EFFECT OF NON-PERFORMING LOANS ON INTEREST INCOME OF

COMMERCIAL BANKS IN KENYA

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DECLARATION

This research proposal is my original work and to the best of knowledge, has not been submitted in this or any other institution for any academic award whatsoever.

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DEDICATION

I dedicate this project to my mother Rose Nditiva Mutungi for her encouragement and financial support throughout my studies. I also dedicate this project to my late brother Richard Masavu who used to be a role model to me.

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ABSTRACT

Non-performing loans (NPLs) are not only argued to adversely affect the financial performance of financial institutions, but they also have other far reaching implications. This is due to the fact that, other potential borrowers may fail to access credit facilities since part of the funds that could be extended as loans by financial institutions are still tied to Non-performing loans. Banks in Kenya have had a high rate of loan default from the borrowers which have caused significant losses to the banks in terms of interest income. Weak net interest income is of particular concern for the long term viability of commercial banks. The heart of the banks' business model is lending to local businesses and households, which makes net interest income the largest source of core operating revenue. This study was therefore guided by objective that sought to; determine the effect of non-performing loans on the interest income of commercial banks in Kenya. Data was collected from secondary sources such as published financial statements of commercial banks between years 2011 to 2014. The researcher adopted a descriptive research design and data was analyzed using quantitative methods. Non-performing loans have been found to influence banks annual interest on income which in turn results to poor financial performance by commercial bank institutions in Kenya. Credit reference bureaus were introduced and have significantly resulted to reduction levels of non-performing loans. It has been however noted that increase in the rate of non-performing loans increases risks of banks being put under statutory management. Computed MLR statistics showed that 93.3% of interest on income was directly influenced by increase in non-performing loans rate. This showed that performance of commercial banks relied on the total interest rate paid through loans.

TABLE OF CONTENTS

DECLARATIONii
ACKNOWLEDGEMENTiii
DEDICATION iv
ABSTRACTv
TABLE OF CONTENTS vi
LIST OF TABLES ix
LIST OF FIGURES x
CHAPTER ONE:INTRODUCTION 1
1.1 Background of the Study 1
1.1.1 Non-Performing Loans
1.1.2 Interest Income
1.1.3 Non-performing Loan and Interest Income
1.1.4 The Commercial Banks in Kenya
1.2 Research Problem
1.3 Objective of the Study 11
1.4 Value of the Study 11
CHAPTER TWO: LITERATURE REVIEW
2.1 Introduction
2.2 Theoretical Review
2.2.1 Stakeholder Theory
2.2.2 Agency Theory 15
2.2.3 Transaction Cost Theory 15
2.3 Determinants of Non-performing Loans

2.3.1 Inadequate Attention to Borrowers	17
2.3.2 Macroeconomic Instability	18
2.3.3 Unsound Assessment Mechanism and Weak Risk Consciousness	19
2.3.4 Lack of Strict Admittance Policies	21
2.4 Empirical Literature Review	22
2.5 Determinants of Interest Income	25
2.6 Summary and Conclusion	27
CHAPTER THREE: RESEARCH METHODOLOGY	29
3.1 Introduction	29
3.2 Research Design	29
3.3 Target Population	29
3.4 Data Collection	30
3.5 Data Analysis	30
3.6 Test of Significance	32
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND	
INTERPRETATION	33
4.1 Introduction	33
4.2 Descriptive Statistics	33
4.2 Multiple Regression Results and Analysis	36
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATION	S 43
5.1 Introduction	43
5.2 Summary	43
5.3 Conclusions	44

APPENDIX I: LIST OF COMMERCIAL BANKS IN KENYA (2012)	. 51
REFERENCES	. 47
5.6 Recommendations for Further Research	. 46
5.5 Recommendations	. 45
5.4 Limitations of the Study	. 44

LIST OF TABLES

Table 3.1: Measurement of Non-Performing Loans	
Table 4.1: Model Summary	37
Table 4.2: ANOVA ^b	
Table 4.3: Coefficients ^a	39
Table 4.4: Correlations	41

LIST OF FIGURES

Figure 4.1: Interest rates (2011-2014)	. 34
Figure 4.2: Total interests on income (2011-2014)	. 35
Figure 4.3: Loans provision by commercial banks	. 36

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The banking industry has experienced significant changes in the amounts of financial assets it holds in the last decade. Both internal and external factors have affected the amounts of loans that have been issued in the banking industry .This in return has fuelled an increase in the non-performing loans. The high level of non-performing loans continues to be an issue of major supervisory concern in Kenya. The level of non-performing loans has been increasing steadily (Central Bank Annual Report 2001). Even the best banks with good lending policies and procedures do become victims of non-performing loans in one way or another. The magnitudes of non-performing loans worry bank policy makers. These loans have made some banks fall into liquidation and closure. (Central Bank Annual Report, 2004).

The deterioration in the quality of non-performing loan portfolio has been at the center of episodes of costly financial institutions' distress and economic crises in both developing and advanced economies. The 2008 global financial crisis is no exception. It's devastating effects, as well as its origination from a sharp increase in mortgage loan defaults in the United States, underscore the linkages between financial and macroeconomic shocks and have renewed interest in the relationship between credit market frictions and the risk of financial instability (Nkusu, 2011). Banking sectors play a key role in the development of an economy. The development role undertaken by

banking sector determines the step for development of economy. Hence the stability of banking sector is a key for the development of an economy.

According to Rawlin et al., (2012), the principal aim of any business is to make profits. That is why any asset created in conduction of business should generate income for the business. Since this issue is applicable for the banking sector business, banks should give due consideration on the management of loans because lending is the main business of commercial banks and loan is normally the main assets and vital source of revenue for the commercial banks (Daniel and Wandera, 2013). Therefore, banks do grant loans and advances to individuals, business organizations as well as government in order to enable them operate on investment and development activities as a mean of contributing toward the economic development of a country in general and aiding their growth in particular. However, if such assets do not generate any income, the banks` ability to repay the deposit amount on the due date would be in question. Therefore, the banks with such asset would become weak. Such weak banks will lose the faith and confidence of the customers. Ultimately, unrecoverable amounts of loans are written off as non-performing loan (Mallick et al., 2010).

As many literatures shows, there have been an increased number of significant bank problems both at matured and emerging economies (Tendia et al. 2012).Deterioration in asset quality is much more serious problem of bank unless the mechanism exists to ensure the timely recognition of the problem. It is a common cause of bank failure. Poor asset quality leads non-performing loan that can seriously damage a banks' financial position having an adverse effect on banks operation (Lafuente, 2012).

1.1.1 Non-Performing Loans

Non- performing loans are also commonly described as loans in arrears for at least ninety days (Guy, 2011). Michael et al (2006) emphasized that NPL in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. Batra,(2003) noted that in addition to the influence on profitability, liquidity and competitive functioning, NPL also affect the psychology of bankers in respect of their disposition of funds towards credit delivery and credit expansion. NPL generate a vicious effect on banking survival and growth, and if not managed properly leads to banking failures. According to this paper, non-performing assets/ loans are loans that are ninety or more days delinquent in payments of interest and/or principal (Bexley and Nenninger, 2012). Non-performing Loans (NPLs) have gained world's attention in the last three to four decades as these increasing NPL's are causing banking crisis which are turning into banking failures (Barr and Siems, 1994).

