

**THE EFFECT OF CREDIT RISK MANAGEMENT ON QUALITY
OF LOANS PORTFOLIO AMONG COMMERCIAL BANKS IN
KENYA**

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DECLARATION

This research project is my original work and has not been presented for an award of a degree in any other University.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CAPM	Capital Asset Pricing Model
CAR	Capital adequacy ratio
CBK	Central Bank of Kenya
CRB	Credit reference bureaus
CRM	Credit risk management
KBA	Kenya Bankers Association
MFB	Microfinance Banks
MRPs	Money Remittance Providers
NPLR	Non-Performing Loan Ratio
ROE	Return on Equity
SME	Small and medium enterprises
SPSS	Statistical Package for social sciences
UAE	United Arab emirates

ABSTRACT

The objective of this study was to determine if credit risk management practices affects quality of loan portfolio among commercial banks regulated by CBK. This investigation was performed with a goal of determining how identification of credit risk, analysis and assessment of risk from credit, monitoring of risk from credit and credit approval/sanction influence quality of loan portfolio of licensed banks in Kenya. The study was performed using a descriptive research design that enables the researcher to establish if there is existence of relationship between management of risk from lending and quality of loan portfolio. The study was performed on all the licensed 42 commercial banks in Kenya with a response rate of 100%. Data for this study was assembled from field by administering questionnaires and analysis done using SPSS. The overall outcome and conclusion of the investigation was that the credit risk management practices in this investigation are highly substantial predictors of quality of loans portfolio among commercial banks in Kenya. The identification of risk from credit, analysis and assessment of risk from credit, monitoring of risk from credit and credit approval/sanction were determined to be of substance in explaining quality of loans portfolio among banks in Kenya. As per outcome of this investigation, another study can be performed for banks in developed world with a larger population to augment on study findings. A similar study can also be commissioned locally with a broad variable of practices for managing credit risk that affect loans quality of banks in Kenya. Good management of risk from lending is an important pillar of banks operations in Kenya and by extension a key pillar to financial success and stability. This investigation recommends that commercial banks need to enhance their methodologies of identifying risk from credit, analysis of risk arising from credits, proper monitoring of credit offered to clients and credit approval to improve on their loan portfolio.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The lending process is guided by credit management practices which are achieved through proper policies that define the procedures and guidelines put in place to ensure successful lending process in commercial banks. Risk from credit is the likelihood that a bank borrower will abandon their commitments of making required payments. As indicated by Chijoriga (1997) credit risk is a costlier hazard in money related establishments and its impact is more considerable when contrasted with different dangers as it straightforwardly influences the dissolvability of budgetary organizations.

According to Zewude (2011), for banks risk from lending operations requires greater attention because of the higher level of risk posed resulting from the loan which is one of largest asset of any commercial bank. Financial institutions have overtime developed credit management practices that are observed during lending. These practices include among others the credit assessments, proper documentations, dispensing, observing and recuperation forms loaning. Bank loaning is likewise in view of set up worldwide principles (Day & Taylor, 1996).

While this study was concerned itself with credit risk, it is prudent to note that financial institutions are faced with a variety of risks which they must identify, measure and mitigate. To achieve proper credit management, banks need to intelligently and diligently manage customer credit lines. It may be challenging to

Set up an ideal acknowledge approach as the best mix of credit strategy factors is very hard to acquire. Subsequently a firm will transform maybe a couple factors at once and watch a definitive impact. Commercial banks ought to occasionally set up inside resilience limits for contrasts amongst expected and real results and procedures for refreshing points of confinement as conditions warrant (Nsereko, 1995)

1.1.1 Credit Risk Management

Credit risk is the likelihood that a bank borrower will abandon their commitments of making required payments. As indicated by Chijoriga (1997) credit risk is a costlier hazard in budgetary organizations and its impact is more generous when contrasted with different dangers as it straightforwardly influences the dissolvability of money related establishments. Loaning is the soul of business banks and this is more consistent with rising economies of creating nations where capital markets are still immature. Foundations of course have achieved colossal hardships on account of dreadful credits. It was settled that remembering the true objective to confine propel adversities along these lines credit shot, it is sensible for money related associations to have a convincing credit danger organization system set up (Basel 2010).

The way toward overseeing credit oversees which hazard factors that identify with the loaning choice inside the setting of every borrower's profile and the advance item parameters and fittingly alters the factor weightings to convey the correct result (Matovu and Okumu, 1996).

Given the data asymmetry that exist amongst borrowers and loan specialists, business banks must set up instrument that guarantees that they asses default chance that isn't known to them keeping in mind the end goal to lessen instances of unfavorable choice and good perils. Commercial banks must set up a powerful framework that ensures reimbursement of credits by borrowers. This is basic in managing data asymmetry issues and in lessening the level of credit misfortunes, therefore the long-haul accomplishment of any keeping money association. Credit chance administration is principal in improving the execution of money related foundations (Basel 2010).

1.1.2 Loan Portfolio

Loan portfolio is the aggregate sum of cash given out by money related organizations as advances in various credit items to the diverse sorts of borrowers. The advance portfolio is biggest resource and the real wellspring of income for business banks. Accordingly, it represents the best wellsprings of hazard to a bank's security and soundness. The estimation of a credit portfolio depends not just on the financing costs earned on the advances, yet additionally on the probability that premium and important will be paid. The main objective of a commercial bank is to maximize profit like any other institution. Its ability to earn profit depends upon its investment decisions. The investment decisions, in turn, depend on the manner in which it manages its loan portfolio.

Portfolio theory guides commercial banks in choosing portfolios with the goal of augmenting the normal rate of return from an advance portfolio with a given measure of hazard or limiting danger from a specific level of expected return by striking the correct mix of benefits in the portfolio. The portfolio display was created by Harry Markowitz in the 1950s and mid-1960s. Its fundamental essential suspicion is that speculators are hazard unwilling and frequently need to expand comes back from their ventures for a given level of hazard(Koch 2000)

1.1.3 Credit Risk Management Practice and Loan portfolio

According to Pykhtin, (2005), credit risk management is a vital capacity of monetary organizations in making an incentive for investors and clients. Credit hazard administration encourages legitimate organization of the advance portfolio keeping in mind the end goal to guarantee impartial dissemination of assets in order to accomplish liquidity arranging. Sound loaning methods in business include distinguishing high-chance advance candidates and altering loaning conditions, for example, security necessities and observing reimbursements. CRM is an essential movement that exists in business banks. The significant point of credit hazard administration in banks is to accomplish greatest hazard balanced rate of return by holding credit chance introduction inside acceptable cutoff points (Wang, 2013).

