AN EVALUATION OF THE EFFECTS OF CREDIT INFORMATION SHARING IN KENYAN COMMERCIAL BANKS' ON NON-PERFORMING LOANS

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DECLARATION

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

Sign…… Date……..

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This Research Project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

To

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‘Except for your support, tolerance and focus, it would never have been a reality for me to successfully complete my MBA’

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To my beloved children Sharline and Bernice,

‘For your ensemble that you may excel academically beyond this point’

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

CBK	Central Bank of Kenya
CRB	Credit Reference Bureau
GDP	Gross Domestic Product
HELB	Higher Education Loans Board
KCB	Kenya Commercial Bank
NPL	Non-Performing Loans
NPA	Non-Performing Assets

LIST OF TABLES

CHAPTER ONE
INTRODUCTION

1.1 Background

The history of banking is faced with many failures making it a very tricky business market that cannot be easily entered. All over the world, central banks are the main regulators of the banking industry in terms of opening and closing banks as well as monitoring the common activities in the banking industry (CBK, 2016).

However, the banking sector requires careful governance and well-calculated plans to make any profits without the risk of collapsing. Even though banks have traditionally dealt with collateral and individuals as the main form of guarantee for borrowed funds, it has emerged that more needs to be done to improve loan servicing by both the loanees and the lending institutions. Arvelo and Aravind (2010) noted that banking is built on both trust and ability to make full recovery of any funds lend to borrowers.

This is in addition to the fact that a bank due to its ability to charge interest on borrowed funds should have adequate funds to circulate around while enticing present and new customers to even bank with them more. The main cause of this collapse has been attributed to the poor management especially in the local or indigenous banks coupled with political interference. There is a growing need to have independent observers not related to the lenders or loanees overseeing the loan management from all lending institutions.

The introduction of credit reference bureaus was not easily accepted in the 1990s by players including the lending bank institutions and the loanees, citing client confidentiality or protection as the key reason for the resistance of an independent entity to be involved in loan management (CBK, 2016). Given that many organizations outside banking industry have now got involved in money lending, market observers have observed that a difference would occur if indeed there was a link or cooperation between

lenders, loanees, regulators and that independent entity to which all players in the banking industry plus their stakeholders would collectively make a reference to.

1.1.1 Credit Reference Bureaus in Kenya

First introduced in the early 1990s, credit reference bureaus (CRBs) are licensed organizations that aim to collect and synthesized information for both individual and corporate consumers on their credit worthiness. This is however restricted to the records that can be available without any manipulation as regulated by central banks in many countries around the world (CBK, 2016)

Specifically, the CRBs were created in line with World Bank requirements to have an organization that could independently keep information containing data on personal details, time of borrowing, length of recovery period, history of transactions and the parties involved in money exchange specifically borrowed funds. As a matter of fact, the Kenyan market had just one such institution and was used only sparingly on corporate consumers. Following the clear success of the initial CRB, the institutions were formally established under the Banking Act (CRB) of 2008 which became effective in early 2009. The real mandate of the CRBs is in policy form where they are tasked with the development and sustainment of an information sharing network that is a key component of the financial system of the country.

The above responsibilities of CRBs in Kenya mean that they have to assess the risk of loaning by determining the historical background of a loanee. By so doing, the CRBs clearly lower the cost of borrowing both from the consumer and lender side since most of the information necessary for agreement is provided at almost no charge to both parties. The final major responsibility of CRBs is to create an environment in the money market in which a culture of responsibility is acceptable in the society. This implies that CRBs would act as a databank accessible to both the lender and borrower indicating the correct historical background of lending or repayment trends. Kenya is still a young nation economically but have three well-established bureaus all based in Nairobi including

Metropol, Creditinfo and Transunion. Understandably, the CRBs are not in large numbers since they serve various finance houses simply with information and that means farm much lesser branches as opposed to banks (CBK, 2016).

1.1.2 Non-Performing Loans

Referred to as NPL in banking platforms, these are repayments which a borrower has not serviced for period of more than 90 days with the consequence that the loan will have little chance of being repaid or totally fail to be repaid. Naturally, if such a borrower has an explanation that convinces the lender of the reasons for non-performance, then such a borrower would be considered a non-defaulter. Makhubela (2006) observes that banking institutions prefer to never have to write off bad debt since their loan portfolios are their primary assets and source of future revenue.

In real operations, these NPLs reflect very poorly on a financial statement of a banking institution and can divert resources from more productive activity. The common practice is to remove the bad loans from the balance sheet in order to reduce the tax liability for the lending institution. However, when a NPL is written off, the lender receives a tax deduction from the loan value. Not only do banks get a deduction, but they are still allowed to pursue the debts and generate revenue from them. Another common option is for banks to sell off bad debts third party collection agencies which then pursue the debt at an extra cost to make a profit (CBK, 2016).

The risk with non-performing loans is that it leaves the lending institution with two options of either disposing of the portfolio for the non-performing loan or simply sell that portfolio elsewhere at no profitable price. It is noted that such NPLs will normally affect the lender's profits, losses and tax position. The non-performing loan will definitely prompt the lender to seek corrective measures including tracing the guarantors and considering sell of collateral assets used for the acquisition of the borrowed finances. It would then involve foreclosure of property or outright seizure of others in order to help recover as much of the loan as possible. With no such assets to help in correcting the situation in a non-performance loan, the option of internal recovery would take place if

the borrower has some assets including savings with the lender. Otherwise if the borrower has been proved to be completely out of capability to make repayments for example in case of university loans for unemployed graduates, the loan is put into forbearance in order to protect both the lender and borrower until such a time that recovery will be possible through gainful employment (CBK, 2016).

The involvement of a third party in loan management thus would engage a recovery entity in which the responsibility of getting back as much value as possible from the loanee is bestowed. From experience in the market, such arrangements ensure that the recovery team optimizes as much as possible any property that the loanee might have and which can be sold to recover the amounts lend by the borrower. A bank that is heavily overwhelmed by non-performing bank loans could eventually collapse depending on the strength of that loan amount. Lang'at (2014) points out that all the non-performing loans do not just come from nowhere but that they are well documented and the loanees can be traced to particular people with records in many other places where this loanee(s) do business or any place where they are offered services. The scholar points out that at times, if customers ever decide to pull out of a bank because of panic due to fear of losing their investments in the lender institution; they can easily overrun that bank through heavy withdrawals. This calls for auditors to detect any covered or uncovered loans. Specifically, such a move enables banking management to have system of detecting fraudulent deals that could result into the collapse of a bank. Even though a bank might have seemingly adequate liquidity, if the auditors do not fully disclose or uncover the various portfolios of each customer, there is a risk of non-performing loans bringing down a well-surviving bank both local or international (Njoroge, 2016).

To avoid the situation where a bank could collapse due to bad debts or non-performing loans, scholars in banking industry have recommended mergers and acquisition of such banks as witnessed both locally and internationally. When banks fail to meet their obligations, they could be liquidated or put under receivership to help stabilize the debt situation without harming both the lenders and borrowers. The accumulation of bad debt due to imprudent borrowing and lending can be aggravated by fraudulent deals in the

banking sector due to politics or simply bad managers in which companies belonging to managers are given preferential as well as unlawful access to loan facilities. Other non-performing loans could be as a result of junior clerks colluding with calculating customers to simply destroy the records of a lender using physical means or technological wizardry (Arevalo & Aravind, 2010).

