THE INFLUENCE OF FINANCIAL RISK MANAGEMENT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

I declare that this is my original work and has not been presented for a degree in any other university.

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To

My dear Mother

Betty Anguka

and

My loving Sister

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ABSTRACT

Financial institutions are faced with critical challenges of finding new and better ways to increase top-line revenues, maintaining necessary capital ratios, improving margins, strengthening balance sheets and enhancing efficiencies within the organization. Commercial Banks therefore employ financial risk management practices whose objective is not to prohibit or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that it can be measured and mitigated. This study sought to assess the influence of financial risk management practices namely; Risk aggregation and Capital Allocation practices, Supervision and Regulation, Disclosures and Funded and Unfunded Credit protection on theFinancial Performance on Commercial Banks in Kenya. The specific objectives were to determine the influence that these practices have had on the financial performance of commercial banks in Kenyaand to establish the relationship between Financial Risk Management and FinancialBank performance.

This was a descriptive survey of commercial banks in Kenya. The credit and management staff of the forty two commercial banks and one mortgage company formed the target population with a sample size of one hundred and seven staff randomly chosen for the study. Primary data through close ended questions was collected in this study on the financial risk management practices employed and their influence on the financial performance of the commercial banks. Data was analyzed using correlation analysis and regression models with the strength of the model being tested using Cronbach's Co-efficient Alpha.

The study found that most commercial banks had highly adopted financial risk management practices to manage financial and credit risk and as a result the financial risk management practices mentioned herein have a positive correlation to the financial performance of commercial banks of Kenya. The study recommends that commercial banks should seek and obtain information consistently so as to permit them to detect potential problems at an early stage and identify trends not only for particular institutions, but also for the banking system as a whole, while also ensuring transparency of banking activities and the risks inherent in those activities, including credit risk.

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LIST OF ABBREVIATIONS

MIS	MANAGEMENT INFORMATION SYSTEMS
RAROC	RISK ADJUSTED RATE OF RETURN
EaR	EARNINGS AT RISK
DR	DEFAULT RATIO
RBS	RISK BASED SUPERVISION
ROA	RETURN ON ASSETS
EBIT	EARNINGS BEFORE INTEREST AND TAXES
MPC	MONETORY POLICY COMMITTEE
RMP	RISK MANAGEMENT PROGRAMS
OECD	ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT
RMG	RISK MANAGEMENT GUIDELINES
NPL	NON PERFORMING LOANS
VaR	VALUE AT RISK
KPI	KEY PERFORMANCE INDEX
SPSS	STATISTICAL PACKAGE FOR SOCIAL SCIENCES
APT	ARBITRAGE PRICING THEORY

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Athanasoglou et al, (2005) the role of commercial banks remains central in financing economic activity and its effectiveness exert positive impact on overall economy as a sound and profitable banking sector is better able to withstand negative shocks and contribute to the performance of the financial system. The author (Athanasoglou et al. 2005) further notes that bank risk taking has some effects on bank profits (Performance) as indicated by total assets, total deposit, net interest, margin and net income. Bobakovia (2003) asserts that the profitability of a bank depends on its ability to foresee, monitor and avoid risks, and possibility of provisions to cover losses brought about by risks that arise.

Risk simply implies a possibility of unexpected outcome. It creates the notion that future events may have some degree of uncertainty, thereby exposing an institution to adversity (Emmett 1997). As it is the major goal of a firm to maximize benefits from cash flows and market status, managers usually achieve their objective through series of activities ranging from product sales, deposit acceptance, provision of funds to clients, etc hence risk is inevitable for financial institutions. The difference in taking reasonable risk is key to financial firms' profitability and asset growth. Financial risk is an umbrella term for multiple types of risk associated with financing, including financial transactions that include company loans in risk of default (Casserley, 1991).

There are a number of major risks encountered by the banks and these are: Asset-backed risks which are risks that the changes in one or more assets that support an asset-backed security will significantly impact the value of the supported security. Asset backed risks include interest rate, term modification, and prepayment risk. Credit risk, also called default risk, is the risk associated with a borrower going into default (not making payments as promised). There is always scope for the borrower to default from his commitments for one or the other reason resulting in crystallization of credit risk to the

bank. These losses could take the form outright default or alternatively, losses from changes in portfolio value arising from actual or perceived deterioration in credit quality that is short of default.

Foreign investment risk arises from rapid and extreme changes in value due to: smaller markets; differing accounting, reporting, or auditing standards; nationalization, expropriation or confiscatory taxation; economic conflict; or political or diplomatic changes. Liquidity risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit). There are two types of liquidity risk: Asset liquidity which arises when an asset cannot be sold due to lack of liquidity in the market. Funding liquidity risk arises when liabilities: cannot be met when they fall due, can only be met at an uneconomic price and can be name-specific or systemic (Claudiu, 2009).

Market risk is the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in market risk factors. The four standard market risk factors are stock prices, interest rates, foreign exchange rates, and commodity prices: Equity risk is the risk that stock prices in general or the implied volatility will change. Interest rate risk is the risk that interest rates or the implied volatility will change. Currency risk is the risk that foreign exchange rates or the implied volatility will change, which affects, for example, the value of an asset held in that currency. Commodity risk is the risk that commodity prices (e.g. corn, copper, crude oil) or implied volatility will change. Operational risk is a risk arising from execution of a company's business functions. It focuses on the risks arising from the people, systems and processes through which a company operates. According to Basel II regulations operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events (Medhat, 2006).

Risk in financial institutions cannot be fully eliminated but what is critical is how efficient a bank can manage its risk exposures. Risk management is the analysis of risk coupled with the implementation of quality risk controls. Ozturk (2007) defines risk management as the process by which managers satisfy their risk taking needs by

identifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce, which to increase and by what means, and establishing procedures to monitor the resulting risk position. In other words, risk management is the process of assessing operational dangers of a particular position, measuring its magnitude, and mitigating such exposures in order not to deter the institutional goals of the banking firm. The changing dynamics of banking activities, the subjected environments within which banks operate, and the volatility of the world economy imply that risk management must also adjust with time (Bikker & Metzmakers, 2005).

The objective of financial risk management is not to prohibit or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that it can be measured and mitigated. It also prevents an institution from suffering unacceptable loss causing it to fail or materially damage its competitive position. Functions of risk management should actually be bank specific dictated by the size and quality of balance sheet, complexity of functions, technical/ professional manpower and the status of MIS in place in that bank (Buttimer, 2001).

The application of sound financial risk management practices related to the adequacy of provisions and reserves in accordance with Basel standards which require banks to have a capital adequacy ratio of 8%. The maintenance of capital adequacy is like aiming at a moving target as the composition of risk-weighted assets gets changed every minute on account of fluctuation in the risk profile of a bank. Capital adequacy is known as the core capital providing permanent and readily available support to the bank to meet the unexpected losses. Aggregate risk exposure is estimated through Risk Adjusted Return on Capital (RAROC) and Earnings at Risk (EaR) method are used by bank to estimate the cost of Economic Capital & expected losses that may prevail in the worst-case scenario and then equates the capital cushion to be provided for the potential loss. RAROC is the first step towards examining the institution's entire balance sheet on a mark to market basis, if only to understand the risk return trade off that have been made. In order to enhance the supervisory mechanism, some banks have put in place, a system of Risk based supervision. Under risk based supervision, supervisors are expected to concentrate

their efforts on ensuring that financial institutions use the process necessarily to identify measure and control risk exposure. The RBS is expected to focus supervisory attention in accordance with the risk profile of the bank (Medhat, 2006).

Banks have also been involved in a process of upgrading their risk management capabilities to include both, loan reviews and portfolio analysis. With the advent of new technologies for buying and selling risks, the banks have taken a course away from the traditional book-and-hold lending practice. With the increased availability of financial instruments and activities, such as, loan syndications, loan trading, credit derivatives, and creating securities, backed by pools of assets (securitization), the banks have become more active in management of risk. Hedging and greater diversification of banking portfolio is being done in order to narrow the dispersion of possible portfolio outcomes and ensure that the combinations of selected assets offset the movements of each other (Buttimer, 2001).

The ultimate objective of risk management implementation is to maintain financial performance in the banking sector as aspects of financial risk management promote early warning system of monitoring relevant indicators; as well as stimulating and making provisions for possible realistic strains on the system by conducting stress testing. The above, helps regulators to monitor the system and prepare for ways to avert potential or discovered stress on the system hence establishing financial performance (Bikker & Metzmakers, 2005).