According to Kurui&Kali (2014), for banks to achieve going concern, they need to have in place functioning lending procedures that spins on funds and repayments of loans by borrowers. This means a restrictive credit control policy should be adopted

to act as a deterrent to unnecessary lending and in the process improve on profitability of the financial institutions (Kipchumba, 2015).

Banks should adopt practices that reduce risk from lending to maximize on shareholder's wealth. Value enhancement can be achieved from minimization of the expenses of budgetary trouble, decrease of assessments and minimization of the likelihood that the firm might be compelled to give up positive net present esteem ventures since it does not have the inside created assets to do as such. Nonetheless, the administrative hazard avoidance speculation holds that supervisors will try to amplify their very own prosperity. This plainly shows the directors of the money related firms may at some point participate in credit chance administration hones without considering the impacts it will have on the investors

1.1.4 Loan Performance in Commercial Banks

A commercial bank is an institution that offers various financial facilities, such as deposit acceptance, offers checking account services and issuing loans. The banking sector in Kenya is regulated by the Companies Act, the banking Act, and the prudential guidelines as issued by the CBK. The CBK is mandated with responsibilities of formulating and executing fiscal policies, monetary policy and promotion prompting banks' liquidity through proper regulations. Banks have come under Kenya Bankers Association (KBA), which serves as a lobby for bank's interests (Central Bank Annual Report, 2016).

The sector's equity base also grew by 10.5 percent to KShs 598 billion in 2016 from KShs 541 billion in 2015. During the same period, customer deposits increased by 5.3 percent from Kshs 2.49 trillion in December 2015 to KShs 2.62 trillion in December 2016. The growth was supported by mobilization of deposits through agency banking and mobile phone platforms. The pre-tax profit for the sector increased by 10.91 percent from KShs 134.0 billion in December 2015 to KShs 147.4 billion in December 2016. The increase in profitability was attributed to a higher increase in income compared to the rise in expenses. The banks income increased by 5.7 percent in 2016 whereas expenses increased by 3.8 percent over the same period. The ratio of gross bad loans to gross loans up surged from 6.8 percent in December 2015 to 9.2 percent in December 2016. An upsurge in bad loans in 2016 was mainly attributable to a challenging business environment (Central Bank Annual Report, 2016).

A performing loan is a loan which isn't in default, or isn't going to be, with a sensible desire that the credit won't enter default despite the fact that it has not in fact defaulted yet is a performing advance. For the most part, banks and other money related foundations dodge non-performing credits, since there is plausibility that they won't have the capacity to recuperate the primary and enthusiasm on the advance. Business banks takes a gander at the quantity of customers applying for advances, the amount they are applying, opportune installment of portions, security swore against the obtained sums, rate of unpaid debts recuperation and the quantity of credit items on the chain. Loan portfolio is commercial bank's most significant

resource. Subsequently, portfolio quality mirrors the danger of credit misconduct and decides future incomes and a foundations capacity to extend and serve existing clients.

Banks must have set up frameworks that dependably characterize advances on the premise of credit hazard to encourage convenient reimbursement of advances by clients to empower them judiciously esteem advances and to decide proper advance arrangements (Kagwa, 2003). Bigger advances ought to be ordered in view of credit hazard reviewing framework. Other, littler advances might be grouped on in light of either a credit hazard evaluating framework or installment misconduct status. Bookkeeping structures and Basel II perceive advance arrangement frameworks as better instruments in precisely assessing the full scope of credit chance (Hanson & Rocha, 1986).

1.2 Research Problem

Credit risk management is critical to any banking institution as it directly affects its financial performance. Credit risk management entails establishment of proper controls for the bank to have a properly managed and performing loan portfolio. Credit creation, being the main income generating activity of the banking institutions, exposes them to credit risk. Credit risk plays a significant part on banks' financial performance and hence profitability as a huge proportion of banks revenue is derived from loan interest. These risks have a huge influence on the bank's

financial performance hence calling for prudent credit risk management practices (Kolapo,Ayeni, and Oke, 2012).

In Kenya, commercial banks are commonly known for providing credit to borrowers however; some of them fail to perform credit assessment procedures while giving out credit. The tremendous growth has been attributed by proper credit management practices that ensure only credit worthy customers are qualified for loans. This has highly contributed to the reduction of nonperforming loans among most commercial banks leading to financial performance of firms. This has necessitated a need for institutions in Kenya to implement credit management practices in order to ensure that only credit worthy customers access finances in order to mitigate risks of default. This is important in maintaining a sound financial balance between lending and borrowing through ensuring that the firm does not suffer from financial losses that might negatively affect the financial performance of (Robinson, 2001).

Weaknesses in credit policy by the Kenya's financial sector lead to collapsing several of the banking institutions over what was termed as poor management of credit risks which resulted to increased amounts of loans that are not being serviced. The poor managements of threats associated with credit extension exposed the banks to non-performing loans which were eventually written off thus reducing the bank's profitability (Kithinji, 2010). The same scenario was to be repeated in the period August 2015 to April 2016 when three banks were placed under statutory management by the Kenya's banks regulator, the Central bank of Kenya. The ill-

fated banks that were placed under receivership were Chase Bank, Imperial Bank Limited and Dubai Bank limited due to inadequate capital and liquidity ratios. Dubai bank was eventually wound up and closed.

The recent crisis in the Kenya's banking sector thus brings sharp focus on credit risk management practices and their effects on loan portfolio quality. A number of studies have been done locally and internationally in relation to credit management and loan portfolio.

Dam (2010) carried a study that evaluated policies and practices adopted to manage credit risk by Joint Stock banks in Vietnam and concluded that the institution had adopted a standard credit risk management framework. The study however did not examine the influence of the CRM policies of the loan portfolio quality of the bank.

Kithinji (2010) assessed the impact of lending operation management activities on earning ability of commercial banks in Kenya. The study found out that most of the profits made by banking financial institutions were not swayed by loans extended or by the delinquent loans and suggested that other factors could have impacted on profits. The study by Kithinji was on all commercial banks and there was likelihood of smoothening out effects and hence the need to concentrate one commercial bank.

In another study, Kaggwa (2013) looked the influence that interest rates had on asset quality performance of Ugandan commercial banks. The study findings indicated even though credit procedures and regulations were being followed there was still some loan repayments defaults that affected credit risk and hence profitability. The study however adopted one policy of credit risk management practices and ignored the rest. Kipchumba(2015), evaluated the influence of assessment of credit on

repayments of loans in Kenya's micro-finance institutions. The study found out that credit assessment to a large extent influenced loan repayment and hence the institutions profitability. It was not clear however if the findings were applicable to commercial banks and Barclays bank of Kenya. Muthee (2010) performed an investigation on the relationship between lending risk management and earning ability of banks in Kenya. The outcome and analysis established that lending risk management influences earning ability of all the commercial banks investigated. The study analyzed the relationship NPLR and ROE using regression. The limitation of his study is that he applied only single independent variable in determining study outcome and ignored other independent variables.

