on the contrary, is more recent and is concentrated in a handful of authors. According to this literature, several reasons account for the existence of credit bureaus. First, they ensure the best assessment of consumers' creditworthiness and their ability to repay prior to the underwriting of credit. Credit reporting thereby allows minimising the occurrence of default and controlling the moral hazard problem, acting as a 'borrowers disciplinary device'. Second, credit reporting assists in eliminating or diminishing the effects of adverse selection, ensuring 'more credit under better conditions'. For these reasons, commercial banks or financial institutions operating in the field attach high importance to the process of screening applicants prior to the granting of credit. Credit bureaus are an essential part of this process. (Khalil and Parigi, 2001) also show the importance of the screening procedure in relation to the large fixed recovery costs. The adverse selection problem occurs because lower-quality borrowers, with higher credit risks, are the ones who are the most willing to pay higher interest rates, reducing the gains to both borrowers and lenders (Alary and Gollier, 2001).

The adverse selection problem signals that when lenders cannot distinguish 'good' from 'bad' borrowers, all borrowers are charged an average interest rate that reflects their pooled experience. If this rate is higher than good borrowers deserve, it will push some good borrowers out of the market, leading in turn to banks charging even higher rates to the remaining borrowers. Through the sharing of information, the lender is able to distinguish 'bad' from 'good' borrowers in the market. Better access to information helps lenders measure borrower risk more accurately and to set loan terms accordingly. Lower-risk borrowers would be offered 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, 2000). 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 latter will be tempted to default on their debt. Anticipating this, creditors will raise rates, leading eventually to the breakdown of the market (Alary and Goller, 2001).

Credit bureaus collect various kinds of financial information on individuals. It is essential that credit and finance companies have access to this information in order to assess the creditworthiness of borrowers prior to granting them credit. Some credit bureaus only collect and make available information on default payments, whereas others compile extensive files on outstanding credit and the repayment history of the individual. An important distinction is made in the industry between negative (or black) information, which is collected only on borrowers with a history of payment defaults and positive (or white) information which is collected on all borrowers in the market, regardless of any previous payment incident. According to (Amparo, 2002) Credit bureaus have an important function within the credit market. They facilitate the assessment of a borrower's creditworthiness and act as a borrower's disciplinary mechanism, becoming key tools in the functioning of the credit industry, in particular for consumer credit institutions. In order for reputation to act as an incentive within the system, the borrower has to know that his payment record will become public knowledge: other lenders must be able to have access to information. In general, the major lending criterion is a bank's prior experience with the borrower, that is, the 'reputation' the borrower has established with the bank. If the borrower is not a client, the bank will first check his or her record with the credit bureau to learn of the existence of any unpaid credit.

By definition, a Non performing loan is a financial portfolio that has been advanced for which the borrower is experiencing difficulties in repayment in line with the agreed terms (Reilly 1997). The issue of Non-Performing Loans (NPLs) has gained increasing

attentions in the last few decades. The immediate consequence of large amount of NPLs in the banking system is bank failure. (Dermirgue 1989), observed that that asset quality is a statistically significant predictor of insolvency and that failing banking institutions always have high level of non-performing loans prior to failure. This has made it necessary to develop an extensive electronic network of credit information by the Credit Reference Bureau Kenya (Bank supervisory report,2010) The Kenyan banking sector was in the 80's and 90's saddled with a momentous Non-Performing Loans (NPLs) portfolio. This invariably led to the collapse of some banks. One of the catalysts in this scenario were "Serial defaulters", who borrowed from various banks with no intention of repaying the loans. Undoubtedly these defaulters thrived in the "information asymmetry" environment that prevailed due to lack of a credit information sharing mechanism. It is argued that the non-performing loans are one of the major causes of the economic stagnation problems. Each non-performing loan in the financial sector is viewed as an obverse mirror image of an ailing unprofitable enterprise. From this point of view, the eradication of non-performing loans is a necessary condition to improve the economic status. If the non-performing loans are kept existing and continuously rolled over, the resources are locked up in unprofitable sectors; thus, hindering the economic growth and impairing the economic efficiency. It is on this that saw the establishment of Credit reference Bureau by the Central Bank of Kenya.

As at 31st December 2010, the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions (43 commercial banks and 1 mortgage finance company), 2 representative offices of foreign banks, 5 Deposit-Taking Microfinance Institutions (DTMs) and 126 Forex Bureaus. 31 of the banking institutions are locally owned while 13 are foreign owned. The locally owned financial institutions comprise of 3 banks with public shareholding, 27 privately owned commercial banks, 1 mortgage finance company (MFC) while 5 DTMs and 126 Forex bureaus are privately owned. Bank supervision annual report (2010).The banking environment in Kenya has, for the past decade, undergone many regulator)' and financial reforms. These reforms have brought about many structural changes in the sector and have also encouraged foreign banks to enter and expand their operations in the country (Kamau, 2009). Kenya's financial sector is largely bank-

based as the capital market is still considered narrow and shallow (Ngugi, 2006). Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks (Kamau, 2009). In fact Oloo ,(2009) describes the banking sector in Kenya as the bond that holds the country's economy together. Sectors such as the agricultural and manufacturing virtually depend on the banking sector for their very survival and growth. The performance of the banking industry in the Kenya has improved tremendously over the last ten years, as only two banks have been put under CBK statutory management during this period compared to 37 bank-failures between 1986 and 1998 (Mwega, 2009). In this study, the focus was on the relationship between information sharing and the level of Non-Performing Loans in commercial banks in Kenya to empirically evaluate how its introduction has affected commercial banks' lending behavior.

1.2 Statement of the Problem

According to Jentzsch, N., & Riestra A., (2003) a recent theoretical research suggests a threefold effect of lenders' exchange of information about borrowers. First, credit bureaus improve banks' knowledge of applicants 'characteristics and permit more accurate prediction of repayment probability. This allows lenders to target and price their loans better, easing adverse selection problems. Second, credit bureaus reduce the informational rents that banks could otherwise extract from their customers. They tend to level the informational playing field within the credit market and force lenders to price loans more competitively. Lower interest rates increase borrowers' net return and augment their incentive to perform. Third, credit bureaus work as a borrower discipline device: every borrower knows that if he defaults his reputation with all other potential lenders is ruined, cutting him off from credit or making it more expensive. This mechanism also heightens borrowers' incentive to repay, reducing moral hazard. Jappelli et. al. (1999).According to Pagano and Jappelli (1993), information sharing improves the pool of borrowers, decreases defaults and reduces the average interest rate. Padilla and Pagano (1997) Information sharing can reinforce borrowers' incentives to perform, either via a reduction of banks' rents or through a disciplinary effect. (Barth, Lin, Lin & Song, 2008) show that information exchange will assist in minimizing lending corruption in banks by reducing information asymmetry between consumers and lenders. All these

theoretical research, shows that information sharing between lenders can foster credit activity and increase borrowers' incentives to repay.

However, some researchers have different suggestions on credit information sharing; Kallberg and Udell (2003) argue that there are problems in terms of coverage and bias by public and private Credit reference bureaus. They points out that the problems may be more severe in voluntary information sharing than where there is government intervention. In this extent there is an effect of information sharing in credit market.

Pagano and Japelli, (1999) states that econometrically, one way to go around the endogeneity of information sharing with respect to lending is to relate credit market performance to lagged measures of the quality and intensity of information sharing. Again this study is based from the side of information sharing toward the credit market.

Kiragu (2010) did a study on the relationship between techniques for management of NPLs and the level of NPLs of commercial banks in Kenya. Chemjor (2007) studied the significance of the factors contributing to non-performing loans problems in commercial banks in Kenya. Kagio (2010) conducted a study on the relationship between loan portfolio and the level of nonperforming loans of commercial banks in Kenya. In these studies the issue of the effect of Information sharing on NPLs has not been addressed. Sharing of credit information in Kenya was put mandatory for all commercial banks in Kenya and therefore knowledge on its relationship with NPLs levels is important .On this account this study was undertaken to fill the information gap on the relationship between Information sharing and levels of NPLs in commercial banks in Kenya.

1.3 Objective of the Study

- i. To establish the levels of nonperforming loans; and
- ii. To establish the relationship between Information sharing and levels of NPLs in commercial banks in Kenya.

1.4 Significance of the Study

Commercial Banks

When a lender first evaluates the creditworthiness of an individual, he gathers information from two principal types of sources. The first source is the lender's own database developed through years of experience in the market and which is composed of past and present clients. The second source is the information available via credit bureaus, which exchange information on the basis of reciprocal agreements and collect information on clients for all financial institutions in the market. The analysis of a client's creditworthiness is completed by information obtained directly by interviewing the applicant and the application of credit-scoring techniques. Consequently, credit bureaus are active players in the credit market.

Borrowers

It is likely almost everyone need to borrow money at some point in life. From the perspective of borrowers, there is an interest in obtaining access to credit in order to finance purchases; hence, the repayment of credit will ensure a clean record on the registry and allow future borrowings from the credit market. In order for reputation to act as an incentive within the system, the borrower has to know that his payment record will become public knowledge: other lenders must be able to have access to information.