The financial performance of commercial banks can be measured by the Return on Assets (ROA) which is a ratio that measures company earnings before interest & taxes (EBIT) against its total net assets. The ratio is considered an indicator of how efficient a company is using its assets to generate before contractual obligation must be paid. It is calculated as: ROA= EBIT/Total Assets. Return On Assets gives an indication of the capital intensity of the banking industry, which will depend on the industry; banks that require large initial investment will generally have lower return on assets (Apps, 1996).

Default Rate (DR) is the term for a practice in the financial services industry for a particular lender to change the terms of a loan from the normal terms to the default terms that is, the terms and rates given to those who have missed payments on loan (Apps 1996). DR ratio can be calculated as Dr Ratio = Non Performing Loans/ Total Loan. Bad Debt Cost is created when a bank agrees to lend a sum of assets to a debtor and granted with expected repayment; in many cases, however the debtor is unable to repay the debt at the fixed period of time by a certain date. In addition, changes in the valuation of debt currency change the effective size of the debt due to inflation or deflation, even though the borrower and the lender are using the same currency. Consequently, this can lead to bad debt cost. Bad debt cost includes lawyer's fees, consultancy fees & commissions to auctioneers (Apps, 1996). Bad debt costs ratio can be calculated as: BDC Ratio= Bad debt cost/ Total cost.

1.1.1 Contextual Overview

Financial risks have resulted in failure of a number of financial institutions in both developed and developing world. For instance Bank of America lost a total of $274 million, Citigroup $242 million and UBS €420 million. On December 2, 2001, Enron Corporation, the largest US energy trader, filed for Chapter 11 bankruptcy protection, creating the largest bankruptcy case in history. Standard & Poor's estimates that Enron and its consolidated entities had $13 billion of on-balance-sheet debt and as of September 30, 2001, the company had more than$19 billion of liabilities on derivatives contracts, including energy, power, and other commodities-related forwards, swaps, and options held by a wide variety of institutions. Simultaneously, many business counterparties experienced large equity price declines owing to credit risk concerns.

In Nigeria, Owojori, Akintoye, and Adidu (2011) notes that at the height of the distress in 1995, 60 out of the 115 operating banks were distressed; the ratio of the distressed banks arising from non-performing loans and leases to their total loans and leases was 67%. The ratio deteriorated to 79% in 1996; to 82% in 1997; and by December 2002, the licences of 35 of these distressed banks had been revoked. In Kenya, the nonperforming loans as a proportion of total loans which is another proxy for credit risk averaged 5.08% in 2008,

13.5% in 2007, stood at 14.3% in 2006 and further averaged 16.07% in 2005 and 19.64% in 2004. Notably, the level of nonperforming loans given by nonperforming loans to total loans decreased during the period 2004 to 2008 (CBK, 2010).

According to the Banking Survey (2009), there are 44 licensed commercial banks in Kenya, one mortgage finance company and one credit reference bureau. Of the 45 financial institutions, 32 are locally owned and 13 are foreign owned. Commercial banks in Kenya are categorized in three tier groups on the basis of the value of bank assets. Tier group one are books with an asset base of more than Ksh40 billion, tier group two are commercial banks with asset base between Ksh40 billion and Ksh10 billion while tier group three are banks with asset base of less than Ksh10 billion. According to the 2009 Banking Survey, there are eleven commercial banks in tier group one, eleven commercial banks in tier group two and twenty on commercial banks in tier group three comprising to a total of forty three commercial banks.

Kenya's banking sector remained stable in 2003 and reported improved performance resulting from lower bad debts charge, reduced operation costs and significant inflow of foreign deposits into local banking system. Two institutions were placed under statutory management and one under liquidation in 2002/03. Central Bank Act was amended to allow formation of a Monetary Policy Committee (MPC) in 2004 and transferring powers from the Minister to Central Bank, to develop risk management guidelines to cover the most common types of risk and to vet Board of Directors, Senior Management and significant shareholders. The banking sector remained stable in 2005/06 but two financial institutions; Daima Bank Ltd and Prudential Building Society were closed and Charter bank was put under statutory management following heighted adverse publicity related to its alleged malpractices (Central Bank Annual Supervision Report, 2006). In 2007, non-performing loans decreased attributable to government of Kenya reduction of non-performing loans in one leading bank, recoveries and write-offs in a number of other banking institutions.

In Kenya the Central bank has taken significant steps towards implementation of risk based supervision. Thus, Inspection procedures and report formats have been modified,

and the Central Bank received Risk Management Programs (RMPs) from all institutions as required of them (CBK, 2003). Ngugi, (2001) postulates that in order to determine the needs of the local banking sector with regard to risk management, the central bank of Kenya conducted a survey in September 2004 that provided a status position on the extent to which risk management is practiced in the financial institutions operating in Kenya. The survey revealed that there was a high level of awareness in banking institutions on the importance of employing systematic methods of identifying, analyzing and controlling or mitigating risks.

But even as banks are being pushed to comply with the provisions of Basel I (1988), some analyst think that too many technological financial and institutional changes have occurred making it necessary to raise the bar. The CBK itself took more than 15 years to operationalise the Basel I (1988) accord having established risk mitigation guidelines only in 2005 following a banking sector survey it conducted in 2004. Concerns over the relevance of Basel I (1988) has seen the CBK contemplate moving a rung higher to implement the more advanced Basel II (1999) framework.

1.2 Statement of the Problem

Financial institutions are still faced with critical challenges of finding new and better ways to increase top-line revenues, maintaining necessary capital ratios, improving margins, strengthening balance sheets and enhancing efficiencies. There is a fundamental change in the business of banking from buy-and-hold strategies to so-called 'originate-to-distribute' models. Regulatory changes, compliance, economic volatility, and issues involving data security, distressed lending and troubled assets add even more concern. Hence the increasing numbers of insolvent banks have become a common feature in banking industry around the world and loss of confidence in the banking system (Saunders & Wilson, 2001). These emerging events have proved the weakness of the Basel Standards. The shortcomings of the Basel I led to a re-structuring of its tenets and a subsequent re-birth of the Basel II Accord, while the recent world financial downturn also exposes the inadequacies of the Basel II which focus on capital adequacy. Basel III

Accord (2009) comprises a comprehensive set of reform measures designed to improve the regulation, supervision and risk management within the banking sector.

A commercial bank has many different types of risks that must be administered cautiously, particularly when the bank deals with a large amount of leverage. Any financial crisis with no effective supervision on risk management of the commercial banks will lead to trouble in the banking system. Schroeck (2002) indicates that keeping up with well driven practices through prudent risk management will result in increased earnings.

Examining the current emphasis that is laid on financial risk management by commercial banks and other financial experts, the level of contribution of this factor to financial performance has not been analyzed. Related studies done in the past have focused on the various aspects of risk management in Kenyan commercial banks. For instance Rajan (1994) notes that expanding lending in the short-term boosts earnings, thus the banks have an incentive to ease their credit standards in times of rapid credit growth, and likewise to tighten standards when credit growth is slowing. Obiero (2002) researched on adequacy of the banking sector regulatory framework in reducing bank failures. The Basel committee (2000) and Hennie (2000) pointed out that the major cause of banking problems and failures are directly related to lax credit standards for borrowers and counterparts; Kabiru (2002) examined how banks assess credit risks in Kenya, while the Basel committee (2000) and Hennie (2000) pointed out that the major cause of banking problems and failures are directly related to lax credit standards for borrowers and counterparts.

There are a number of non-published theses and projects which have focused on credit risk management done by various university students. However there is little study that has been done in Kenya to establish how financial risk management practices influence the financial performance of commercial banks in Kenya. This study therefore aims at determining the influence of financial risk management practices on the financial performance on commercial banks in Kenya.

1.3 Objectives of the Study

The general objective of this study is to explore the influence of financial risk management on financial performance on commercial banks in Kenya.

The following specific objectives will guide the study:

i) To examine the influence of risk aggregation and capital allocation practices on financial performance of commercial Banks in Kenya.

ii) To investigate the influence of supervision and regulation on the financial performance of commercial Banks in Kenya.

iii) To examine the influence of disclosures on the financial performance of commercial Banks in Kenya.

iv) To examine the influence of funded and unfunded credit protection on financial performance of commercial Banks in Kenya.

1.4 Significance of the Study

The study will be significant to financial institutions because they will be able to understand credit management and risk management practices and how they influence the financial performance of the banks and how the same can be leveraged to achieve high financial performance. The study will also be important to the bank operational staff and management who will be able to understand the risk management practices that contribute to financial performance of commercial banks and ensure that they undertake acceptable banking practices and procedures. The study will also facilitate bank customers to understand and appreciate risk management practices instituted by banks so as to adhere to prudential banking practices.