Non-performing loans are one of the main reasons that cause insolvency of the financial institutions and ultimately hurt the whole economy (Hou, 2007). By considering these facts it is necessary to control non-performing loans for the economic growth in the country, otherwise the resources can be jammed in unprofitable projects and sectors which not only damages the financial stability but also the economic growth. In order to control the non-performing loans, it is necessary to understand the root causes of these

non-performing loans in the particular financial sector (Rajaraman and Visishtha, 2002). According to Waweru and Kalami (2009), NPLs are closely associated with banking crises. Greenidge and Grosvenor (2010) further argued that the magnitude of NPLs is a key element in the initiation and progression of financial and banking crises.

1.1.2 Interest Income

The concept of interest income refers to the revenue generated from loans disbursed to commercial banks customers. Performance of loan portfolio may be measured using proxies for credit risk and measures of loan quality such as provision for loan losses, net losses or charge offs, non-performing assets, return on net assets and return on equity among others. A high proportion of loans to total assets and rapid growth of the loan portfolio are potential early warning signals of loan quality problems which indicate potential failure to collect funded income (Sinkey, 1998).

As noted by Peterson (1981), simple comparisons of average loan performance between two groups of borrowers can be misleading if the groups do not exhibit similar distributions of expected returns. Clausen (2009), analyses Profitability Ratio Analysis of the Income Statement and the Balance Sheet. Ratio analysis of the income statement and balance sheet are used to measure company profitability level as well as the future revenue stability of the firm. These two important reports show the profit and net worth of the company. They report the affairs of a firm in terms of profits compared to sales as well as how the assets are performing in terms of generating revenue

1.1.3 Non-performing Loan and Interest Income

Non-performing loans are one of the main reasons that cause insolvency of the financial institutions and ultimately hurt the whole economy (Hou, 2007). By considering these facts it is necessary to control non-performing loans for the economic growth in the country, otherwise the resources can be jammed in unprofitable projects and sectors which not only damages the financial stability but also the economic growth. In order to control the non-performing loans, it is necessary to understand the root causes of these nonperforming loans in the particular financial sector (Rajaraman and Visishtha, 2002). According to Waweru and Kalami (2009), NPLs are closely associated with banking crises. Greenidge and Grosvenor (2010) further argued that the magnitude of NPLs is a key element in the initiation and progression of financial and banking

Weak net interest income is of particular concern for the long term viability of commercial banks. The heart of the banks' business model is lending to local businesses and households, which makes net interest income the largest source of core operating revenue. Net interest income is the cash flow banks receive from loans and investments in securities minus interest payments on deposits and other forms of debt. Cash inflows and outflows depend directly on the interest rates a bank charges on loans and recovery rates on the non-performing loans.

Net interest income is affected not only by the maturity and repricing structure of assets and liabilities, but also by their composition. The interest rate on bank loans generally is higher than on marketable securities because loans tend to be riskier. In addition, loans are a more costly investment because of the information requirements to make the loan and high monitoring costs once the loan is made. Moreover, some types of loans, such as commercial land development loans, are riskier and more costly to make and monitor than other types of loans. As a result, net interest income should increase with balance sheet measures such as the ratio of loans to total assets. (Greendge and Grosvenor, 2010) The levels of non-performing loans in commercial have a lasting impact on the funded income generation.

1.1.4 The Commercial Banks in Kenya

The history of banking in Kenya dates back to 1896 when the National Bank of India opened a branch in Kenya. In 1992, there were 15 Commercial Banks operating in Kenya. This number increased to 43 by 2006. However, only five banks were controlling 57.11 percent of the loans market, leaving 38 Commercial Banks to control the rest by 2006. The Kenyan commercial banking sector was also composed of, five banks registered abroad, eight foreign owned but locally incorporated banks, seven Commercial Banks with Government participation and thirty six banks locally owned by the end of 2001 (CBK, 2007). Commercial Banks offer several services to the public including, opening saving and current account, allowing deposits from customers, foreign exchange transactions and giving loans to the public. They in-turn charge a fee for allowing deposits and opening accounts and charge interest in the case of loans. Also, banks are of major importance for the financing of firms and households.

The extent to which banks adjust their lending and the pricing of loans in response to monetary policy actions can be an influential channel through which monetary policy shapes the economy. The role of banks in the monetary policy transmission process can work through various channels. In modern day Kenya, there is a reasonably sophisticated banking system. Commercial banks account for much of the total deposit in the country. There are a total number of 44 licensed commercial banks in Kenya that provide services to several large corporations and medium sized businesses as well as small business enterprises and individuals. The banking industry is governed by the Companies Act, the Banking Act and the Central Bank of Kenya.

Commercial banks play a crucial role in an economy. Their traditional role is financial intermediation involving mobilization of deposits from Surplus units in the economy and lending to the deficit units to finance their productive Investments. By lending to Manufacturers, farmers, distributors and traders, banks play a crucial role in the economic development of the country (Metropol, 2002). As profit seekers, commercial banks are inclined to formulate policies that aim at diversifying their portfolio and thus guaranteeing some minimum rate of return. To achieve the objective of profit maximization, banks make decisions to invest excess cash in varying securities, involving not only the amount to invest but also the types of security in which to invest. These decisions are normally based on evaluation of expected net cash flows and the uncertainty associated with the cash flows.

1.2 Research Problem

Non-performing loans (NPLs) are not only argued to adversely affect the financial performance of financial institutions, but they also have other far reaching implications. This is due to the fact that, other potential borrowers may fail to access credit facilities since part of the funds that could be extended as loans by financial institutions are still tied to NPLs. The NPLs also affect the economy of a country which explains the reason why the CBK sets guidelines for enabling financial institutions to mitigate NPLs. Different studies have been undertaken globally on the area of non-performing. A study conducted by Karim et al., (2010) on the Banks efficiency and non-performing loans from Malaysia and Singapore revealed that there is no significant difference in cost efficiency between banks in Singapore and Malaysia although banks in Singapore exhibit a higher average cost efficiency score. Likewise, lower cost efficiency increased non-performing loans.

Siddigui, Malik &Shah, (2012) carried out a study on the impact of interest rate volatility on non-performing loans in Pakistan. The study concluded that rising NPLs in Pakistan are significantly but not solely impacted by the volatility in the cost of borrowings. Jimenez and Saurian (2005) examined the Spanish banking sector between 1984-2003.They provide evidence that NPLs were determined by GDP growth, high interest rates and lenient credit policy.

Locally, numerous studies have been conducted on non-performing loans. Nkusu (2011) carried out the study on non-performing loans and macro-financial vulnerabilities in

advanced economies. The study established that an increase of non-performing loans beyond some level may result to major economic setbacks such as the 2008 financial meltdown. Several local studies have also been conducted in the area of non-performing loans. Wanjira (2010) conducted a study on the relationship between non-performing loans management practices and financial performance of commercial banks in Kenya. The study established that commercial banks need to adopt good lending practices such as ensuring sufficient collaterals, limiting lending to various kinds of businesses, loan securitization, ensuring clear assessment framework of lending facilities and us of procedures in solving problematic loans.

Akahege (2011) carried out a research on the determinants of NPL among commercial banks in Kenya. The study found out that poor credit analysis by banks, sources of income, interest rates charged by banks, loan repayment period, staff turnover and other behavioral aspect like morality of individual were the major causes of loan default which resulted in NPLs in banks. Another study by Kirui (2014) on the effect of non-performing loans on profitability of commercial banks in Kenya revealed that Kenyan commercial banks have remained with persistent challenge of managing non-performing loans that are considered to have effects on its profitability. The study indicated that there was a negative effect of non-performing loans ratio on return on assets, confirming that non-performing loans negatively affects profitability of commercial banks in Kenya.