Academia and Researchers

The study will add to the wide academia gap of knowledge in this area of the relationship between information sharing and levels of NPLs in commercial banks in Kenya which may in turn be used to trigger subsequent studies in the sub areas of the same topic.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to review the available literature on the effect of CRB on NPL by commercial banks in Kenya. The literature identifies some theories in finance and accounting that supports the problem in question. It will review the empirical studies on the issue as well as the general literature. Ultimately it will summarize the chapter with some remarks to provide insight and validation for an analysis of commercial banks NPLs.

2.2 Credit Reference Bureaus

Information exchange and the economics of information exchange has been the subject of a large body of academic literature, which shows that asymmetric information between borrowers and lenders can prevent the efficient allocation of credit in a market. Academic literature has identified asymmetric information as the defining characteristic of credit markets. These asymmetries cause adverse selection and moral hazard. For some, asymmetric information may eventually act as a barrier to entry Dell'Ariscia, (1998). Literature on credit bureaus, on the contrary, is more recent and is concentrated in a handful of authors. According to this literature, several reasons account for the existence of credit bureaus. First, they ensure the best assessment of consumers' creditworthiness and their ability to repay prior to the underwriting of credit. Credit reporting thereby allows minimising the occurrence of default and controlling the moral hazard problem, acting as a "borrowers disciplinary device'. Second, credit reporting assists in eliminating or diminishing the effects of adverse selection, ensuring 'more credit under better conditions'. For these reasons, commercial banks or financial institutions operating in the field attach high importance to the process of screening applicants prior to the granting of credit. Credit bureaus are an essential part of this process. Khalil and Parigi (2001) also show the importance of the screening procedure in relation to the large fixed recovery costs. The adverse selection problem occurs because lower-quality borrowers, with higher credit risks, are the ones who are the most willing to pay higher interest rates,

reducing the gains to both borrowers and lenders Alary and Gollier, (2001). The adverse selection problem signals that when lenders cannot distinguish good from bad borrowers, all borrowers are charged an average interest rate that reflects their pooled experience. If this rate is higher than good borrowers deserve, it will push some good borrowers out of the market, leading in turn to banks charging even higher rates to the remaining borrowers. Through the sharing of information, the lender is able to distinguish bad from good borrowers in the market. Better access to information helps lenders measure borrower risk more accurately and to set loan terms accordingly. **Lower-risk borrowers** would be offered 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, (2000).

The moral hazard problem implies that a borrower has the incentive to default unless there are consequences for his future applications for credit. These results 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 latter will be tempted to default on their debt. Anticipating this, creditors will raise rates, leading eventually to the breakdown of the market (Alary and Goller, 2001). According to Jappelli and Pagano (1999), credit bureaus play a key role as 'borrower discipline devices'. Every borrower knows that if he defaults, his reputation with all other potential lenders is ruined, cutting him off from credit or making it more expensive. The reputation of the borrower is a key factor in any assessment of his ability to repay; the information contained in a credit registry becomes part of the borrower's 'reputation collateral'. Late payments or defaults reduce this 'collateral', providing an additional incentive for timely repayment Miller, (2000).

Limits to information-sharing on the financial history of borrowers exist namely because of credit institutions fear of competition. This may be applied in the case of positive data, since all financial institutions agree to the exchange of negative information. By supplying information to credit bureaus, although they lose exclusivity of data, lenders ultimately gain for they are better able to distinguish the good borrowers from the bad

ones. In a market with perfect information, where lenders are able to predict with certainty the repayment behaviour of borrowers, they would compete to attract good borrowers by offering better loan conditions Jappelli and Pagano, (1999).

2.2.1 The Basics of Credit Bureaus

Credit registries, or credit bureaus, are databases of information on borrowers in a financial system. The data are provided by lenders, and together with data from other sources, such as courts or tax authorities, are managed by central banks, private companies or professional associations, which compile all the information referring to an individual into a single file. In most cases, credit bureaus operate on a reciprocal basis and only credit institutions supplying information to the registry can obtain information from it. Data from the registries are made available for a fee in the form of credit reports to credit institutions. The credit report is a decisive factor when deciding whether or not to grant a request for credit or a loan and for credit management purposes, such as following up the solvency of a credit card holder. A credit bureau can issue several kinds of credit reports depending on the information gathered (positive or negative), the purpose of the information (housing or consumer credit and the amount requested. In some countries, consulting credit bureaus' files prior to the underwriting of credit is obligatory by regulation.

2.2.2 Functions of CRBs

Credit reference bureaus have an important function within the credit market. They facilitate the assessment of a borrower's creditworthiness and act as a borrower's disciplinary mechanism, becoming key tools in the functioning of the credit industry, in particular for consumer credit institutions. The benefits of credit bureaus to lenders and borrowers are obvious. Both parties in the relationship have an interest in maximizing the number of good credit agreements granted and refusing the bad ones. For lenders, the optimization of credit granted and refused is the key to ensuring the profitability of fund management.

2.3 Non-performing Loans

According to Martin (1998), a substantial number of banks have failed, mainly because of non-performing loans. Poor loan quality has its roots in the informational problems which afflict financial markets, and which are at their most acute in developing countries, in particular problems of moral hazard and adverse selection. Martin B. (1990), the cause of financial distress in local banks in Africa and implications for prudential policy. According to Krugman (1999), the problem of nonperforming loans does not weaken the banking system per se if banks are recapitalized. The bad loan problem only destabilizes the banking system if investors lose confidence regarding the stability of the banking system. Krugman P. (1999) Balance sheet, the transfer problems and financial crises, international tax and public finance.

Sach et al (1996) and Tonell (1999) view non-performing loans as the outcome of periods of banks' lending booms. These periods are associated with financial market liberalization a development which comes along with poor mechanism of prudential supervision and regulation.

The process of financial market liberalization has to interrelated implications. First it improve the terms under which debtors can obtain funds from banks. These aspects, in addition to the lagging development of expertise, credit market imperfections and institutional and policy deficiencies related to bank supervision and regulation imply that banks may not correctly price risk and may invest in risky and poorly performing projects. The credit expansion correspond increase the average share of bad loans and deteriorates the quality of the bank's loan portfolios.

Deyoung and Whaten (1994) argue that the share of nonperforming loans decreases with the cost efficiency of banks. At the core of this relationship is the notion that efficient banks operate more stringent monitoring standards that inefficient banks cost-efficient banks are better protected against adverse development than cost inefficient banks. Reynolds S. E. et al (2000) suggested that the banks aggressive lending policies, coupled with weak profitability, led to high levels of nonperforming loans.

Kwack (2000) found that a high corporate leverage ratio affects the level of nonperforming loans. A troubled real estates sector could be another contributing force to a rising non-performing loan ratio Kwack found that a high corporate leverage ratio affects the level of nonperforming loans. A troubled real estate sector could be another contributing force to a rising non-performing loan ratio Kwack found out that the 3 month interest rate and non performing loan rates are very significant in explaining financial crisis. The diversification principle (Kwach, 2000) suggests that corporations are not as risky as individual due to their size and quality of assets. Kwack (2000) suggests that corporations are not as risky as individual due to their size and quality of assets.

The rise in nonperforming loan ratios has serious consequences for the economy Bernstein (1996) developed a model in which he showed that the level of nonperforming loans is a significant determinant of the level of bank costs, as well as the estimates of scale economies in banking lending policy is also affected by non-performing loans ratios. Banks will adjust their loans preference ratio and the weight of risky loans in order to avoid a crisis. This will lead to a more conservative real estate lending policy as suggested by Shen and Chang (2001).

2.3.1 Causes of Nonperforming Loans

Moral hazard contributes to highly imprudent and in some cases fraudulent, lending strategies of many banks. A large share of bad debts is attributed to insider loans, often unsecured, in high risk ventures soda as real estate. Some banks also suffer from adverse selection of their borrowers, driven by the high lending rates which local banks charge to compensate for their high cost of fund Kwack, (2000). Macroeconomic stability the problems of poor loan quality faced by vocal banks are compounded by macroeconomic instability. Periods of high and very volatile inflation in the country with interest rates liberalized led to very high lending rates Collier, (1993).

The willingness of the regulatory authorities to support distressed banks with loans rather than close them down is probably an important contributor to the moral hazard. Many of

the failed banks in Kenya have been able to borrow heavily from their respective central banks for liberal months and in some cases for more than a year before they were closed. The extent of imprudent management in the failed banks indicates that there were serious deficiencies in bank regulation.