The study will provide insight in the most successful strategies banks use to handle credit risk. The findings of the study will assist Central Bank of Kenya in formulating guidelines that will enhance Risk Management in the banking sector. Academicians will benefit from the information of the study as the study will contribute to existing body of knowledge. The study will further provide the background information to research organizations and scholars and identify gaps in the current research for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This involves a comprehensive survey of publications in a specific field of study or related to a particular top of research usually in the form of a list of references or an in-depth review of key works. In this chapter, literature, which is related to and consistent with aspects pertaining to the examination of the influence of financial risk management on the financial performance of commercial Banks in Kenya?

2.2 Theoretical Literature Review

Several theories have been put forward which have implications on Risk Management:

Interest Rate theories recognize that interest rates have an effect on risk because the higher the interest rate the higher the risk that the loan might not be repaid and thus the higher the risk (Bluhm, Overbeck, & Wagner, 2003). The interest rate theories contends that the long term interest rates are more risky than short term interest rates, thus investors expect a higher return if they have to be motivated to hold instruments that are long term interest bearing instrument (Brigo & Mercurio, 2006).

Cukierman (1991, 1992) directly focuses on the relationship between financial performance and interest rate smoothing. He constructs a model where higher future short-term interest rates adversely affect bank profitability. He shows that smoothing interest rate fluctuations raises bank profitability. As Garfinkel (1991) points out, a shortcoming of Cukierman's model is that all bank assets are riskless and banks face no possibility of becoming insolvent.

2.2.1 Portfolio Theory

Portfolio Theory in the banking sector is applied in constitution of loan portfolios of banks where there are guidelines on loans that banks should extend to their clients, such

as limit in terms of credit that should be extended to third parties (Wilson, 1997). The agency theory contends that many banks are managed by the managers and not by the owners. Banks that are managed by professional managers are expected to better analyze and monitor credit awarded to their clients. Commercial banks should be properly managed and management should be "fit and proper" to be able to make decisions on credit risk management and that which should steer banks to high levels of profitability (Glasserman & Li, 2005).

2.2.2 Arbitrage Pricing Theory

According to Ross (1976), Arbitrage Pricing theory predicts a relationship between the returns of a portfolio and the returns of a single asset through a linear combination of many independent macro-economic variables. An asset pricing model based on the idea that an asset's returns can be predicted using the relationship between that same asset and many common risk factors.

The arbitrage pricing theory (APT) describes the price where a mispriced asset is expected to be. It is often viewed as an alternative to the capital asset pricing model (CAPM), since the APT has more flexible assumption requirements. Whereas the CAPM formula requires the market's expected return, APT uses the risky asset's expected return and the risk premium of a number of macro-economic factors. Arbitrageurs use the APT model to profit by taking advantage of mispriced securities. A mispriced security will have a price that differs from the theoretical price predicted by the model. By going short an overpriced security, while concurrently going long the portfolio the APT calculations were based on, the arbitrageur is in a position to make a theoretically risk-free profit.

The Structure of Basel II (1999) rests on three pillars: The first pillar deals with minimum capital and the various approaches to credit risk (Standardized Approach and Internal Ratings Based Approach). The second pillar deals with the supervisory review process. It is designed to provide the necessary responsibility and surveillance mechanisms for the capital adequacy rules in the first pillar and to provide incentives for the adoption of

improved risk management techniques. The third pillar addresses market discipline and is principally aimed at disclosure requirements. These will afford to the market the information necessary to assess the capital adequacy and risk exposures of a bank. The Basel (1988) has however largely focused on credit risk

Theories about what causes non-performing loans generally fall into one of four categories: lack of incentives for project selection; principal-agent problems, moral hazard due to low capital; or soft budget constraints due to dynamic commitment problems. Bank managers have little incentive to monitor borrowers or select appropriate projects. One reason is that the financial system evolved out of a central planning system. It was designed simply as a mechanism to transfer savings from households to state enterprises. The government has attempted to increase the efficiency of the financial system by encouraging state owned banks to adopt a more commercial orientation. However, bank managers often lack the skills to engage in effective project selection and pressures to make loans for social purposes remain strong. In addition, the legal system makes it very difficult to collect nonperforming loans. Lenders do not expect their loans to be collectible and borrowers know they will not have to repay. This means there is little incentive for banks to monitor loans.

Political Interference is another reason that banks lack incentives to engage in appropriate project selection. For example, the OECD (2002) argues the most important factor in the buildup of NPLs is the government's reliance on policy lending to support social projects unable to earn a commercial return. The OECD argues the government has sent mixed messages to bank managers inhibiting the development of a strong credit culture. A second explanation for the rise in NPLs focuses on principal-agent problems. Banks or firms receive different payoffs than the government which induces them to engage in unwanted behavior. The Asian Development Bank (2004) argues that banks have fewer incentives to monitor loans because of implicit government guarantees while firms may feel they are freed from their obligation to repay. Similarly, Turner and Hawkins (1999) note that loan quality suffers when officers loan are rewarded on the basis of the volume of loans without sufficient attention to risk.

2.3 Empirical Literature Review

Hassan (2009) conducted a study on Risk Management Practices to assess Islamic banks in Brunei Darussalam and evaluated the implemented risk management practices and techniques to deal with different kinds of risks. Amran et al. (2009) explored the availability of risk disclosures in the annual reports of Malaysian companies. Studies conducted by David (1997) outlined that there are four major sources of risk. The researcher also defined 'risk' as the reduction in firm's worth to adjust the business background, such as market risk which reflects the adjustment in net asset value outstanding, affecting the changes in fiscal factors such as interest rates, exchange rates, and equity and commodity prices.

In a study conducted by Schroeck (2002) indicated that good Risk Management Practices will improve the value of the firm. In a study conducted by, Nocco and Stulz (2006) it suggested that banks in the long run should focus on enterprise risk management and this will give them a competitive advantage then to manage and monitor risks individually.

In Taiwan, Hu and Chu (2004) carried out their own study examining how ownership structure affects Non-performing Loans (NPLs). The sample consisted of twenty three commercial and state Banks. Their findings revealed that an increase in the government's shareholding facilitates political lobbying. On the other hand, private shareholding induces more Non-performing Loans (NPLs) to be manipulated by corrupt private owners. The results show that the rate of NPLs decreased as the ratio of government shareholding in a bank rose (up to 63.51%), while the rate thereafter increased. The report posits further that joint ownership has the lowest rate of NPLs among Taiwanese public, mixed and private commercial banks. The joint ownership effect on NPLs ratios is negative and its magnitude is sufficiently large in Taiwan's banking industry. Bank size is negatively related to the rate of NPLs, which supports their argument that larger banks have more resources for determining the quality of loans.

In their study Benedikt, Marsh, Vall and Wagner (2006) examined risk management policies for ten banks in the United States using a multivariate model and found that banks that adopt advanced credit risk management techniques (proxies by the issuance of

at least one collateralized loan obligation) experience a permanent increase in their target loan level of around 50%. Partial adjustment to this target, however, means that the impact on actual loan levels is spread over several years. The findings confirm the general efficiency- enhancing implications of new risk management techniques.

The Central Bank of Kenya (2010) undertook a Risk Management Survey (2010) aimed at evaluating what effect the Risk Management Guidelines, RMGs (2005) have had on institutions' risk management functions, in order to determine the impact and adequacy of the Risk Management Guidelines (RMGs) .CBK surveyed all the 44 banks. The major of the survey included the existence and Management of the Risk Management; however 95% of the respondents indicated that their institutions had an independent risk management function, while the remaining 5% indicated not having one in place. The leadership of the risk management determines and directs an institution's overall risk management strategy: its selection, implementation, and ultimate success or failure. In the survey, 42% of the respondents indicated that they had a functional head for their Risk Management Function with a risk-related title such as Risk Manager, Chief Risk Officer or Director, Risk. In 37% of the respondent institutions, the head of the risk department doubled up as the head of compliance or management information systems (MIS). It is noteworthy that majority of the institutions (81%) had dedicated risk management functions, showing the level of importance to which they assign the likely impact of inadequate risk management.

Beaver (1966) applied a univariate model for discriminating between healthy and bankrupted ratios. He compared a list of ratios individually to for 79 failed firms and a matched sample for 79 healthy firms. Consequently, Beaver investigated how 30 financial ratios could predict the firm's bankruptcy and found that six financial ratios could discriminate well between healthy and bankrupted firms five years before the failure occurs. Although the Beaver's pioneer study presented a simple univariate model, it gave a solid base for future research in this field.