1.1.3 Credit Reference Bureaus and Non-Performing Loans

Political linkage was for long the most common reason for people or corporate entities to default in loan repayment. Everett (2015) pointed out that loan defaulters had to have a political link to the management or to the ruling regime in Asian countries in order to pull off such default. The process of getting a loan is far much easier in America as opposed to Europe where guarantees are strictly vetted while the individual persons are made to undergo rigorous checks as a tradition in the continent. The same could be said for Africa in general in which Kauko (2012) noted that most bank loanees had direct connections with members of parliament and the political elite. The implication is that there was for a long time a general malaise in which loans were a risk even after one deposited collaterals for a specific loan. In effect, banking institutions became stymied in their quest to entice customers to get their loan in the fear that they might be politically connected.

When a customer defaults, the lending institutions' first action is to try to reduce the loss through the forceful sell of the loanee's valuable assets to add to what was put down as a guarantee. This would thus involve the auctioneers normally arriving in a very rough manner to the loanee premises. Once banks got connected and trusted to the CRBs, the incidents of loan defaulting dramatically dropped but significantly, the amount of cash borrowed by customers also went down forcing banking institutions to keep interest rates high so as to make optimum profits from the few borrowing clients.

A notable area of CRB operation is the student's loan system in Kenya in which initially, former beneficiaries would not honor their obligations to pay back government loans. This led to heavy backlog of defaulted loans by graduating and working class people. The establishment and near-enforcement of CRB Act has led to sharp decline in the

number of defaulters while raising the percentage of those who will voluntarily pay since failure to pay would be reflected in any other institution (CBK, 2016). Some Kenyan banks have now made it mandatory to have their clients directly linked to the CRBs such that on request for any loan facility, the client's CRB record is reflected and hence management get the opportunity to decide on the correct action to take for the loan to be processed.

1.1.4 Commercial Banks in Kenya

Kenya's banking industry is divided into three tiers with a total of 42 banking houses. These include both commercial and public banks although strictly speaking, there is no such thing as a public bank since all of them aim to make profits openly with common burdens of unpaid loans as well as risky ventures in their day to day operations.

The Central Bank of Kenya (CBK) reports that there are 42 banks currently operating in Kenya with 6 banks found in the top tier controlling almost 50 percent of the market followed by 16 Tier 2 banks that control another 42 percent of the market leaving out a paltry 8 percent of the market controlled by Tier 3 banks which are mainly 21 small private banks. In effect, the Tier 1 banks are the old stable large banks composed of Cooperative, Commercial, Equity, Barclays, Standard Chartered and CBA. Some of the major Tier 2 banks include Diamond Trust, NIC, Family bank, Eco bank, HFCK, NIC, I&M and CFC Stanbic. The final Tier 3 banks include such banks as Baroda, Jamii Bora, Fidelity, ABC and Guardian. Although the CRB Act requires linkage of the banks to the CRBs, it is up to the individual banks to decide when to use the CRB information on their clients thus making it difficult to fully enforce the powerful tool of CRBs.

Even though the CRB policy is aimed at reducing the changes of risky loans, reports indicate that there was an increase in the defaulting loans by almost 35 percent in the recent past including 2012 and 2013. This is in spite of there being stringent measures taken by most banks to ensure compliance with CRB guidance. The reports further indicated that the main cause of defaulting was now high interest rates in which even after a client has taken a loan, it became difficult to service the same due to high charges

on the rates. Other observations have come up to prove that the defaulting loans have actually come down yet in Kenya, commercial banks of high repute have gone under in the recent past due to bad debts (CBK, 2014).

1.2 Research Problem

Banking as one of the oldest professions is inherent with many risks, the major one being collapse of a bank where no indication existed that it would do so. In many cases, there is never a sign that a banking institution is about to collapse thus causing extreme panic on the customers and excessive hemorrhage on the institution through frantic massive withdrawals. Clearly, what is lacking is a system of information where both the customer and the lending bank have some common database where they can check on each other's credibility.

Studies across Europe Jappelli and Pagano (2009) observed that the high interest rates and wide variety of guarantees required to acquire credit was largely responsible for the low levels of defaulting as opposed to the American cases where security demands for accessing loans were not as stringent. However, Beck *et al.* (2013) noted that whereas the European experience is caused by the trust levels among the member states, it would be difficult not to attach high interest rates to the loaned amounts given the multiple nationalities across Europe as opposed to the one or similar peoples across the USA.

Even though studies on the Asian continent have shown that social lending can be a source of defaulting since loanees take for the granted the trust between lender and loannee.

Locally, there has been a tremendous scale-down on loan defaults ever since some Tier 1 banks tied their loan facilities to the CRBs. Collins and Wanjia (2011) established that loan intake had reduced drastically once one specific Tier 1 bank introduced the requirement that lending would depend on the CRB report produced by the bank and which can be verified independently by the customer. Similarly, there is a suggestion that Tier 2 and Tier 3 banks use the CRB information selectively leading to the recent collapse on formidable Kenya banks in the two Tiers. This study therefore found gaps in the studies of the mentioned scholars. First, non-African studies in America, Europe and

Asia apply in a different environment both culturally and economically. Second, it is possible that the problems encountered in one bank could not be the same as in the other bank or with various CRBs. It is from this context that the author got inspired to evaluate how non-performing loans have changed since the introduction of the CRBs in Kenya. The field question for the study was therefore, *"what is the effect of CRBs on non-performing loans in Kenyan commercial banks?"*

1.3 Research Objectives

The study aimed at establishing the effect of CRBs' information in NPLs in Kenya. It specifically sought to explore how CRB listing of defaulters has affected NPLs in Kenya and in particular, Nairobi County.

1.4 Value of the Study

It was forecast that the study would be invaluable to the policy makers of the country. The main policy beneficiary would be expected to be the treasury, central bank and auditor general in their daily obligation of customers obeying their pledge of business trust in the market.

This study was also thought to be of great importance to the institutions of higher learning and their stakeholders since they are heavily involved in the financing of Kenya's education through academic loans which if not well monitored turn out to be gifts misused by the recipients, who would graduate and join the same culture of non-payment for services provided. Specifically, the Higher Education Loans Board (HELB) of Kenya as the lead academic lender would and is already benefitting from the works of these CRBS

Yet another important beneficiary would be the stakeholders which include all fund lenders as well as organizations that help customers get necessary funds at critical times. Similarly, scholars and knowledge base managers would be willing to review any part of a law or theory that is affected by findings in this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter highlights the literature related to CRBs and non-performing loans. The main theory of concern is the information symmetry theory. Other theories could be considered including information sharing theory, credit default theory and moral hazard, but the most appropriate for this study is thought to be information asymmetry. This is followed by a review of non-performing loans and the effect of credit reference bureaus. Finally, a conceptual framework is provided on the study variables to be implemented in research methodology.

2.1 Theoretical Review

The first part of this chapter explores the major theories that deal with non-performing loans or specifically the theories of defaulting. These include theory of information asymmetry, information sharing theory, moral hazard and credit default theory. In explaining each theory, both international and local reviews have been included.

2.1.1 Information Asymmetry Theory

Propagated by Auronen (2003), the theory proposes that on a given market, two parties will always have different access to information that is meant to lead to one solution. In this way, one party has information which if the other party had, the transaction would take place but on a different footing. In other words, the party which has negative information tries to hide it or simply that the party which requires knowing the negative information does not readily find the sought information while naturally it cannot demand for the same from second party.

Information asymmetry was and has remained the key theory in market dynamics since whatever transactions take place, both parties are bound to discover new information that

they were not aware of. This is regardless of how thorough one reads between the lines of an agreement. The chances are always high that a party would rather face the consequences of non-disclosure than miss the target of getting much sought-after agreement especially finances (Wandera & Kipyego, 2013).

Of great importance when dealing with the theory of information asymmetry is the fact that in any such contracts, each party is trusting the other to have given out all the information sought to actualize the transaction. In any case, the party that has more power on the specific contract information will always come up on top. This has no economic power in the background for example a junior person could present all necessary papers to prove that they qualify for a million dollar loan, while personally knowing that the next day he is leaving town for ever thus throwing the lender into irrecoverable debt of a million dollars plus interest (Bubb & Kauffman, 2014).

