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EFFECT OF MITIGATING CREDIT RISK ON PERFORMANCE OF COMMERCIAL BANKS IN KENYA: A CASE OF CHUKA TOWN

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ABSTRACT

This paper aimed at investigating the effect of mitigating credit risk to the performance of commercial banks currently operating in Chuka Town in Tharaka Nithi County. The study was descriptive in nature. The study opted for both primary and secondary forms of data. The secondary data was collected from the documentations obtainable from the banks and the primary data from various banks using questionnaires. The collected data was examined to make inferences through a series of operations. Data was analyzed using descriptive statistics involving percentages. The study found out that the banks had policies and strategies of mitigating credit risk which has direct impact on their performance with the credit section being recognized as the most important sector in the banking section. This is due to the fact that credit is the major investment that is being undertaken by commercial banks. Although all this are known by commercial banks still emphasis need to be put up for all credit risk policies to be observed carefully as still commercial banks experience risks that lead to heavy losses. Also it was found that there was a significant relationship between bank performance (in terms of return on asset) and credit risk management (in terms of risk identification, monitoring and credit sanctions. Better credit risk management results in better bank performance. Thus, it is of crucial importance that banks practice prudent credit risk management and safeguarding the assets of the banks and protect the investors' interests

Key Words: Portfolio, Credit Risk Management, Performance of Commercial Bank

1.0 INTRODUCTION

1.1 Background of the study

Financial performance is company's ability to generate new resources, from day- to- day operations, over a given period of time; performance is gauged by net income and cash from operations. A portfolio is a collection of investments held by an institution or a private individual (Apps, 1996). Risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources (Apps, 1996). Whereas Credit risk is the risk of loss due to a debtor's nonpayment of a loan or other line of credit (either the principal or interest (coupon) or both) (Campel, etal, 1993) default rate is the possibility that a borrower will default, by failing to repay principal and interest in a timely manner. A bank is a commercial or state institution that provides financial services, including issuing money in various forms, receiving deposits of money, lending money and processing transactions and the creating of credit.

Credit risk management is very important to banks as it is an integral part of the loan process. It maximizes bank risk, adjusted risk rate of return by maintaining credit risk exposure with view to shielding the bank from the adverse effects of credit risk. Banks are investing a lot of funds in credit risk management modeling. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization. Credit risk can be accessed through analyzing the financial performance of commercial banks in an attempt to mitigate impacts arising from credit defaults. The future of these banks depends on the possession of good credit risk management dynamics. Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred. The existing procedures for credit risk management are not adequate to compete with the existing financial and economic challenges thus the need for continued study and analysis on the matter of credit risk and managing it.

Carbaugh (2008) claims that for most banks, loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank. Banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transactions.

There is need to investigate whether this investment in credit risk management is viable to the banks. This study therefore seeks to investigate the impact of credit risk management on a bank's financial performance in Kenya.

Commercial banks have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to relaxed credit standards for borrowers and counterparties, poor portfolio risk management whereby they fail to determine the best asset combination to invest in, which should have a negative correlation or lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties thus making them default in honoring their obligations as regards repayment of the loans. This \ has led to the coming up with various ways of risk management that has resulted to affecting the performance of banks. By laying down strategies and policies it requires that the banking institutions have to abandon other customers who their policies do not accommodate. Also the various strategies require resource input in order to put up the structures that should put up credit risk control effective. Though all this have been done it still remains a challenge to commercial banks to balance between customer's needs of credit and also the policies that have been laid down by institutions which results to both positive and negative financial performance. Regardless 0f the various researches that have been done still a gap remain on how effective credit risk control can be achieved since still the issues of non-performing loans have not been contained completely. The principal concern of this study is to ascertain the effect of various techniques of mitigating credit risk and strategies that are adapted by commercial banks on their performance.

1.2 Purpose of the Study

The purpose of this study was to examine the effect of mitigating credit risk on the performance of commercial banks. It was meant to enable one see the impact of credit risk to the performance of banks and the appropriate methods to be undertaken for improvement.