A study by Ongweso (2005) on the relationship between interest rates and nonperforming loans in commercial banks in Kenya revealed that there was a positive relationship between interest rates and non-performing loans, an indication that when interest rates increase, commercial banks should put in place mechanisms to deal with non-performing loans to minimize their adverse effects on bank performance. In addition, Muriithi (2014) study on effects of non-performing loans on liquidity risk of commercial banks in Kenya concluded that capital adequacy, nonperforming loans and loans growth was found to have the most significant negative influence on liquidity risk and size of the bank had the least positive effect on liquidity risk. Any asset created in conduction of business should generate income for the business. Since this issue is applicable for the banking sector business, banks give due consideration on to the management of loans because lending is the main business of commercial banks and loan is normally the main assets and vital source of revenue for the commercial banks (Daniel and Wandera, 2013).

Other studies include Gaitho (2010) who carried out a survey on the main causes of nonpreforming loans in commercial banks in Kenya, Kiptoo (2011), who carried out a research on the strategic response adopted by KCB to cope with challenges of NPL and Ochola (2009) who carried out a research on the relationship between risk management and non-performing loans. The exclusion of income in the studies on the effect of nonperforming loans and performance of commercial banks leaves a vital gap to be filled. The studies conducted have not explored the contextual view of non-performing loans and its effects on interest income in commercial banks. A bank earns interest on outstanding loans. It also earns interest on short-term and long-term investments. Interest income, which forms a major chunk of a bank's total income, is dependent on the volume of loans disbursed and the level of loans performance. This effect of non-performing loans to the banks income necessitated this study with the aim to answer the following research question, what is the effect of non-performing loans on interest income of commercial banks in Kenya?

1.3 Objective of the Study

The objective of this study was to determine the effect of non-performing loans on the interest income of commercial banks in Kenya.

1.4 Value of the Study

This study was important because it can assist the policy makers in the banking industry to realize the importance of continuously managing their loan portfolio by either closely following up on repayment with customers or training employees to appraise and monitor the quality loan portfolios.

This study also provides valuable insight into what role close management of nonperforming loans can play in both financial and social performance of commercial banks in Kenya. It also adds to the pool of knowledge on how Commercial banks can use quality loan management practices to build goodwill, improve profitability and cut down on costs associated with defaults and reduced interest income.

Other researchers can use the study to further their study in this area by reviewing the empirical literature and establishing study gaps to fill.

The academicians can find the study useful as it highlights areas for further research and also can contribute to new knowledge. The academicians being charged with dissemination of knowledge to various stakeholders may also find this study useful when doing so.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

To better understand the concept of non-performing loans in Commercial banks, the following areas were reviewed in this chapter; Theoretical framework which discusses key theories on non-performing loans, Empirical Literature Review, Determinants of non-performing loans and lastly summary and conclusions.

2.2 Theoretical Review

If a bank's asset quality is inadequate, the bank will have to increase its bad debt losses as well as spend more resources on the collection of non-performing loans. Different scholars and researchers have written and reached extensively on this subject. Some of the theories on this subject are discussed below.

2.2.1 Stakeholder Theory

Stakeholders' theory, developed originally by Freeman (1984) as a managerial instrument, has since evolved into a theory of the firm with high explanatory potential. Stakeholder theory focuses explicitly on equilibrium of stakeholder's interests as the main determinant of corporate policy. The most promising contribution to risk management is the extension of implicit contracts theory form employment to other contracts, Including sales and financing Cornell and Shapiro, (1987). To certain industries, particularly high-tech and services, consumer trust in the company being able to continue offering its services in the future can substantially contribute to company

value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy. Since corporate risk management practices lead to a decrease in these expected costs, company value rises (Klimczak, 2005). Therefore stakeholder theory provides a new insight into possible rationale for risk management. However, it has not yet been tested directly. Investigations of financial distress hypothesis provide only indirect evidence (Judge, 2006).

Stakeholder management is important for firms to survive and be successful in the longterm as each stakeholder group supplies the firm with critical resources or makes a contribution to the firm (Deegan, 2006). In exchange, each group expects its interests to be satisfied by inducements. As Hill and Jones (1992) described, investors provide the firm with financial capital. In exchange, they expect the firm to maximize the riskadjusted return on their investment. Creditors provide the firm with finance and, in exchange, expect their loans to be repaid on schedule. Management and employees provide firms with time, skills and human capital commitments. In exchange, they expect fair income and adequate working conditions. Customers supply the firm with revenues and expect value for money in exchange. Suppliers provide the firm with inputs and seek fair prices and dependable buyers in exchange. Local communities provide the firm with locations, local infrastructures and perhaps favorable tax treatment. In exchange, they expect corporate citizens who enhance and/or do not damage their quality of life. As the ultimate goal of corporate decisions is market place success, good stakeholder-firm relationship management is instrumental to assure revenues, profits and, ultimately returns to shareholders (Berman et al., 1999).

2.2.2 Agency Theory

Agency theory has its origins in the 1960s and 1970s by Stephen Ross and Barry Mitnick, who were responsible for economic and institutional theory of agency respectively (Ross, 1973; Mitnick, 1974, 2006). Agency theory raises a fundamental problem in organizations—self-interested behavior. A corporation's managers may have personal goals that compete with the owner's goal of maximization of shareholder wealth. Since the shareholders authorize managers to administer the firm's assets, a potential conflict of interest exists between the two groups.

According to the Agency theory, the principal agency problem can be reduced by better monitoring such as establishing more appropriate incentives for managers. In the field of corporate risk management agency issue have been shown to influence managerial attitudes towards risk taking and hedging Smith and Stulz (1985). Agency theory also explains a possible mismatch of interest between shareholder management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value project (Smith and Stulz, 1987). Consequently, agency theory implies that defined hedging policies can have important influence on firm value (Fite and Pfleiderer, 1995).

2.2.3 Transaction Cost Theory

Transaction costs are costs (e.g. in terms of money or time) incurred when making an economic exchange. In firms, transaction costs may include the costs of organizing business activity over time, planning the future and limiting as well as allocating risks

which may arise in the future. It therefore includes the elements of uncertainty and opportunism, which are both indispensable for debates in corporate governance. Coase argued in his 1937 article that transaction costs explain both the existence of firms and their optimal size. In "The Nature of the Firm" he identified certain transactions which are prohibitively costly if the parties involved could only deal with instant market transactions. In order to carry out a market transaction it is necessary to identify the party one wishes to deal with, establishing terms and conditions, conducting negotiations and concluding a contract.

In transaction cost theory, does not contradict the assumption of complete markets. It is based on convexities in transaction technologies. Here, the financial intermediaries act as coalitions of individual lenders or scale or scope in the transaction technology. Transaction cost theory has proven an essential framework for decision on the vertical boundaries of the firm. Transaction costs are the cost associated to the division of work. Williamson (2000), indicated that transaction occurs when a good or service is transferred across a technology separable interfaces. Variables that describe a transaction are among others, the specificity, the uncertainty, and the frequency of the transaction, whether an asset or a service is only or much more valuable in the context of a specific transaction.

2.3 Determinants of Non-performing Loans

Non- performing loans are a result of the compromise of the objectivity of credit appraisal and assessment. The problem is aggravated by the weakness in the accounting, disclosure and grant of additional loans. In the assessment of the status of current loans, the borrower's credit worthiness and the market value of collateral are not taken into account thereby rendering it difficult to spot them. The causes for loan default vary in different countries. It extends from borrower's specific act to bank's weak regulatory mechanism in advancing loans and monitoring procedures.