From the foregoing, none of the studies reviewed have specifically focused on definite risk administration policies influencing loan-portfolio of Kenyan Banking institutions. Some of the studies have revolved on the entire financial sector while not giving attention to banking institutions. This creates gaps in literature that the current study seeks to fill. The current study thus seeks to answer the question, what is the effect of credit risk management practices on quality loan portfolio among commercial banks in Kenya.

1.3 Research Objective

The objective of this study was to examine the effect of credit risk management on quality of loans portfolio among commercial banks in Kenya

1.4 Value of the Study

This study will offer empirical data for policy formulators in formulating sound policies for successful operations of commercial banks in Kenya. The outcome of the study might also be value to other non-banking organizations on the best lending operations practices to properly administer risk from lending.

The investigation outcome will also be of great value to forthcoming researches since it will be utilized as literature review, and further related research in the area of credit risk and portfolio management. This will likewise add to the general assemblage of information and frame a reason for additionally explore.

To credit unions administration and executives, the investigation will give familiarity with different procedures towards administration of credit hazard and advance portfolio to achiever productivity the area. Learning of credit administration procedures will business banks recognize plan, control and adequately oversee business banks to upgrade development.

This investigation will likewise be instrumental to the administration since it will help them in approach definition concerning tax assessment and other administrative necessities of business banks in the nation.

To the investors the exploration discoveries might make some essential mindfulness and help them in conceptualize the environments under which banks can operate and to limit strife amongst administration and investors.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This section summarizes the literature that are existing regarding credit management practices and loan portfolio that is mostly used by commercial banks to determine whether their customers are credit worthy or not. Risk always exists in every financial decision taken by commercial banks. Financial Institutions are therefore tasked to manage the risk prudently to avoid losses.

2.2. Theoretical Review

There are a few relevant theories that explain why commercial banks would always wish to manage credit risk to improve on their loan portfolio. These theories provide theoretical evidences on the effect of credit risk management on quality of loans portfolio among commercial banks in Kenya.

2.2.1. The Agency Theory

This theory was originated by Stephen A. Ross and Barry M. Mitnick, (1970).The agency theory Takes a gander at the ever display organization relationship where one gathering, the vital, delegates work to another, the specialist who plays out the particular obligations. The organization hypothesis is concentrates on settling irreconcilable circumstance that can happen in office connections. The agency problem normally occurs when the principal cannot validate what the agent is doing and therefore the agent can use his position to advance personal interests. In order to safe guard their own interest and the wealth of bank shareholders and depositors,

bank managers need to investigate and monitor the activities of existing borrowers. Having in place proper credit risk management practices is one way that the CBK uses to protect the shareholders' interests in commercial banks and to protect them from any activities by managers that may lead to losses.

2.2.2. The Capital Asset Pricing Model

Capital asset pricing model figures on the model of portfolio decisions developed by Harry Markowitz (1959). CAPM suggests that investors should fully diversify their portfolios so as to have a mix of both risky and risk free investments.

Effective credit risk management in commercial banks ensures that there is an optimal mix of assets in terms of loans that are advanced by commercial banks to the various categories of customers. It further ensures an optimal mix of loans to the risky as well as the less risky segments so that the bank is not unduly exposed in case one segment of the market is adversely affected due to economic downturn.

2.2.3 The Moral Hazard Theory

According to Krugman (2009) the moral hazard can be portrayed as any situation in which a party to a transaction makes a decision on quantity of hazard to accept, while the other party take up the cost if things don't go as arranged. The enormous banks or loaning foundations can give unsafe advances that will pay well if the speculation turns out well yet be ransomed by the citizen through the legislature if the venture turns out seriously. It is on this start the national bank of anticipates that every single business bank will have sound hazard administration strategies to controls the way advances are progressed by commercial banks

2.2.4. The Portfolio Theory

This theory, first suggested by Harry Markowitz(1952).The theory Search for the best mix of assets to increase expected returns with minimum level of hazard. From this hypothesis, the hazard in a portfolio is directly related to risk for every benefit, the degree of assets distribution on every benefit and the ultimate relationship between benefits and hazards in a portfolio (Markowitz, 1952). The hypothesis in this manner applies in the range of loaning in Banks because of the way that the banks should loan to various segments of the economy and in controlled extents as managed by the Central bank. In regulating the loans that commercial banks can lend to the various sectors, in order to have an optimal mix of risk assets, they are therefore required to have documented risk management policies to guide the process.

The Portfolio Theory still has been subjected to different reactions. The presumptions made by Markowitz have been reprimanded because of research discoveries in different fields of study, especially inside behavioral financial aspects. The behavioral financial specialists have demonstrated that the suspicion on "speculators' acting reasonably" isn't right. Similarly, the examinations did in the territory of behavioral back, have tested all speculators have correct thought of potential returns, as ordinarily the desires of financial specialists are one-sided.

2.2.5 Information Theory

Information theory analyses quantification, storage and communication of communication. The theory was proposed by Claude E. Shannon in 1948 to evaluate the fundamental limits on communication and signal processing. The theory is dedicated to the discovery and exploration of mathematical laws that govern the behavior of data as it is stored, transferred, or retrieved. Derban, Binner and Mullineux (2005) prescribed that borrowers ought to be subjected to screening particularly in type of credit evaluation. Acquiring dependable data from planned borrowers is imperative in performing viable screening as determined by data symmetry hypothesis. Subjective and quantitative methods can be utilized as a part of surveying the borrower's data. This method limits preparing costs, decreases subjective judgments and conceivable predispositions.

2.3. Determinants of Loan Portfolio

Loan portfolio is a combination of advances extended to borrowers or purchased and are being held for reimbursement. Loan portfolio is the major asset of commercial banks and predominate source of revenue. The determinants of quality of loan portfolio are stated below:

2.3.1. Credit Risk Identification

Risk identification is one of the vital actions banks take to effectively manage risk. For effective credit risk management, banks have to identify what risks they face. It is therefore important not to miss out any risk during risk identification. There exist a number of techniques that commercial banks can employ to identify the risk. The

first step in establishing the operation of the risk administration function is to determine the crucial segments inside and outside the corporation. Units and the employees are given the responsibilities to identify the specific risk that might need attention (Kromschroder and Luck, 1998).

Al-Tamimi (2002) established that commercial banks in United Arab Emirates were exposed to credit risk as the major risk. Further, the study established that the major methods used to identify credit risk posed by borrowers is inspection by credit managers and financial statements analysis. The major practices used in risk management are institutionalizing credit standards, credit worthiness evaluation, credit scoring, assignment of risk rating and collateral. Credit risk identification has positive significance on credit risk management practices.

