EFFECT OF CREDIT RISK MANAGEMENT TECHNIQUES ON THE PERFORMANCE OF UNSECURED BANK LOANS EMPLOYED COMMERCIAL BANKS IN KENYA

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ABSTRACT

Financial risk in a banking organization is possibility that the outcome of an action or event could bring up adverse impacts. Such outcomes could either result in a direct loss of earnings / capital or may result in imposition of constraints on bank's ability to meet its business objectives. The purpose of this study was to investigate the effect of credit risk management techniques on the performance of unsecured bank loans by commercial banks in Kenya.

Key words*: Credit risk, Portfolio Theory, credit*

Introduction

Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk. The process of risk management is a two-step process. The first is to identify the source of the risk, which is to identify the leading variables causing the risk. The second is to devise methods to quantify the risk using mathematical models, in order to understand the risk profile of the instrument. Once a general framework of risk identification and management is developed, the techniques can be applied to different situations, products, instruments and institutions. It is crucial for banks to have comprehensive risk management framework as there is a growing realization that sustainable growth critically depends on the development of a comprehensive risk management framework (Greuning and Iqbal, 2007).

Risk management is a complex task for any organization and increasingly important in a world where economic events are linked. It is a two-step process. The first is to identify the source of the risk, which is to identify the leading variables causing the risk. The second is to devise methods to quantify the risk using mathematical models, in order to understand the risk profile of the instrument (Kealhofer, 2003). The techniques of risk identification are facilitative tools intended to maximize the opportunity of identifying all the risks or hazards inherent in a particular facility, system, or product. The tools may be categorized under the broad headings of intuitive, inductive and deductive techniques.

Once a general framework of risk identification and management is developed, techniques can be applied to different situations, products, instruments and institutions. Peters, (1989) described the development of a conceptual model of how auditors assess inherent risk in a normal audit environment and its implementation as a knowledge-based (expert) system.

They asserted that the auditor begins the inherent risk evaluation process by generating expectations of accounts balances. The addition of risk evaluation completes the process of risk assessment. British Standard 4778 considers risk assessment to refer to analysis of inherent risks and their significance in an appropriate context. Organizations are exposed to various types of risks which can come from uncertainty in financial variables (financial risk), project failures, legal liabilities, accidents, natural causes and disasters as well as deliberate attacks from an adversary, (Saunders, 1996).

Purpose of the Study

The study will investigate the relationship between various credit mitigation techniques employed by banks on unsecured loans and the overall bank performance. The study will be beneficial to commercial bank management as its focus is on credit risk management of unsecured loans which is the core source of business for many banks. The study will present varied practices which can be shared by many commercial banks in the industry.

Finally, the study will contribute to the broader realm of business and academic research. In business, through its recommendations, the study will add value to better credit management practices in businesses and service quality. In academia, the study will add value to academic research in the broader area of credit management. Future researchers will not only use this study as a form of reference for future studies, also suggest future research activities that can be explored.

Statement of the problem

Credit risk management practices is an issue of concern in financial institutions today and there is need to develop improved processes and systems to deliver better visibility into future performance. There have been controversies among researchers on the effect of credit management techniques adopted by various institutions. According to Saunders and Allen (2002), good selection strategy for risk monitoring is adopted by the credit unions implies good pricing of the products in line with the estimated risk which greatly affect their profitability. Mwirigi (2006) on the other hand stated that loan portfolio management and operational efficiency management are the most important to consider in CRM as they are the most important in enhancing the performance. The principal concern of this study is to ascertain the effect of various credit risk management techniques and strategies that are adapted by commercial banks on their performance.

Objectives of the Study

General Objectives

The broad objective of the study will be to investigate the effect of credit risk management techniques of unsecured bank loans on performance of commercial banks in Kenya.

Specific Objectives
The specific objectives of the study are:

i. To investigate the effect of credit risk identification on the performance of unsecured loans by commercial banks in Kenya.
ii. To establish the effect of credit risk analysis and appraisal on the performance of unsecured loans by commercial banks in Kenya.
iii. To find out the effect of credit risk monitoring on the performance of unsecured loans by commercial banks in Kenya.
iv. To assess the effect of credit approvals / sanctions on the performance of unsecured loans by commercial banks in Kenya.