2.3.1 Inadequate Attention to Borrowers

Few of the loan defaults that make trouble for banks can be blamed on reduced attention to borrowers. Borrowers give better attention to the loans that they borrowed when they have the perception that better attention is given to them. Banks rarely lose money solely because the initial decision to lend was wrong. Even where there are greater risks that the banks recognize, they only cause a loss after giving a warning sign. More banks lose money because they do not monitor their borrower's property, and fail to recognize warning signs early enough. When banks fail to give due attention to the borrowers and what they are doing with the money, then they will fail to see the risk of loss. The objective of supervising a loan is to verify, first, whether the basis on which the lending decision was taken continues to hold good. Secondly, whether the loan funds are being properly utilized for the purpose they were granted.

A bank can use different ways to monitor the borrower. First, it can follow up the financial stability of a borrower by periodically scrutinizing the operations of the accounts, verifying the value of security and examining the stock statements. Secondly, bank officials can personally visit the borrower periodically to determine the progress of

the borrower company's business activity and where necessary giving advice to resolve any problems. A bank official may be appointed to the board of directors of a company that has been granted a loan. Banks however, eschew this practice, either because they do not have adequate officials who are capable of undertaking the task, or because they may be held legally responsible in the event of a borrower becoming insolvent.

2.3.2 Macroeconomic Instability

Macroeconomic stability and banking soundness are inexorably linked. Both economic theory and empirical evidence strongly indicate that instability in the macro-economy is associated with instability in banking and financial markets and instability in these sectors is associated with instability in the macro economy. Most problems of poor loan quality faced by banks were compounded by macroeconomic instability. This is mostly manifested by high inflationary rate and makes loan appraisal more difficult for the bank, because the viability of potential borrowers depends upon unpredictable development in the overall rate of inflation, its individual components, exchange rates and interest rates.

Moreover, asset prices are also likely to be highly volatile under such conditions. Hence, the future real value of loan security is also very uncertain. Banks do poorly both when product and asset price inflation accelerate unexpectedly and when inflation decelerates unexpectedly, unemployment increases, and/or aggregate output and income decline unexpectedly. Macroeconomic instability would have consequences for the loan quality of banks in any country. High inflation increases the volatility of business profits because of its unpredictability, and because it normally entails a high degree of variability in the rates of increase of price of the particular goods and services which make up the overall price index. The probability that firms will make losses rise; as does the probability that they will earn windfall profits. Generally looking, the effect of macroeconomic instability on the financial sector and banking in particular makes it a cause for non- performing loans.

Because financial institutions basically deal in forward contacts, whose profitability hinges greatly on the ability to predict future prices, they do not do well in volatile environments that increase uncertainty and make forecasting more difficult. To reduce their risk exposure, the banks collateralize their loans with either the borrowers' estimated future income and/or the estimated future value of specified assets. If either the realized income or realized asset prices fall sufficiently short of the projected values, the borrower may default and generate losses for the bank.

2.3.3 Unsound Assessment Mechanism and Weak Risk Consciousness

Risks can be quantified and minimized for a bank's management and its auditors when considering the need to provide for bad and doubtful loans. No loan is entirely without risk. Every loan, no matter how well it is secured, and no matter who is the borrower, has the potential to generate loss for the lender. It is the degree of risk to which a loan is susceptible and the probability of loss that vary; these should normally be reflected in the interest margin and other terms set at the inception of the loan. There are situations under which setting performance indicators ignored risk adjusted revenues.

However, little emphasis is given on risk control and exit management. Heavily relying on the materials provided by managers and only reviewing the written reports and financial reports do not make risk review mechanism conscious. A bank should conduct due diligence by making every possible examination available. A bank, in considering whether to lend or not, takes into account the quality of a borrower which is reflected in, its past and projected profit performance, the strength of its balance sheet and the nature of the market for its product, economic and political conditions in the country in which it is based, the quality and stability of its management and its general reputation and standing.

The borrower's ability to repay a loan is of paramount importance. Ideally, the loan will be self- financing in that it will be repaid from the cash flow that the borrower is able to generate from employing the proceeds of the loan. A bank will often require security for a loan in the form, say, of a guarantee or mortgage, in which case it will be concerned about the value and title of that security. The decision to grant loan, however, should be based on the prospects and solvency of the borrower and a careful analysis of how the funds to repay the loan will be generated. Constant monitoring increases the chance that the company will respond to a bank's concern and provide information more willingly. A bank which always closely follows a company's standing can often point out danger or opportunities to the company, as well as quick agreement to request for credit.

2.3.4 Lack of Strict Admittance Policies

Under the influence of idea of pursuing market share excessively, banks do not establish detailed and strict market admittance policies, which undermine the first risk to prevent gate and weaken the orientation effect of admittance policies to market. During pre-loan investigation, some relationship managers put little emphasis on authenticity and integrality review on related materials. They have not clarified the true intended usage of the loan and the review is too optimistic, which does not analyze the potential influence of changes in related factors. There is also no deep review on the market, no enough understanding on enterprises' operation management situation, no thorough risk revaluation; inaccurate assessment, the risk of loans is not fully covered and the risk on group customers and affiliated enterprises are not identified effectively. The factors above damage the loans at the early stage.

Some extends credit against the rules, i.e. exceeding authority to offer loans, splitting one big number into several small pieces to avoid the authority constraint, issuing bank acceptance to fund enterprises on a rolling basis, or discount without actual trade background. Most problems in this case relates with accepting guaranty from unqualified institutions such as governments and agencies, high loan-to-value ratio, providing loans without property registration and transfer of collateral, guaranty for each other between enterprises and legally flawed credit procedures. There are also problems in which the conditions of the loans are not satisfied and the contracts of loans are not completed.

2.4 Empirical Literature Review

Empirical studies have pointed to the effect of Non-Performing loans to commercial banks to the financial performance both locally and internationally. A study conducted by Karim et al., (2010) on the Banks efficiency and non-performing loans from Malaysia and Singapore revealed that there is no significant difference in cost efficiency between banks in Singapore and Malaysia although banks in Singapore exhibit a higher average cost efficiency score. Likewise, lower cost efficiency increased non-performing loans. The result also supported the hypothesis of bad management proposed by Berger and DeYoung (1992) that poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans.

Jimenez and Saurian (2005) examined the Spanish banking sector between 1984-2003.They provide evidence that NPLs were determined by GDP growth, high interest rates and lenient credit policy.

Siddigui, Malik &Shah, (2012) carried out a study on the impact of interest rate volatility on non-performing loans in Pakistan. The research covered the period between 1996 and 2012.The researchers used weighed average lending interest rate as published quarterly by the state bank of Pakistan. The study focused on twenty one commercial banks and the weighted average NPL was obtained from their financial statement. The study concluded that rising NPLs in Pakistan are significantly but not solely impacted by the volatility in the cost of borrowings. Padilla and Pagano (1997) points out that the disciplinary effect of credit bureaus arises only from the exchange of negative information. Credit information about past defaults generates fear of social stigma. Sharing white information, i.e. statistics on borrowers' characteristics, while attenuating adverse selection effects, may actually decrease the disciplinary effect of credit information sharing. Consequently, the reasonable benefit of sharing black and white information depends on the relative importance of moral hazard and adverse selection problems in the market.