Information asymmetry should not be construed to mean planned fraud. Even in normal circumstances, there can be information asymmetry that is unintended. There can never be perfect information for example a parent taking a loan to pay fees would naturally list his own property as security but not that of his child. Similarly, a bank does not readily avail to the customer such information as the bad loans causing the bank not to lend as much funds as the customer would like to have. A bank with Kshs. 5 billion in bad debts, 4 million for lending and customers requiring Kshs. 5 or 6 million would not readily inform the customers the reason for their slashed amount requests. Instead, they would hide behind the customer reasons to show why they cannot lend Kshs. 5 or 6 million in total (Fan et al., 2013). This theory is important to this study since it elaborates and guides on one of the main causes of parties defaulting. The parties control information flow in the transactions without the other party having a chance of stopping that happening because they do not know.

2.1.2 Moral Hazard

Closely associated with the previous theory of information asymmetry is the moral hazard theory. In fact this is a direct modeling from the information asymmetry theory where out of the two parties not having equal access to pertinent information, one party has no power to hit back or retaliate on realization of a failed or non-performing transaction. For example, in insurance claims, one party might do nothing if the other refuses to pay. Legal action might result but that does not guarantee pay leading to a moral hazard in which the aggrieved party can absolutely do nothing (Fan et al, 2013). Similarly, a bank which lent millions or billions to an internal customer can do literally nothing to recover the same if it turned out that the trusted customer was indirectly a paper tiger with no business that can help recover the huge amounts lent. No amount of caning, jailing or sell of property could recover the lost funds implying that the lender is completely helpless. Another common example is where an insurer pays the first premium and thereafter, returns with a claim of literally the highest payable amount, meaning the insurance firm has to pay for no deposits from the customer. In this case, the insurance firm cannot police the customer and hence a serious moral hazard environment exists (Lambert et al, 2012).

Many scholars give the solution of signaling to avoid the moral hazard situation in which a credible lender will use specific signals to determine if the customer has an intend that can match what is being asked of him. For example if a bank wants to lend a customer one million, they would test to see if the customer knows or has experience of using a million profitably to have enough balance for repayment without straining. So without even checking for collateral security, the bank tries to use signaling to determine the

suitability of a loanee to repay a debt. All this is in effort to reduce the chances of failure to pay debt. Thus a borrower who owns a pickup and would like to take a million dollar loan signals good intend to pay as opposed to one who has a good business and repayment plan on paper. Even though the bank could attach the pickup as guarantee item, the most important item in the minds of the bank is that a pick up is a direct involvement in business boosting and could enhance one's operations thus stabilizing the repayment plan (Cassar et al,. 2015)

2.1.3 Theory of Credit Default

The theory of credit default as brought up by Philipon and Skrater (2012) tries to show that the cause is always linked to the effect thus combining the idea of delinquency and insolvency for any entity at a transaction. This means that it is possible to evaluate risk at distant or before a transaction takes place clearly putting the weight of proof on the lending party. Kaya and Verashchagina (2015) have pointed out that a variety of borrowers has identified individual borrowers as most prone to risk thereby prompting thorough vetting of individuals as opposed to corporate borrowers. In effect, the banking institutions have decided to be more cautious through very high rates and extremely tough lending conditions that bar most of the borrowers. Customers have a tendency of citing client confidentiality thus baring banks and other lending institutions from accessing some of their information in the CRBs or any information source for that matter. Credit default theory therefore gives a leeway in that the lending body should have deeper information on an entity depending on the level of individualism involved in the financial transaction.

To this effect, credit default theory gives a hint that a borrower should also study the region from which a borrower is based. In that way, there are always areas from which a person trying to get a loan in a specific banking institution will get difficulties. In talking about regions, the theory notes that even countries and continents should be subject to

scrutiny when lending of funds is necessary. Thus it is not possible for the individual borrower to get funds if the region or origin is kind of blacklisted by the bank. For all practical reasons, the theory of credit default heavily applied to this study as it focused on areas of concern that could be potential sources of asymmetric information (Cassar et al,, 2015). Again, the theory complements moral hazard theory in that with a background of regions that are known to have defaulters, the theory clearly advocates for a study of that region to help bankers avoid non-performing loans.

2.2 Non-Performing Loans

Considered to be the main cause of poor performance by banking institutions and most of the times the major factor in a collapsing one, non-performing loans as Beck et al (2013) put it are normally estimated to be loans that have not been serviced for approximately 90 days and beyond with chances of doing so, growing thinner by every passing day. In other words, banks and institutions of money lending are normally careful to give an individual a specific grace period in which no repayment is done. That way, the lender seems to give a borrower time enough to get organized and plan for a smooth repayment.

Even though lending institutions could choose to sell the non-performing portfolios, there is an inherent risk that the same will happen to the entity that has bought this portfolio. This makes NPL a very risk asset. The lending house could seek to recover the principle amount through foreclosure or selling items that were set aside as security by the borrower. However, the problem with this path is that some of the assets might be so hard to sell for recovery of the said amounts. Again, the security items might not be as valuable as they were assessed or in worst case scenario, the security might even go missing. In such a case, even the lender has no powers to do anything unless they have their own investigative team to trace the history of those security items.

2.3 Causes of NPLs at Banks

In many instances, NPLs are caused by generally similar reasons deriving from common economic factors. Social and cultural factors could also be a cause of the NPLs in which different people of the world have a different perspective of what borrowing entails.

2.3.1 Persistently High Interest Rates

Taken to be the main backbone of banking industry, interest rates have remained the single source of constraint between a lender and a borrower. Wandera and Kipyego (2013) pointed out that in one workshop by bankers, it was suggested that borrowers should pay all interest upfront and only handle principle amounts subsequently. More so, most transactions involve borrowers that are not aware of how interest rates operate thus leading to serious information asymmetry from the beginning of the negotiations. In other words, borrowers are at a big disadvantage when it comes to interest rates and by the time they learn a bit of it, they get tempted to abscond or even rescind their repayment plans (Louzis et al, 2011).

What most borrowers do not realize is that interest rates are not personally controlled and that however much they would like the rates lowered, lending institutions cannot do without them. The purchasing power of a customer in the market is thus influenced by the market forces leading to the difficult and deterrence of payment of the same amount that was lending to a customer. For example a customer who borrowed 1 million and finds the price of goods to have risen to 1.2 million will feel secretly undone and hence find it difficult to buy the 1.2 million product for which price was negotiated at 1 million. This would lead to a temptation to either not buy the good or take an alternative loan to fill the gap. Such a borrower is definitely bitter and would easily delay in repayment or default altogether (Lambert et al, 2012).

2.3.2 Country's Rate of Inflation

As an economic factor, inflation is beyond an individual's control and will hit the borrower anyway it comes. Theories on inflation have always indicated that the supply

of goods and services are at the center of inflation however, to supply those goods or services require several other factors to be well catered for. For example, in most African countries, the rate if inflation is never uniform in which one gets goods in one part of a region costing almost double in another part.

Using the analogy of vehicle purchase, Madise (2011) pointed out that high inflation tempted people to be corrupt through supply of goods to areas that are having scarce supplies through illegal means. The persons in the areas of scarcity thus have to pay for the process of not being in an area with abundance and hence get tempted to default on payment or tempted to steal those goods from somewhere thus denying a trader genuine returns on investment.

2.3.3 High Rates of Unemployment

The economic crisis of high unemployment rate is a cause of concern for any lenders. For a start, it has been pointed out that a non-working person cannot be relied upon to repay a loan implying that even if this person shows the potential to have profitable business, the fact that they are unemployed will always cast doubt in the lender's mind. Once the unemployed people get a loan, they will always feel they have a moral right to be given more time to repay leading to many defaults (Arevalo & Aravind, 2010).