Research Questions

i. What is the effect of credit risk identification on the performance of unsecured loans by commercial banks in Kenya?
ii. What is the effect of credit risk analysis and appraisal on performance unsecured loans by commercial banks in Kenya?
iii. To what extent does credit risk monitoring affect performance of unsecured loans by commercial banks in Kenya?
iv. How does locus of planning affect performance of unsecured loans by commercial banks in Kenya?

Theoretical Review

Portfolio Theory

Since the 1980s, companies have successfully applied modern portfolio theory to market risk. Many companies are now using value at risk models to manage their interest rate and market risk exposures. Unfortunately, however, even though credit risk remains the largest risk facing most companies, the practice of applying modern portfolio theory to credit risk has lagged (Margrabe, 2007).

Companies recognize how credit concentrations can adversely impact financial performance. As a result, a number of institutions are actively pursuing quantitative approaches to credit risk measurement. This industry is also making significant progress toward developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. Portfolio quality ratios and productivity indicators have been adapted. (Kairu 2009).The combination of these developments has vastly accelerated progress in managing credit risk in a portfolio context.

Traditionally, organizations have taken an asset-by-asset approach to credit risk management. While each company's method varies, in general this approach involves periodically evaluating the quality of credit exposures, applying a credit risk rating, and aggregating the results of this analysis to identify a portfolio's expected losses. The foundation of the asset-by-asset approach is a sound credit review and internal credit risk rating system. This system enables management to identify changes in individual credits, or portfolio trends in a timely manner. Based on the changes identified, credit identification, credit review, and credit risk rating system management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

While the asset-by-asset approach is a critical component to managing credit risk, it does not provide a complete view of portfolio credit risk, where the term risk refers to the possibility that actual losses exceed expected losses. Therefore, to gain greater insight into credit risk, companies increasingly look to complement the asset-by-asset approach with a quantitative portfolio review using a credit model (Mason and Roger, 1998).

Companies increasingly attempt to address the inability of the asset-by-asset approach to measure unexpected losses sufficiently by pursuing a portfolio approach. One weakness with the asset-by-asset approach is that it has difficulty identifying and measuring concentration. Concentration risk refers to additional portfolio risk resulting from increased exposure to credit extension, or to a group of correlated creditors (Richardson, 2002).

Arbitrage Pricing Theory (APT)

A more interesting alternative was the Arbitrage Pricing Theory (APT) of Ross (1976). Stephen Ross's APT approach moved away from the risk vs. return logic of the CAPM, and exploited the notion of pricing by arbitrage to its fullest possible extent. As Ross himself has noted, arbitrage-theoretic reasoning is not unique to his particular theory but is in fact the underlying logic and methodology of virtually all of finance theory.

This theory subscribes to the fact that an estimate of the benefits of diversification would require that practitioners calculate the covariance of returns between every pair of assets. In their Capital Asset Pricing Model (CAPM), Morris (2001) solved this practical difficulty by demonstrating that one could achieve the same result merely by calculating the covariance of every asset with respect to a general market index. With the necessary calculating power reduced to computing these far fewer terms (betas), optimal portfolio selection became computationally feasible.

Information Theory

Derban, Binner and Mullineux (2005) recommended that borrowers should be screened especially by banking institutions in form of credit assessment. Collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening as indicated by symmetric information theory.

Qualitative and quantitative techniques can be used in assessing the borrowers although one major challenge of using qualitative models is their subjective nature. However according to Derban, Binner and Mullineux (2005), borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique minimizes processing costs, reduces subjective judgments and possible biases. The rating systems will be important if it indicates changes in expected level of credit loan loss. Brown Bridge (1998, pp.173-89) concluded that

quantitative models make it possible to numerically establish which factors are important in explaining default risk, evaluating the relative degree of importance of the factors, improving the pricing of default risk, screening out bad loan applicants and calculating any reserve needed to meet expected future loan losses.

Risk-Adjusted Return on Capital (RAROC) Model

An increasingly popular model used to evaluate the return on a loan to a large customer is the **R**isk-**A**djusted **R**eturn on **C**apital **(RAROC)** Model. This model, originally pioneered by Bankers Trust (acquired by Deutsche Bank in 1998) is now adopted by virtually all the large banks in Europe and the US, although with some differences among them (Saunders and Cornett, 2007). The essential idea behind RAROC is that rather than evaluating the actual promised annual cash flow on a loan as a percentage of the amount lent or (ROA), the lenders balance the loan's expected income against the loan's expected risk.