Kalberg and Udell (2003) also points out that information exchange from multiple sources improves the precision of the signal about the quality of the credit seeker. As a result, the default rate reduces. In contrast, the effect on lending is vague, because when banks exchange credit information about borrowers' categories, the implied increase in lending to good borrowers may fail to compensate for the reduction in lending to risky borrowers. Banking competition for borrowers strengthens the positive effect of information sharing on lending: when credit markets are competitive, information sharing reduces informational interest charged and increases banking competition, which in turn leads to increased lending. Information sharing can also create incentives for borrowers to perform in line with banks' interests. Klein (1992) shows that information sharing can motivate borrowers to pay their loans, when the legal atmosphere makes it difficult for banks to implement credit agreements. In this model borrowers repay their loans because they know that defaulters will be blacklisted, reducing external finance in the near future. Oloo (2001) traced the genesis of NPLS in Kenya to the external environment in which the Kenyan banks operate. He argues that when the government was faced by the

clamour for multiparty, it held an election in 1992 for which it was ill prepared. Out of desperation, the CBK was compelled to imprudently print money ostensibly to fund the elections. The result was a sharp increase in interest rates as the government thereafter, sought to clear up excess liquidity. The domestic debt rose from Kshs. 45 billion in 1992 to Kshs. 166 billion, in 1993. Oloo further comments that the interest rate on treasury bills rose from 23% in early 1992 to 76% in 1993. This argument points that external environment had an influence on the level at NPLs in the banking industry in Kenya.

Kanyuru (2011) carried out a research on the determinants of lending rates of commercial banks in Kenya. She found out that cost of funds (loans) was determined by taxation policies, core liquid asset requirement, transaction cost, CBK and its regulatory role, management fees and staff costs. The research further revealed that interest rates were majorly influenced by inflation, demand for loans, foreign exchange rates and other macro and micro economic environment factors.

Wanjira (2010) conducted a study on the relationship between non-performing loans management practices and financial performance of commercial banks in Kenya. The study established that commercial banks need to adopt good lending practices such as ensuring sufficient collaterals, limiting lending to various kinds of businesses, loan securitization, ensuring clear assessment framework of lending facilities and use of procedures in solving problematic loans. A study was also carried out by Mwangi (2012) on the relationship between the level of non-performing and the financial performance of commercial banks in Kenya. The study established that when the non-performing loans are low, the financial performance of commercial banks is high and the reverse also happens when the non-performing loans are also high.

Wandera and Kwambai (2013) conclude that credit information sharing and level of nonperforming loans are indeed related. Credit Information Sharing, increases transparency among financial institutions, helps the banks lend prudently, lowers the risk level to the banks, acts as a borrowers discipline against defaulting and it also reduces the borrowing cost i.e. interest charge on loans. CRB has come of age and has helped the bank to lend with care. The effect of it therefore has led to reduced non-performing loans. Finally, the study concludes that the trend of the non-performing loans as a percentage of the total loans within KCB has improved in the last six years. The improvement is as a result of introduction of credit information sharing mechanism through CRB. The study further concludes that, the main factors that lead to bad loans in the bank are; lending to borrowers with questionable characters, serial loan defaulters, high interest rates that make it hard for some to pay, diversion of funds by borrowers. These causes make many borrowers not to honour their obligations hence leading to many non-performing loans.

2.5 Determinants of Interest Income

Clausen (2009), analyses Profitability Ratio Analysis of the Income Statement and the Balance Sheet. Ratio analysis of the income statement and balance sheet are used to measure company profitability level as well as the future revenue stability of the firm. These two important reports show the profit and net worth of the company. They report the affairs of a firm in terms of profits compared to sales as well as how the assets are performing in terms of generating revenue. The key determinants of net interest income in most commercial banks include;

The quality of assets usually deteriorates because of non-performing loans. To measure the quality of assets the ratio of the total loans to total assets (loan/asset) is utilized. Growth in bank's riskiest assets may concern banks underestimates of non-performing loans. Hence, higher levels may reflect poorer asset quality, which in turn impact the banks' net income streams.

Asset size is a determinant meant to serve as a proxy for the size of the bank and is measured as the ratio of bank assets to total banking sector asset value. Size variable is expected to have a positive influence on the survival time for the banks. That is, as the size of the banks increase it is less likely that they will fail and longer the survival time. Operating costs erode the NIM. On the cost side, operating expenses, expressed as a percentage of total assets are expected to erode revenue generation.

Credit risk is a determinant of interest income since higher credit risk leads banks to charge higher margins. Uncertainty of income streams is priced into the bank's margins. The derived hypothesis is that in equilibrium banks charge higher interest rates when loans are riskier, therefore, a positive relationship of credit risk with Net interest income is expected. The larger the size of the transactions, the larger the income margins that banks charge. The volume of loans is related to the interest margin since it affects the risk in bank's intermediation function. Specifically, the size of transactions interacts with the management's risk aversion and the variability of interest rates (i.e. with the other variables related to the risk pricing of the margins) and leads, in the equilibrium state, to increased net income margins.

2.6 Summary and Conclusion

Taking deposits and lending money is the most basic function of a bank. Banks usually charge higher interest on the money it lends than the interest it pays on deposits. The difference between interest earned and paid is called a bank's net interest income. The sum of net-interest income and non-interest revenues are a bank's net operating revenues. Expenses other than interest are deducted from net operating revenues to arrive at a bank's net income. A bank earns interest on outstanding loans, interest on short-term and long-term investments. Interest income, which forms a major chunk of a bank's total income, is dependent on the volume of loans and the prevailing level of non-performing loans. A bank pays interest on deposits and borrowed funds.

Researches done however revolve around the causes of non-performing loans, how the non-performing loans come to existence as well as how they affect the financial and profitability of commercial banks in Kenya. Researches also revolve around how these loans affect Return on Equity (ROE) and ROTA.

No studies show how the funded income of commercial banks is affected by the nonperforming loans. This study aimed to contribute to the gap on the effect of nonperforming loans in commercial banks in Kenya in reference to the funded income.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design and the methodology that was used to carry out the research. It outlines the research design, the population the data collection and analysis.

3.2 Research Design

The research design for this study was descriptive design. Descriptive research is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The research design was to identify the level of nonperforming loans in Kenya for the period between 2011 and 2014 and their effect on interest income of commercial banks in Kenya.

3.3 Target Population

For the purpose of this study, the population of the study was done on all Commercial Banks in Kenya. These Banks are forty three (43) in number as per the central Bank of Kenya's Banking Supervision Report of 2012(Appendix II). Data for the period 2011 to 2014 was analyzed and given the small number of banks, a census survey was carried out.

3.4 Data Collection

The study used secondary data to achieve its objective. The secondary data sources are periodically released by the central bank of Kenya, statistical documents, banking surveys of various years; Kenya national bureau of statistics publications and annual published accounts. Data on the amounts of non-performing loans was obtained from the banking survey and published financial statements. Data on commercial banks level of interest income was obtained from the published financial statements and annual statements of the selected commercial banks.

3.5 Data Analysis

According to Babbie (2010), data analysis is carried on the data collected to transform it to a form that is suitable for use in drawing conclusions that reflect on the ideas, and theories that initiated the inquiry. Multiple regression Analysis was done to examine the effect of non-performing loans on interest income in commercial banks in Kenya. In multiple regressions two or more independent variables are applied to explain/predict the dependent variable (Ghauv, 2005). The purpose, according to Ghauv (2005), is to make the model more realistic, control for other variables and explain more of the variance in the dependent variables. The regression model used was of the functional form below, since the researcher excluded the effect of other variables like credit analysis in the research.