It is also clear that unemployment leads in some way to inflation since there are many goods and people with the power to purchase. This implies that the goods will not be sold at correct prices and hence rate of repayment for those business people who borrowed funds will be poor or non in the worst case scenario. With poor power to purchase and poor influence of the seller to convince the unemployed person to purchase, the situation becomes untenable for both parties and hence leading to a stalemate on the market which translates into people stealing goods and those who borrowed funds faiing to repay consistently or uniformly(Madise,, 2011; Lang'at, 2014)

2.3.4 Size of Commercial Bank

Many countries have specific bank levels with majority including Kenya having three tier levels. These include Tier 1, Tier 2 and Tier 3 banks to which customers attach different

values and affection. Whereas the Tier 1 banks are the old and new powerful ones on the market, majority of new and very old customers will be found in the Tier 2 and Tier 3 banks with the safe thinking that they are well organized. The traditional thinking borne in America was that some banks are too big to fall, leading to the Tier system. According to Kostoversky (2015), there is no set rule as to which bank can fall and which one cannot fall folling the American experience in which the state had to bail out the largest Tier 1 banks when a fall was historically eminent. On the contrary, more Tier 2 and Tier 3 banks are more prone to fail since they ask fewer questions and the borrowers could be very close to the banking personnel as opposed to the Tier 1 banks with millions of customers across vast regions. So even though the vast numbers appear to hide those intending to fail to repay, the large regions covered means that Tier 1 banks have more information on the customers as opposed to the Tier 2 and Tier 3 banks. It therefore implies that size of a bank is very fundamental in determining the probability that a non-performing loan will result (Arishabba, 2011).

2.3.5 Listing of Loan Defaulters

One of the major determinants of NPLs is the listing of loan defaulters which can galvanize a group to either pay fast or disappear altogether. Naturally, no human being wants to be on a list of shame and the moment they are listed on such a list, they have two reactions. One is to clear their names and the other one is to remain silent and feel that by listing their names, the lender has got his share of the deal and hence the borrower is entitled not to pay back.

It is also notable that listing of defaulters has the positive effect of notifying other intending borrowers that they would be listed down as well if they defaulted. Similarly, it can encourage naughty people or people with bad intend to come forward for such loans knowing that they will just be listed and that is all. In other words, there should be further steps or measures undertaken in order to enforce the list (Kaya and Vershchagina, 2015)

2.4 Empirical Review

Kostoversky (2015) studied political and moral hazards in money borrowing noting that in most Eastern bloc countries, one had to be politically connected in order to have such strings of defaulting on loans. The banks in such situations are normally operated by carefully selected individuals who help in creation of false accounts and erasure of records. However, the scholar concluded that it was possible to use the state machinery on small individuals to break the information asymmetry between borrower and lender. The banks sampled were all thought to be politically connected with regular groups of people on defaulters' list turning up to be prominent people in government related organizations.

More studies have also been carried in the Far East by Cassar et al (2015) using comparative analysis of state-owned banks verses private commercial banks. The scholars found that members of particular community always had prior information of what loans were available and hence beat the rest of the country communities in the rush to access state-subsidized loans. In conclusion, they recommended that information asymmetry be reduced through prior and timely announcement of such loan packages especially from the government side.

In Uganda, Arishaba (2011) used descriptive study design on specific banks to find that inflation and high interest rates were not the sole cause of heavy default in some banks. Instead, there was a linkage between being listed on the list of defaulters and total lack of a database that would help eliminate repeat offenders. Thus, it was possible for a person with a Non-Performing loan to carry on with the character of non-repayment to another bank. This again points towards information asymmetry as well as moral hazard since the new customer in region A could be same one in region B who has defaulted

Locally cases of loan defaulting are common with Collins and Wanjau (2011) using an empirical study with a structured questionnaire concluding that there was strong evidence to suggest that scrupulous people use information asymmetry to fail to repay loans as

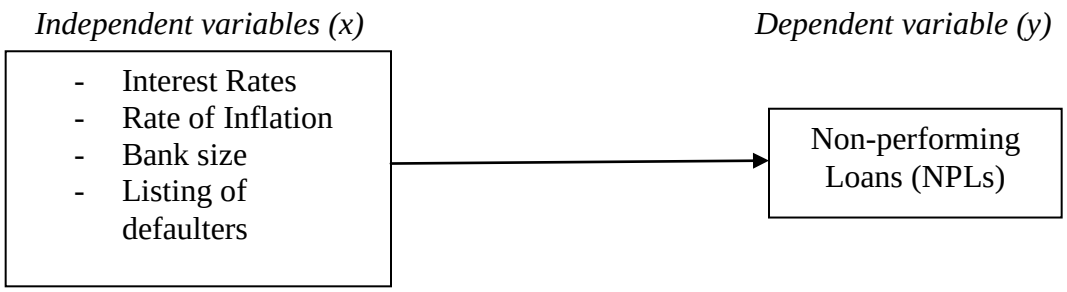
they can move from location A to location B where they are unknown leading to a chain of NPLs that would appear to be related through specific loan defaulters.

Another scholar to have carried out a study in the field of NPLs was Kwambai (2013) using a case study of Kenya Commercial bank to conclude that interest rates contributed significantly to defaulting but they could also play a positive rate as they keep in check any would-be borrower from a spur borrowing funds. What the study by Kwambai brought up was the conclusion that even if one manages to reduce as much information asymmetry as possible, many other factors including inflation should be combined to determine the optimum level of lending as well as the group of people to whom the bank can confidently give loans.

2.5 Conceptual Framework

The study is focused on establishing the effect of credit reference bureaus on non-performing loans in commercial banks. This therefore calls for a dependent variable and independent variable for which this study will have performance of non-performing loans as the dependent variable and effect of credit reference bureaus as the independent variables. This is as indicated in figure 1.

Figure 1 : Conceptual Framework



CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

Chapter three describes the research design, target population; sample to be adopted in the study. The methods of data collection and data analysis are further discussed respectively. The importance of methodology is to arrange all processes or operations of a study in order to attain the right procedures and collect the right data to be analysed correctly with effective findings (Kothari, 2008).

3.2 Research Design

The research design that was adopted in this study was descriptive research. Descriptive research entails collecting data that describe events. It often uses visual aids such as graphs and charts to help the reader to understand the data distribution. It involves observing and describing the behaviour of a subject without influencing it in any way (Cooper & Schindler, 2009).

3.3 Population

The target population for this study was 43 Commercial Banks in Kenya, and the three main CRBs in Kenya that is Creditinfo Credit Reference Bureau Limited, Credit Reference Bureau Africa Limited t/a TransUnion and Metropol Credit Reference Bureau Limited. These are the holders of information on lenders as well as borrowers which the study is interested in. According to the central bank of Kenya, there are 43 commercial banks and they are categorised according to their longevity and capacity of reserves. This then brings up three tiers for both private and public banks. The population is therefore composed of 6 Tier1 banks, 16 Tier2 banks and 21 Tier3 banks all regulated by the Central Bank of Kenya.

3.4 Sample Size

For the purpose of this study, the researcher employed stratified sampling. The researcher opted for this sampling technique as it was fast, inexpensive, and easy and the subjects were readily available. The sample size was drawn from the population of interest in all three tiers of banking institutions including the 6 in Tier 1, the 16 medium-sized Tier 2 and the 21 small banks in Tier 3. The criterion for selection within the three tiers was accessibility and ease of collecting data on non-performing loans.