2.3.2 Measures of Nonperforming Loans

Nonperforming loans can be measured by using capital ratios i.e. the ratios of owner's equity to total bank assets. Prior to 1989, the allowance for loan and lease losses was part of the regulatory capital. The change in the capital standards in 1989 substantially excluded this allowance from regulatory capital. Thus, before 1989 recognition of a loans loss provision increased (decreased) the regulatory capital. Also prior to (after) 1989, loan write offs decreased (had a negligible effect on) regulatory capital ratio. Moyer (1990) argues that banks do manage loan write offs, but do alter loan loss provisions to manage capital ratios. Bishop, (1996) said for banks and Stinson, (1993) conclude that there is no capital ratio management. Mayer (1990) concludes that banks do not manage loan write offs, but do not alter loan loss provisions to manage capital ratios. Collins et al (1995) concluded oppositely that banks use write offs, but net loan loss provisions, to manage capital ratios.

2.5 Theoretical Framework

2.5.1 Agency Theory

When human interaction is viewed through the lens of the economist, it is presupposed that all individuals act in accordance with their self-interest. Moreover, individuals are assumed to be cognizant of the self-interest motivations of others and can form unbiased expectations about how these motivations will guide their behavior. Conflicts of interest naturally arise. These conflicts are apparent when two individuals form an agency relationship, i.e. one individual (principal) engages another individual (agent) to perform some service on his/her behalf. A fundamental feature of this contract is the delegation of some decision-making authority to the agent. In this study the commercial banks acts as the principal and the borrower is the agent as a result of the lending contact. Agency

theory is an economic framework employed to analyze these contracting relationships. Jensen and Meckling. (1976) present the first unified treatment of agency theory. Unless incentives are provided to do otherwise or unless they are constrained in some other manner, agents will take actions that are in their self-interest. These actions are not necessarily consistent with the principal's interests. Accordingly, a principal will expend resources in two ways to limit the agent's diverging behavior: (1) structure the contract so as to give the agent appropriate incentives to take actions that are consistent with the principal's interests and (2) monitor the agent's behavior over the contract's life. Conversely, agents may also find it optimal to expend resources to guarantee they will not take actions detrimental to the principal's interests (i.e. bonding costs). These expenditures by principal and/or agent may be pecuniary/non-pecuniary and are the costs of the agency relationship. Given costly contracting, it is infeasible to structure a contract so that the interests of both the principal and agent are perfectly aligned. Both parties incur monitoring costs and bonding costs up to the point where the marginal benefits equal the marginal costs. Even so, there will be some divergence between the agent's actions and the principal's interests.

The reduction in the principal's welfare arising from this divergence is an additional cost of an agency relationship (i.e. "residual loss"). Therefore, Jensen and Meckling (1976) define agency costs as the sum of: (1) the principal's monitoring expenditures; (2) the agent's bonding expenditures; and (3) the residual loss. Barnea et al. (1985) divide agency theory into two parts according to the type of contractual relationship examined - the economic theory of agency and the financial theory of agency. Contracts that simultaneously solve the incentive problem and the risk-sharing problem are referred to as "first-best." First-best contracts provide agents with incentives to expend an optimal amount of effort while producing an optimal distribution of risk between principal and agent. A vast literature examines these issues (Ross, 1973; Shavell. 1979; Holmstrom, 1979).

Conflicts also arise between stockholders and bondholders when debt financing is combined with limited liability. For example, using an analogy between a call option and

equity in a levered firm (Black and Scholes, 1973; Galai and Masulis, 1976), one can argue that increasing the variance of the return on the firm's assets will increase equity value (due to the call option feature) and reduce debt value (by increasing the default probability). Simply put, high variance capital investment projects increase shareholder wealth through expropriation from the bondholders. Obviously, bondholders are cognizant of these incentives and place restrictions on shareholder behavior (debt covenants).

2.5.2 Asset Allocation Theory

In the analysis of portfolio management, the initial work of Markowitz (1959) was directed towards finding the optimal weights in a portfolio. It was quickly realized that the decisions involved in building up a portfolio were less frequent than the decisions to modify existing portfolios. This is especially important when analyzing how profitable portfolio managers have been over time. If, for example, a portfolio consists of equities and bonds, some investment managers might be particularly skilled in choosing specific companies in which the portfolio should invest, while others might be able to forecast at which times the portfolio should be more heavily invested in shares. The first type of skill would be classified as being more concerned with portfolio selection while the latter would be described as connected with timing or asset allocation. Asset allocation decisions can be further divided. Investors can decide on an ad hoc basis to alter their portfolio by changing the weights of the constituent assets as a result of some specific model. For example, forecasting models are used to predict the performance of equities relative to bonds or real estate relative to equities. Dependent on the outcome of these forecasts, the investor will switch into or out of the asset being forecasted. Models are used to derive frequent forecasts of one asset against another and to move the portfolio day by day depending on the outcome of the forecasting model. This type of model is sometimes referred to as tactical asset allocation (TAA) and in practice is used in conjunction with some sophisticated trading in derivatives such as options or futures. Instead of buying more shares, this system buys options or futures in an index representing equities. If equities rise in value, so will the options and futures position and the portfolio thereby will increase in value to a greater extent than underlying equities.

This theory is related to the study on impact of CRBs on NPLs in the listed commercial banks in that during the lending contract there are conditions put and they are binding. Asset allocation theory introduces TAA and in this case there is breach of contract.

TAA is used to adjust portfolio exposure to various factors such as interest rates and currency movements as well as overseas investments Arnott et al., (1989). An alternative category of asset allocation is the technique of dynamic asset allocation, where there is less emphasis on forecasting which component assets will perform well in the next period and more on setting up a policy by which the portfolio reacts automatically to market movements. This can be organized with the help of options and futures but can also be carried out by adjusting the weights of the component assets in the light of predetermined rules. For example, the policy of buying an asset when that asset has performed well in the current period and selling when it has done badly can be carried out in such a way as to provide portfolio insurance, i.e. it protects the portfolio by reducing the exposure to successive falls in the value of one of its constituent assets. An alternative dynamic asset allocation policy is that carried out by rebalancing so as to maintain a reasonably constant proportion in each asset. This involves selling those assets which have just risen in value and selling those assets which have just fallen in value. The two strategies are profitable in different phases of the market. When the market is moving strongly, the insurance policy is most successful. If, however, the market is tending to oscillate without a strong trend, the 25 rebalancing policy works best, these principles are well illustrated in Perold and Sharpe (1988).

2.5.3 Information Asymmetry Theory

This strand of theory is based on the notion that the borrower is likely to have more information than the lender about the risks of the project which they receive funds. This leads to the problem of moral hazard and adverse selection. Matheys and Thompson (2008). These problem reduces the efficiency of the transfer of funds from surplus to deficit units. The banks overcome these problems in three respects. First by providing commitment to long term relationships with customers, second through information sharing and thirdly through delegated monitoring of borrowers. Under direct financing, it necessary for a lender to collect information to try to redress the information asymmetry

2.6 Empirical Studies

Pagano and Jappelli (1993), information sharing improves the pool of borrowers, decreases defaults and reduces the average interest rate. In the model, each bank has private information about the credit worthiness of local residents but no information about immigrants, who therefore face adverse selection. If banks exchange their private information about residents, they can lend safely to immigrants as well, so the default rate decreases. The effect on lending is ambiguous, however. The volume of lending may increase or decrease, because when banks exchange information about borrowers' types, the implied increase in lending to safe borrowers may fail to compensate for the reduction in lending to risky types.

Padilla and Pagano (1997) Information sharing can reinforce borrowers' incentives to perform, either via a reduction of banks' rents or through a disciplinary effect. The exchange of information between banks reduces the informational rents that banks can extract from their clients within lending relationships. He makes this point in the context of a two-period model where banks are endowed with private information about their borrowers. This informational advantage confers to banks some market power over their customers, and thereby generates a hold-up problem: since banks are expected to charge predatory rates in the future, borrowers exert low effort to perform, leading to high default and interest rates, and possibly to the collapse of the credit market. By committing to exchange information about borrowers' types, they restrain their own future ability to extract informational rents. This reduces the probability of default of each borrower and the interest rate he is charged, and increases total lending relative to the regime without information sharing.

Padilla and Pagano (1999) argued that an effect on incentives exists even when there is no hold-up problem. This effect is present when banks, instead of exchanging information about borrowers' types, communicate to each other data about past defaults. He shows that show that this creates a disciplinary effect. When banks share default information, default becomes a signal of bad quality for outside banks and carries

the penalty of higher interest rates. To avoid this penalty, entrepreneurs exert more effort, leading to lower default and interest rates and to more lending. Kiragu, (2010) observed that in a high NPL condition; banks increasingly tend to carry out internal consolidation to improve the asset quality rather than distributing credit. In the conventional operations of banks, the high level of NPLS requires them to raise provisions for loan loss that decreases the banks revenue and reduces the funds for new lending.