 $Y = B0 + B1 X1 + B2 X2 + B3 X3 + \xi i$

Where:

Y is the dependent variable –Total Interest income measured by Return on Assets (ROA) = net profit/total assets. This ratio indicates how much net income is generated per Ksh of assets.

B0 is the constant

B1 is the regression coefficient

X1 is the monthly level of non-performing loans in commercial banks in Kenya measured by Net Loans to total asset ratio (NLTA) = (Net loans/total assets) NLTA measures the percentage of assets that is tied up in loans

X2 is annual interest rate measured by interest rate to net inflation ratio= (Interest rate/Net inflation)

X3 is annual inflation rate of the Bank measured as an annual percentage increase as reported in the Consumer Price Index (CPI)

ξi is the error term assumed to have zero mean and independent across time period

The Pearson's product moment coefficient(r) was used to estimate the association between the variables (NPL, Interest rate, Annual inflation rate and Interest Income) based on the sampling data. A coefficient of determinations (R2) was performed to determine how much of the dependent variable comes about as a result of the independent variables being tested. The data was analyzed using Statistical Package for Social Sciences (SPSS).

Variable	<u>Measurement</u>
Non-performing Loans	Total loan/Total loan portfolio*100

Tab	le 3.1:	Measurement	of l	Non-Per	formi	ing I	Loans
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Net Interest Income	Interest	income-Interest	expenses/Total	Interest
	income*1	00		
Interest Rate	Interest ra	ate/Infaltion-1		

According to Mbote (2006) there are three common ratios used to by commercial banks to measure NPL; NPL provision to operating income which measure how much of the banks operating income has been swallowed by the provision set aside for NPL; Net NPL to Total loans which measure how much of the Total loans portfolio is non-performing and Total provision for NPL to Total NPL which measures how far the banks operating income cover the provision.

3.6 Test of Significance

The multiple linear regression model and t-statistic will be used to determine the relative importance (sensitivity) of each independent variable (non-performing loans) in affecting the Interest income which will be measured using Return on Asset. The results are said to be statistically significant within the 0.05 level, which means that the significance value must be smaller than 0.05. In addition, the Pearson Product Moment Correlation Coefficient will be used to test the direction and magnitude of the relationship between the dependent and independent variables at 95% confidence level.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the results of the research on the influence of non-performing loans on interest of income of non 43 commercial banks in Kenya from the year 2011 to year 2014. The central bank of Kenya has made significant efforts in regulating commercial banks to ensure that the rate of non-performing loans reduces significantly with the introduction of credit reference bureau. Therefore, this chapter presents the inferential and descriptive statistics results on the effect of non-performing loans on interest income of 43 commercial banks in Kenya. A multiple regression analysis was conducted to test the study model and correlation was also conducted to determine the degree of relationship between independent and dependent variable.

4.2 Descriptive Statistics

The study sought to determine the interest rates charged on loans for 43 commercial banks from year 2011 to 2014. The data obtained are given in Figure 4.1.



Figure 4.1: Interest rates (2011-2014)

The result shows that there has been fluctuation of interest rates among the 43 commercial banks from the year 2011 to 2014. For instance, the least interest rate charged by one commercial bank in 2014 was 9.1% with the highest interest rate (21.6%) recorded in 2012. The variation and fluctuation in interest rates is caused by several factors like; inflation, central bank monetary policy committee among others. Moreover, the statistics on the total interest on income are given in Figure 4.2.



Figure 4.2: Total interests on income (2011-2014)

Statistics on Figure 4.2 shows that there has been some improvement from year 2011 to 2014 on the total interest on income received by commercial banks from the loans disbursed. For instance, the figure illustrates that total interest generated from loans was low in 2011, appreciated in 2012 and 2013 but 2014; the total interest on income has been increasing. Moreover, the study also analyzed the loans provision by 43 commercial banks in Kenya from year 2011 to 2014. The results are illustrated in Figure 4.3.



Figure 4.3: Loans provision by commercial banks

The figure above shows that there has been an increase in loan provision by commercial banks in Kenya for the past four years. For instance, the statistics shows that more than 250 million shillings was given out by commercial banks as loans in the year 2013 alone. The bigger banks (given in ascending order in the appendix) enjoy monopoly as most of them give more than 100 million alone of loans in one year. This study will investigate the degree to which non-performing loans influence interest on income of commercial banks in Kenya.

4.2 Multiple Regression Results and Analysis

The results presented in the tables below represent the SPSS regression and other descriptive statistics that have been done.

Table	4.1:	Model	Summary
-------	------	-------	---------

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.968 ^a	.937	.933	1477.286
a. Predictors	: (Constant), An	nual inflation ra	te, Monthly level of NP	I, Annual interest
rate				

The model had an R square value of 0.937 indicating that the percentage of the dependent variable variance that was explained by the independent variables was 93.7%. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.968. From the model summary the R is 0.968 shows how much the variable varies with the independent variable. The R squared and the adjusted R is 0.937 and 0.933. This means that non-performing loans, annual interest rate and annual inflation rate do explain 93.3% of the changes that do occur in the Kenya commercial banks total income interest. This kind of relationships are negative in that an increase in loan loss will impact negatively on the banks total interest on income hence poor performance. This therefore leads to the conclusion that as expected the non-performing loans through their influence in provision, annual interest rate and annual inflation rate have negative influence in level of total interest income in organizations. The analysis of the variables is presented below in the ANOVA table 4.2.

Table 4.2: ANOVA^b

Model		Sum of Squares	df	Mean	F	Sig.
				Square		
1	Regression	1.273E9	3	4.243E8	194.434	.001 ^a
	Residual	8.511E7	39	2182373.845		
	Total	1.358E9	42			

a. Predictors: (Constant), Annual inflation rate, Monthly level of NPI, Annual interest rate

b. Dependent Variable: Total interest income

Table 4.2 the p-value of the regression model non-performing loans to income equals 0.001 implying that the model is statistically significant at 5% level of significance. The ANOVA findings in the table above (P-value of 0.001) show there is correlation between the independent variables (Annual inflation rate, monthly level of non-performing loans and annual interest rate) and the dependent variable (Interest income). Therefore at 95% confidence interval i.e P-value of 0.05 it implies that all the independent variables influence the banks total interest income. The coefficients have been presented in the Table 4.3.

Table 4.3: Coefficients^a

Model		Unstan	dardized	Standardized	t	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta		
1	(Constant)	901.187	635.879		1.417	.164
	Monthly level of NPI	551	.341	110	-1.615	.114
	Annual interest rate	1.036	.070	1.036	14.881	.000
	Annual inflation rate	-119.372	120.474	044	991	.328
a.	Dependent Variable: Tot	al interest in	come			

From the coefficients with a significant level of 5% shows that as far as total interest on income is concerned, non-performing loans, annual interest rate and annual inflation rate are significant contributors to the performance of commercial banks in Kenya. NPLS which represents non-performing loans is negative hence representing the negative relationship between growth in bad loans and the performance of commercial banks for the last four years. A regression equation can be determined from the coefficients as follow:

Total interest on income =901.187-551 monthly level of NPL+1.036 annual interest rate-119.372 annual inflation rate.