2.3.2. Risk Analysis and Assessment

Various conceptual studies have been made on risk analysis and assessment with focus to quantification and mitigation of risk. Organizations should classify the different risks they are exposed to the ultimate potential of loss (Fuser et al, 1999). The classification allows the management to clearly segregate the adverse risk that might affect banks going concern from those that can have slight impact. Normally, there exist an inverse relationship between the probable loss and its equivalent likelihood.

In a study conducted by Al-Mazrooei and Al-Tamimi (2007), It was established that commercial banks in United Arab Emirates are more effective in examining and evaluating risk and there is a significant difference between UAE commercial banks

and overseas banks that conduct lending risk analysis and evaluation. Further, the study established that assessment and analysis of lending risk have bearing on credit risk management practises. Drzik (1995) study established that big banks in the United States had made a considerable progress in development and institutionalizing of risk controls. The measures adopted by the United States have improved pricing and performance measurement as well as credit controls.

2.3.3. Risk Monitoring

Credit risk managers have responsibility of ensuring that there is a proper quantification, monitoring and control of risk arising from credit. Credit risk managers therefore have responsibilities of ensuring there is a proper unearthing of likely events or forthcoming fluctuations that could negatively compromise quality of loans portfolio and the bank's potential to counter changes should they occur. Proper risk management requires commercial banks to have in place an adequate structure for evaluation and reporting to ensure that credit risks are adequately identified and assessed and that controls are operational to mitigate the risk. The process of credit monitoring entails performing regular contact with borrowers, creation of an atmosphere and trust to borrowers so as banks can be considered as solution providers, creation of an organizational culture that provides support to borrowers during difficulties and assist the borrowers in any way possible to tackle the challenges, keen monitoring of the state of borrower's business through their bank accounts, periodic re-examination of the borrower's reports as well as conducting borrower's call backs and visits, keeping up to date credit files for

borrowers and frequent reviewing of borrowers previous credit rating . Credit risk monitoring is a vital tool that assist commercial banks to discover lapses and potential defaulters and at early stage and also to test if risk management practices are sound so as to reduce bank exposure to non-performing loans(Al-Tamimi and Al-Mazrooei, 2007).

Parrenas, (2005), alluded that the shareholders of commercial banks can exercise their privileges and powers to request data to assess the soundness of lending risk controls instituted by the management. The report tabled to shareholders by the directors assist the owners to assess the soundness of the organization with appropriately.

Ahmad and Khan (2001) in their study on credit risk management established that on average the highest percentage is on risk posed by lending management procedures and policies that is 82.4%, proper operational control of banks that is 76% and the least being quantification, vindicating and conducting close supervision on risk that is 69%.

2.3.4. Credit Approval/Sanctions

Strong and well established policies and procedures for approved credit facilities to both new and existing clients is very vital while managing the risk that arises from credits offered by commercial banks (Heffernan, 1996).

Additionally, monitoring of borrowers is key since borrowers' profile change with time because of shift in underlying variable and problems created with moral hazard

and adverse selection by commercial banks (Derbanet al., 2005). Banks must institute written policies and guidelines on approval required for credit facilities, the approval authorities and clear guidelines on credit decision making. Approval authorities should be well trained and authorized by executives. Employees with mandate to approve lending should take care of new lending approvals, extending additional credits, and changes on credits previously approved, particularly credit rearrangement, all of which should be clearly documented. It is a sensible practice in credit management that officers in charge of credit approvals should not also be entrusted with customer relationship management responsibility since this might lead to conflict of interest. (Mwisho, 2001),

2.4 Empirical Review

Several studies have been undertaken to understand the risk arising from credit operations as well as other underlying risks facing financial institutions. Ahlberg & Anderson (2012), conducted credit risk assessment and Basel III on 95 small and large banks in Sweden. They administered questionnaires to collect data and the same was analyzed done using mean and standard deviation. The study found out that most banks had a well-developed credit process where assembling a shared trust association with the client is urgent. On the off chance that there is a presence of good connection between the loan specialist and client, it ends up noticeably less demanding to gather solid data and along these lines improving the way toward settling on right choice. The exploration assessed minor contrasts amongst smaller and bigger banks in their credit appraisal. The study further found that most banks

were liberal with making changes to the new regulation and thus did not limit small businesses from accessing loans

Djankov, McLiesh, and Shleifer (2007), conducted an examination on the impacts of credit administration on advance reimbursement in private credit in 129 nations in Eastern Europe, money related administrators of the back establishments were meeting and information investigation was completed utilizing mean and standard deviation. The discoveries of the examination inferred that credit administration rehearses were huge in encouraging advance reimbursement.

Eurenius (2011) in her article in The Swedish Daily Newspaper carried out an investigation about the challenges facing 65 small businesses in fulfilling the banks requirements to receive loan. A semi structured questionnaire was finished by utilization of rates; the examination found that small and developing firms regularly worked in new unexplored business ranges which open them to higher hazard. It is further contended that SMEs have challenges in acquiring obligation in light of data asymmetry, which exists in a higher degree than for bigger and open firms. Along these lines it is troublesome for the banks to get imperative data about private ventures, because of restricted and uncertain data.

Omara (2007) conducted a study to explore on the lending evaluation process and reimbursement of bank advances in Barclays Bank Kampala. 73 respondents were taken as sample and the consequences of the examination demonstrated that Barclays

delayed in scoring advances, a duty expense was charged to both new and current clients. Information investigation was finished utilizing tables and frequencies. It was additionally found that Barclays bank required insurance for advances above UGX 20 Million.

Zewude (2011) conducted an examination using a credit risk administration and the profitability of commercial banks in Ethiopia. The motivation behind the investigation was to quantify the effect of credit chance administration on profitability of seven noteworthy business banks in Ethiopia. The researcher utilized relapse demonstrate, to examine the information which was gathered from the National Bank of Ethiopia and from seven business banks of the nation. The ROE was taken as the reliant variable while the free factors were the NPL proportion and the Auto. The examination uncovered that both nonperforming credit proportion and capital ampleness proportion negatively affects performance of commercial banks in Ethiopia.

Waweru and Kalani (2009) performed an examination on commercial banking emergencies in Kenya, causes and remedies. The examination inspected the reasons for non-performing advances, the action bank administrators made to relieve that issue and the achievement of such activities. They utilized an example of 30 chiefs chose from the ten biggest business banks. Their investigation reasoned that national monetary downturn was seen as the most essential outer factor while client inability to uncover crucial data amid the credit application process was thought to be the key

client particular factor. The examination additionally found that absence of a forceful obligation gathering methodology was seen as the principle bank particular factor. They built up a survey from a broad audit of writing and was composed on the on the premise of the exploration questions. Basic relapse examination was utilized to test the connection amongst dependent and independent factors.