Altman (1968) created a multivariate discriminant model, which became one of the most used of all bankruptcy prediction models. He examined 33 healthy listed firms and 33

bankrupted listed firms, two in the US manufacturing industry in the 1946-1965 period. Initially, Prof. Altman provided a multivariate discriminant analysis (MDA) on 22 financial ratios and constructed the Z-score model that consisted of 5 ratios. Based on the Z-Score he divided firms into three groups when predicting bankruptcy – healthy, bankrupted and the other firms. The model proved to be extremely accurate in predicting bankruptcy (95%). However, this original model suffered several pitfalls such as it was applied on small listed firms and the US manufacturing industry.

2.3.1 Financial Performance

In their study Toutou, Xiaodong (2011) defines financial performance as a general measure of how well a bank generates revenues from its capital. It also shows a bank's overall financial health over a period of time, and it helps to compare different banks across the banking industry at the same time.

The bank's financial performance generally can be recognized as its stability and profitability. The stability refers to its risk factors and profitability refers to its financial return. After risk and return theory created by Bowman (1980), more and more studies used different accounting ratios to measure risk and return within corporate finance, which is concentrated on risk and return relationship between accounting variables (Nickel & Rodriguez, 2002) from firm's financial report. For example, researchers by using return on asset (ROA), return on equity (ROE) and Net profit margins (Miller & Bromiley, 1990; Nickel & Rodriguez, 2002) to measure their financial returns. However, (Nickel & Rodriguez, 2002) points out some limitations by using mean-variance relationships for measuring of risk and return. They criticized that somehow variance is measured historically when it should be measured as expectation. Thus, another market-based measure of risk and return, which based on the stock price of the firm, is used to measure financial performance since it reflects the expectation of firm's future performance (Dubofsky &Varadarajan, 1987). As a result, stock return can be seen as an effective substitute for accounting based measurement of performance.

With a better understanding of the relationships between risk and return, researchers started to examine both of them at the same time to evaluate firm's financial performance. Some of risk adjusted performance measures was created for this matter, such as Sharpe ratio, the Treynor Index and the Jensen index. Sharpe ratio measures the excess return (risk premium) per unit of risk in an investment portfolio (Sharpe, 1994). It has principal advantage of directly computable from observed series of returns without additional information from source of profitability. Unlikely, The Treynor Index measures the performance of a portfolio based on the return earned per unit with its Beta (systematic) risk (Kim & Gu, 2003), which ignores any unsystematic at present. Finally, Jensen Index employs the SML (security market line) as its benchmark to test if a portfolio produced an abnormal return compare to whole capital market (Haugen, 1997). It also called alpha value measurement and does not measure with unsystematic risk as Treynor index.

Moreover, it was found that the state of a bank's financial performance lays not only on its profitability but also it solvency and stability. Given that investors generally have different perception of a bank's financial performance it therefore implies that for a reasonable approach in measuring bank performance, it will require deeper analysis on how banks run their business taking into consideration key factors such as profitability, liquidity, risk and solvency.

These Indicators of performance can therefore be divided into four main groups: liquidity indicators, solvency indicators, profitability indicators and activity indicators. The liquidity indicators explore the firm's ability to meet its short-term or to cover its long-term liabilities with long-term assets. Generally, higher liquidity implies a lower probability of default. Persisting problems with low liquidity usually indicate problems ahead with meeting long-term liabilities (i.e. declining solvency), which in the extreme case can result in the company failure.

The solvency indicators describe the firm's ability to meet its long-term liabilities. Generally, a higher debt ratio and a longer debt repayment period result in a higher

probability of default. By contrast, an ability of the company to generate sufficient funds for debt repayment and a higher proportion of internal funds reduce this probability.
The profitability indicators explain how the company generates profit and the quantity of inputs it uses to do so. Generally, higher profitability implies a lower probability of default. The activity indicators measure the efficiency of use of various inputs by the company. From the financial point of view, it would be ideal if the company generated sales/profit by using the minimum amount of resources. The sales turnover ratio is constructed so that the value of the indicator rises – and the probability of default falls – as the volume of sales rises.

In summary, one way to characterize financial performance is to distinguish between financial and non-financial performance (Ittner, 2008). The financial performance is often measured using traditional accounting KPI's such as ROA (Ittner & Larcker, 1997; Fraquelli & Vannoni, 2000; Crabtree & DeBusk, 2008). The advantage of this measurement is their general availability, since every profit oriented organization produces these figures for their yearly financial reporting (Chenhall & Langfield-Smith, 2007).

2.3.2 Risk Aggregation & Capital Allocation

Capital Adequacy in relation to economic risk is a necessary condition for the long-term soundness of banks. Aggregate risk exposure is estimated through Risk Adjusted Return on Capital (RAROC) and Earnings at Risk (EaR) method. The RAROC process estimates the cost of Economic Capital & expected losses that may prevail in the worst-case scenario and then equates the capital cushion to be provided for the potential loss. The Economic Capital is the amount of the capital (besides the Regulatory Capital) that the firm has to put at risk so as to cover the potential loss under the extreme market conditions. In other words, it is the difference in mark-to-market value of assets over liabilities that the bank should aim at or target. As against this, the regulatory capital is the actual Capital Funds held by the bank against the Risk Weighted Assets. After measuring the economic capital for the bank as a whole, bank's actual capital has to be

allocated to individual business units on the basis of various types of risks. This process can be continued till capital is allocated at transaction/customer level.

Determining how much capital must be held against contingencies that could arise from such risks are very important for the soundness and performance of the banking sector. The Basell (1988) Accord targets a bank's capital holdings as a proportion of the credit risk of their on-balance-sheet and off-balance-sheet business. For this purpose, investment instruments were classified according to their risk, and a risk coefficient assigned to each group. The weighting formula for asset risk was intended to determine the capital coverage needed for a bank's exposure to credit risk.

The most widely accepted of these is the Value-at-Risk (VaR) model, which reflects the maximum loss that can occur in the value of a portfolio having a certain investment horizon under a certain probability. Since it is a simple and clear-cut concept, the VaR model is widely used for measuring market risk. It permits comparison of the market risk of different investment instruments, so that portfolio performance can be evaluated in terms of the risk undertaken. Especially for measuring market risk to determine capital adequacy, this model has become a necessity in many countries and financial institutions. Another method widely used for measuring market risk is Scenario Analysis. Scenario Analysis is a technique used to see how the value of a portfolio would be affected by various probable changes in market conditions (Basle 11, 1999).

Basel II (1999) allows to banks a choice between two broad methodologies for calculating their capital requirements in relation to credit risk. The Standardized Approach is in many respects the "default option"; banks will have to use this approach unless the alternative is approved by its supervisor. The Standardized Approach measures credit risk by reference to pre-set percentages of the risks attributable to individual claims. The applicable percentages are, in their turn, determined by reference to ratings provided by approved external credit assessment agencies.

Under the Internal Ratings-Based Approach, banks may use their own internal risk evaluations in setting the capital requirement applicable to particular exposures. Internal

credit risk ratings are summary indicators of the degree of risk inherent in institutions' individual credit exposures. In combination, credit ratings also provide a useful snapshot of the overall quality of an institution's credit portfolio. A credit rating represents an assessment of the risk of loss from the failure of a given counterparty to meet debt servicing and other payment obligations on a timely basis. There is no standard approach to risk rating credit exposures. Credit rating systems vary widely among institutions, including in their basic structure, operating design and uses, (Basel Committee, 2000).

2.3.3 Supervision and Regulation

According to Central Bank of Kenya (CBK) (2006), Supervisory reporting systems provide for early detection in the intervals between on-site examinations, external audits, or supervisory visitation, enabling supervisors to take prompt action before problems become more serious. To complement the information available in public and supervisory reporting, supervisors often collect additional information to assist in clarifying a bank's risk profile, as well as to better understand important credit risk management issues.

Supervisors collect data during on-site examinations, targeted examinations, external audit processes, and special studies or surveys. This first-hand information is used together with public disclosures and regular supervisory reporting to obtain a more comprehensive picture of the bank's condition, operations, risk profile and risk management activities (CBK, 2010). Internal management information considered most relevant for credit risk includes: broad credit risk management information, including asset quality figures; internal control/internal audit statistics and other measures; trend and sector analyses; performance measures relating actual results to expected performance; and, economic capital allocated to credit risk and returns on this capital (Fofack, 2005).