3.5 Data Collection

The study used secondary data. The data was obtained from commercial banks and CBK databases as all banks are expected to file their annual financial results with CBK, information was also collected from the CRBs. The data collected included: number of loan defaulters before enactment of listing of loan defaulters and the level of non-performance loans from banks before enactment of listing of loan defaulters and the number of loan defaulters after enactment of listing of loan defaulters and the level non-performance loans from banks after enactment of listing of loan defaulters.

3.6 Data Analysis

The research obtained quantitative data from banks and CRBs. Descriptive and inferential statistics was employed in analysis of these data with aid of the Statistical Package for Social Sciences (SPSS) V.20.0 package. Descriptive statistics includes percentages and measures of central tendency (mean and standard deviation). The study used inferential statistics to establish effects of listing loan defaulters by credit reference bureaus on the level of non-performing loans in commercial banks in Kenya. Specifically, the study used Karl Pearson's coefficient of correlation to establish this relationship. The correlation coefficient was expected to be two-tailed as the relationship outcome is expected to be either positive or negative and at 95% confidence level.

The regression equation is:

$$\mathbf{Y = ß_0 + ß_1X_1 + ß_2X_2 + ß_3X_3 + ß_4X_4 + e}$$

Where

Y= Level of non-performing loans in commercial banks measured by the total amount of nonperforming loans in Kshs (natural log (ln) of total loans defaulted)

X_1= Total number of listed defaulters by each bank (natural log (ln) of total defaulters

X_2, X_3 and X_4 = Control variables

X_2= Interest rate measured by changes in interest rates (natural log (ln) in value of annual changes in interest rates)

X_3 = Bank Size, defined as the natural log (ln) of total assets

X_4 = Inflation rate measured by the Consumer Price Index (CPI), natural log (ln) of annual mean rates

While $ß_1$ to $ß_4$ are the coefficients of determination and e is the error term.

A regression analysis is done in order to predict the value of the dependent variable for individuals for whom some information concerning the explanatory variables is available, or in order to estimate the effect of some explanatory variable on the dependent variable (Armstrong 2012).

CHAPTER FOUR
ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

Chapter 4 presents the study analysis that yielded results for discussion. The chapter is arranged such that actual analysis done per variable is presented followed by a full discussion corroborating studies from other scholars and the field of NPLs as well as CRBs

4.2 Field Response Rate

As a study using both empirical and descriptive data, it was clearly going to be a success since most of the data to be collected would be found in secondary sources. This meant that all the 43 active banks had their data recorded or stored at the central bank of Kenya from where this study collected the required information for analysis. Although this represents a response rate of 100 percent, other sections of the questionnaire could not be answered by respondents from all the tiers with a response rate of as low 52 and 48 percent. Overall, the response rate was in line with the previous scholars in banking industry for example Makhubela (2006) had a response rate of 47 percent while Njue had a response rate of 53 percent. Both scholars dealt with banking related studies and gathered data from their local commercial banks.

4.3 Descriptive Statistics

4.3.1 Non-Performing Loans

Table 4.1: Defaulted Amounts

Year	Gross Loans and Advances Kshs. Million	Gross Non performing loans Kshs. Million	Net non-performing loans Kshs. Million
2011	1,083,100.00	58,300.00	13,893.00
2012	1,289,000.00	57,500.00	22,937.00
2013	1,406,100.00	77,300.00	35,476.00
2014	1,800,000.00	101,700.00	48,544.00

Source: CBK Annual report 2014

As indicated in Table 4.1, there was a variation of total amounts for NPLs with a steady increase of the same from 2011 to 2014 at an average increase of 70 percent. Clearly, the more loans are given out, the more NPLs appear to occur.

4.3.2 Analysis based on Interest Rates

Table 4.2: Interest rates

Year	Interest Rate (%)
2011	20.04
2012	18.15
2013	16.99
2014	15.99

Source: CBK Annual report 2014

Much to the expected thinking, interest rates were found to have been going down at a steady rate of 10 percent with the highest of 20.04 percent recorded in 2011 while the lowest rate was recorded in 2014 at 15.99 percent.

4.3.3 Size of Commercial Bank Based on Assets

Table 4.3: Descriptive Statistics Bank size

Year	Median	Min	Max	Mean	Std Deviation
2011	0.441	0.302	0.449	0.445	1.18
2012	0.52	0.612	0.626	0.623	1.16
2013	0.84	0.631	0.889	0.851	1.11
2014	0.986	0.825	0.979	0.972	1.14

Source: CBK Annual report 2014

Results in Table 4.3 indicate that the level of bank assets rose steadily from a mean of 0.445 in 2011 to a high of 0.972 in 2014. The standard deviation declined from a high of 1.18 in 2011 to a low of 1.11 in 2013 but rose again in 2014 an indication that the results did not deviate much from the average mean across the period of study.

4.3.4 Basis of Inflation Rate

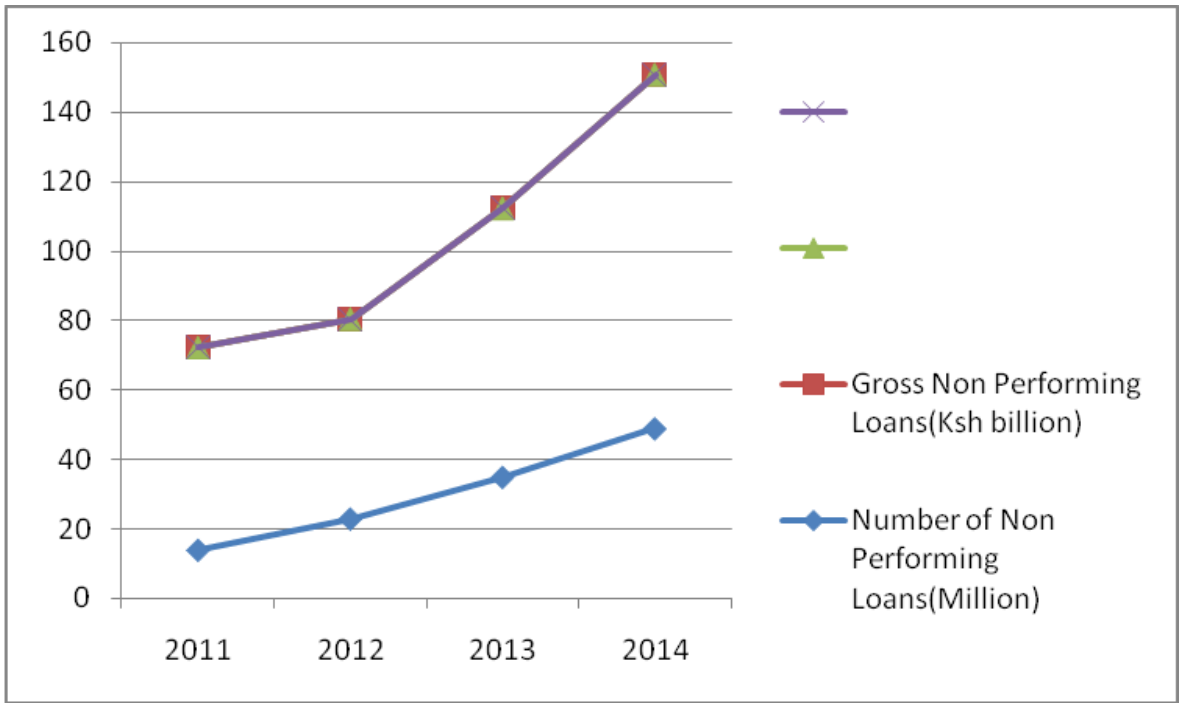
Table 4.4: Analysis for Inflation Rate

Year	Median	Minimum	Maximum	Mean	Std. Deviation
2011	13.45	4.26	17.63	14.00	3.24
2012	9.23	2.85	10.21	9.40	3.12
2013	5.43	2.01	7.13	5.70	1.22
2014	6.98	4.87	7.38	7.30	1.32

Source: CBK Annual report 2014

Results as tabulated above in Table 4.4 indicate that the banking industry like any other business in Kenya experienced a high inflation rate of 14 percent in 2011 steadily coming down to a low of 5.7 in 2013. The inflation rate however is seen to rise in the final year of analysis which was 2014.