The RAROC Model is basically represented by,
RAROC = (one year net income on loan)/ (Risk adjusted assets). ………………………….. (4)
For denominator of RAROC, duration approach can be used to estimate worst case loss in value of the loan:

$$DLn = -DLnx\ Ln \times (DR/\ (1+R))\ \text{.. (5)}$$

Where, DR is an estimate of the worst change in credit risk premiums for the loan class over the past year.

Ln= Loan

DLn= Change in loan class

R=Interest Rate

According to James Christopher (1996), the immediate purpose of the RAROC risk measurement systems is to provide bank managements with a more reliable way to determine the amount of capital necessary to support each of their major activities and, thus, to determine the overall leverage for the bank as a whole. This paper also stipulates that the RAROC system provide a uniform measure of performance and that management can, in turn use this measure to evaluate performance for capital budgeting and as an input to the compensation system used for senior managers.

Empirical Review
Risk Identification

Risk identification is vital for effective risk management. In order to manage credit bank risks effectively, management of bank have to know what risks face the bank. The important thing during risk identification is not to miss any risks out. There are a number of different techniques that can be used in risk identification The first step in organizing the implementation of the risk management function is to establish the crucial observation areas inside and outside the corporation (Kromschroder and Luck, 1998). Then, the departments and the employees must be assigned with responsibilities to identify specific risks. For instance, interest rate risks or foreign exchange risks are the main domain of the financial department.

In relation to commercial banks' practice of risk management, Al-Tamimi (2002) found that the UAE commercial banks were mainly facing credit risk. The study also found that inspection by branch managers and financial statement analysis are the main methods used in risk identification. The main techniques used in risk management are establishing standards, credit score, credit worthiness analysis, risk rating and collateral. The recent study by Al-Tamimi and Al-Mazrooei (2007) was conducted on banks' risk management of UAE national and foreign banks. Their findings reveal that the three most important types of risks encountered by UAE commercial banks are foreign exchange risk, followed by credit risk, then operating risk.

Risk identification is positively significant to influence risk management practices. In the case of banks, studies made especially on risk identification and risk mitigation includes the work of Haron and Hin Hock (2007) on market and credit risk, and Haron (2007) specifically on operational risk. Haron and Hin Hock (2007) explain the inherent risk; credit and market risk exposures in Banks. Also, they illustrate the notion of displaced commercial risk that is important in Banks. They conclude that certain risks may be considered as being inherent in the operations of conventional banks. Although the risk exposures of Banks differ and may be complex than conventional financial institution, the principles of credit and market risk management are applicable to both. In addition, the IFSB's standards on capital adequacy and risk management guiding principles mark the first steps in an ongoing process of developing prudential standards and filling regulatory gaps in the field of finance.

Risk Analysis and Appraisal

There are many conceptual studies made on risk analysis and assessment by reference to measurement and mitigation of risk. In practice, it is useful to classify the different risks according to the amount of damage they possibly cause (Fuser et al, 1999). This classification enables the management to divide risks that are threatening the existence of the corporation from those which can cause slight damages. Frequently, there is an inverse relationship between the expected amount of loss and its corresponding likelihood, that is; risks that will cause a high damage to corporation, like earthquakes or fire, occur seldom, while risks that occur daily, like interest rate risks or foreign exchange risks, often cause only relatively minor losses, although these risks can sometimes harm the corporations seriously.

The empirical findings by Al-Tamimi and Al-Mazrooei (2007) highlighted that UAE banks are somewhat efficient in analyzing and assessing risk and there is a significant different between UAE national and foreign banks in the practice of risk analysis and assessment. Additionally, the findings show that risk analysis and assessment are influencing risk management practices. It is also mentioned by Drzik (1995) that the BAI Risk Management Survey showed that large bank in the US had made a substantial progress in their development and implementation of risk measures. The measures are used not only for risk control purposes, but also for performance measurements and pricing. In the context of banking, few conceptual studies (Sundararajan, 2007) discuss the risk measurement aspects particularly on the unique risk.