The extent of imprudent management in the affected banks indicates that there are serious deficiencies in bank regulation and supervision (Banking Survey, 2000). When many of the banks were set up in the 1980s or early 1990s, banking legislation was outdated and Central Bank supervision departments were seriously understaffed (Kariuki, 1993). More

often, political pressure is brought to bear on Central Banks to exercise regulatory forbearance. The Central Banks often lacks sufficient independence from the government to refuse liquidity support to politically connected banks and to strictly enforce the banking laws. In particular, for those banks with strong political connections, the expectation that regulators could be pressured to exercise forbearance must have seriously undermined discipline and incentives for prudent bank management (Kiyai, 2003).

In addition to prudential regulations designed to ensure the safety of the banking system, there is another important aspect of the legal framework which affects banks. This is the body of commercial laws and regulations governing a bank's contractual relationship with its customers (Hellmann, 1995). A key aspect of this legislation that often causes problems for the banks is that involving debt collection or recovery. They further note that foreclosure and other legal actions involve a cumbersome legal process that may take years to complete at great expense to the banks. This cumbersome process is a disincentive to banks to take strong action to collect their problem debts. It may also encourage bankers to lend additional funds to carry the problem borrowers in the hope that the borrowers may recover and pay off their debts. All too often, though, the borrowers are unable to recover and the losses incurred by the banks multiply to even greater levels (CBK, 2005)

If banks are to remain viable, the legal system must be able to balance the rights of banks to foreclose on collateral with the rights of individuals and firms so that debts can be recovered in a timely manner. This may require changes in laws governing commercial transactions and bankruptcy and a wide range of actions to improve the effectiveness of the legal system, e.g., hiring more judges and establishing courts specifically designed to hear commercial law and bankruptcy cases, (Hellmann, Thomas, et al 1995). According to Mullei (2005), as of the 31st of May 2002, 2,385 cases involving debts amounting to Shs.11b were languishing in court. The delays in disposing of these cases in court seem to reflect abuses of the judicial system by debtors or weaknesses in the judicial system itself. It further indicates that an ineffective legal framework may result in banking

system distress but, more often than not, lack of enforcement and supervision are equally at fault.

In the view of CBK (2003), supervisory problems may be rooted in conflicting public policy goals for supervision, political interference, a lack of political will to deal with problems, organizational weaknesses such as understaffing, inadequate compensation, poor leadership, and divided supervisory responsibilities, and the lack of a clear view on the role of supervision. While agreeing Kiyai (2003) notes that problems may also result from examination methodologies which focus on technical compliance with laws and regulations or which are diluted by responsibilities for non-prudential concerns such as tax compliance, foreign exchange controls, and special lending programs.

2.3.4 Disclosures

The causes of the non-performance of the financial institutions emanate from the nature even of their activity. Works of Williamson (1970) Akerlof (1970) and of Mishkin (1991), affirms that the increase in informational asymmetries encourages the agents to resort to the financial institutions in order to reduce the unfavorable selection and the moral hazard. The organization of the financing activities by the means of a financial institution thus makes it possible to generate a higher level of information which leads to a situation of balance between the applicants and the suppliers of funds. However, the maintenance of this state requires the safeguarding of confidence in the financial institution to avoid the problems of banking panic. Indeed, the activity of the banks is mainly assured via the deposits the economic agents whose cash withdrawals generally follow the law of the great numbers.

The occurrence of an event which weakens confidence in the system accelerates the rate of withdrawal of the depositors and obliges the financial intermediary to liquidate its positions on other credits by accepting great losses of capital. This sale chains some generally results in a fall in the assets prices and a strong deterioration of the image of the financial intermediaries. In answer, the depositors, in lack of confidence, will continue to withdraw their funds thus involving a banking panic in the financial system. The paper

of Diamond and Dybvig (1983) confirmed that even the depositors which maintain their confidence may find it beneficial to withdraw their funds. Thus, the financial intermediary deals with two requirements, that to maintain the liquidity with the depositors and that to be able to liquidate its credits at the good moment and handsome price. It thus runs often a risk of transformation which returns this system of intermediation vulnerable to banking panics.

There is need for transparency of banking activities and the risks inherent in those activities, including credit risk. In particular, meaningful and accurate information disclosed in a timely manner provides an important foundation for market discipline and public scrutiny of banks (Basel, 2006). Information should be provided with sufficient frequency and timeliness to give a meaningful picture of the institution's financial position and prospects and it should also be reliable. Market participants and other users need information that can be compared across institutions and over time.

Monthly Economic Review (1995), reports that confidentiality is apparently established in the Banking Act and is extended to loans in default as well as loans in good standing. A loan arranged by a bank for one of its customers should be treated confidentially so long as both parties are honouring the loan agreement. When a loan is in default, however, the right to make the default public may stimulate repayment or renegotiation of the loan agreement and encourage new applicants for loans to ensure that their applications are bona fide (Fofack, 2005). The problem of non- performing loans would diminish if confidentiality were removed from all loans.

According to Caprio, and summers (1993), fear of disclosure should encourage potential borrowers to avoid seeking loans with little, if any, intention of repaying, and strengthen management's ability to refuse doubtful loan applications. The issue of a bank's right to disclose its business dealings with a customer to a third party may, in future, be addressed by the bank including in its new account opening documentation and loan application documentation a consent from the customer that the bank may disclose at its sole discretion information concerning its business dealings with the customer.

In his findings Kariuki (1993) established that in many banks, the quality of financial information submitted to banks for the purpose of obtaining credit is frequently poor and, in some cases, intentionally incorrect or incomplete. If banks are to become more prudent and sophisticated in their management of credit risk, they must base credit decisions on a borrower's ability to repay. This ability is determined, to a large extent, by an analysis of financial information submitted by the borrower (Kiyai, 2003). To strengthen the position of banks in obtaining sound financial information upon which to base their credit decision, regulations should make it illegal for a borrower to submit false financial information to obtain a loan. This would provide a means of recourse within the legal system through which banks could pursue damages.

The Basel (2006) reaffirmed the accords of Basel (1999) that while each bank's specific disclosures will vary in scope and content according to its level and type of activities, all banks should provide sufficient timely and detailed information so as to allow market participants to develop a full and accurate picture of the bank's credit risk profile. Further, a bank's disclosures should be consistent with the information the bank generates and uses internally to measure, manage and monitor credit risk; accordingly, as management information systems and management reporting continue to evolve and improve, the timeliness and extent of disclosures should improve.

2.3.5 Funded and Unfunded Credit Protection

The notion of funded credit protection suggests an arrangement under which the bank has recourse to cash or some other asset in order to recover the moneys owing to it. Basel II (1999) allows for various forms of funded credit protection, including on balance sheet netting. On balance sheet netting of mutual claims/reciprocal cash balances between the bank and the counterparty create effective security and may accordingly be recognized as an acceptable form of credit risk mitigation. Assets can be deposited with or retained by a bank to be treated as funded credit protection and this can include cash or cash equivalent instruments; gold; debt securities of governments/central banks which meet stated credit quality criteria; debt securities issued by banks, local authorities and certain other entities which meet stated credit quality criteria; short term debt securities with an acceptable

rating; equities or convertible bonds included on a main index; and units in a collective investment scheme, provided that they have a daily price quotation and invest only in instruments which are themselves eligible for recognition (Karabulut & Bilgin, 2007).

An institution using the comprehensive approach to collateral may also treat as eligible: equities/convertible bonds not included on a main index but which are quoted on a recognized stock exchange; and collective investment schemes which have a daily price quote and which invest solely in the collateral noted in above (Kiyai, 2003). An institution which adopts the Internal Ratings-Based Approach may, in addition, treat the following types of security as eligible: real estate, provided that the borrower is expected to fund repayment from other sources, rather than the cash flows from the property itself.

Unfunded credit protection includes guarantees and credit derivatives. Unfunded credit protection involves an unsecured obligation of a third party. Since no specific asset is available by way of security in the context of unfunded credit protection, it follows that the rules focus on the creditworthiness and reliability of the provider and the validity and enforceability of that party's obligations. As a result, credit protection is only "eligible" for these purposes if it is provided by an appropriate counterparty. These include: national governments/central banks; multilateral development banks; certain international organizations; banks; and other corporate which meet stipulated credit requirements (Payl,e 1997).

Consistent with this cost-benefit trade-off, Drucker and Puri (2006) show that the loans sold by banks appear to have relatively low monitoring costs; For example, sold loans tend to have more restrictive covenant packages than unsold loans. Thus, banks often sell loans that are designed specifically for an intermediation profit rather than for a long-run investment profit, using more restrictive covenant packages that mitigate selling costs. The riskier the loans, the likelier they are to be sold, controlling for other effects, perhaps because they tie down more bank capital.