Chemjor (2007) did a study on the significance of the factors contributing to non-performing advances in Commercial Banks in Kenya. The researcher used questionnaires that were administered to the 43 commercial banks in Kenya that year. The factors leading to non-performing loans were divided into 3 categories, bank related factors, economic factors and customer related factors. To rank the factors according to their significance, a Likert scale continuum was used then Factor Analysis was used to determine their significance. From the study, she established that insolvency or dissolving of the borrowing company had the most significant contribution to the non-performing loan problem. The second factor was death of the borrower.

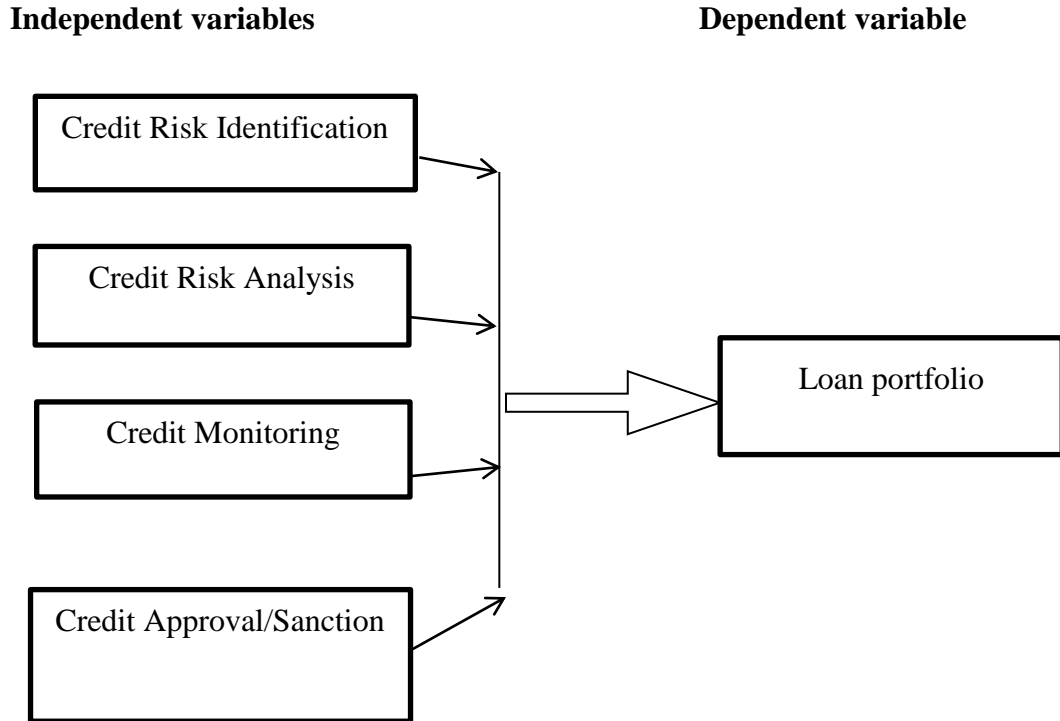
Muasya (2013) did a study investigating the relationship between credit risk administration practices and advance losses on commercial banks in Kenya. A descriptive research design was utilized in the study. The study also tried to look at the most referred practice in commercial banks and the effects on loans portfolio losses. The study utilized a standard questionnaire to collect primary data from the credit officers and managers through the drop and pick method. The information was

then dissected and the findings displayed utilizing tables giving unmistakable insights including frequencies, mean and rates. Research findings concluded that a significant number of commercial banks in Kenya had not put in place credit risk management information systems to effectively measure, monitor, control and identify risk. In accordance with the findings and conclusions of the investigation the researcher suggested that sound credit chance administration hones are embraced and actualized particularly however credit risks administration information systems.

2.5 Conceptual Framework

This study analyzed the effect of credit risk management on quality of loans portfolio among commercial banks in Kenya. The independent variables in the study were Credit risk identification, Credit risk assessment and analysis, Credit monitoring and credit approval/sanctions. The independent variables were analyzed to determine their effect on quality of loan portfolio of commercial banks in Kenya which is a dependent variable.

Figure 1: The conceptual framework



2.6 Summary of the Literature Review

Credit risk management practices play a vital role in reducing loan defaults rate among commercial banks. CRM practices therefore help banks in improving on their loan portfolio. The literature review outlined the need of embracing sound credit chance administration practices and portfolio administration to achieve a definitive objective of good recuperation and to keep up great advance resource quality. Studies conducted by various scholars have shown that banks are affected by many risks although credit risk is the major risk that has to be measured and monitored closely.

In respect to the theories and the empirical evidence, it is prudent to adopt the best credit risk management practices that reduce the losses arising from loans. Commercial banks therefore should proactively manage their loan portfolios, minimize provisions, lost interest income and minimal bad debt write-offs. Financial institutions shall enhance growth and profitability through adoption of better credit risk management practices.

Studies have been done in respect to management of risk arising from credit and loan performance however none of these studies have investigated on credit risk management practices on loan portfolio among commercial banks. This study thus pursues to determine the effect of credit risk management on loans portfolio among commercial banks in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents and discusses research design, population of the study, data collection techniques used in this study, data analysis and presentation.

3.2 Research Design

Orodho (2003) explains research design as a structure needed to generate solutions to research questions. It is a presentation of the structure or strategy of investigations which seeks to answer various research questions (Legase, 2009).

A descriptive survey was utilized in this investigation; the outline was picked on the grounds that it gave a way to logically understand credit risk and portfolio management in commercial banks. Descriptive Research is the examination in which amount information is gathered and examined with a specific end goal to portray the particular phenomenon in its present occasions, current patterns and linkages between various elements at the present time. As indicated by Cooper and Schindler (2003) a descriptive study depicts the states of mind existing conditions through perception and understanding systems.

Descriptive research configuration was utilized because since it empowered the analyst to sum up the discoveries to a bigger populace. This examination along these lines had the capacity to sum up the discoveries to all the commercial banks in Kenya.

3.3 Target Population

Target population can be characterized as an entire arrangement of people, cases/objects with some regular noticeable attributes of a specific sort unmistakable from other populace. Because of little size of the populace, no inspecting was directed. This is a study of all the authorized business banks in Kenya and thus, the number of inhabitants in enthusiasm for the examination were altogether authorized commercial banks in Kenya. As at December 2016, there were 42 licensed commercial banks (Appendix 1).

3.4 Data Collection

Kothari (2004) states that problem definition and research design are followed by the identification of the data collection methods, which can either, be primary and secondary methods. Primary data is data that is being collected for the first time, while secondary data is data that had previously been collected for another purpose, but deemed appropriate for the current study. This type of data had already been subjected to statistical analyses.