1.3 Objectives of the Study

The broad objective of the study was to investigate the impact of mitigating credit risk on the performance of commercial banks in Chuka Town. The study was guided by the following specific objectives;

i. To investigate the effect of credit risk identification on the performance of commercial banks in Chuka Town
ii. To establish the effect of credit risk monitoring on the performance of commercial banks in Chuka Town.
iii. To assess the effect of credit approvals on the performance of commercial banks in Chuka Town.

2 LITERATURE REVIEW

2.1 Theoretical review

The fact that the banking industry is still growing great effort must be put in place to ensure that effective strategies are put in place to minimize risk and maximize loan performance at any particular point while in operation.

2.1.1 Portfolio Theory

Margrabe (2007) postulates that even though credit risk remains the largest risk facing most commercial banks, the practice of applying modern portfolio theory to credit risk has lagged. Kairu (2009), claims that 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. 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 mitigation of credit risk. 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 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 & 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).

2.1.2 Arbitrage Pricing Theory (APT)

A more interesting alternative to portfolio theory was the Arbitrage Pricing Theory (APT) of Ross (1976). Stephen Ross's APT approach moved away from the risk vs. return relationship 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.

2.1.3 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 et al (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 effective 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.

2.2 Empirical review

2.2.1 Introduction

According to Kithinji (2010); commercial banks have approved decisions that are not well examined, there has been cases of loan defaults and non performing loans, massive extension of credit and directed lending. Policies to minimize on the negative effects have focused on mergers in banks, better banking practices but stringent lending, review of laws to be in line with the global standards, well capitalized banks which are expected to be profitable, liquid banks that are able to meet the demands of their depositors, and maintenance of required cash levels with the central bank which means less cash is available for lending. This has led to reduced interest income for the commercial banks and by extension reduction in profits, the banks also concentrate highly on collateral as the main security for loans which at times makes the banks assume other forms of mitigating risk. Donald et al (1996) defines Credit risk simply as the potential that a bank borrower or counterpart will fail to meet its obligations in accordance with agreed terms. The goal of credit risk management is to maximize a bank's risk- adjusted rate of return by maintaining credit risk exposure within acceptable parameters.

Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions, i.e. consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

According to Nelson and Schwedt (2006), the banking industry has made strides in managing credit risk. Until the early 1990s, the analysis of credit risk was generally limited to reviews of individual loans, and banks kept most loans on their books to maturity. Today, credit risk management encompasses both loans reviews and portfolio analysis. Moreover, the development of new technologies for buying and selling risks has allowed many banks to move away from the traditional book and hold lending practice in favor of a more active strategy that seeks the best mix of assets in light of the prevailing credit environment, market conditions, and business opportunities. Much more so than in the past, banks today are able to manage and control obligor and portfolio concentrations, maturities, and loan sizes, and to address and even eliminate problem assets before they create losses. Many banks also stress test their portfolios on a business line basis to help inform their overall management.

2.2.2 Risk Identification

Risk identification is vital for effective mitigation of credit risk. In order to manage credit 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 and this can be done through establishing an appropriate credit risk environment (Kromschroder & Luck, 1998). This is the responsibility of the board of directors who should approve and periodically (at least annually) review the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring credit risk. 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 worthiness analysis, risk rating and collateral. Senior management of a bank is responsible for implementing the credit risk strategy approved by the board of directors. This includes ensuring that the bank's credit-granting activities conform to the established strategy, that written procedures are developed and implemented, and that loan approval and review responsibilities are clearly and properly assigned. Senior management must also ensure that there is a periodic independent internal assessment of the banks credit-granting and management functions.

2.2.3 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. 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.

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 & Al-Mazrooei, 2007). Monitoring is the last step in the corporate risk management process, (Pausenberger & 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.

In many firms, fancy value-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. There are three stages in the credit risk monitoring process, namely; the simple risk control of the business avoiding being over concentrated in any one sector, estimating the probability of defaulting and assessing recovery, the link between economic capital and return. Clearly banks would like to set minimum rates of return they expect to earn on their portfolios after provisioning. The link between economic profit and risk is the next stage in advancing the practice of credit risk management and risk management is used as a strategic management tool to align RAROC (Risk Adjustment Returns on Capital) with ROE (Return on Equity). Each bank must understand what drives the share price of the bank and thus must understand the link between economic capital, intellectual property owners IPOs (Intellectual Property Owners) and ROE.