Kiragu (2010) continued to observe that this cutback of loans impairs the corporate sector as they have difficulties in expanding their working capital, blocking their channels of resuming normal operation or growth. Unavailability of credit to finance firm's working capital might trigger the second round business failure which in turn affects negatively the quality of loan books of commercial banks. It is unfortunate that commercial banks in Kenya are still burdened with presence of NPLS and still non-performing loans are being recorded -Non performing loans are still being experienced in the balance sheets of commercial banks in Kenya in 2002, NPLs was 76.1 billion and 74.0 billion in the year 2003. It can be said unequivocally that NPLs are the result of economic slowdown. For instant, Shiozaki (2002) have identified Japan's high level of NPLs as an outcome of prolonged economic stagnation and deflation in the economy. Since the bursting of the 'bubble' in the early 1990s

In addition, Hanazaki et.al. (2002) and Yanagisawa (2001) highlight cross shareholdings, stock market volatility, virtual blanket guarantee of bank debts and the system of 'relationship banking' as factors responsible for the prolonged fragility of the Japanese banking Sector. According to the definition of the financial reconstruction law (FRL) the total amount of NPLs of all banks in Japan as of the end of March 2003 was 35.3 trillion yen, although there are claims that the actual amount of NPLs might have exceeded 100 trillion yen.

Berger and Udell (1997) analysis the relationship between cost efficiency and NPLs in an ambivalent way. The higher the NPLs volume. The lower the cost efficiency, nevertheless, mismanagement also lead to a rising amount of bad loans. Analysis outsourcing potential of real estate function with respect to the agency problem related to

that. Those findings may have important implications for the outsourcing of servicing and work out of real estate.

A study on securitization of NPL on China was conducted. Nishimura, Kazuhito and Yikiki (2001). His examination of the legal and economic framework concerning securitization of non-performing loans results in a call for government participation via policy adjustments and debt restructuring plans which are crucial for successful large scale Securitization. According to Brown Bridge (1998), the single biggest contributor to the bad loans of many of the failed local banks was insider lending

Economic theory has long stressed the importance of information in credit markets. The exchange of financial data and customers' information sharing devices has been the subject of a large body of academic literature. Theorists have long aimed at showing that access to credit is essential for economic development and growth. To this purpose, the subject relating to the effects of asymmetric information and credit rationing in credit markets has been thoroughly analysed.

The economic model pioneered by Akerlof, (1970), who takes the used car market as an example, is often cited as the first economic study to recognise the issue of quality uncertainty, the importance of trust and the role of asymmetric information in financial relationships.

Jaffee and Russell (1976) by prospecting in economic terms that there is a link between the issue of asymmetric information and the problem of credit rationing. However, the first generation of theoretical treatment of asymmetric information in credit markets which is today uncontroversially considered as one of the most influential papers on adverse selection in credit markets and the economic basis for the existence and explanation of credit rationing was developed in 1981 by Stiglitz and Weiss who used the small business credit market as the economic model to understand why is credit rationed. The adverse selection aspects of interest rates is a consequence of different borrowers having different probabilities of repaying their loan. The expected return to the bank obviously depends on the probability of repayment, so the bank would like to be able to identify borrowers who are more likely to repay. It is difficult to identify 'good

borrowers' and to do so requires the bank to use a variety of screening devices. The interest rate which an individual is willing to pay may act as one such screening device: those who are willing to pay high interest rates may, on average, be worse risk; they are willing to borrow at high interest rates because they perceive their probability of repaying the loan to be low. As the interest rate rises, the average 'riskiness' of those who borrow increases, possibly lowering the bank's profits. Similarly, as the interest rate and other term of the contract change, the behavior of the borrower is likely to change. For instance, while Diamond, Campbell and Kracaw, (1991) as well as Stiglitz and Weiss,(1981)put forward that information may be used for supporting profitable lending, at the same time they all advance the idea that financial intermediaries such as banks are institutions specializing in the acquisition and dissemination of information including data monitoring the repayment of loans and other transactions of their customers thus performing the function of resource allocation in the economy. Papers by Klein, Vercammen, and Padilla and Pagano, (1991) offer other pertinent theoretical arguments to understanding the factors that may encourage the implementation of information sharing systems in the credit market. Ultimately, thus, Vercammen, (1995) puts forward that policies that restrict the flow of information from borrowers to lenders may be desirable from a social efficiency perspective because such policies would sustain reputation effects.

Miller and Galindo,(2000) analyze the extent to which credit reporting alleviates credit rationing to companies, indicating that they are less credit constrained when credit reports are available. Lending institution use two kinds of credit scores, these based solely on the credit histories of individuals as reflected in credit bureau records, and those that weigh other factors along with credit history. The former are generally referred to as "bureau scores" while the latter are often referred to as "applications scores" origination scores (Avery. Bostic, Calem and Caller 2000).Bureau scoring models are built on the premise that past performance in repaying debts is the best predictor of future performance. They are designed to rank individuals on the bases of their relative credit worthiness and quantify the likelihood that a given individual will default. Nearly all evaluation of bureau scoring models has focused on their ability to predict relative credit

worthiness Kegode (2006). An example of variables included in a credit report of a credit bureau as quoted by Kegode (2006) is where personal information would be assessed to include the name, current and previous address, social security number, telephone number, date of birth and current and previous employer. Thomas, (2000) as quoted by Mbijiwe states that the objective of credit scoring is to find a rule that separates good credit risks from bad credit risks. Credit scores are based on data rather than human judgments, making credit scoring an objective risk assessment tool as opposed to a subjective, possibly discriminator)', human interpretation of information. Until now, however, empirical evidence relating to the impact of CRBs in commercial banks in still seems to be missing. It is on this tenet that this study seeks to find out the impact of information sharing on Non-Performing Loans (NPLs) in Kenya

2.7 Chapter Summary

The exchange of a certain amount of information regarding the financial and payment history of borrowers is necessary to the development and smooth functioning of financial markets. Scale economies of gathering, processing and screening credit and non-credit information justify the existence of credit bureaus. Recent technological improvements have reduced the cost of collecting information and also the cost of sharing that information through credit bureaus. At the same time, however, there is an obligation to preserve the right of the individual to privacy concerning his or her financial transactions. Credit bureaus are key actors in the assessment of an individual's ability to repay incurred debts and can serve as valuable disciplinary instruments vis-a-vis borrowers. Banks must pass on negative information to a credit reference bureau on a monthly basis. The bureau gets updated on any eventual (positive) changes to that information as they occur. Any bank that provides such information is also free to request information from a credit reference bureau on a potential borrower. A Credit Score is a measure of credit risk calculated from a credit report using a standardized formula. A positive score is characterized by frequently paid bills; lack of defaults on outstanding balances; maintaining steady employment; On the other hand, a negative credit score is characterized by late payments; bankruptcy; fraud charges; liens or foreclosures; loss of employment. There is no doubt that CRB is a novel concept and one that is expected to have major positive impact

on lending market. Borrower's credit history plays a major role when applying for any type of credit or loan, such as a credit card, auto loan, mortgage, employment screening, utilities deposits and insurance. It is a good idea to know what is included in personal credit history before applying for credit or a loan. The law requires credit reference bureaus to supply a borrower with one free credit report per year, and also issue a free credit report whenever a bank makes an adverse decision about borrower using information obtained from a credit report. It is very important for a borrower to update details with personal banks, in order to ensure the accuracy of the Credit Reports. A borrower is also expected to point out errors in the credit report to avoid incorrect decisions on credit application or inaccurate credit scores. Because of the apparent positive evaluation of the lender borrower relationship, there is high probability that other developing countries will seek to emulate the credit bureau concept.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the following sections, proposed research design, population and sample, data collection procedures, data analysis procedures and data validity and reliability.

3.2 Research Design

The type of research design was causal relationship design. According to Nachmias, (1999) an independent variable is expected to produce a change in the dependent variable in the direction and of the magnitude specified by the theory. However, he states that if a researcher observes that whenever the independent variable varies too, it does not necessarily mean that a cause and effect relationship exists. In this study the dependent variable was Non-performing Loans and the independent variables were the information shared with the CRBs yearly, arrears of the loans and the defaulted loans yearly. A census study was used in this study to enable the researcher collect comprehensive and thus provided information that was relevant and specific. This research design was the best as the credit reference bureau was expected to have some impact on the commercial banks NPLs.

3.3 Population and Sample

The population for this study constituted registered and operational commercial banks as at 31st December 2004 licensed to carry out banking business under the Banking act Cap 488 Part II Sec (4) (5) be made up of all the registered commercial banks in Kenya to the year 2010. Currently there are 44 licensed commercial banks according to Central Bank of Kenya (Appendix 2) For the purpose of this study a sample was not used as was a census survey. Mugenda and Mugenda (2003) observes that at times the target population is so small that selecting a sample would be meaningless and therefore taking the whole population is such a case is advisable.

3.4 Data Collection Method

The research study utilized both secondary and primary data. Quantitative data on non-performing loans for the commercial banks was extracted from annual reports, profit and loss accounts, balance sheets and cash flow statements. A period of one year was considered (2010). These statements were obtained from the commercial banks, published financial statements from local newspapers as well as from Kenya institute of bankers Association offices. These sources were preferred as they were authoritative. Data on Credit reference bureaus was obtained through the use of questionnaires that were directed to commercial banks in Kenya. The questionnaires were administered to staff in credit departments. The questionnaires consisted of both closed and open ended questions and were dropped to be picked later. Such questions were preferred as they were easier to analyze since they were in immediate usable form. A standardized questionnaire was developed to allow comparison of results amongst the various respondents. This method of data collection was appropriate as it was easier to administer because each item was followed by alternative answers. The drop and pick approach was considered as it gave the respondents time to fill the questionnaires and allow the researcher a chance to review the questionnaire before picking it to ensure completeness of responses.