For purpose of this study, the researcher used secondary data derived from annual reports of the banks and annual reports from the central bank of Kenya and primary data collected through structured questionnaires. The considered respondents were Credit Managers of Commercial Banks in Kenya.

3.5 Data Analysis

Data analysis is computing appropriate measures as well as identifying patterns and relationships that exist between the variables being studied, to either disapprove or support the null and alternative hypothesis set. The data collected has to be processed through editing, coding, classification and tabulation before analyzing it using the appropriate tool (Kothari 2004).

The data collected was outlined, coded arranged. Inferential insights were utilized to build up the connection between credit risk administration and loans portfolio among commercial banks in Kenya. This study analyzed the effect of credit risk management on loans portfolio among commercial banks in Kenya.

For purpose of this investigation, quantitative information was broken down in light of Pearson relationship examination and regression model which appeared:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where; Y= loan portfolio quality which was measured by Net loans /Total assets

α = Constant term (Total Assets)

β = Beta coefficient

X1= Credit Risk assessment and analysis

X2= Credit Risk Identification

X3= Credit monitoring

X4= Credit Approval/Sanction

e = Error term

ANOVA which is analysis of variance was utilized to test the significance of the analytical model being applied.

CHAPTER FOUR: DATA ANALYSIS

4.1 Introduction

This chapter discusses the interpretation and presentation of the outcomes obtained from the study. Descriptive and inferential statistics was used to discuss the outcome of the investigations. The study used linear regression model models, descriptive statistics and correlation analysis. Correlation analysis shows the strength of the relationships between the variables used in the model.

4.2 Response Rate

The researcher studied a sample of 42 licensed commercial banks as at December 2016. Data was obtained from all the 42 commercial banks making a response rate of 100% which is excellent and adequate for analytical inference (Mugenda and Mugenda 2003).

Table 1: Response Rate

Response Rate	Frequency	Percentage
Response	42	100%
Unresponse	0	0%
Total	42	100.00%

4.3 Descriptive Statistic

Table 2 below provides descriptive statistics for the variables used in the study. The mean, maximum, minimum and standard deviations of the variables were considered. The average net loans for the 42 licensed commercial banks as at December 2016 was

Kenya Shillings 56002998690 with standard deviation of Kenya Shillings 78536125540. Total asset value for the 42 banks as at December 2016 had a mean value of Kenya Shillings 95790983980 with a standard deviation of Kenya Shillings 125823899380. Loan Portfolio as a ratio of Net Loans to Total assets registered a mean of 0.76 with standard deviation of 0.431 as shown in table 2 below.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Net Loans (Ksh)'000'	42	2733280	385745331	56002998.69	78536125.540
Total assets (Ksh)'000'	42	6193000	595239643	95790983.98	125823899.380
Loan Portfolio Net Loans/Total assets	42	0	1	.76	.431
Valid N (listwise)	42				

Source: Researcher Analysis using SPSS

4.4 Credit Risk Management

4.4.1 The relationship between management of credit risk and loans portfolio

One of the objectives of the study was to assess whether there exists any relationship between practises of managing risk from credit and Loans portfolio of banks. Respondents were to either confirm if the relationship between practises of managing risk from credit and loans portfolio of banks exists by answering either yes or not. The result is presented in table 3 below. The result in table 3 below with a mean of 1.00 and

standard deviation of 0.000 shows that respondents agreed there is a relationship between practises adopted to manage risk from lending and loans portfolio of Bank.

Table 3: Do you think there is any relationship between Management of Credit Risk and quality of Loans portfolio of Banks

N	Valid	42
	Missing	0
Mean		1.00
Std. Deviation		.000
Std. Error of Skewness		.365
Std. Error of Kurtosis		.717
Minimum		1
Maximum		1

4.4.2 Does practises of manging credit risk affect loans portfolio of your Bank?

The second objective of the study was to assess if credit risk management affects loans portfolio of the banks. Respondents were to answer either yes or no and the findings from the respondents are presented in table 4 below.

Table 4: Does practises of managing Credit Risk affect loans portfolio of your bank

N	Valid	42
	Missing	0
Mean		1.00
Std. Deviation		.000
Std. Error of Skewness		.365
Std. Error of Kurtosis		.717
Minimum		1
Maximum		1

With a mean of 1.00 and standard deviation of 0.000, the findings show that the respondents were in agreement that credit risk management affect loans portfolio of their banks.

4.4.3 Measures to Credit risk

The study also established the practices that measure credit risk in the banks under study. The practices identified were identification of credit risk, analysis and assessment of credit risk, credit approval/sanction and credit monitoring. Table 5 below indicates that majority of the respondents (83.3%) agreed that credit risk identification is the main practices put in place as a measure to credit risk.

Table 5: Among the following practices that measure management of credit risk which one does apply to your bank

	Frequency	Percent	Valid Percent	Cumulative Percent
Credit Risk Identification	35	83.3	83.3	83.3
Valid Credit Analysis and Assessment	7	16.7	16.7	100.0
Total	42	100.0	100.0	

4.4.4 Credit risk identification

The study also sought to assess what extent banks consider credit risk identification. Using likert scale of 1 = To a very great extent, 2=To a great extent, 3=To a moderate extent, 4 = To a little extent and 5= Not at all. The findings are presented in table 6 below. The result shows that to a very great extent banks consider credit risk identification.

Table 6: To what extent does your Bank consider Identification of risk from credit

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does your Bank consider Identification of Credit Risk	42	1	1	1.00	.000
Valid N (listwise)	42				

4.4.5 Credit Analysis and Assessment

Using likert scale of 1 = To a very great extent, 2=To a great extent, 3=To a moderate extent, 4 = To a little extent and 5= Not at all, the study examined the extent banks consider credit analysis and assessment. With a mean of 1.07 and standard deviation of 0.342, the result indicates that to a very great extent banks consider credit analysis and assessment.

Table 7: To what extent does your bank consider Analysis and Assessment of risk from credit

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does your Bank reflect Analysis and assessment of risk from credit	42	1	3	1.07	.342
Valid N (listwise)	42				

4.4.6 Credit Approval/Sanction.

The study assessed whether banks consider credit approval/Sanction, Using likert scale of 1 = To a very great extent, 2=To a great extent, 3=To a moderate extent, 4 = To a little extent and 5= Not at all, the findings were presented in table 8 below.

Table 8: To what extent does your bank consider approval/sanction of credit

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does your Bank consider approval/sanction of credit	42	1	3	1.07	.342
Valid N (listwise)	42				

The findings shows that to a very great extent banks consider credit analysis and assessment.