Figure 4.1: Trend of NPLs



Source: CBK Annual report 2014

In the preceding results presented in Figure 4.1, there is a clear trend in which NPLs have steadily rose over the period of study; 2011-2014. This applies on both net NPLs and gross NPLs across the banking sector. It is also noticeable that the sharpest rise occurred from 2012 and the trend was on the increase as at the year 2014.

4.4 Relating Variables Through Correlation Tool

Table 4.5: Correlations

		NPLs	Defaulters	Rate of Interest	Bank Size	Rate of Inflation
NPLs	Correlation coefficient	1.000	0.553	0.711	0.322	0.544
	Sig. (2-tailed)	0.000	0.476	0.439	0.335	0.958
	N	43	43	43	43	43
Defaulters	Correlation coefficient	-0.553	1.000	0.142	0.037	1.000
	Sig. (2-tailed)	0.001	0.000	0.000	0.003	0.002
	N	43	43	43	43	43
Rate of Interest	Correlation coefficient	0.711	0.142	1.000	0.046	0.008
	Sig. (2-tailed)	0.003	0.001	0.000	0.000	0.000
	N	43	43	43	43	43
Bank Size	Correlation coefficient	-0.322	0.037	0.046	1.000	0.124
	Sig. (2-tailed)	0.002	0.000	0.001	0.000	0.002
	N	43	43	43	43	43
Rate of Inflation	Correlation coefficient	0.544	1.000	0.008	0.124	1.000
	Sig. (2-tailed)	0.000	0.001	0.003	0.000	0.000
	N	43	43	43	43	43

Source: Research data, 2015

Results from Table 4.5 indicate that the correlation between listing of defaulters and NPLs at commercial banks was strongly negative with a coefficient of -.553 and a p value of 0.001 ($p<0.05$), From the results, it was also indicative that a weak negative correlation existed between NPLs and interest rates with a coefficient of .711 and a significance of 0.003 ($p<0.05$). There was also a weak correlation of negative 0.322 with a corresponding significance level of 0.002 ($p<0.05$). Similarly, rate of inflation with

respect to the NPLs had a coefficient of 0.544 at a significance level of 0.000 indicating strong significance in the effect of the variable to the NPLs.

4.5 Using Regression to Relate Variables

Following the establishment of a correlation among the variables, it was possible to carry out the relationship using a regression model. This was carried out using a linear regression model of the form Y = a + bx + c.

4.5.1 Summarized Model Result

Table 4.6: Output Summary of Model

Model	R	R Square	Adjusted R Square	Std. error of the estimate
1	0.887^a	0.787	0.671	0.37290

Source: Research data, 2015

From the results of Table 4.6, the single linear regression model had a high R square value of 0.787 adjusted to 0.671. This implies that 67.1 percent of the variations in the dependent variable can be explained by the variations in the independent variables. The standard error of estimate at 0.37 is within acceptable statistical limits indicating that the results are acceptable and that the analysis used significant figure trends that correlated both dependent and independent variables.

4.5.2 ANOVA for NPLs

Table 4.7: Output for ANOVA

Model		Sum of Squares	df	Mean Square	F	Sigma
1	Regression	3.028	5	0.757	4.588	0.003^b
	Residual	6.270	38	0.165		
	Total	9.298	43			

Source: Research data, 2015

Critical value = 2.44

Results of the ANOVA analysis in Table 4.7 indicate that the high F-statistic of 4.55 (Critical value = 2.44) was a strong show of high significance. This relationship was also shown through a strong significance level of 0.003 ($p<0.05$) implying that the regression of the variables yielded positively strong results.

4.5.3 Analysis Using Beta Coefficients

In order to actualize the variable formula in the study model, beta coefficients were derived.

Table 4.8: Beta Coefficients Summary

Model	Unstandardized coefficient		Standardized coefficient		
	B	std error	Beta	T	sig.
Constant	1.541	0.429	0	3.592	0.000
Listing of loan defaulters	-0.382	0.104	0.343	-3.673	0.000
Interest rate	0.201	0.115	0.192	1.747	0.001
Bank size	-0.372	0.103	0.313	-3.610	0.002
Inflation rate	0.183	0.124	0.153	1.475	0.000

Source: Research data, 2015

Results in Table 4.8 above presented the beta coefficients and their t value significance.

This was to enable the study fill in the linear algebraic equation of $Y = a + bx + c$ as follows: where a, is the intercept, b is the beta coefficient and c is the residual or error term.

Y (NPLs) = 1.541-0.382X_1 + 0.201X_2-0.372) X3 + 0.183

The analysis therefore established that independent variables were influencing the dependent variable which was NPLs performance at commercial banks. In effect, the NPLs would still be 1.541 times higher if none of the variables was considered. However, since this is not a vacuum, that scenario cannot exist and that figure is simply an intercept to anchor the regression model in the study.

Otherwise, for every change of NPLs, there is a negative influence of 0.382 contributed by interest rates and yet another negative 0.372 units of influence by rate of inflation. There is also a positive influence of 0.201 units from the size of commercial bank assets in every increase of NPLs. Notably all significance figures indicated a strong p value ranging from 0.000 to 0.002 ($P<0.05$), thus making the results viable for further discussion in comparison to other scholars in the field of NPLs

4.6 Study Findings Based on Analysis

4.6.1 Effect of NPLs Listing

It was indicative from the results that the listing of NPLs entities of defaulters list had a positive relationship. The results are in direct corroboration of studies carried out by Makhubela (2006) in identifying that listed loan defaulters could be a risk on the market since they are able to regroup and repackage themselves on a different market while the very list of the defaulters is a sign that perhaps the banking house in question has no strong internal as well external linkages that can help reduce incidences of NPLs.

Similarly the reputation of a bank was found to be at risk by studies in Asia in which culturally, a defaulter was thought to be best handled through cultural counseling instead of shaming them through the listing system (Madise, 2011).

4.6.2 Bank Interest Rate

Findings based on interest rates indicated that there was a strong relationship between interest rates and NPLs. This results were in line with what Otwori (2013) concluded in the study on bankruptcy. The scholar concluded that interest rates were particularly variable and that many borrowers could not clearly understand the way interest rates worked leading to a high level of dissatisfaction especially during the later period of repayment. Otwori recommended interest rates that were immovable even in the face of inflation and other variable factors.

Philppon and Skreta (2013) in their study on government sponsored banks and their high NPLs indicated that interest rates alone could not have a large influence on the NPLs

since there was a clear forum for loanees to express their feelings on rates. They claimed that most NPLs were caused by individual characteristics of the entity involved.

4.6.3 Size of Bank in Terms of Assets

Although the results of the study indicated that there was a weak relationship between the size of bank assets and the performance of NPLs, other studies have indicated otherwise. Louzis et al (2011), established that the size of bank assets was a positive in their reduction of NPLs in that a large bank will develop large resources to pursue defaulters. Similarly, the Tier 1 banks cover large regions and hence the chances of tracing an individual were higher than that of the Tier 3 banks. This conclusion implied that there was a higher risk of NPLs occurring in smaller or Tier 3 banks since they had fewer resources to pursue defaulters and the fear of collapsing also means that banks with little assets will be more subject to NPLs.