2.2.4 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, says 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, says Mwisho(2001). According to 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. 12 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 management ranks as well as their expertise, says Mwisho (2001).

3.0 METHODOLOGY

3.1 Research Design

The study adopted descriptive research design that sought to investigate the study variables without manipulating any of them or tampering with any of them in an attempt to understand the effect of credit risk management techniques on the performance of commercial banks in Kenya.

This design is a systematic inquiry where the researcher does not have direct control of the independent variables. This method is also flexible and gives the researcher an opportunity to try various sources and methods of data collection. Its outcome clearly defines a research problem, answers the research questions and a set of objectives thus it's appropriate

3.2 Location, Population and sample size of the Study

The study was basically carried out in Chuka Town in Tharaka Nithi County with six commercial banks namely; KCB, Equity, Cooperative, Barc1ays, K-Rep, and Posta banks being the target institutions. The information was obtained from employees of these commercial banks who had various levels of experience in the banking sector. The study also includes information from printed materials, interviews, and questionnaire data. The study will mainly analyze the effects that are associated with credit risk mitigation to the performance of commercial banks. The target population of study population was bank 100 employees in the credit department of commercial banks found in Chuka town in Tharaka Nithi County. The study considered the entire employee in the credit department of commercial banks.

3.3 Data Collection Procedures and Data Analysis

Data was collected using self -administered questionnaires. The choice of this method of data collection was selected because questionnaires can reach a large group of respondents within a short time and with little cost, at the same time use of questionnaires will enable the respondents to remain anonymous and be honest in their responses (Kasomo, 2007). The questionnaires with adequate instructions and easy to understand language were hand delivered to the already identified samples of the population by the researcher and the trained research assistants. Dates of collecting the filled questionnaires were agreed upon at the time of delivery and follow up was made through use of mobile phones. Kasomo (2007) defines data analysis as the process of bringing order to data and manipulating it. It involves organizing data into patterns, categories and basic descriptive units. For this study, descriptive data analysis was done. The researcher organized the data to ensure that raw data was sorted and coded. Data analysis was done with guidance of a statistician using the Statistical Package for Social Sciences (SPSS) computer software. Information from the analyzed data was presented using percentages and frequency distribution tables.

6.0 Empirical Results and Discussions

6.1 Descriptive Statistics

Table 1: Experience of Respondents in Banking Sector

Banking experience	Frequency	Percent
<1 year	0	0
1-2 years	14	14.23
3-5 years	57	57.24
> 5 years	29	28.53
Total	100	100

Table 1 above shows the percentage of the years of experience the respondents had working with the banking sector. The researcher asked this question to know how experienced the respondents were in terms of banking sector. In the results, I notice that 57.24 have experience working with in the bank 3-5 years. Whereas, the respondents who have working experience in banking sector more than five years was 28.53, 1-2 years was 14.23 and less than one year was null.

Table 2: Experience of Respondents in the area of Risk Management

Experience in risk management areas	Frequency	Percent
<1 year	2	2.38
1-2 years	45	45.24
3-5 years	34	34.1
> 5 years	19	19.05
Total	100	100

Table 2 shows the percentage of the years of experience the respondents had working with risk management areas. This question was asked because the researcher wanted to know how experienced the respondents were in the area of risk management. In the results, it was notice that 45.24 have experience working with risk management area for 1- 2 years whereas, the respondents who have working experience in risk management for 3-5 years was 34.1, more than 5 years was 19.05 and 1 to 2 years was 2.38.

Table 3: The effort put in place in mitigating Credit Risk

Response	Frequency	Percent
Very high	14	13.57
High	57	56.78
Medium	26	25.54
Low	4	4.11
Total	100	100

The second question was asked the respondents to indicate the effort put in place in mitigating credit risk in their organization. The researcher asked this in order to find out how important the respondents think credit risk management is. The results show that the effort put in place to mitigate credit risk is mostly high as represented 56.78 medium is rated second as indicated by 25.54, followed by very high 13.57 then low 4.11.