2.4 Summary

Determining how much capital must be held against contingencies that could arise from such risks are very important for the soundness and financial performance of the banking sector. The 1988 Basle Capital Accord targets a bank's capital holdings as a proportion of the risk of their on-balance-sheet and off-balance-sheet business. Supervisory reporting systems provide for early detection before problems become more serious. To complement the information available in public and supervisory reporting, supervisors often collect additional information to assist in clarifying a bank's financial risk profile, as well as to better understand important financial risk management issues.

Market participants and other users need information that can be compared across institutions and over time to make meaningful evaluations of banks, information should therefore be comprehensive. This often implies the aggregation, consolidation and assessment of information across a number of activities and legal entities. The notion of funded credit protection suggests an arrangement under which the bank has recourse to cash or some other asset in order to recover the moneys owing to it. Banks and other lenders often transfer credit risk to liberate capital for further loan intermediation. In addition to selling loans outright, lenders are increasingly active in the markets for syndicated loans, collateralized loan obligations (CLOs), credit default swaps (CDSs), credit derivative product companies, "specialty".

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presents the different methods that the researcher will use to collect, analyze, present and discuss the findings of the study. This includes details on the research strategy, the different categories of respondents and how the data will be collected during fieldwork. Also the ways through which the different data sets will be analyzed and presented is discussed.

3.2 Research Design

The study used a descriptive survey approach in collecting data from the respondents. Descriptive survey research portrays an accurate profile of persons, events, or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group (Burns and Grove 2003). The descriptive survey method was preferred because it ensured complete description of the situation, making sure that there is minimum bias in the collection of data (Kothari, 2008).

3.3 Target Population

Target population refers to the entire group of individuals or objects from which the study seeks to generalize its findings (Cooper and Schindler, 2008). The target population will comprise of credit staff and management staff drawn from the forty two (42) commercial banks and one mortgage company making it 43 Banks and will consist of thirty five (35) managers and fifty one (51) supervisory staff provided by the human resources departments in the 43 banks. The study will cover a five year period spanning from (2007 – 2011).

3.4 Sample and Sampling Technique

Sampling is that part of statistical practice concerned with the selection of an unbiased or random subset of individual observations within a population of individuals intended to yield some knowledge about the population of concern, especially for the purposes of

making fair generalization of results back to the population from which they were chosen (Bernard, 2002).

The researcher used stratified random sampling procedure to select a sample that represent the entire population due to the fact that the population is not homogeneous making it the most appropriate to come up with the target sample.

From the target population of one hundred and seventy two (172) 50% will be selected giving a sample size of 86 (86).

3.5 Research Instruments

The study will use questionnaires to collect data. The primary data for this study will be collected using the questionnaires and complemented by desk research hence ensuring that detailed and relevant information on the subject of study is collected. Questionnaires will be used in collecting data and consisted of a mixture of open ended and close ended questions and according to Polit, and Beck (2003), this allows for intensity and richness of individual perceptions in respondent responses. The study will use questionnaires because they are flexible and facilitates the capture of in-depth knowledge of the respondents, promotes respondent cooperation and allows the interviewer to probe further for clarification of issues (Patton, 2002).

3.6 Data Collection Procedure

The questionnaires were self - administered containing mainly closed and open ended questions to the sample respondents and according to Polit, and Beck (2003), this will allow for intensity and richness of individual perceptions in respondent responses. Each respondent received the same set of questions in exactly the same way. A letter requesting for information will accompany the questionnaire explaining the purpose of study to the respondents.

Library and desk research was also carried out by scrutinizing official reports, guides and credit risk management documentation which will be availed by relevant banks. The

researcher also looked out for credit risk trends from written literature in the libraries and other relevant sources.

3.7 Data Analysis

Quantitative data, which was collected using closed ended questions in the questionnaires, was chronologically arranged with respect to the questionnaire outline to ensure that the correct code is entered for the correct variable. Data cleaning was then done and tabulated.

The study employed use of Correlation and Regression Models to assess the financial risk management being followed by the Commercial Banks in Kenya. In designing these models with the help of SPSS 17, the study categorized the influence of financial risk management on financial performance of commercial banks into dependent and independent variables. The dependent variable of this study is financial performance of commercial banks measured by financial soundness indicators such as: capital adequacy ratio, asset quality, earning and liquidity. Independent variables included the four main aspects of risk management which are: risk aggregation and capital allocation, supervision and regulation, disclosures and funded and unfunded credit protection. The model was therefore presented in the equation below.

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon$$

Where. Y = Financial Performance, measured by ROA; α = constant; b_{1-4} = Regression Coefficient; X_1 = Risk Aggregation and Capital Allocation; X_2 = Supervision and Regulation; X_3 = Disclosures; X_4 = Funded and Non-Funded Credit Protection and ε = error term.

The strength of the model was then tested using Cronbach's Coefficient Alpha, which can be thought of as the average of all of the inter-item correlations. If the items did indeed measure the same construct in the same way and were indeed answered in an identical manner, then the only differences in their values should be due to random errors of measurement. Cronbach's alpha gives the proportion of the total variation of the scale scores that is not attributable to random error.

Qualitative data was mainly gathered from open ended questions and interviews; a qualitative data checklist was then developed. The checklist was clustered along main themes of the research to ease consolidation of information and interpretation and then analysed through content analysis which is the process of analyzing verbal or written communications in a systematic way to measure variables qualitatively (Denzin & Lincoln, 2000).

The data or results has been presented in the form of figures and tables so that it is easy to observe general trends (Coolican, 2003). Thus presentation of data is in the form of tables, pie-charts and bar graphs only where it provides successful interpretation of the findings. Descriptive data has been provided in form of explanatory notes.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

After collecting data from the respondents, the data was edited, classified, coded and tabulated. The data analysis was based on the research objectives and questionnaire items pertaining to the influence of financial risk management on financial performance in commercial banks in Kenya and specific objectives and research questionnaires which include the influence of risk aggregation and capital allocation practices, supervision and regulation, disclosures and funded and unfunded credit protection on financial performance of commercial Banks in Kenya.

4.2 Presentation of Findings

4.2.1 Validity and Reliability

Table 4.1: Test of Validity and Reliability of the Questionnaire

Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	No of Items
.856	.796	15

Source: Research Data

The table above indicates the test of validity and reliability for a Pilot Study of the study questionnaire using Cronbach's α (alpha) coefficient. Fifteen (15) respondents were used as a sample during this Pilot Study. The alpha coefficient for the 15 questionnaires that were distributed to the respondents was .856 or 85% suggesting that the study instrument (Questionnaire) have a relatively high internal consistency.

4.2.2 Response Rate

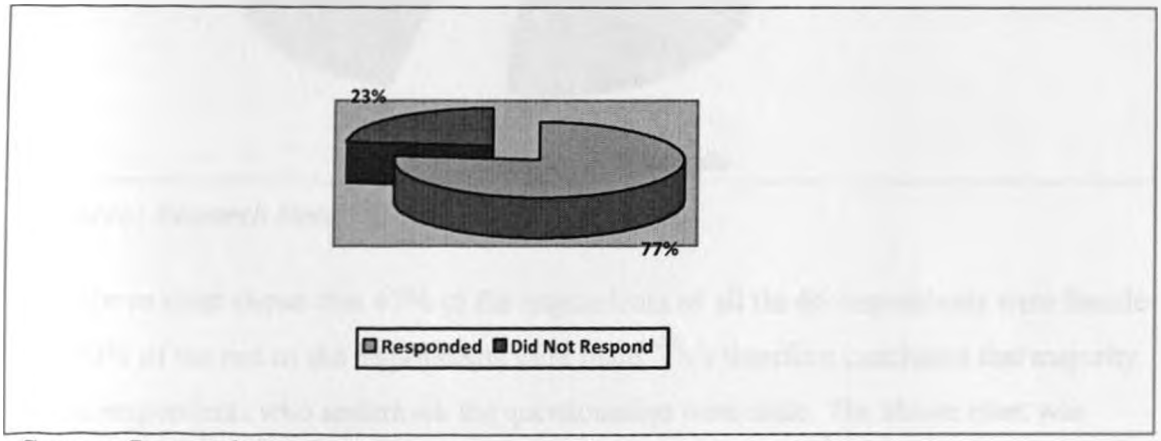
Table 4.2: Response Rate

Response Rate	Frequency	Percentage
Responded	66	76.7
Did not Respond	20	23.2
Total	**86**	**100**

Source: Research Data

The above study shows the total number of the people who responded and those who did not respond. The total number of questionnaires that were distributed to the field were 86 but 66 questionnaires which represent 77% were returned fully answered while 20 questionnaires which represent 23% were not returned. From table 4.1 and figure 4.1 it can be inferred that there was good response rate. The response rate reflected the view of Mugenda & Mugenda (2003) who indicated that a response rate of 70% and over is very good as it gives a representative sample for meaningful generalization and minimizes errors.