Notwithstanding the report title, Risk: Analysis, Perception and Management, the working definitions employed by the Royal Society Study Group (1992) do not include the term risk analysis. According to the study group, risk estimation comprises identification of the outcomes and estimation of both the magnitude of the consequences and the probability of those outcomes. The addition of risk evaluation completes the process of risk assessment. British Standard 4778 considers risk assessment to refer to analysis of inherent risks and their significance in an appropriate context. It therefore seems possible at this stage to conclude that risk assessment and risk analysis are synonymous terms.

Strutt (1993a) outlines an engineering approach which defines risk analysis in the same terms as the Royal Society Study Group defines risk estimation and indeed claims that risk analysis is also called risk estimation. This is a narrower definition which now suggests that the preliminary conclusion above is mistaken. However, in another paper (Strutt, 1993), the same author expands his definition of risk analysis to include evaluation of acceptance or tolerance to the risk.

Strutt (1993c) gives the fullest definition of risk analysis in a third paper where he sets out the concept in seven stages as systematic assessment (item by item - question every part of the system), identification of risks (local and global scale), assessment of risks (frequencies and consequences). This may involve a number of different analyses like establishing acceptable or tolerable levels of risk, evaluation of risks, determine whether the risks are as low as reasonably practicable, and determine risk reduction measures where appropriate. Risk analysis now goes beyond evaluation to include some of the decision making processes of risk management. Brainstorming is the main intuitive technique, involving a group generating ideas off the top of their heads with a philosophy of nobody is wrong - let's get the ideas on the board. Although quick and simple, it lacks the comprehensive approaches of the more sophisticated techniques.

A comprehensive risk measurement and mitigation methods for various risk arising from financing activities and from the nature of profit and loss sharing in the source of funds especially investment account holders are explained by Sundararajan (2007). He concludes that the application of modern approaches to risk measurement, particularly for credit and overall banking risks is important for banks. Also, he suggests that the need to adopt new measurement approaches is particularly critical for banks because of the role play, the unique mix of risks in finance contracts.

Risk Monitoring

The main function of the risk manager is to monitor; measure and control credit risk. The Risk Manager's duty includes identification of possible events or future changes that could have a negative impact on the institution's credit portfolio and the bank's ability to withstand the changes. The areas to examine critically are: Economic or industry changes, Market – risk events and Liquidity conditions.

Effective risk management requires a reporting and review structure to ensure that risks are effectively identified and assessed and that appropriate controls and responses are in place (IRM, AIRMIC and ALARM; 2002). Risk monitoring can be used to make sure that risk management practices are in line and proper risk monitoring also helps bank management to discover mistake at early stage (Al-Tamimi and Al-Mazrooei, 2007). Monitoring is the last step in the corporate risk management process (Pausenberger and Nassauer, 2002).

According to Parrenas, (2005), the shareholders of the institutions can use their rights to demand information in order to judge the efficiency of the risk management system. The director's report enables the shareholders to assess the status of the corporation knowledgeably and thoroughly. Khan and Ahmad (2001) conducted a survey of risk management practices and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 69% score as compared to risk management policies and procedures that is 82.4%, and internal control of banks that is 76%. Al-Tamimi and Al-Mazrooei (2007) found that there is significant difference between UAE national and foreign banks in risk monitoring and controlling. Also, the UAE commercial banks have an efficient risk monitoring and controlling system and it has positive influence on risk management practices.

According to Baldoni, (1998), the area of interest rate risk is the second area of major concern and on-going risk monitoring and management. Here, however, the tradition has been for the banking

industry to diverge somewhat from other parts of the financial sector in their treatment of interest rate risk. Most commercial banks make a clear distinction between their trading activity and their balance sheet interest rate exposure. Investment banks generally have viewed interest rate risk as a classic part of market risk, and have developed elaborate trading risk management systems to measure and monitor exposure. For large commercial banks and European-type universal banks that have an active trading business, such systems have become a required part of the infrastructure. But, in fact, these trading risk management systems vary substantially from bank to bank and generally are less real than imagined. In many firms, fancy value-at-risk models, are up and running. But, in many more cases, they are still in the implementation phase. In the interim, simple ad hoc limits and close monitoring substitute for elaborate real time systems. While this may be completely satisfactory for institutions that have little trading activity and work primarily on behalf of clients, the absence of adequate trading systems elsewhere in the industry is a bit distressing.