3.5 Data Analysis

Quantitative questionnaires were validated, coded and checked for any errors and omissions. Later the data was run through the statistical Package for Social Science (SPSS) Version 18. Quantitative data was analyzed using descriptive statistics such as mean, percentage changes, standard deviation, tabulation and ratio. In addition, the b coefficients were calculated to measure the mean and percentage between the level of non-performing loans before the introduction of CRBs and after. Spreadsheets were used to determine appropriate charts and tables for data presentation. A multiple linear regression analysis model was used in this study because of the nature of the responses which were continuous and not dichotomous. Nachmias and Nachmias, (1999) points out that this model describes the extent of linear relationship between the dependent variable and a number of other independent (or control) variable. ANOVA was used to measure the effect of information sharing on level of NPLs in commercial banks in Kenya.

This model was of the form

$$Y = b_0 + b_1X_1 + b_2X_2 + E_t$$

Where:

Y = Non performing loans

b_0 = Constant Multiplier for Independent Variable

X_1 = Defaulted Loans

X_2 = Total Arrears

X_3 = Total Loans Exposures

E_t = Error Term

Derivation of Variables

To obtain the levels of non-performing loans the study obtain the differences of annual averages for 2010 and 2011 financial years using table 14 and 13 of the questionnaire (Levels of NPLs by banks in months). The number of records kept in files by various banks help determine the level of defaulted loans hence the annual average differences for table 7 and 6 in the questionnaire became useful. Total arrears are established by obtaining the annual average differences for table 9 and 8 of the questionnaire (credit reports issued). Finally, total loan exposures are established by obtained the annual average difference between tables 16 and 15 (Number of reports requested by banks in months).

3.6 Data Validity and Reliability

Data reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials Mugenda and Mugenda (2003). This study reduced the random error by consistently looking at the trend of the Banks non-performing loans in the proposed duration. Accuracy was enhanced during the time of picking the data. The researcher used test retest method whereby questionnaires were administered twice to the same group credit reference bureau officials+. A time lapse of 2 weeks was allowed before the questionnaire were administered again. Comparison

between the two sets was done using Pearson's correlation coefficient to determine the reliability of the questionnaire Mugenda and Mugenda (2003) recommend that a reliable coefficient of 0.80 or more implies that there is a high degree of reliability of the data. Data validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study Mugenda and Mugenda (2003).Peer review of the questionnaire was encouraged during the time of dropping the questionnaire to enhance data validity. To enhance validity, the researcher's supervisor was asked to appraise the instruments.

CHAPTER FOUR

DATA ENTRY, ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the analysis of data collected from the administered questionnaires. 44 questionnaires in total were administered but the researcher managed to obtain 35 completed questionnaires representing a 79.5% response rate. The questionnaire contained four different sections containing questions on all the objectives of the study.

4.2 Years started operations

Majority (54.3%) of the respondents indicated that their bureaus had started operations in the year 2010 while the remaining 45.7% indicated that they had started their operations in the year 2011 as shown in table 4.1 and figure 4.1 below.

Table 4.1 Years started operations

Year	Frequency	Percentage
2010	19	54.3
2011	16	45.7
Total	35	100.0

Source: Research Data 2011

Years started operations

• Series2 • Series1



Figure 4.1

4.3 Number of records in files one year before and up to July 2010

Majority of the respondents indicated that their bureaus on average kept between 9,171 and 28,685 records in their files one year before and up to July 2010 as shown by the means and standard deviations in table 4.2 below. The lowest mean recorded was 9,171.4286 during the month of October while the highest mean recorded was 28,685.7143 during the month of June 2010. These statistics are useful to determine the loan default rates.

Table 4.2 Descriptive Statistics for number of files one year before and up to July 2010.

	Mean	Std. Deviation
August	12,742.8571	1540.48994
September	13,485.7143	1915.43926
October	9,171.4286	1543.21502
November	14,257.1429	1268.22843
December	16,114.2857	676.12340
January	16,485.7143	612.20088
February	18,342.8571	1862.04911
March	19,771.4286	1373.82494
April	18,800.0000	3700.55640
May	19,628.5714	1610.36558
June	28,685.7143	1921.57149
July	27,171.4286	2781.08860

Source: Research Data 2011

4.4 Number of records in files after July 2010 up to September 2011

Majority of the respondents indicated that their bureaus on average kept between 13,057 and 48,028 records in their files after July 2010 up to September 2011 as shown by the means and standard deviations in table 4.3 below. The lowest mean recorded was 3,057.1429 during the month of December while the highest mean recorded was 48,028.5714 during the months of May and June thus a significant increase in information available for sharing with other bureaus.

Table 4.3 Descriptive Statistics for number of records after July 2010 up to September 2011

	Mean	Std. Deviation
August	14,142.8571	3273.26835
September	17,314.2857	1304.80689
October	15,400.0000	1818.20856
November	16,200.0000	1430.75463
December	13,057.1429	758.14901
January	19,142.8571	733.35880
February	23,342.8571	683.53997
March	24,142.8571	1497.89769
April	26,942.8571	169864.12266
May	30,657.1429	1731.08020
June	33,028.5714	1382.36188
July	39,657.1429	1161.71418
August	42,657.1429	1731.08020
September	48,028.5714	1382.36188

Source: Research Data 2011

4.5 Credit reports issued one year before and up to July 2010.

Majority of the respondents indicated that their bureaus on average issued credit reports between 50,657 and 92,628 as shown by the means and standard deviations below in table 4.4 below. The lowest mean recorded was shs. 50,657.1429 during the month of August 2010 while the highest mean recorded was shs. 92,628.5714 During the month of June 2010.

Table 4.4 Descriptive Statistics on credit reports issued one year before and up to July 2010

	Mean	Std. Deviation
August	50,657.1429	2013.81781
September	56,314.2857	2054.71379
October	49,942.8571	1625.94510
November	67,142.8571	1088.51915
December	73,171.4286	617.66707
January	84,542.8571	610.82669
February	92,228.5714	1941.58386
March	76,714.2857	1466.71760
April	84,685.7143	3562.64466
May	85,571.4286	1614.01426
June	92,628.5714	1832.48007
July	86,057.1429	2656.21200

Source: Research Data 2011

4.6 Credit reports issued after July 2010 to September 2011

Majority of the respondents indicated that their bureaus on average issued credit reports between 49,085 and 92,142 as shown by the means and standard deviations below in table 4.5 below. The lowest mean recorded was shs. 49085.7143 during the month of August 2010 while the highest mean recorded was shs. 92,142.8571 During the months of March 2011 and August 2011.

Table 4.5 Descriptive Statistics on credit reports after July 2010 and September 2011

	Mean	Std. Deviation
August	49,085.7143	3266.32937
September	55,000.0000	1328.42233
October	50,342.8571	1877.77805
November	69,142.8571	1458.09822
December	67,257.1429	741.33652
January	76,085.7143	781.07876
February	85,285.7143	667.36658
March	92,142.8571	1497.89769
April	78,742.8571	700.54001
May	89,542.8571	1771.38791
June	91,857.1429	1437.78541
July	79,600.0000	1168.20627
August	92,142.8571	1497.89769
September	78,742.8571	700.54001

Source: Research Data 2011

4.7 Type of data provided by lenders to your bureau

Majority (54.3%) of the respondents indicated that lenders mainly provided data on arrears to their bureaus while the remaining 45.7% of them indicated that lenders mainly provided information on defaulted loans. The findings are as shown in table 4.6 and figure 4.2 below.

Table 4.6 Type of data provided by lenders to bureaus

Data	Frequency	Percentage
Default loan	16	45.7
Arrears	19	54.3
Total	35	100.0

Source: Research Data 2011

Type of data provided by lenders to bureaus

m Default loan • Arrears

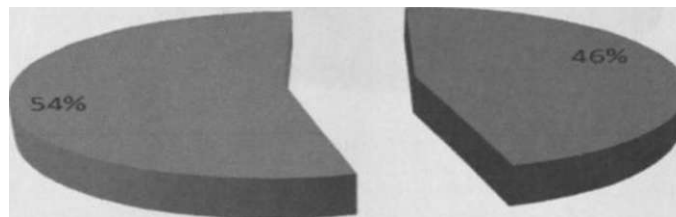


Figure 4.2

4.8 Sharing of positive information (white information)

Majority (77.1%) of the respondents were of the opinion that there were banks that shared positive information (white information) while the remaining 22.9% of them were of the contrary opinion as shown in table 4.7 and figure 4.3 below.