Table 4: Necessity of the role of Inspection done by the Branch Manager

Response	Frequency	Percent
Strongly agree	98	97.66
Agree	0	0
Disagree	0	0
Not sure	2	2.34
Total	100	100

Table 4 the respondents strongly agree that the role played by the manager of inspection is crucial in mitigating credit risk as it makes the employees to be more careful in the operations of the firm.

6.2 Risk Monitoring

The researcher sought to know whether banks have procedures of evaluating each portfolio to establish its performance. This helps the organization to manage their credit risk, because the employees of the organization work under the procedures or policy developed by the organization. Organizational structure involves an organization's internal pattern in relationships, authority and communication. Structure is comprised of formal lines of authority and communication, and the information as well as data that flow along these lines (Stank, Daugherty and Gustin, 1994). Structure and processes of the organizations are most effective when their design function match their environment and impact to organization's strategies (Hunter, 2002). The respondents agree that their organization have documented procedures for risk management.

6.3 Effects of sanctions during Approvals

Table 5: Effects of sanctions during Approvals

Response	**Frequency**	**Percent**
Yes	98	98.23
No	2	1.77
Total	100	100

From the responses of respondents credit sanctions are important in mitigation of credit risk indicated by the 'yes' response 98.23. 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, says 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, says Mwisho (2001).

6.4 Regression Model Results

Table 6: Regression Model Results

	coefficient	Std.Error	T-statistics	Sig
Constant	1.584	0.0612	25.88235294	0.046
Risk identification	0.2495	0.0061	40.90163934	0.005
Risk monitoring	0.2718	0.1251	2.172661871	0.019
Credit sanctions	0.4777	0.0151	31.63576159	0.011

Dependent Variable: Return on Asset R-Squared=0.6926 *df=5* *F-Statistic*=3.195

The three independent variables that were studied, explain 69.26% variation in the model is accounted for by the factors in the model. This therefore means that other factors not studied in this research contribute 30.74% of the effect of credit risk management on performance of commercial banks in Chuka Town. The study model is as shown below;

$Y=1.1584-0.2495X_1+0.2718X_2+0.4777X_3$

Where; Y = performance of commercial banks (ROA)

X_1 = Risk identification

X_2 = Risk monitoring

X_3= Credit-approval/sanctions

The researcher conducted a multiple regression analysis and from the above regression model, holding risk identification, risk monitoring and credit-approval/sanctions constant, performance 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 0.2495, a unit increase in Risk monitoring would cause an increase in performance by 0.2718. 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 mitigation of credit risk, risk identification and risk monitoring and credit approvals or sanctions by commercial banks in Chuka Town. The overall model is statistically significant since the F critical at 5% level of significance was 2.109<3.195. Also the significance value is 0.006<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.

5.0 Conclusions and Recommendations

5.1 Conclusions

The study shows that respondents identified commitment and support from top management as the most important. Top-level management responds to business processes and manages credit risk. Most of the organizations believe that it is the responsibility of the Board of Directors or Committee and Executive Management team to establish credit risk management. Top management decides the objectives and strategies for organizational credit risk management activities, mission and overall objectives. The entire respondent indicates that their organization has a documented credit risk management guidelines and Most of the respondents understand the guideline of credit risk management. The guidelines also help the institutions to supports the goals and objectives of credit risk management. Because the financial world is always in fluctuation, almost more than half of the respondent suggests that organizational structure must be reviewed regularly and adjusted to adapt to changing financial environments and the changes made once per year and at the time when it is believed to have changes. The study also reveals that banks with good or sound credit risk management policies have lower loan default ratios and thus low credit risk and higher interest income (Profitability). This study found that there is a significant relationship between bank performance (in terms of return on asset) and credit risk management (in terms of risk identification, monitoring and credit sanctions. Better credit risk management results in better bank performance. Thus, it is of crucial importance that banks practice prudent credit risk management and safeguarding the assets of the banks and protect the investors' interests

5.2 Recommendations

The researcher concentrated on only three factors and thus recommends that further study be carried out on the topic to find out the other factors that enhance mitigation of credit risk to enhance performance of commercial banks. Risk identification and credit approval/sanction had an high effect on the performance and therefore great emphasis and measures need to be put in this aspect to ensure continued high returns. Risk monitoring was of little significance and care also needs to be exercised on this front. The research found out that most of the banks do not give out questionnaires to customers to know the reasons for their defaulting of then loans something that should be taken into consideration so as to have reasons why other customers fail.