Credit-approval/Sanctions

Clear established process for approving new credits and extending the existing credits has been observed to be very important while managing Credit Risks in banks (Heffernan, 1996). Further, monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables (Mwisho, 2001), and also very important in dealing with moral hazard problem (Derban*et al.*, 2005). Monitoring involves, among others, frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the flow of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted.

Banks must have in place written guidelines on the credit approval process and the approval authorities of individuals or committees as well as the basis of those decisions. Approval authorities should be sanctioned by the board of directors. Approval authorities will cover new credit approvals, renewals of existing credits, and changes in terms and conditions of previously approved credits, particularly credit restructuring, all of which should be fully documented and recorded. Prudent credit practice requires that persons empowered with the credit approval authority should not also have the customer relationship responsibility. Approval authorities of individuals should be commensurate to their positions within manageme**t** ranks as well as their expertise (Mwisho, 2001).

RESEARCH DESIGN AND METHODOLOGY

The study used descriptive research design. The target population of this study was management staff working in commercial banks of the top, middle and low level management ranks. The sample size was 39 respondents. The data collection instruments were questionnaires. Quantitative data collected was analyzed by descriptive statistics using SPSS and presented through percentages, means, standard deviations and frequencies. For this study, the researcher was interested in measuring the effect of credit risk management techniques on the performance of unsecured loans by commercial banks in Kenya. The factors of are β (independent variables) and dependent variable is Y.

The regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_{4+} \beta_5 X_{5+} \alpha$$

Where Y is the dependent variable (loan performance), β_0 is the regression coefficient, β_1, β_2, β_3, β_4 and β_5 are the slopes of the regression equation and the independent variables are; X_1 the risk identification, X_2 the risk analysis and assessment, X_3 risk monitoring and X_4 Credit-approval/Sanctions while α is an error term normally distributed about a mean of 0 and for purpose of computation, the α is assumed to be 0. The equation was solved by the use of statistical model where SPSS was applied.

Results and findings

4.3 Risk Identification

From the study, it was observed that risk identification affects the performance of the unsecured loans to a moderate extent as indicated by a mean of 2.5; Inspection by branch managers affected the performance of unsecured bank loans to a great extent as indicated by a mean of 2.3; financial statement analysis also affected the performance of unsecured bank loans to a great extent as indicated by a mean of 2.1; Establishing standards affected the performance of unsecured bank loans to a great extent as indicated by a mean of 1.7, Credit scoring affected the performance of unsecured bank loans to a great extent as indicated by a mean of 1.6, Risk rating and collateral and Credit worthiness analysis affected the performance of unsecured bank loans to a great extent as indicated by a mean of 1.5.

The study revealed that the credit manager established the crucial observation areas inside and outside the bank as indicated by a mean of 2.5, the that the departments and the employees are assigned with responsibilities to identify specific risks as indicated by a mean of 1.7, and that risk identification is positively significant to influence risk management practices as indicated by a mean of 1.6.

4.4 Risk Analysis and Appraisal

From the findings, the respondents indicated that measurement affect the performance of unsecured bank loans to a moderate extent as indicated by a mean of 2.5, Classification affect the performance of unsecured bank loans to a great extent as indicated by a mean of 2.2, Risk evaluation affect the performance of unsecured bank loans to a great extent as indicated by a mean of 1.9, Risk estimation affect the performance of unsecured bank loans to a great extent as indicated by a mean of 1.7 and determining risk reduction measures affect the performance of unsecured bank loans to a great extent as indicated by a mean 1.6.

Respondents strongly agreed that risk analysis and assessment comprises identification of the outcomes as indicated by a mean of 2.2, the respondents strongly agreed that risk analysis and assessment comprises estimation the magnitude of the consequences as indicated by a mean of 1.9, the respondents agreed that risk analysis and assessment comprises the probability of those outcomes as indicated by a mean of 1.6.

4.5 Risk Monitoring

From the findings, the respondents indicated that risk monitoring moderately affected the performance of unsecured bank loans as indicated by a mean of 2.6. The respondents indicated that controls in place and responses in place affected the performance of unsecured bank loans to a great extent as indicated by a mean of 2.6, the respondents indicated that reporting and review affected the performance of unsecured bank loans to a moderate extent as indicated by a mean of 2.5 and Internal control affected the performance of unsecured bank loans as indicated by a mean of 2.4.