Table 4.7 Sharing of positive information (white information)

Sharing positive information	Frequency	Percentage
Yes	27	77.1
No	8	22.9
Total	35	100.0

Source: Research Data 2011

Sharing of positive information (white information)

• Yes • No

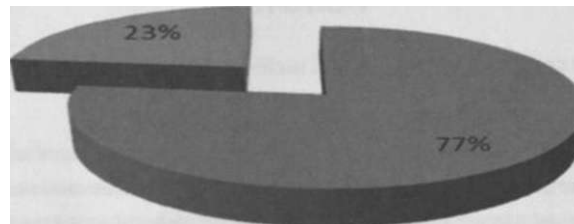


Figure 4.3

4.9 Percentage of sharing positive information (white information)

14.5% of the respondents indicated that the level of sharing positive information was at 80%, 11.4% at 78%, 76%, 74%, 72%, 67% and 60%, 5.7% at 55%, 45% and at 30% as shown in table 4.8 and figure 4.4 below.

Table 4.8 Percentage of sharing positive information (white) information

% of Sharing positive information	Frequency	Percentage
30.00	2	5.7
45.00	2	5.7
55.00	2	5.7
60.00	4	11.4
67.00	4	11.4
72.00	4	11.4
74.00	4	11.4
76.00	4	11.4
78.00	4	11.4
80.00	5	14.3
Total	35	100.0

Source: Research Data 2011

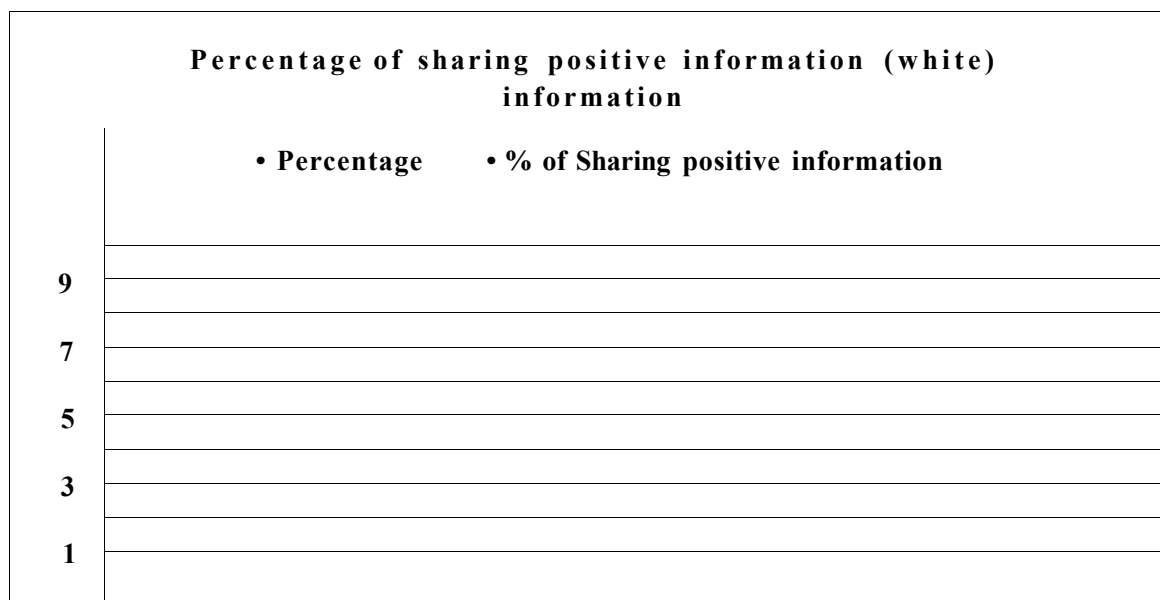


Figure 4.4

4.9 Levels of NPLs one year before 2010 and up to July 2010 in months

Majority of the respondents indicated that their bureaus on average shared information on NPLs worth between shillings 49.942M and shillings 92,628M as shown by the means and standard deviations below in table 4.9 below. The lowest mean recorded was shs. 49,942.8571 during the month of October 2010 while the highest mean recorded was shs. 92,628.5714 during the month of June 2010.

Table 4.9 Descriptive Statistics on levels of NPLs one year before 2010 and up to July 2010

	Mean	Std. Deviation
August	50,657.1429	2013.81781
September	56,314.2857	2054.71379
October	49,942.8571	1625.94510
November	67,142.8571	1088.51915
December	73,171.4286	617.66707
January	84,542.8571	610.82669
February	92,228.5714	1941.58386
March	76,714.2857	1466.71760
April	84,685.7143	3562.64466
May	85,571.4286	1614.01426
June	92,628.5714	1832.48007
July	86,057.1429	2656.21200
Valid N (listwise)		

Source: Research Data 2011

4.10 Levels of NPLs after July 2010 up to September 2011

Majority of the respondents indicated that their bureaus on average shared information on NPLs between 47,085M and 91.857M as shown by the means and standard deviations below in table 4.10 below. The lowest mean recorded was shs. 47,085.7143 during the month of August 2010 while the highest mean recorded was shs. 91,857.1429 during the month of June 2011 thus a significant decrease in the level of NPLs in commercial banks for the period under study.

Table 4.10 Descriptive Statistics on levels of NPLs after July 2010 up to September 2011

	Mean	Std. Deviation
August	47,085.7143	3266.32937
September	55,000.0000	1328.42233
October	50,342.8571	1877.77805
November	69,142.8571	1458.09822
December	67,257.1429	741.33652
January	76,085.7143	781.07876
February	85,285.7143	667.36658
March	91,122.8571	1497.89769
April	78,742.8571	700.54001
May	89,542.8571	1771.38791
June	91,857.1429	1437.78541
July	79,600.0000	1168.20627
August	91,142.8571	1497.89769
September	78,742.8571	700.54001
Valid N (listwise)		

Source: Research Data 2011

4.11 Number of reports requested by banks one year before and up to July 2010

Majority of the respondents indicated that their bureaus on average were required to issue between 50,171 and 92,685 reports requested by banks as shown by the means and standard deviations below in table 4.11 below. The lowest mean recorded was shs. 50,171.4286 during the month of October 2010 while the highest mean recorded was shs. 92,685.7143 during the month of march 2010.

Table 4.11 Descriptive Statistics on the number of reports requested by banks one year before and up to July 2010

	Mean	Std. Deviation
August	51,742.8571	1540.48994
September	56,485.7143	1915.43926
October	50,171.4286	1543.21502
November	67,257.1429	1268.22843
December	73,114.2857	676.12340
January	84,485.7143	612.20088
February	92,342.8571	1862.04911
March	92,685.7143	1373.82494
April	84,800.0000	3700.55640
May	85,628.5714	1610.36558
June	76,771.4286	1921.57149
July	86,171.4286	2781.08860
Valid N (listwise)		

Source: Research Data 2011

4.12 Number of reports requested by banks after July 2010 and up to September 2011

Majority of the respondents indicated that their bureaus on average were required to issue between 50,400 and 119,942 reports requested by banks as shown by the means and standard deviations below in table 4.12 below. The lowest mean recorded was shs. 50,400 during the month of October 2010 while the highest mean recorded was shs. 119,942.8571 during the month of April 2011 thus a significant increase in the level of information sharing amongst banks.

Table 4.12 Descriptive Statistics on number of reports requested by banks after July 2010 and up to September 2011

	Mean	Std. Deviation
August	50,642.8571	3273.26835
September	55,057.1429	1304.80689
October	50,400.0000	1818.20856
November	69,200.0000	1430.75463
December	67,314.2857	758.14901
January	76,142.8571	733.35880
February	85,342.8571	683.53997
March	92,142.8571	1497.89769
April	119,942.8571	169864.12266
May	89,657.1429	1731.08020
June	92,028.5714	1382.36188
July	79,657.1429	1161.71418
August	89,657.1429	1731.08020
September	92,028.5714	1382.36188
Valid N (listwise)		

Source: Research Data 2011

4.13 Number of reports requested by individuals before July 2010 and up to July 2010.

Majority of the respondents indicated that their bureaus on average were required to issue between 40,571 and 45,085 reports requested by individuals as shown by the means and standard deviations below in table 4.13 below. The lowest mean recorded was Ksh. 40,571.4286 during the month of July 2010 while the highest mean recorded was Ksh. 45,085.7143 during the month of August 2010.

Table 4.13 Descriptive Statistics number of reports requested by individuals before July 2010 and up to July 2010_

	Mean	Std. Deviation
August	45,085.7143	1094.67773
September	43,628.5714	1699.23364
October	42,028.5714	1504.61475
November	41,257.1429	1146.42301
December	42,171.4286	1294.46138
January	41,571.4286	1219.58803
February	43,200.0000	2564.46302
March	41,800.0000	2587.29930
April	42,171.4286	1464.99778
May	41,485.7143	2693.90847
June	44,685.7143	3428.01116
July	40,571.4286	2090.39420
Valid N (listwise)		

Source: Research Data 2011

4.14 Number of reports requested by individuals after July 2010 up to September 2011

Majority of the respondents indicated that their bureaus on average were required to issue between 49,942 and 92,257 reports requested by individuals as shown by the means and standard deviations below in table 4.14 below. The lowest mean recorded was shs. 49,942.8571 during the month of August 2010 while the highest mean recorded was shs. 92,257.1429 during the months of March 2011 and August 2011 thus indicating a significant increase in information sharing among individuals.