4.6.4 Inflation Rate

The results based on inflation rates were indicative of strong relationship between NPLs and inflation rate. This was in support of what other scholars including Lang'at (2014) and Cassar et al (2015) concluded in their different studies which hinged on the factors affecting NPLs performance in commercial banks. The scholars observed that there was a high chance of defaulting whenever the inflation rate went up since loanees were directly affect in their purchasing power leading to both compulsive defaulting and carefully planned type of defaulting. Other scholars who have ascertained through studies on the bank market that inflation rates are directly related include Lambert et al (2012), Wandera & Kipyego (2013) as well as Kaya and Vereshchagina (2015).

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter 5 has presented the study summary of findings as well as conclusions and recommendations. The chapter also presents the limitations encountered and ends with a section on recommended further studies that were thought to enhance knowledge of NPLs and CRBs.

5.2 Summary of Findings

Results of the study were carried out to derive discussions and from that the study found that there was a negative relationship between NPLs and the listing of defaulters. In this finding, it was established that different banks listed their defaulters differently due to the various sizes of assets. This implied that Tier 1 banks had a different listing system as opposed to Tier 2 and Tier 3 banks.

Another finding was that the level of interest rates was a big detriment to smooth loan servicing implying that there were a sizeable number of entities that would otherwise repay their loans smoothly but due to high and fluctuating interest rates, defaulting was inevitable.

The study also found that the size of bank in terms of assets had a direct relation to the performance of NPLs. Specifically, the study found that larger bankers of Tier 1 type had the larger capacity to chase after defaulters as opposed to the banks with smaller sized assets. This finding implied that it was easier for smaller banks to experience NPLs as opposed to the bigger banks.

The final finding by the study was that inflation rates had a high positive relationship with NPLs in which higher rates of inflation meant that the rate of defaulting was also

very high. This was true following the uniform response of NPLs to the changes in the country's inflation rates over the 4 year period commencing 2011.

5.3 Conclusions

Deriving from the study findings, it was concluded that the CRBs played an important role in the supply of valuable information that made the screening of potential borrowers more viable than in the period before CRBs were made mandatory in most of the banking transactions.

The study also concluded that high performance in terms of investment could result into high NPLs as defaulters took advantage of the high performance to justify their non-repayment of the loaned amounts.

Finally the study concluded that both interest rates and inflation rates played a major role in the high NPLs occurrence both directly and indirectly. Directly in that the amount to be repaid was attached to the interest rates regardless of the profitability to the borrower of the funds provided by lending institutions. Indirectly, inflation led to poor purchase power rendering the borrower incapable of making optimum purchases of supplies on the market while also making it difficult for suppliers to supply adequate goods or services.

5.4 Recommendations

The study derived recommendations based on the conclusions in which first, it was recommended that Kenya government should have a policy of well-controlled interest rates especially for the commercial banks. In effect, the study was recommending that the government through the Central bank of Kenya should not leave interest rates to the control of the banks. However the recommendation also recognized that there is a newly formed law on interest rates.

The study too recommended that formally listed defaulters should be brought to book so as to reduce the incidences of repeat defaulters. In this line, the study was of the opinion that CRBs should have funding to encourage collection of more data on clients.

The study finally recommended that monitoring of loans should be a joint function such that apart from the CRBs, other sister bodies should be formed to help in control and vetting of potential loanees as well as deciding on how much a lender can give to specific borrowers to avoid internal over borrowing.

5.5 Study Limitations From the Field

The study had limitations that could have led to less data collected as opposed to the optimum potential. First, this study had a scope of limitation on commercial banks meaning that several other lenders in the market could not be accessed to establish their NPLs status. This was overcome through the application of corroborative studies by other scholars of similar findings.

Second, the study had a limited access to the primary data that would have made the results as current as possible however to overcome this limitation, the study fully used secondary data especially from the Central bank of Kenya and Kenya Bankers Association.

Finally, even though the study had limited itself to the period 2011 to 2014, the corroboration of the findings was done using studies from different periods thus compensating for the missed periods.

5.6 Suggested Areas for Further Studies

In view of the study findings and recommendations, it was deemed necessary to suggest areas of further study that would enhance knowledge in the field of NPLs and CRBs both in Kenya and globally. First, there would be a study comparing the NPLs performance in the East African countries. Second, it is also possible to have a study covering NPLs in urban and rural areas to establish the factors that cause differences of similarities. Finally, there it was thought possible to carry out a survey on the performance of banks after undergoing high NPLs or after listing. Although banks do not easily own up to a failure, such a study would help establish the effect of NPLs directly on bank performance.

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APPENDICES

Appendix I: List of Commercial Banks in Kenya

Classification and Description Commercial Banks

Large (Tier I) - In Kenya, 6 banks make up the top tier and collectively control 49.9% of the market

Medium (Tier II) - In Kenya, 16 banks make up the second tier and collectively control 41.7% of the market

Small (Tier III) - In Kenya, 21 banks make up the third tier and collectively control 8.4% of the market

A 3x3 matrix of the Kenyan commercial banking sector as of December 2015

	Local banks	Foreign banks	Banks with gov. participation
SMALL	▪ ABC ▪ Charterhouse ▪ Credit Bank ▪ Dubai Bank ▪ Equatorial ▪ Fidelity ▪ Giro ▪ Guardian ▪ Jamii Bora Bank ▪ Middle East ▪ Oriental Commerical ▪ Paramount Universal ▪ Trans-National ▪ Victoria	▪ First Community ▪ Habib A.G. Zurich ▪ Habib Bank ▪ Gulf Africa ▪ Sidan ▪ UBA	▪ Consolidated Bank ▪ Development Bank
MEDIUM	▪ Chase Bank ▪ Family Bank ▪ Imperial Bank ▪ I&M ▪ NIC ▪ Prime Bank	▪ Bank of Africa ▪ Bank of Baroda ▪ Bank of India ▪ CFC Stanbic ▪ Citibank N.A. ▪ Diamond Trust ▪ Ecobank ▪ Guaranty Trust	▪ Housing Finance ▪ National Bank
LARGE	▪ Commercial Bank of Africa ▪ Equity Bank ▪ Cooperative Bank	▪ Barclays Bank ▪ Standard Chartered	▪ Kenya Commercial Bank

Appendix II: List of Gross Non-Performing Loans per bank

		Gross Non-performing loans			
		2011	2012	2013	2014
No.	Name of Bank	Kshs. Million	Kshs. Million	Kshs. Million	Kshs. Million
1	ABC Bank	436	425	798	1,521
2	Bank of Africa	512	518	845	1,645
3	Bank of Baroda	208	198	396	1,046
4	Bank of India	259	219	357	1,014
5	Barclays Bank of Kenya	5,270	4,298	5,098	5,998
6	CFC Stanbic Bank	1,495	1,480	1,684	2,151
7	Chase Bank	893	854	1,047	1,555
8	Citibank	471	503	964	1,416
9	City Finance Bank	395	380	884	1,386
10	Commercial Bank of Africa	1,580	1,564	2,264	2,836
11	Consolidated Bank	764	761	835	1,318
12	Co-operative Bank of Kenya	3,347	3,341	3,667	4,294
13	Credit Bank	569	576	976	1,494
14	Development Bank of Kenya	938	928	1,264	1,760
15	Diamond Trust Bank	752	743	1,520	2,103
16	Dubai Bank	580	542	942	1,446
17	Eco Bank	879	943	1,408	1,916
18	Equatorial Commercial Bank	2,439	2,501	2,946	3,443
19	Equity Bank	5,474	5,301	5,346	5,861
20	Family Bank				