A more representative equation would be:

y = 901.187 - 0.551x1 + 1.036x2 - 119.372x3

Where:

 $\beta 0=901.187$ shows that if the level of independent variables are held constant zero, Interest income would be 901.187

 β 1= -0.551, shows that one unit change in monthly level of non-performing loans would result in 0.551 decrease in interest income.

 $\beta 2$ = 1.036, shows that one unit change in annual interest rate would result in 1.036 increase in interest income.

 β 3= -119.372, shows that one unit change in annual inflation rate would result in 119.372 decrease in interest income.

The constant in this case is large which explains all other factors affect commercial banks total interest on income for instance fees and commission exchange gains, trading in treasury bonds and other investments. The Standard Errors are the standard errors of the regression coefficients. They can be used for hypothesis testing and constructing confidence intervals. The Standardized coefficients (Beta) are what the regression coefficients would be if the model were fitted to standardized data, that is, if from each observation we subtracted the sample mean and then divided by the sample SD. The t statistic tests the hypothesis that a population regression coefficient is β is 0, that is, H₀: β = 0. It is the ratio of the sample regression coefficient B to its standard error.

A regression for interest income from loans and the level of nonperforming loans was also run and the results showed an R squared of 0.743 and an adjusted R of 0.684 this shows that the interest income of a commercial banks are impacted more than the overall profit for the organization. The coefficients also indicated significant results in terms with both NPLs having more than 95% significance towards contribution interest income. In both regression the standard deviation were not significant hence the conclusion that commercial banks can expect to be impacted negatively by the growth.

Correlation between independent and dependent variables

A correlation was computed to check the relationship that existed between independent variable; nonperforming loans on dependent variable; total interest on income. The statistics used was Pearson Correlation to compute the data. The results are given in Table 4.4.

		Monthly level of	Total interest income
		NPI	
Monthly	Pearson	1	742**
level of NPI	Correlation		
	Sig. (2-tailed)		.000
	Ν	43	43
Total	Pearson	742**	1
interest	Correlation		
income	Sig. (2-tailed)	.000	
	Ν	43	43

Table 4.4: Correlations

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

Results sows that there exist a strong negative degree (r=0.742) of correlation between non-performing loans and total interest income by commercial banks from 2011-2014. The correlation statistics also appears to be significant (p<0.01). This implies that an increase in the level of non-performing loans would result to decrease in total interest on income by commercial banks in Kenya. This indicates that banks need to put more efforts towards ensuring that non-performing loans are reduced, tracked and regulated. Credit sharing of information among banks need to be strengthened.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study set out to find how the effect of non-performing loans on commercial banks interest on income in Kenya. Kenyan commercial banks can be impacted by the nonperforming loans. This chapter presents the findings and conclusions of the study and gives recommendations on policy action and review.

5.2 Summary

From the equation in chapter for the findings indicate that commercial banks will be negatively affected by raising levels of non-performing loans through provisioning made and interest in suspense. The coefficients for provisions and NPLs on both interest income from loans and profit was not significant (p=0.114) taking into account a significance level of 95%. The R squared and adjusted R also showed that changes in NPLs will affect the banking sector interest on income by 93.3%. Moreover, computer correlation statistics revealed that there existed significant negative relationship between non-performing loans and interest on income. This implied increase in non-performing loans would affect overall banks profitability hence shareholders would not get value for their money. The findings of the study showed that Non- performing loans are not equally distributed among commercial banks in Kenya a details analysis of commercial banks with more than Ksh 25 billion worth of assets which are classified as large by central bank of Kenya were further analyzed.

5.3 Conclusions

Non-performing loans have been found to influence banks annual interest on income which in turn results to poor financial performance by commercial bank institutions in Kenya. Credit reference bureaus were introduced and have significantly resulted to reduction levels of non-performing loans. It has been however noted that increase in the rate of non-performing loans increases risks of banks being put under statutory management. Computed MLR statistics showed that 93.3% of interest on income was directly influenced by increase in non-performing loans rate. This showed that performance of commercial banks relied on the total interest rate paid through loans.

5.4 Limitations of the Study

Most of the banks are not quoted at the NSE. It was therefore difficult to obtain the data required for the study .Even where the researcher visited the premises; it was still difficult to obtain the data.

The banking industry in Kenya currently is characterized by a large number of competitors. Some banks could hold back some information for fear that it might be used against them by their competitors.

The banking industry is a very busy industry and this made it challenging collecting information from some units across the day. It required that the data be collected very early in the morning before the day gets busy. Due to time limit this was not practical.

The financial statements reports are prepared on the basis of the accounting records. Therefore any error in the financial or accounting records could be automatically been passed to the financial statements and reports.

There were cases where different financial institutions attached different meanings to the same item .For example; a word like non-performing loans was used interchangeably with the word impaired loans or bad loans. In other instances loan loss provision was used to mean allowance for impairment.

5.5 Recommendations

The study makes the following recommendations

Central bank of Kenya being the regulator of banking sector should ask from individual commercial banks on a quarterly basis an calculation of loans that have migrated from good book to bad book to avoid a situation where a commercial bank can have a compounding effect huge bad loan beginning to receive payments hence migrating from bad book to good book and at the same time bad good loans migrating to be bad hence a net effect of reduction in bad loans yet a bank is still having NPLs growth.

Management of commercial banks should have a catalogue of remedies to correct bad loans from different situations that have led to the loans being bad to reduce the impact of prolonged NPLS which reduces the income from already funded facilities not performing Strict adherence to the know your customer (KYC) policy by regulator my help a commercial bank to predict and avoid issuing fresh loans to a client that is in problems Commercial banks should engage a credit bureau for assistance in credit assessment and provision of information about susceptible defaulters.

5.6 Recommendations for Further Research

From the study the following recommendation can be made;

The Effect of Non-Performing Loans on Profitability of Commercial Banks in Kenya Further studies should be done on possible use of provisions for losses on nonperforming loans for profit smoothening by managers of commercial banks in Kenya. The study on effect of non-performing loans on profitability should also be done on other financial institutions such as Micro Finance Institutions to find out if the same results would be achieved

REFERENCES

- Berger A. N. & DeYoung R. (1997). Problem Loans and Cost Efficiency in Commercial Banks, Forthcoming, *Journal of Banking and Finance, Vol. 21, Pp.10-30*
- Berman, S. L., Andrew, C., Kotha, S. J. and Thomas, M. (1999), "Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance", *Academy of Management Journal, Vol.42, No.5, Pp.488-506.*
- Bexley J. B. & Nenninger S. (2012), Financial Institutions and the Economy. *Journal of Accounting and Finance*, 12(1) 2012
- Casson, P. & McKenzie G., (2007). A comparison of measures of earnings per share. *The European Journal of Finance*
- Central Bank of Kenya, (2000), (2001), (2004),(2006), (2008), Central Bank of Kenya Annual Report.
- Clausen James (2009). Accounting 101 Financial Statement Analysis in Accounting: Liquidity Ratio Analysis Balance Sheet Assets and Liabilities, *Journal of Financial Statement*.
- Cornell, B., & Shapiro, C. (1987), Concept of Net Organizational Capital (NOC).
- Coase, R. (1937), The Nature of the Firm, 4 Economica, Pp386-405.
- Deegan, C. (2006), Financial Accounting Theory, McGraw-Hill Australia Pty Limited.
- Fite, D., Pflaiderer, P., (1995), "Should Firms use Derivatives to Manage Risk?" Risk Management; Problems and Solutions, Mc Graw- Hill, New York pp 61-76.
- Freeman, R.E(1984). "Strategic management: A stakeholder Approach" Boston, MA: Pitman.
- Gaitho, E, W. (2010), A survey of causes of non-performing loans in commercial banks in Kenya. UON MBA Thesis
- Ghuv, P and Ghonhug, K, (2005). Research method in business studies, a practical guide
- Greenidge, K. & Grosvenor, T. (2010), Forecasting Non-performing Loans in Barbados. Journal of Business, Finance and Economics in Emerging Economies, 5, 80-107
- Guy, K. (2011), Non-performing Loans. *The Central Bank of Barbados Economic* Review Volume XXXVII, No.1