REFERENCES

1. Al- Tamimi, H. and Al-Mazrooei M., (2007), Banks' "Risk Management: A Comparison Study of UAE National and Foreign Banks", *The Journal of Risk Finance*, Vol. 8 No.4, pp. 394-409.
2. Apps. R (1996). The Monetary and Financial System",3 ed., London; Bonkers Books Ltd.
3. Bhatia M. A (2005), "Portfolio View of Credit Risk", http://www.gtnews.com/article/5909.cfm accessed on 2nd October 2015.
4. Bridge B M. (1998), "Financial Distress in Local Banks in Kenya, Uganda and Zambia: Causes and Implications for Regulatory Policy", *Development Policy Review Journal*, Vol. 16 No.2, pp.173~89
5. Carey, A. (2001), "Effective risk management in financial institutions: the Turnbull approach", *Balance Sheet*, Vol. 9(3).
6. Comptroller's Handbook (2001), Rating Credit Risk, Comptroller of the Currency Administrator of National Banks.Christopher J. (1996), "RAROC Based capital budgeting and performance evaluation", A paper presented at Wharton Financial institution Center's conference on risk management in banking.
7. Davies, A and Keams, M. (1992), "Banking Operations: UK Lending and International Business", New York, Pitman.
8. Fisher D. E. and R. J. Jordan (1996), "Security Analysis and portfolio"
9. Musyoki D. (2011), "International Journal of Business and Public Management" (ISSN: 2223-6244) Vol. 2(2): 72-80
10. Emory C.W Et al (1995), "Business Research Methods", 5th ed., Me Graw Hill International Edition.
11. Goodhart, C.A.E (1998), "The Central Bank and Financial System, London", McMillan press Ltd httpllen.m.wikipedia.org
12. Heffernan S. (1996), "Modem Banking in Theory and Practice", 5th ed.,JohnWiley and Sons Ltd, England.
13. Hunter, J. (2002), "Improving organizational performance through the use of effective elements of organizational structure", *International Journal of Health Care Quality Assurance incorporating Leadership in Health Services*, Vol. 15(3).
14. Kairu P K. (2009), "Credit Management", 2nd Ed., Focus Publishers Ltd Nairobi
15. Kithinji A.M (2010), "Credit risk management and profitability of commercial banks in Kenya't.Kromschroder F. and Luck C (1998), "Optimal contract for Islamic banking: a survey literature", paper presented at the International Conference on Islamic Economics in the 21 st Century.
16. Kasomo, D. (2007). *Research Methods in Humanities and Education*. *Research, Statistics, Measurement, Evaluation and Testing*. Zapf Chancery Eldoret, Kenya.
17. Margrabe K, (2007), "The incidence of secured debt: evidence from the small business community", *Journal of Financial and Quantitative Analysis,* Vol. 24 pp.379-394.
18. Mason G. and Roger B. (1998), "A capital adequacy framework for Islamic banks: the need to reconcile depositors' risk aversion with managers' risk taking", *Applied Financial Economics*, Vol. **14** No.4, pp.429-441.
19. Morris, J. (2001), "Risk Diversification in the Credit Portfolio: An Overview of Country Practices", Working paper, IMF, Washington DC.
20. Mullineux A. et al (2005), "Loan repayment performance in community development finance institutions in the UK", *Small Business Economics,* Vol. 25 pp.319-332.
21. Mwisho, A.M. 2001, "Basic lending conditions and procedures in commercial banks". *The Accountant*, Vol. 13 No.3
22. Parrenas, J. C. (2005), "Bank's Risk Management Practices: A Survey of Four Asian Emerging Markets".