Table 4.14 Descriptive Statistics on the number of reports requested by individuals after July 2010 up to September 2011.

	Mean	Std. Deviation
August	49,942.8571	3795.84027
September	54,885.7143	1278.12888
October	50,457.1429	1787.91461
November	69,028.5714	1617.65470
December	67,142.8571	912.10349
January	76,028.5714	890.66117
February	85,400.0000	774.59667
March	92,257.1429	1400.48011
April	74,685.7143	16671.16466
May	89,485.7143	1837.06013
June	92,085.7143	1442.45356
July	79,771.4286	1285.34075
August	92,257.1429	1400.48011
September	74,685.7143	16671.16466
Valid N (listwise)		

Source: Research Data 2011

4.15 Location of headquarters

Majority (71.4%) of the respondents indicated that the headquarters of their bureaus were located in Nairobi, 11.4% each indicated that they were located in Kisumu and Mombasa respectively and the remaining 5.7% of them in Nakuru.

4.16 Branches in rural areas

Majority (65.7%) of the respondents indicated that they did not have branches in rural areas while the remaining 34.3% of them indicated otherwise as shown in table 4.15 and figure 4.5 below.

Table 4.1S Branches in rural areas

Branches in rural areas	Frequency	Percentage
Yes	12	34.3
No	23	65.7
Total	35	100.0

Source: Research Data 2011

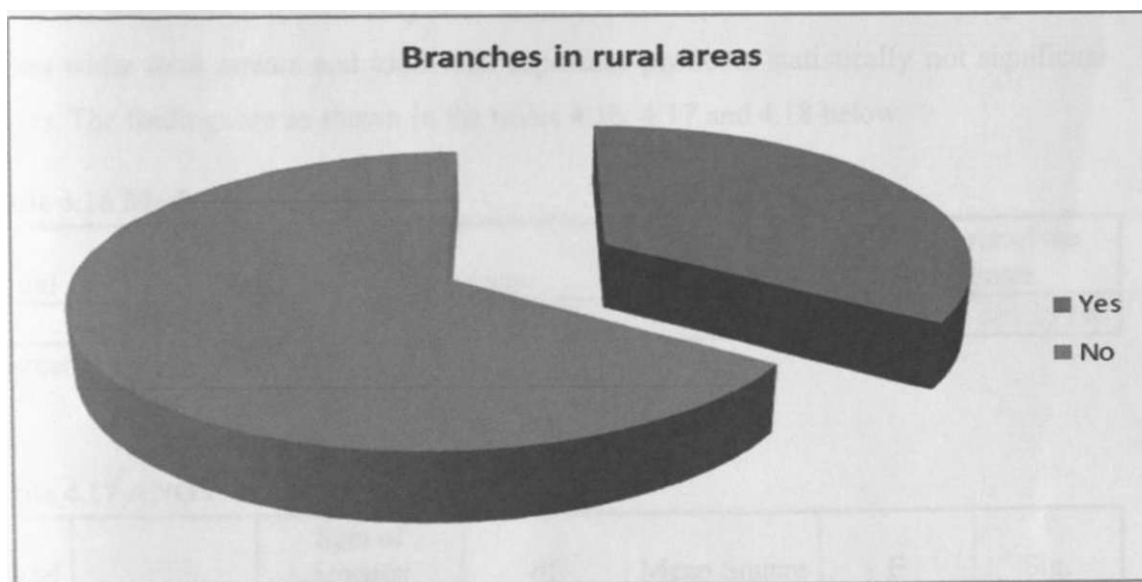


Figure 4.5

4.17 Collection of information from clients who reside in rural areas

Respondents unanimously indicated that they send field officers in rural areas to collect information of clients who reside where they do not have branches. Some respondents also indicated that their bureaus had agents in rural areas where they did not have branches which help them obtain information about their clients.

4.18 Regression analysis

The research study wanted to establish the relationship between information sharing and levels of nonperforming loans in commercial banks in Kenya. The research findings indicated that there was a strong positive relationship ($R= 0.747$) between the variables. The study also revealed that 55.8% of nonperforming loans in commercial banks can be explained by the independent variables. From this study it is evident that at 95% confidence level, the variables produce statistically significant values for this study when combined hence can be relied on to explain non-performance loans in commercial banks. However, when tested individually only defaulted loans produces statistically significant values while total arrears and total loan exposures produces statistically not significant values. The findings are as shown in the tables 4.16, 4.17 and 4.18 below.

Table 4.16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747	.558	.516	591.03796

Source: Research Data 2011

Table 4.17 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13690293.577	3	4563431.192	13.064	.031
	Residual	10829101.852	31	349325.866		
	Total	24519395.429	34			

Source: Research Data 2011

Table 4.18 Coefficients

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error			
I (Constant)	2860.530	1196.579		2.391	.023
" Defaulted loans	-1.135	.191	-.713	-5.942	.011
Total arrears	-.012	.037	-.039	-.324	.748
Total loans exposures	.012	.009	.173	1.444	.159

Source: Research Data 2011

From this study it was evident that at 95% confidence level, the variables together produce statistically significant values for this study (high t-values, $p < 0.05$.) Positive effect was reported for total loans exposures ($P = .173$). However, negative effect was reported for defaulted loans and total arrears ($P = -0.713$ and $p = -0.039$) respectively.

The results of the regression equation below shows that for a 1 - point increase in the independent variables, a non-performing loan is predicted to increase by 2860.53, given that all the other factors are held constant. The equation for the regression model is expressed as:

$$Y = a + p_1X_1 + p_2X_2 + p_3X_3$$

$$Y = 2860.53 - 1.135X_1 - 0.012X_2 + 0.012X_3$$

Where

Y = Non performing loans

X₁ = Defaulted loans

X₂ = Total arrears

X₃ = Total loans exposure

4.19 Summary and interpretation of findings

From the study findings it would be safe to conclude that, sharing of client's information amongst commercial banks and individuals helps reduce the level of non-performing loans advanced by commercial banks. The conclusion is supported by the results the various descriptive and inferential statistics.

From the analysis done it is evident that the credit reference bureaus have started operating in Kenyan economy for at least one and a half years. This is demonstrated by the duration in which the staff has been engaged in these institutions. It is also worth noting from findings that almost every staff in credit department of various commercial banks is acquainted with the skills to capture credit history of every client who approach a bank to acquire loans. The credit reference bureaus are getting roots after it got backed up by the CBK regulations. Most banks abided with the directive that was issued in 2010 and more banks are following the footsteps of their counterpart. Majority of the respondents indicated that they had started operations in the year 2010 and that their bureaus on average kept between 9,171 and 28,685 records in their files one year before and up to July 2010 and between 13,057 and 48,028 records in their files after July 2010 up to September 2011. Respondents unanimously indicated that their bureaus on average issued credit reports worth between shillings 50,657 and shillings 92,628 one year before and up to July 2010 and between shillings 49,085 and shillings 92,142 after July up to September 2011. This by extension indicates that banks had earlier suffered and incurred a lot of costs in NPLs provisions. As it is a convention that the loan provisions are operating costs of every business. The more the loan is getting delayed the higher the provisions are set aside and eventually the loans get written off if repayments are not realized. This reduces the profits of such a company. Banking industry in Kenya has been observed to reap much from the profits announce. This is true because from the fundamental analysis theory in finance, any information released is captured instantly in the price of a share. Therefore from this study sharing the clients credit profile will benefit both the lender and the client. If the client has had a positive information (white information)

Majority of the respondents indicated that their bureaus provided data on arrears than on defaulted loans and that majority of banks provide positive information (white information) at 80%. Majority of the respondents further indicated that their bureaus on average shared information on NPLs worth between shillings 49,942 and shillings 92,628 one year before and 2010 and up to July 2010 and between shillings 47,085 and shillings 91,857 after July 2010 and up to September 2011 thus a significant decrease in the level of NPLs in commercial banks for the period under study. Further, majority of the respondents indicated that their bureaus on average were required to issue between 50,171 and 92,685 by banks before July 2010 and up to July 2010 and between 50,400 and 119,942 after July 2010 and up to September 2011 thus a significant increase in the level of information sharing amongst banks. Majority of the respondents also indicated that their bureaus on average were required to issue between 40,571 and 45,085 reports requested by individuals before July 2010 and up to July 2010 and between 49,942 and 92,257 after July 2010 up to September 2011. From the findings it is observable that earlier many borrowers made a lot of effort to repay their loans, but did not get rewarded for it because this good repayment history was not available to the lenders that they approached for new loans. On the other hand, whenever borrowers fail to repay their loans lenders were forced to pass on the cost of defaults to other customers through increased interest rates and other fees. That is good borrowers were paying for bad. The sharing of credit information allows lenders to better distinguish between good and bad borrowers. The initiation of credit reposting will make someone who has failed to pay their loan at one lender not simply able to walk to another lender to get another loan without the lender knowing about it. From the findings it means over time better information on potential borrowers should mean that it will be both cheaper and easier to obtain loans.