Results indicate that credit approval guidelines and monitoring of borrowers affect the performance of unsecured bank loans to a great extent as indicated by a mean of 1.8 and that Clear established process affect the performance of the bank to a great extent as indicated by a mean of 1.5.

According to the findings, the respondents strongly agreed that frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser and that monitoring the flow of borrower's business through the bank's account affect the performance of unsecured bank loans as indicated by a mean of 2.6, the respondents strongly agreed that developing the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation affect the performance of unsecured bank loans as indicated by a mean of 2.5, the respondents agreed that Regular review of the borrower's reports as well as an on-site visit affect the performance of the bank as indicated by a mean of 2.1 and the respondents agreed that updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted affect the performance of unsecured bank loans as indicated by a mean of 2.0 and 1.9 respectively.

4.6 Credit-approval/Sanctions

Respondents indicated that credit approval guidelines and monitoring of borrowers affect the performance of unsecured bank loans to a great extent as indicated by a mean of 1.8 and that Clear established process affect the performance of the bank to a great extent as indicated by a mean of 1.5. The study sought to find out the level of agreement of the respondents on the effect of credit-approval/sanctions on the performance of unsecured bank loans. From the findings, the respondents strongly agreed that clear established process for approving new credits and extending the existing credits has been observed to be very important while managing Credit Risks in banks and banks must have in place written guidelines on the credit approval process and the approval authorities of individuals or committees as well as the basis of those decisions affect the performance of the bank as indicated by a mean of 2.0, the respondents agreed that monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables affect the performance of unsecured bank loans as indicated by a mean of 1.9, the respondents agreed that prudent credit practice requires that persons empowered with the credit approval authority should not also have the customer relationship responsibility, some approval authorities will be reserved for the credit committee in view of the size and complexity of the credit transaction and that credits to related parties should be closely analysed and monitored so that no senior individual in the institution is able to override the established credit granting process affected the performance of unsecured bank loans as indicated by a mean of 1.8. The adjusted R^2 is called the coefficient of determination. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (performance) that is explained by all the four variables independent variables (Credit-approval/sanctions, Risk analysis and appraisal, Risk monitoring Risk identification).

The four independent variables that were studied, explain 69.0% of the effect of credit risk management techniques on performance of unsecured bank loans by commercial banks in Kenya as represented by the R^2. This therefore means that other factors not studied in this research contribute 31.0% of the effect of credit risk management techniques on performance of unsecured bank loans by commercial banks in Kenya. Therefore, further research should be conducted to investigate the other factors to explain the 31% not explained by the factors investigated under this research that effect of credit risk management techniques on performance of unsecured bank lo As per the SPSS generated the established regression equation was:

$$Y = 1.584 + 0.0495X_1 + 0.2050X_2 + 0.3660X_3 + 0.4770X_4$$

Where;
Y = performance of unsecured bank loans
X1 = Risk identification
X2 = Risk monitoring
 X3= Risk analysis and appraisal,
 X4= Credit-approval/sanctions

The researcher conducted a multiple regression analysis and from the above regression model, holding risk identification, risk analysis and appraisal, risk monitoring and credit-approval/sanctionsconstant, performance of unsecured loans in Commercial banks would be 1.584. It was found out that a unit increase in Risk identification in Commercial banks would cause an increase in performance by 0.0495, a unit increase in Risk monitoring would cause an increase in performance by 0.2050, also a unit increase Risk analysis and appraisal, would cause an increase in performance of unsecured loans by 0.3660. Also a unit increase in Credit-approval/sanctions would cause an increase in performance by 0.4777. This shows that there is a positive relationship between performance of unsecured bank loans and risk identification, risk analysis and appraisal, risk monitoring and credit-approval/sanctions by commercial banks in Kenya.

a) Predictors: (Constant), Credit-approval/sanctions, Risk analysis and appraisal, Risk monitoring Risk identification

b) Dependent Variable: performance

The significance value is 0.006which is less that 0.05 thus the model is statistically significance in predicting how Credit-approval/sanctions, Risk analysis and appraisal, Risk monitoring Risk identification affect performance of unsecured bank loans by commercial banks in Kenya.. The F critical at 5% level of significance was 2.109. Since F calculated is greater than the F critical (value = 3.195), this shows that the overall model was significant.