4.4.7 Credit Monitoring

Lastly the study sought to know if banks consider credit monitoring. Using a likert scale of 1 = To a very great extent, 2=To a great extent, 3=To a moderate extent, 4 = To a little extent and 5= Not at all. The result showed that to a very great extent banks consider credit monitoring.

Table 9: To what extent does your bank consider monitoring credit.

	N	Minimum	Maximum	Mean	Std. Deviation
To what extent does your Bank consider monitoring credit	42	1	1	1.00	.000
Valid N (listwise)	42				

4.5 Inferential Statistics

The inferential statistics involved the use of multiple linear regression analysis to determine the significance of the coefficients of the explanatory variables in explaining

the variation in dependent variables. Model summary was applied to establish the proportion of the dependent variable explained by the explanatory variables while analysis of variance was used to determine the fitness of the model used in the analysis..

4.5.1 Regression Analysis

Regression analysis looked at the model summary, analysis of variance and regression coefficients. The estimated model as explained in chapter three is given by:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

4.5.2. Model Summary

Determination coefficient (R^2) was performed to determine the proportion of the total variation in dependent variable that is accredited to the changes in the explanatory variables. The study established R^2 of 0.937 which illustrates that 93.7% of the total variation in loan portfolio was attributed to changes in the explanatory variables used in the model.

Table 10: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937 ^a	.937	.928	7.684555

a. Predictors: (Constant), Analysis and assessment of credit risk, Identification of credit risk, Monitoring of credit, Approval/Sanction of credit

4.5.3 Analysis of Variance

The study used ANOVA statistics to establish the significance of the relationship between loan portfolio and the independent variables. The regression model is good and fits the data since the level of 0.000 which is less than 0.05; therefore the model is fit for estimation.

Table 11: Analysis of Variance

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	60.508	3	17.251	.4580	.0000
Residual	123..112	1	35.5580		
Total	183.62	4			

a. Dependent Variable: Loan portfolio

b. Predictors: (Constant), Analysis and assessment of credit risk, Identification of credit risk, Monitoring of credit, Approval/Sanction of credit

4.5.4 Model Coefficients

Table 12 below shows the regression result for the study. The estimated coefficient of the explanatory variables with their t statistics are presented below.

Table 12: Regression result

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.210	0.870		6.580	0.000
	Credit risk analysis	0.120	0.057	0.154	2.23	0.005
	Credit identification	0.052	0.0470	0.297	3.081	0.0002
	Credit monitoring	0.280	0.011	0.348	2.802	0.049
	Credit approval	0.358	0.0210	0.408	2.686	0.0364

a. Dependent Variable: Loan portfolio

4.6 Interpretation of the Findings

The regression result shows that credit risk analysis and assessment has a significant and positive impact on loan portfolio (P-value = 0.005) therefore one unit increase in credit risk analysis will lead to 0.12 unit increase in loan portfolio. The relationship between credit risk identification and loan portfolio is positive and statistically significant (P-value = 0.002) hence a unit increase in credit risk identification will result to 0.052 unit increase in loan portfolio. The regression result further shows that credit monitoring has a positive and significant influence on loan portfolio and a unit increase in credit monitoring will lead to 0.280 unit increase in loan portfolio. Credit approval has a positive and significant effect on loan portfolio (P-value = 0.0364). Therefore a unit increase in credit approval will lead to 0.358 unit increase in loan portfolio.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of study outcomes, conclusion from the study, recommendations and suggestions for further study derived from the findings. The chapter also presents the limitations that were encountered during the study with an objective of improving future researches.

5.2 Summary of the Findings

Statistical analysis in chapter four above provided various results which can be summarized in terms of descriptive statistics and inferential statistics. The study showed that the average net loans for the 42 licensed commercial banks as at December 2016 was Kenya Shillings 56002998690 with standard deviation of Kenya Shillings 78536125540. Total asset value for the 42 banks as at December 2016 had a mean value of Kenya Shillings 95790983980 with a standard deviation of Kenya Shillings 125823899380. Loan Portfolio as a ratio of Net Loans to Total assets registered a mean of 0.76 with standard deviation of 0.431. With a mean of 1.00 and standard deviation of 0.000 the respondents agreed there is there exist an effect of management of credit risk practises on loans portfolio of Bank. The finding further showed that the respondents were in agreement that credit risk management affect loans portfolio of their banks. Credit risk identification is the main practices put in place as a measure to credit risk. To a very great extent banks consider credit risk identification. With a mean of 1.07 and standard deviation of 0.342, the result further indicated that to a very great extent banks consider

credit analysis and assessment. The analysis showed that to a very great extent banks consider credit analysis and assessment.

The study showed that 93.7% of the total variation in loan portfolio was attributed to changes in the explanatory variables used in the model. The regression result showed that credit risk analysis and assessment has a significant and positive impact on loan portfolio. The relationship between credit risk identification and loan portfolio is positive and statistically significant. The regression result further showed that credit monitoring has a positive and significant influence on loan portfolio. Credit approval has a positive and significant effect on loan portfolio.

5.3 Conclusions

From the outcome, the study makes a conclusion that banks need to properly manage risk arising from credit to shield them from failing to meet their obligations and objectives, minimize loan defaulters, minimize loss of bank's assets and ensures the organization improves performance of assets and to maximize returns on investments.

From the outcome, the study makes a conclusion that banks need to adopt credit risk management practices which entails analysis and assessment of risk posed by lending, identification of risk arising from lending, monitoring the risk and having in place a proper approval procedures as practices used by the banks in credit risk managements.

5.4 Policy Recommendations

Grounded on the study findings, it is recommended that commercial banks need to enhance their methodologies of identifying risk from credit, analysis and assessment of

risk arising from credits, proper monitoring of credit offered to clients and credit approval to improve on their loan portfolio.

5.5 Limitations of the Study

The validity and reliability of data collected for this study that was obtained from the credit officers of various commercial banks in Kenya depends on the honesty of the officers interviewed. Further, the number of licensed commercial banks in Kenya is less compared to those commercial banks in developed world therefore a similar study can be commissioned with a larger population to augment on study findings.