Majority of the respondents indicated that the headquarters of their bureaus were located in Nairobi and that majority of the bureaus do not have branches in rural areas. Respondents further indicated that in order to collect information/ share information from clients who reside in rural areas they send field officers and engage agents and in this case are the lenders who help in obtaining information about their clients. The fact from the findings that most of the CRBs are located in Nairobi it possesses some challenges

both to the borrowers as well as the lenders. Customer data is submitted to the CRB by the lenders. The customers are expected to update their data either with the CRB or their lenders upon receipt of their reports to ensure that their data is accurate. The proximity will be much problem and this may end up making it inconvenient for clients to get loan facilities. Despite the fact that the credit reports the credit report does not tell the bank whether to lend or not it guides them to make more informed decision on good or bad risk. Whether the lender makes decision not to lend solely based on the information they find on the credit report.

The study finding shows that sharing of credit information reduces the level of NPLs. In extension it shows that credit history is important for future lending decisions to lenders. The longer the credit history, the more useful the credit report. For good payers a detailed credit report becomes good collateral to lenders. This could indicate that if lenders are aware of a customer's good payment history, that consumer could benefit from lower interest rate, easier terms or less collateral. From the findings it would be in order to note that consumers of credit have a duty to insist that positive information be sent to the credit bureaus. This is because the core objective of the data sharing exercise seems to be to collate a history on one's credit worth.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study focus was based on the curiosity on whether there was any relationship between information sharing and level on NPLs in commercial banks in Kenya. All along in Kenyan banking industry there has been challenges on NPLs. This can made many lenders to slow down in lending businesses which to greater extent make a slowdown of economies. The study was intending to open eyes to lenders as well as borrowers. Many borrowers make a lot of efforts to repay their loans but do not get rewards for it because this good repayment history is not available to the lender that they approach for new loans. Therefore the intended beneficiaries of this study were the commercial banks, borrowers and the researchers.

The research study utilized both secondary and primary data. Quantitative data on non-performing loans for the commercial banks was extracted from annual reports, profit and loss accounts, balance sheets and cash flow statements. A period of one year was considered (2010). These statements were obtained from the commercial banks, published financial statements from local newspapers as well as from Kenya institute of bankers Association offices. These sources were preferred as they were authoritative. Data on Credit reference bureaus was obtained through the use of questionnaires that were directed to commercial banks in Kenya. The questionnaires were administered to staff in credit departments. The questionnaires consisted of both closed and open ended questions and were dropped to be picked later. Such questions were preferred as they were easier to analyze since they were in immediate usable form.

In summary, the response rate of the survey was 21%. The aim of the discussion was to establish the relationship between information sharing and level of information sharing in commercial banks in Kenya. Why the findings were the way they were and if they were consistent with or contrary to the previous empirical findings. The discussions and presentations were guided by the objective of the study which was to establish the

relationship between Information sharing and levels of NPLs in commercial banks in Kenya.

5.2 Conclusions

From the study findings it would be safe to conclude that, sharing of clients information amongst commercial banks and individuals helps reduce the level of non-performing loans advanced by commercial banks. The conclusion is supported by the results the various descriptive and inferential statistics.

Majority of the respondents indicated that they had started operations in the year 2010 and that their bureaus on average kept between 9,171 and 28,685 records in their files one year before and up to July 2010 and between 13,057 and 48,028 records in their files after July 2010 up to September 2011. Respondents unanimously indicated that their bureaus on average issued credit reports worth between shillings 50,657 and shillings 92,628 one year before and up to July 2010 and between shillings 49,085 and shillings 92,142 after July up to September 2011.

Majority of the respondents indicated that their bureaus provided data on arrears than on defaulted loans and that majority of banks provide positive information (white information) at 80%. Majority of the respondents further indicated that their bureaus on average shared information on NPLs worth between shillings 49,942 and shillings 92,628 one year before and 2010 and up to July 2010 and between shillings 47,085 and shillings 91,857 after July 2010 and up to September 2011 thus a significant decrease in the level of NPLs in commercial banks for the period under study. Further, majority of the respondents indicated that their bureaus on average were required to issue between 50,171 and 92,685 by banks before July 2010 and up to July 2010 and between 50,400 and 119,942 after July 2010 and up to September 2011 thus a significant increase in the level of information sharing amongst banks. Majority of the respondents also indicated that their bureaus on average were required to issue between 40,571 and 45,085 reports requested by individuals before July 2010 and up to July 2010 and between 49,942 and 92,257 after July 2010 up to September 2011.

Majority of the respondents indicated that the headquarters of their bureaus were located in Nairobi and that majority of the bureaus do not have branches in rural areas. Respondents further indicated that in order to collect information/ share information from clients who reside in rural areas they send field officers and engage agents who help in obtaining information about their clients.

5.3 Policy Recommendations

The conclusion that emerges yet again is that, sharing of clients' information amongst commercial banks and individuals helps reduce the level of non-performing loans advanced by commercial banks. This therefore calls for establishing of strategies that facilitate sharing of information among the lenders.

From the findings again non-banking institutions (SACCO, MFI, HELB Telecom bills etc.) have not been included in CRB data base. It would be recommended that Kenya Credit Providers Association work out the modalities for submission of data by all lenders (banks and non-banks) to the CRBs. This is because the current Kenya legal arrangements restrict availability of bank information to banks alone.

In addition in future information from other sources-power, water and phone payment can also help banks to assess the consumers' ability to pay and it would be recommended that the modalities be worked out to include such information. Also the findings outcome that shows collectively, negative and positive information gives a more complete picture of customers. It would be recommended that both the 'Black' and 'White' information be shared and some rules and regulations should be put in place by regulators to enforce this in order to make the information sharing beneficial to all stakeholders.

5.4 Limitations of the study

The researcher encountered quite a number of challenges related to the research and most particularly during the process of data collection. Due to inadequate resources, the researcher conducted this research under constraints of finances and therefore collected data from Nairobi County only in this study. During the study the researcher traveled on foot for long distances before accessing different banks to access the respondents, In

addition financial challenges were witnesses as some of the respondents had to be pushed to assist with data. This was done through many calls to remind them.

Time allocated for the study was insufficient while holding a full time job and studying part time. This was encountered during the collection of material as well as the data to see the study success. However the researcher tried to conduct the study within the time frame as specified.

Some respondents were biased while giving information due to reasons such as privacy and busy schedules at their work place. This was because some of them had a thought that this would give their employers a millage in terms of competition. Others wanted to be paid in order to give data. Other thought that the information they were requested to volunteer was confidential

5.5 Suggestions for Further Studies

Arising from this study, the following directions for future research in Finance were recommended as follows: First, this study focused on registered commercial banks in Kenya with branches mainly within Nairobi and therefore, generalizations cannot adequately extend to other commercial banks outside Nairobi. Based on this fact among others, it is therefore, recommended that a broad based study covering all commercial banks in all major towns be done to find out the relationship between information sharing and levels of nonperforming loans in commercial banks.

Secondly, it is important to carry out similar study among Micro-financial institutions to find out the relationship between information sharing and levels of nonperforming loans advanced by them.

Finally, it is also suggested that future research should focus on the different aspects of micro financing on the levels of nonperforming loans by commercial banks and micro financial institutions.

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PART B:

PLEASE ENCLOSE ANY PUBLISHED OR OFFICIAL MATERIAL THAT YOU FEEL WOULD BE RELEVANT TO UNDERSTAND THE INFORMATION SHARED

SCALE OF OPERATIONS

5. Year started operating

6. Number of records in your files one year before and up to July 2010 in months

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

7. Number of records in your files after July 2010 up to September 2011

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

8. Credit reports issued one year before and up to July 2010 in months

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

9. Credit reports issued after July 2010 up to September 2011

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

DATA SUPPLIED BY COMMERCIAL BANKS

10. Which type of data is provided by lenders to your bureau?

Volumes

Defaulted Loans

Arrears

11. Are there banks that share positive information (White Information?)

Yes No

12. If yes what percentage

What are the volumes of information shared in terms of;

Levels of NPLs by your bank in months

13. One year before 2010 and up to July 2010 in months

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

14. After July 2010 up to September 2011

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

Number of reports requested by your bank in months

15. Before July 2010 and up to July 2010 in months

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

16. After July 2010 up to September 2011

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

Number of reports requested by individuals in months

17. Before July 2010 and up to July 2010 in months

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

18. After July 2010 up to September 2011

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

DESCRIPTION OF CREDIT REFERENCE BUREAU THAT YOUR BANK DEALS WITH

19. What is the name of your Bureau

20. Town where headquarters is located.

21. Does your bureau has branches in rural areas (Please Tick) Yes No

22. If **No** how does it collect information/share information from clients who reside in rural areas

APPENDIX 2

LIST COMMERCIAL BANKS IN KENYA

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

Source Central Bank of Kenya