		2,158	2,209	2,926	3,417
21	Fidelity Commercial Bank	370	351	950	1,454
22	Fina Bank	268	265	836	1,319
23	First Community Bank	435	547	957	1,529
24	Giro Commercial Bank	581	563	1,249	1,747
25	Guardian Bank	545	502	1,006	1,603
26	Gulf African Bank	457	480	1,249	1,755
27	Habib A.G. Zurich	356	429	829	1,418
28	Habib Bank (K) Ltd	786	803	1,357	1,861
29	HFCK	687	672	1,294	1,874
30	I&M Bank	805	754	1,450	1,968
31	Imperial Bank	785	764	1,066	1,550
32	Kenya Commercial Bank	5,678	5,752	5,954	6,437
33	K-REP Bank	350	341	910	1,411
34	Middle East Bank	405	354	847	1,356
35	National Bank of Kenya	3,807	3,764	4,028	4,556
36	NIC Bank	1,587	1,509	2,046	2,572
37	Oriental Commercial Bank	850	892	1,354	1,948
38	Paramount Universal Bank	205	258	834	1,334
39	Prime Bank	681	704	1,369	2,041
40	Southern Credit Bank	1,980	2,049	2,841	3,547
41	Standard Chartered Bank	4,520	4,535	4,824	5,713
42	Trans-National Bank	1,670	1,643	2,231	2,839

43	Victoria Commercial Bank	1,073	1,285	1,652	2,248
	TOTAL	**58,300**	**57,500**	**77,300**	**101,700**

Appendix III: List of Gross loans and Advances per bank

		Gross Loans and Advances			
		2011	2012	2013	2014
No.	Name of Bank	Kshs. Million	Kshs. Million	Kshs. Million	Kshs. Million
1	ABC Bank	8,074	9,594	14,509	23,045
2	Bank of Africa	10,240	11,881	15,648	24,370
3	Bank of Baroda	3,714	4,552	7,214	13,157
4	Bank of India	4,981	4,803	6,375	11,723
5	Barclays Bank of Kenya	87,833	101,491	90,712	122,107
6	CFC Stanbic Bank	27,431	36,098	29,034	38,071
7	Chase Bank	15,667	19,632	18,696	31,134
8	Citibank	8,887	11,808	18,902	24,000
9	City Finance Bank	7,248	7,819	12,812	18,118
10	Commercial Bank of Africa	26,991	31,532	39,034	62,647
11	Consolidated Bank	13,643	16,652	14,911	29,970
12	Co-operative Bank of Kenya	69,768	81,136	62,153	96,202
13	Credit Bank	11,157	12,857	19,520	25,538
14	Development Bank of Kenya	13,055	20,668	22,734	31,074
15	Diamond Trust Bank	12,966	16,886	27,890	31,624
16	Dubai Bank	10,943	12,753	17,205	21,109
17	EcoBank				

		17,235	21,481	24,920	29,705
18	Equatorial Commercial Bank	46,019	58,709	56,114	60,949
19	Equity Bank	105,269	124,729	127,286	149,548
20	Family Bank	39,308	50,319	55,208	69,426
21	Fidelity Commercial Bank	6,852	7,995	13,971	19,007
22	Fina Bank	5,105	5,982	11,147	16,488
23	First Community Bank	7,768	11,996	14,723	18,877
24	Giro Commercial Bank	10,017	13,216	16,993	20,197
25	Guardian Bank	10,093	11,461	12,897	20,831
26	Gulf African Bank	8,279	9,697	14,193	18,474
27	Habib A.G. Zurich	6,521	8,864	12,191	16,393
28	Habib Bank (K) Ltd	14,858	16,190	18,093	22,155
29	HFCK	12,246	15,273	20,871	29,497
30	I&M Bank	14,825	18,125	22,656	34,594
31	Imperial Bank	14,457	16,754	19,382	27,434
32	Kenya Commercial Bank	99,614	125,433	130,274	138,430
33	K-REP Bank	6,481	7,732	13,188	18,444
34	Middle East Bank	11,504	7,763	11,145	16,950
35	National Bank of Kenya	70,500	83,756	89,511	98,120
36	NIC Bank	34,389	35,929	37,065	60,188
37	Oriental Commercial Bank	15,741	18,979	20,831	25,973
38	Paramount Universal Bank	3,942	4,300	7,943	13,824
39	Prime Bank	13,353	11,733	14,411	21,150

40	Southern Credit Bank	37,030	40,176	44,047	50,366
41	Standard Chartered Bank	86,493	106,455	117,857	121,553
42	Trans-National Bank	31,810	30,092	32,333	38,847
43	Victoria Commercial Bank	20,795	25,700	29,500	38,692
	TOTAL	**1,083,102**	**1,289,001**	**1,406,099**	**1,800,001**

Appendix IV: Banks size

		Bank Size			
		2011	2012	2013	2014
No.	Name of Bank	Kshs. Million	Kshs. Million	Kshs. Million	Kshs. Million
1	ABC Bank	14,217	16,326	21,095	39,734
2	Bank of Africa	15,110	20,233	25,094	30,617
3	Bank of Baroda	6,551	7,752	12,952	18,929
4	Bank of India	8,508	8,179	11,445	13,538
5	Barclays Bank of Kenya	186,478	192,509	219,907	254,821
6	CFC Stanbic Bank	50,268	66,474	71,708	74,649
7	Chase Bank	27,495	33,434	33,566	41,891
8	Citibank	15,147	20,108	33,935	32,000
9	City Finance Bank	12,561	15,316	18,001	27,451
10	Commercial Bank of Africa	47,754	53,699	70,080	95,063
11	Consolidated Bank	23,657	28,358	29,179	44,073
12	Co-operative Bank of Kenya	112,593	138,174	146,586	170,337
13	Credit Bank	18,981	21,896	30,045	42,564
14	Development Bank of	22,795			

	Kenya		35,198	40,815	48,553
15	Diamond Trust Bank	22,061	28,757	33,450	45,832
16	Dubai Bank	18,309	23,718	28,890	31,043
17	EcoBank	30,554	41,581	44,740	49,509
18	Equatorial Commercial Bank	55,726	79,981	85,744	85,581
19	Equity Bank	192,273	224,456	232,698	259,246
20	Family Bank	91,769	105,693	109,116	125,710
21	Fidelity Commercial Bank	11,647	13,616	25,082	31,678
22	Fina Bank	8,801	10,187	12,012	18,525
23	First Community Bank	13,166	20,428	26,433	31,461
24	Giro Commercial Bank	16,640	22,507	28,508	33,661
25	Guardian Bank	16,581	19,518	23,155	30,190
26	Gulf African Bank	14,225	16,514	20,481	27,167
27	Habib A.G. Zurich	11,246	15,095	21,887	24,107
28	Habib Bank (K) Ltd	25,631	27,571	32,484	36,925
29	HFCK	21,978	25,009	32,470	44,692
30	I&M Bank	26,482	30,867	37,675	60,575
31	Imperial Bank	25,691	28,533	34,797	45,723
32	Kenya Commercial Bank	168,488	195,613	225,778	240,717
33	K-REP Bank	12,070	13,168	23,678	34,269
34	Middle East Bank	19,406	13,221	20,009	24,565
35	National Bank of Kenya	83,902	102,473	120,536	128,533
36	NIC Bank	85,081	88,186	90,466	120,313
37	Oriental Commercial Bank	26,825	32,321	37,398	43,289

38	Paramount Universal Bank	6,709	7,323	9,260	17,723
39	Prime Bank	22,556	23,282	25,872	45,250
40	Southern Credit Bank	55,385	68,420	79,078	83,943
41	Standard Chartered Bank	143,857	161,293	187,970	212,589
42	Trans-National Bank	50,062	54,246	58,049	74,746
43	Victoria Commercial Bank	35,565	43,767	52,124	58,218
	TOTAL	**1,874,801**	**2,195,000**	**2,524,248**	**3,000,000**