Figure 4.1: Response Rate



Source: Research Data

4.2.3 Response on the Basis of Gender

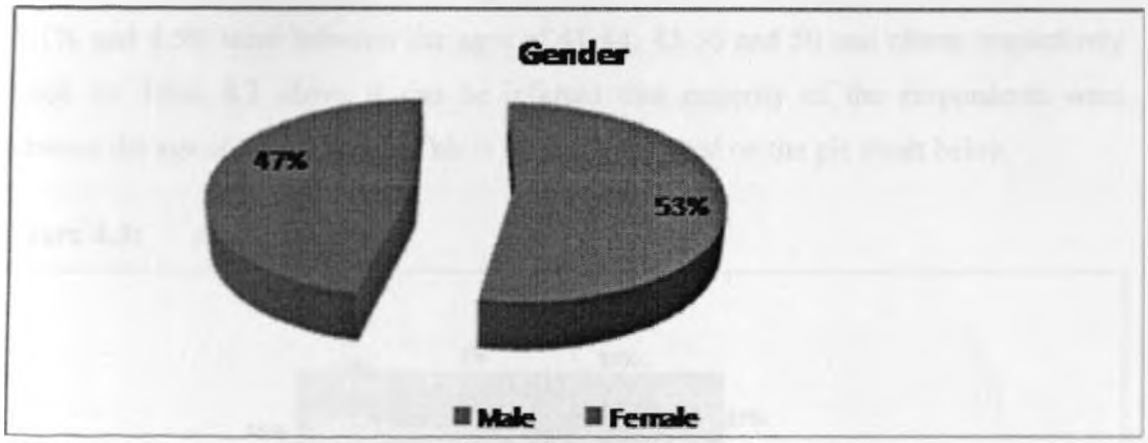
Table 4.2: Response on the Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	35	53.1	53.1	53.1
Female	31	46.9	46.9	100
Total	**66**	**100**	**100**	

Source: Research Data

According to the above study the total number of males who responded was 35 representing 53.1% of total respondents while 31 were female representing 46.9%. Based on the study it can be concluded that the majority of respondents were male.

Figure 4.2: Gender of Respondents



Source: Research Data

The above chart shows that 47% of the respondents of all the 66 respondents were female and 53% of the rest of the respondents were male. This therefore concludes that majority of the respondents who undertook the questionnaire were male. The above chart was chosen to give a clear and simple illustration of how the respondents have been categorized.

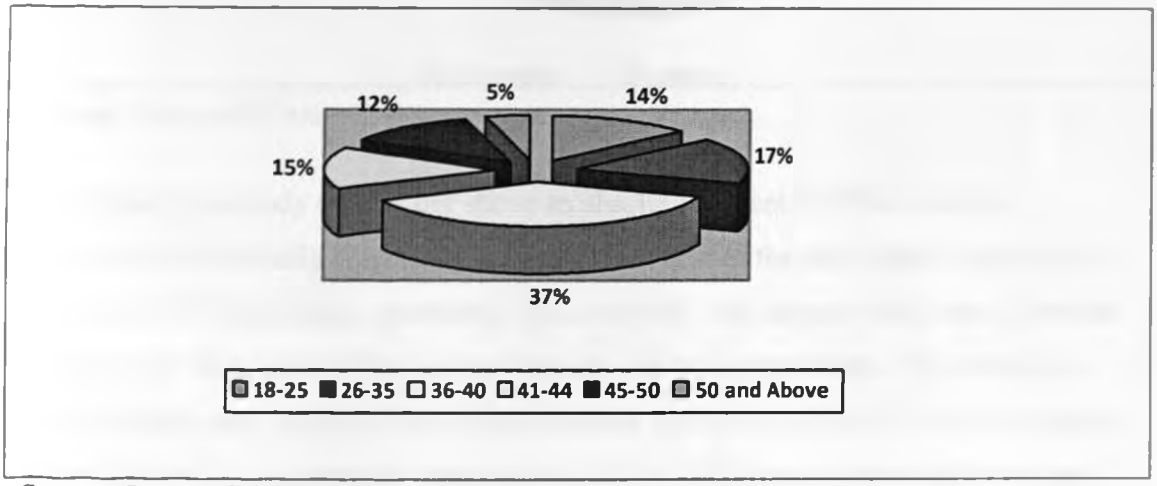
Table 4.3: Age Category

	Frequency	Percent	Valid Percent	Cumulative Percent
Between 18 -25	9	13.6	13.6	13.6
Between 26 - 35	11	16.6	16.6	30.2
Between 36 – 40	25	37.8	37.8	68
Between 41 - 44	10	15.1	15.1	83.1
Between 45 - 50	8	12.1	12.1	95.2
50 and above	3	4.5	4.5	100
Total	**66**	**100**	**100**	

Source: Research Data

According to the study above 13.6% of the respondents were between the ages of 18-25; 16.6% and 37.8% were between the ages of 26-35 and 31-35 respectively, while 15.1%, 12.1% and 4.5% were between the ages of 41-44, 45-50 and 50 and above respectively Based on Table 4.3 above it can be inferred that majority of the respondents were between the age of 36-40 years. This is further illustrated on the pie chart below.

Figure 4.3: Age Category



Source: Research Data

4.2.4 Respondents Level of Education

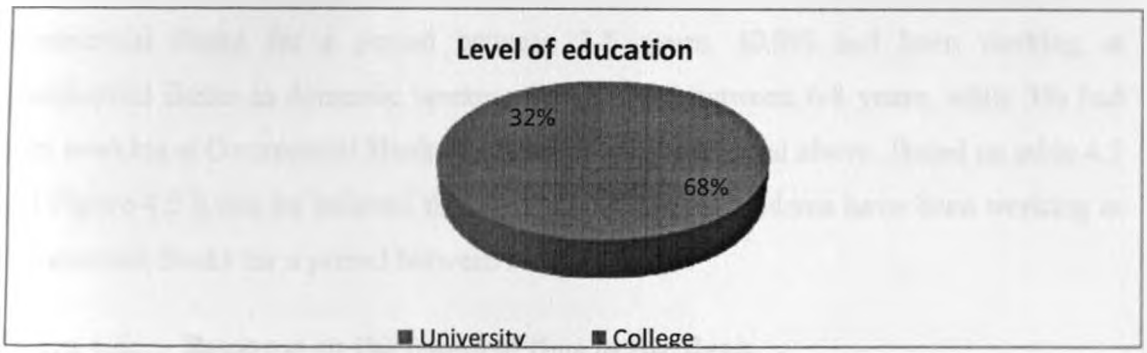
Table 4.4: Response on the level of education

	Frequency	Percent	Valid percent	Cumulative Percent
University	45	68.2	68.2	68.2
College	21	31.8	31.8	100
Total	**66**	**100**	**100**	

Source: Research Data

According to the study above 68.2% of the respondents were university graduates, while 31.8% were college graduates. Based on Table 4.4 above it can be inferred that majority of the respondents were university graduates.

Figure 4.4: Response on the Level of education



Source: Research Data

According to the study carried out above an absolute percent of 68% of all the respondents are actually University graduates. The rest of the respondents forming the balance of 32 % are college graduants who do no not hold degree certificates. From the research data then, most of the respondents are University graduates. The above pie – chart has been used owing to the simple and clear picture it potrays to represent thedata above. 68% of the respondents are graduates which will give us a more informed and detailed results owing to their education level.