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APPENDIX 1: Licensed Commercial Banks in Kenya as at 31st December 2016

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya
6. Stanbic Bank
7. Chase Bank Kenya (In Receivership)
8. Citibank
9. Commercial Bank of Africa
10. Consolidated Bank of Kenya
11. Cooperative Bank of Kenya
12. Credit Bank
13. Development Bank of Kenya
14. Diamond Trust Bank
15. Ecobank Kenya
16. Equity Bank
17. Family Bank
18. Fidelity Commercial Bank Limited
19. First Community Bank
20. Giro Commercial Bank
21. Guaranty Trust Bank Kenya

22. Guardian Bank
23. Gulf African Bank
24. Habib Bank
25. Habib Bank AG Zurich
26. Housing Finance Company of Kenya
27. I&M Bank
28. Imperial Bank Kenya (In receivership)
29. Jamii Bora Bank
30. Kenya Commercial Bank
31. Middle East Bank Kenya
32. National Bank of Kenya
33. NIC Bank
34. Oriental Commercial Bank
35. Paramount Universal Bank
36. Prime Bank (Kenya)
37. Sidian Bank
38. Spire Bank
39. Standard Chartered Kenya
40. Trans National Bank Kenya
41. United Bank for Africa
42. Victoria Commercial Bank

APPENDIX 2: Questionnaire

This questionnaire seeks to collect data to be used in a study of “THE EFFECT OF CREDIT RISK MANAGEMENT ON QUALITY OF LOANS PORTFOLIO AMONG COMMERCIAL BANKS IN KENYA”. You are kindly requested to provide answers to these questions as honestly and precisely as possible. The information you will provide will be treated as confidential and will be used only for the purpose of this study. Please tick where appropriate and fill the required information in these spaces provided.

Part A: General information

1. Name of the Bank
2. Years served in the bank.....
3. Level of education

Part B: Credit risk Management

Please indicate by a tick to show your answer to the stated questions.

4. Do you think there is any effect between the Credit Risk Management and Loans portfolio of Banks?

Yes No

5. Does Credit Risk Management affect loans portfolio of your Bank?

Yes No

6. What is the importance of managing Credit Risks into your Bank?

.....
.....

7. Among the following practices that measure credit risk mention by ticking which does your bank apply

- Credit Risk Identification
- Credit Analysis and Assessment
- Credit Approval/Sanction
- Credit monitoring

8. To what extent does your Bank consider Credit Risk Identification?

- | | | | |
|------------------------|--------------------------|--------------------|--------------------------|
| To a very great extent | <input type="checkbox"/> | To a little extent | <input type="checkbox"/> |
| To a great extent | <input type="checkbox"/> | Not at all | <input type="checkbox"/> |
| To a moderate extent | <input type="checkbox"/> | | |

9. To what extent does your Bank consider Credit Analysis and Assessment?

- | | | | |
|------------------------|-------------------------------------|--------------------|--------------------------|
| To a very great extent | <input type="checkbox"/> | To a little extent | <input type="checkbox"/> |
| To a great extent | <input type="checkbox"/> | Not at all | <input type="checkbox"/> |
| To a moderate extent | <input checked="" type="checkbox"/> | | |

10. To what extent does your Bank consider Credit Approval/Sanction?

- To a very great extent To a little extent
- To a great extent Not at all
- To a moderate extent

11. To what extent does your Bank consider Credit monitoring?

- To a very great extent To a little extent
- To a great extent Not at all
- To a moderate extent

12. When does your Bank consider that a client has defaulted on Loan/ Credit repayment?

Period	Not at all	Least	Moderate	Most used
One month late payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More than 12 months payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using supervision on one to one basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Which approach(s) does your Bank use in Credit Risk analysis before awarding Credit to the Customer?

APPENDIX 3: Summary of net loans and total assets for Commercial Banks in Kenya

SUMMARY OF NET LOANS AND TOTAL ASSETS FOR COMMERCIAL BANKS IN KENYA FOR THE YEAR ENDED DEC 2016			
Name of the bank	Net Loans (Ksh)'000'	Total assets (Ksh)'000'	Loan Portfolio= Net Loans/Total assets
1. ABC Bank (Kenya)	14,641,988	22,864,968	0.640367745
2. Bank of Africa	31,541,959	55,995,671	0.563292812
3. Bank of Baroda	36,400,900	82,907,475	0.4390545
4. Bank of India	19,246,080	47,815,075	0.402510714
5. Barclays Bank of Kenya	168,509,529	259,498,223	0.649366794
6. Stanbic Bank	115,587,723	214,682,729	0.538411839
7. Chase Bank Kenya	73,610,693	151,806,942	0.484896751
8. Citibank	28,514,888	103,323,540	0.275976684
9. Commercial Bank of Africa	111,650,821	226,534,551	0.492864424
10. Consolidated Bank of Kenya	9,221,256	14,135,528	0.65234606
11. Cooperative Bank of Kenya	232,307,329	351,828,577	0.66028556
12. Credit Bank	7,899,394	12,237,889	0.645486652
13. Development Bank of Kenya	8,733,212	16,411,435	0.532141888
14. Diamond Trust Bank	125,817,859	190,947,903	0.65891197
15. Ecobank Kenya	24,473,512	47,123,839	0.519344615
16. Equity Bank	213,805,548	379,748,996	0.563018073
17. Family Bank	50,163,555	69,491,684	0.721864144
18. Fidelity Commercial Bank Limited	4,120,000	7,000,000	0.588571429
19. First Community Bank	10,940,003	14,962,089	0.731181522
20. Giro Commercial Bank	9,191,918	16,247,276	0.56575133
21. Guaranty Trust Bank Kenya	12,906,196	29,619,072	0.435739378
22. Guardian Bank	8,963,164	14,994,362	0.597768948

23. Gulf African Bank	16,193,046	27,156,264	0.596291375
24. Habib Bank	3,812,504	12,508,025	0.304804635
25. Habib Bank AG Zurich	5,242,175	17,032,990	0.307765988
26. Housing Finance Company of Kenya	54,469,605	71,930,140	0.757257041
27. I&M Bank	120,696,861	182,157,482	0.662596231
28. Imperial Bank Kenya (In receivership)	41,500,484	70,333,693	0.590051258
29. Jamii Bora Bank	9,356,471	15,724,254	0.595034334
30. Kenya Commercial Bank	385,745,331	595,239,643	0.648050471
31. Middle East Bank Kenya	4,512,000	6,193,000	0.728564508
32. National Bank of Kenya	59,339,225	115,114,374	0.515480586
33. NIC Bank	113,040,863	169,458,985	0.667069161
34. Oriental Commercial Bank	6,638,054	9,920,247	0.669142008
35. Paramount Universal Bank	5,799,443	9,426,931	0.615199475
36. Prime Bank (Kenya)	38,559,603	65,338,211	0.590153945
37. Sidian Bank	14,434,572	20,875,499	0.691459974
38. Spire Bank	7,433,605	13,802,498	0.53856954
39. Standard Chartered Kenya	122,711,038	250,274,108	0.490306564
40. United Bank for Africa	2,733,280	7,781,237	0.351265486
41. Trans National Bank Kenya	6,367,429	10,372,441	0.61387951
42. Victoria Commercial bank	15,292,829	22,403,481	0.682609502