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The study aimed at investigating thecredit risk management techniques on performance of unsecured bank loans by commercial banks in Kenya**.**

The research found that risk identification affects the performance of unsecured bank loans to a moderate extent as indicated by a mean of 2.5; Inspection by branch managers affected the performance of unsecured bank loans to a great extent as indicated by a mean of 2.3. The respondents strongly agreed that the credit manager established the crucial observation areas inside

and outside the bank as indicated by a mean of 2.5; the respondents also agreed that the departments and the employees are assigned with responsibilities to identify specific risks as indicated by a mean of 1.7.

The study further found out that the respondents indicated that Measurement affect the performance of unsecured bank loans to a moderate extent as indicated by a mean of 2.5. The respondents strongly agreed that risk analysis and assessment comprises identification of the outcomes as indicated by a mean of 2.2 and that risk analysis and assessment comprises estimation the magnitude of the consequences as indicated by a mean of 1.9.

In addition, the study found out that the respondents indicated that risk monitoring moderately affected the performance of unsecured bank loans and that controls in place and responses in place affected the performance of unsecured bank loans to a moderate extent as indicated by a mean of 2.6, The respondents strongly agreed that frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser and that monitoring the flow of borrower's business through the bank's account affect the performance of unsecured bank loans as indicated by a mean of 2.6.

Finally the study found out that the respondents indicated that credit approval guidelines and monitoring of borrowers affect the performance of unsecured bank loans to a great extent as indicated by a mean of 1.8.

The respondents strongly agreed that clear established process for approving new credits and extending the existing credits has been observed to be very important while managing Credit Risks in banks and banks must have in place written guidelines on the credit approval process and the approval authorities of individuals or committees as well as the basis of those decisions affect the performance of unsecured bank loans as indicated by a mean of 2.0. The respondents agreed that monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables affect the performance of unsecured bank loans as indicated by a mean of 1.9.

The study concludes that risk identification affects the performance of unsecured bank loans to a great extent and that inspection by branch managers affected the performance of unsecured bank loans to a great extent.

The study further concludes that risk measurement affects the performance of unsecured bank loans to a great extent and that risk analysis and assessment comprises identification of the outcomes also affected the performance of unsecured bank loans to a great extent.

Moreover the study concludes that risk monitoring moderately affected the performance of the bank and that controls in place and responses in place affected the performance of the bank to a great extent.

Finally the study concludes thatcredit approval guidelines and monitoring of borrowers affect the performance of unsecured bank loans to a great extent and that clear established process for approving new credits and extending the existing credits has been observed to be very important while managing Credit Risks in banks

This study has reviewed the study on the credit risk management techniques of unsecured bank loans on performance of commercial banks in Kenya. To this end therefore a further study should be carried out to establish the effect on credit risk management techniques on the performance of unsecured loans by other non – banking financial institutions in Kenya.

Moreover a study should also be carried out to establish the congruence between the risk management strategies on unsecured loans in both the banking and non – banking financial institutions in Kenya. This will help the policy makers in coming up with an air tight Risk management framework to guide this crucial monetary sector in improving the performance of unsecured loans.

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	Not at all	Little extent	Moderate extent	Great extent	Very great extent	mean	stdev
Risk identification affect the performance of the bank	2	8	31	54	8	2.5	0.5
Inspection by branch managers	5	5	23	44	23	2.3	0.6
Financial statement analysis	0	0	26	59	15	2.1	0.6
Establishing standards	0	0	13	46	41	1.7	0.7
Credit scoring	0	0	8	46	46	1.6	0.7
Risk rating and collateral	0	0	0	46	54	1.5	0.7
Credit worthiness analysis	0	0	0	54	46	1.5	0.7
The credit manager establish the crucial observation areas inside and outside the bank	0	8	31	62	0	2.5	0.5
The departments and the employees are assigned with responsibilities to identify specific risks	0	0	13	46	41	1.7	0.7
Risk identification is positively significant to influence risk management practices.	0	0	10	36	54	1.6	0.7
Measurement	8	18	26	13	36	2.5	0.5
Classification	0	5	26	49	21	2.2	0.6
Risk evaluation	0	5	10	54	31	1.9	0.6
Risk estimation	0	5	5	44	46	1.7	0.7
Determine risk reduction measures	0	0	10	41	49	1.6	0.7