- Hill, C. W. L. and Jones, T. M. (1992), "Stakeholder agency theory", Journal of Management Studies, Vol.29, No.2, pp.131-154.
- Hou, Y., (2007) The Non-performing Loans: some Bank-level Experiences. 4th AFE-QASS Conference, INEAG, Samos
- Howels, P. and Bain, K, (2007). Financial markets & Institutions, Pearson Education Ltd
- Jimenez, G. and Surina, J. (2005). Credit circle, credit risk and prudential regulations. Vol 2No.2 paper
- Judge, A. (2006) *Hedging and the use of Derivatives*: Evidence from UK Non- Financial Firms
- Kallberg, J. & Udell, G. 2003. The value of private sector business credit information sharing: the US case, *Journal of Banking and Finance*, 27: 449-469.
- Kanyuru,G. F (2011).*The determinants of lending rates of commercial banks in Kenya*, UON MBA thesis
- Kiptoo, P. (2011). Strategic responses adopted by Kenya Commercial Bank to cope with the challenge of Non-performing loans. UON MBA Thesis
- Kithinji, A. M (2011). Credit risk management and profitability of commercial banks in Kenya. *Aibuma Conference*. Nairobi, Kenya.
- Kiyai T. (2002) "Approaches for Restructuring Non- Performing Loan and Factors Determining Success in Kenya" Unpublished MBA Project, University of Nairobi.
- Klein, Daniel B. (1992). "Promise Keeping in the Great Society: A Model of Credit Information Sharing", *Economics and Politics, vol. 4, no. 2, 117-136*.
- Klimczak, K.M.,(2005), "Corporate Risk Management from Stakeholders Perspective". *Trans 05, SHH, Warzawa*, Poland, pp 371-380
- Kwambai D. and Wandera M.(2013) *Effects of credit information sharing on nonperforming loans: the case of Kenya commercial bank Kenya*, Unpublished MBA Project Jomo Kenyatta University of Agriculture and Technology, Nairobi Campus
- Mac Donald, S.S. and Koch, T.W. 2006, *Management of Banking*, 6th edition, U.S.A: Thomson- South Western
- Matu (2001) "The Applicability of Financial Crisis Predictive Models to Bank Failures" Unpublished MBA Project, University of Nairobi

Metropol (2002), Where does KCB go from here? Magazine, November/December

- Mucheke J.G, (2001) "Determinants of NPL in Kenya: The Case of Commercial Banks," Unpublished MBA project UON
- Mutie C.M. (2006) "Credit Scoring Model and Non-Performing Loans in the Kenyan Commercial Banks" Unpublished MBA project UON
- Nkusu, M. (2011), Nonperforming Loans and Macro financial Vulnerabilities in Advanced Economies, *IMF Working Paper No 11/161*.
- Obiero, D.(2002) The Banking Sector Regulations Framework: Its Adequacy In Reducing Bank Failures, Unpublished MBA Project, University of Nairobi.
- Ochola, E, J, (2009), A thesis on the relationship between credits risks management and non-performing loans in Kenya. UON MBA thesis
- Oloo O. (2001). A Comprehensive, Analysis of Banking of Kenyas' Banking Sector. In Market Intelligence. *The Business and Finance Journal*: Annual Special Edition
- Oloo O. (2003). Challenges facing Kenya's Banking Sector. In Market Intelligence. *The Business and Finance Journal*, Annual Special Edition
- Ongweso, B. A. (2005) The relationship between interest rates and non-performing loans in commercial banks in Kenya_UON MBA Thesis
- Patersson, Jessica & Isaac Wadman.2004. Non- Performing Loans-The markets of Italy and Sweden, Uppsala University thesis, Department of Business Studies
- Padilla, A. Jorge and Marco Pagano (1997). Endogenous Communication among Lenders and Entrepreneurial Incentives, *The Review of Financial Studies 10, 1, Winter*, 205-236.
- Pauly, M. V. (1968). The Economics of Moral Hazard: Comment. American Economic Review 58:531-537
- Rajaraman, I &Vasishtha, G (2002). Non-Performing Loans of PSU Banks: Some Panel Result, *Economic and Political Weekly*, 429 435.
- Sinkey J. F. Fr (1992) Commercial Bank, Financial Management: In the Financial Services Industry. Fourth Edition: Published by Macmillan publishing Company.
- Sinkey JF.(2002): Commercial Bank Financial Management in the Financial-Services Industry, 6th edition. New Jersey: Prentice Hall.

- Smith, C., and Stulz, R.M., (1985). The Determinants of Firms Hedging Policies. *Journal* of Financial and Quantitative Analysis, Vol 20. No. 4 P. 391-405.
- Smith, C., and Stulz, R.M., (1985). The Determinants of Firms Hedging Policies. *Journal* of Financial and Quantitative Analysis, Vol 20. No. 4 P. 391-405.
- Siddiqui, S., Malik, K. & Syed Z.A. (2012), Impact of interest rate volatility on Nonperforming loans in Pakistan, *International Research Journal of Finance and Economics, issue 84*.
- Williamson, D. (2000) *Two Approaches to resolving Non-Performing Assets*, London, Allyn and Bacon, Published in Bank Parikrama, Retrived 12 February 2010.
- Waweru, N. M. & Kalani, V. M. (2009). Commercial Banking Crises in Kenya: Causes and Remedies. African Journal of Accounting, Economics, Finance and Banking Research, 4 (4),

APPENDIX I

LIST OF COMMERCIAL BANKS IN KENYA (2012)

Kenya Commercial Bank National Bank of Kenya Equity Bank Ltd Eco Bank of Kenya Ltd Bank of Africa Commercial Bank of Africa Ltd Fina Bank Ltd Standard Chartered Bank Barclays bank of Kenya Ltd NIC Bank Ltd Consolidated Bank of Kenya Ltd Bank of India African Banking Corporations Ltd Equatorial Commercial Bank Ltd Bank of Baroda (k) Ltd CFC Stanbic Bank Ltd Charterhouse Bank Ltd Chase Bank (k) Ltd Citi Bank N.A Kenya Co-operative Bank of Kenya Ltd Credit Bank ltd Development Bank of Kenya Ltd Dubai Bank Kenya Ltd Diamond Trust Bank Kenya Ltd Family Bank ltd Fidelity commercial bank ltd First community bank ltd Giro commercial bank ltd

Guardian Bank Ltd Gulf African Bank Ltd Habib Bank Ltd Habib Bank A.G Zurich Imperial bank ltd I&M Bank Ltd Jamii Bora Bank Ltd K-rep Bank Ltd Middle East Bank (k) Ltd Oriental Commercial Bank Ltd Paramount Universal bank Ltd Prime Bank Ltd Trans-national Bank Ltd UBA Kenya Bank Ltd Victoria Commercial Bank Ltd Housing Finance Company of Kenya Ltd Source: (www.centralbank.go.ke)