4.2.5 Length of Time in the Bank

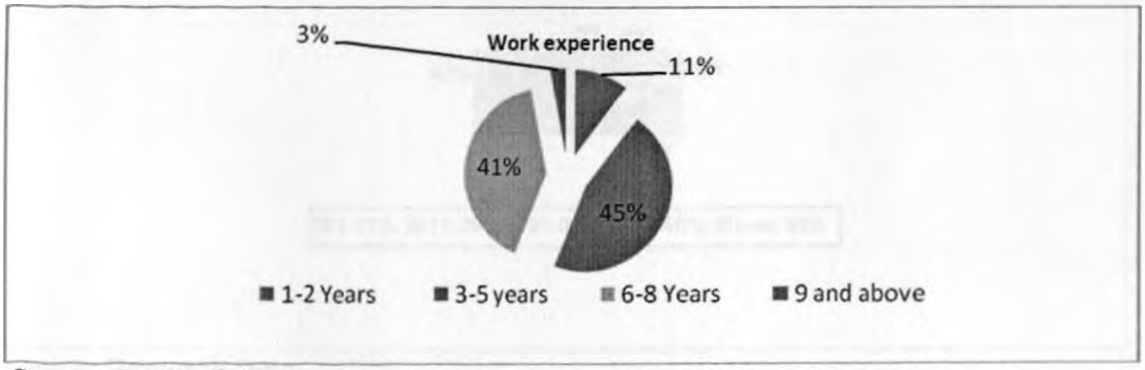
Table 4.5: Response on the length of time in the Bank

	Frequency	Percent	Valid percent	Cumulative Percent
1 – 2 years	7	10.6	10.6	10.6
3 – 5 years	30	45.5	45.5	56.1
6 – 8 years	27	40.9	40.9	97
9 and above	2	3	3	100
Total	**66**	**100**	**100**	

Source: Research Data

According to the study above 10.6% of the respondents have been working at Commercial Banks for a period between 1- 2 years, 45.5% had been working at the Commercial Banks for a period between 3-5 years, 40.9% had been working at Commercial Banks as domestic workers for a period between 6-8 years, while 3% had been working at Commercial Banks for a period of 9 years and above. Based on table 4.5 and Figure 4.5 it can be inferred that majority of the respondents have been working at Commercial Banks for a period between 3-5 years.

Figure 4.5: Response on the length of time in the Bank



Source: Research Data

4.2.6 Level of Credit Risk

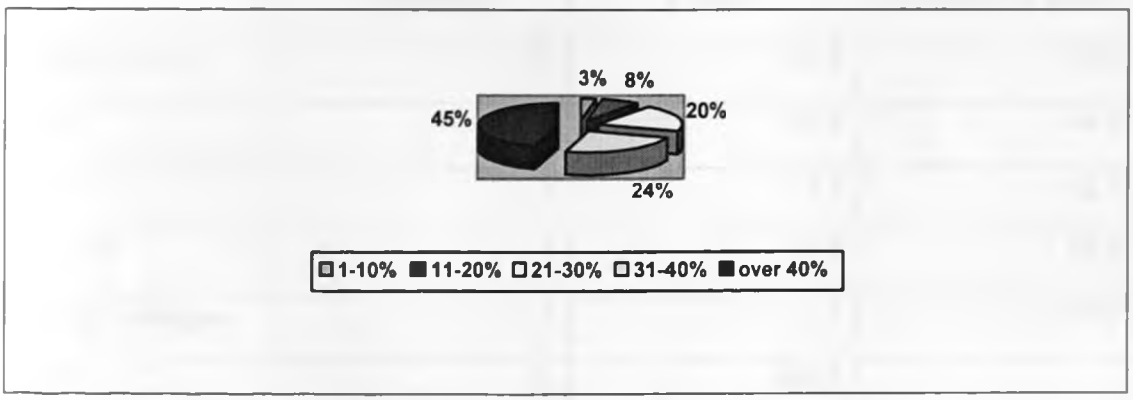
Table 4.6: Responses on the Level of Credit Risk

	Frequency	Percent	Valid percent	Cumulative Percent
0 - 10	2	3	3	3
11 - 20	5	7.5	7.5	10.5
21 – 30	13	79.6	19.6	30.1
31 - 40	16	24.2	24.2	54.3
Over 40	30	45.4	45.4	100
Total	**66**	**100**	**100**	

Source: Research Data

The study shows the response of the various respondents on the level of credit risk. The level of Credit risk the Bank is exposed is over 40% Credit Risk category with 45.5%, followed by 31-40 percentage loan category with 24.2%, 21-30 percentage loan category with 19.6%; 11-20 percentage loan category with 7.5% and 0-11 percentage loan category with 3%. From the results it can be deduced that the level of credit risk is within over 40 percentage credit risk category.

Figure 4.6: Responses on the Level of Credit Risk



Source: Research Data

4.2.7 Influence of Financial Risk Management on Performance

Table 4.7: Response to influence of financial risk management to performance

	Frequency	Percent	Valid percent	Cumulative Percent
Yes	53	80.3	80.3	80.3
No	13	24.2	25.7	100
Total	**66**	**100**		

Source: Research Data

The study shows the response of respondents on whether financial risk management influence financial performance in commercial banks. According to the study 80.3% of the total respondents indicated that financial risk management influence financial performance in commercial banks, 24.2% of the respondents indicated that financial risk management does not influence financial performance in commercial banks. From the table and figure it can be inferred that financial risk management influence financial performance in commercial banks credit risk in the bank.

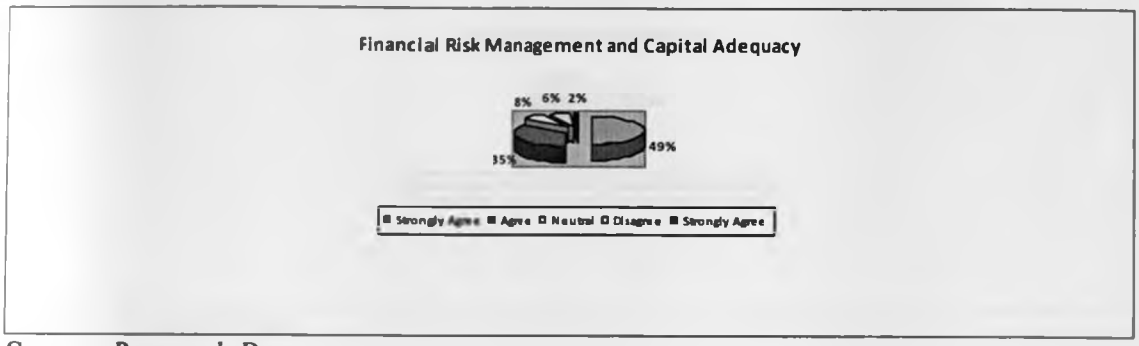
4.3 Performance Measures of Commercial Banks

Table 4.8: Response to Financial Risk management affecting Capital Adequacy

	Frequency	Percent	Cumulative Percent
Strongly Agree	33	50.0	50.0
Agree	23	34.8	84.8
Neutral	5	7.5	92.3
Disagree	4	6.0	98.3
Strongly Disagree	1	1.5	100.0
Total	**66**	**100.0**	

Source: Research Data

Figure 4.8: Response to Financial Risk management affecting capital adequacy



Source: Research Data

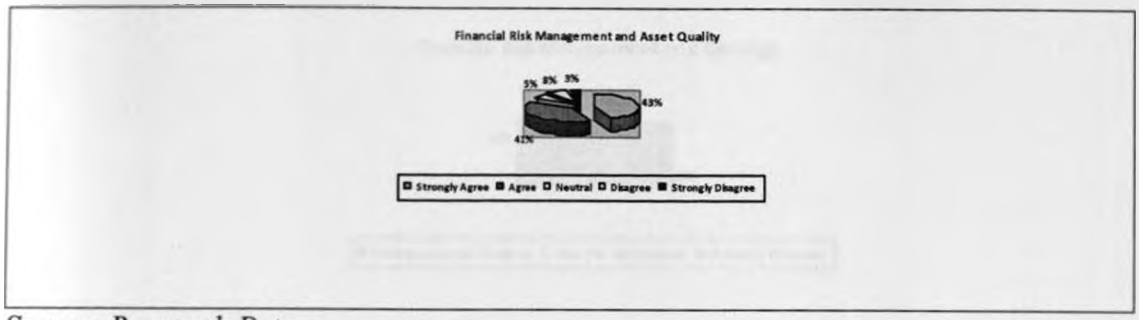
The study shows the views of respondents on whether Financial Risk Management affects capital adequacy in Banks. According to the study 50% of the total respondents strongly agree that Financial Risk management affects capital adequacy in Banks, 34.8% of the respondents agreed that Financial Risk management affects capital adequacy in Banks, 7.5% of respondents were neutral, 6% of the total respondents disagreed that the financial Risk management affects capital adequacy in Banks, while 1.5% strongly disagreed that the financial Risk management affects capital adequacy in Banks. From the Table and Figure above majority of the respondents strongly agreed that the financial Risk management affects capital adequacy in Banks

Table 4.9: Response to financial risk management affecting banks asset quality

	Frequency	Percent	Cumulative Percent
Strongly Agree	29	43.9	43.9
Agree	27	40.9	84.8
Neutral	3	4.5	89.3
Disagree	5	7.5	96.8
Strongly Disagree	2	3.0	100.0
Total	**66**	**100.0**	

Source: Research Data

Figure 4.9: Response to financial risk management affecting banks asset quality



Source: Research Data

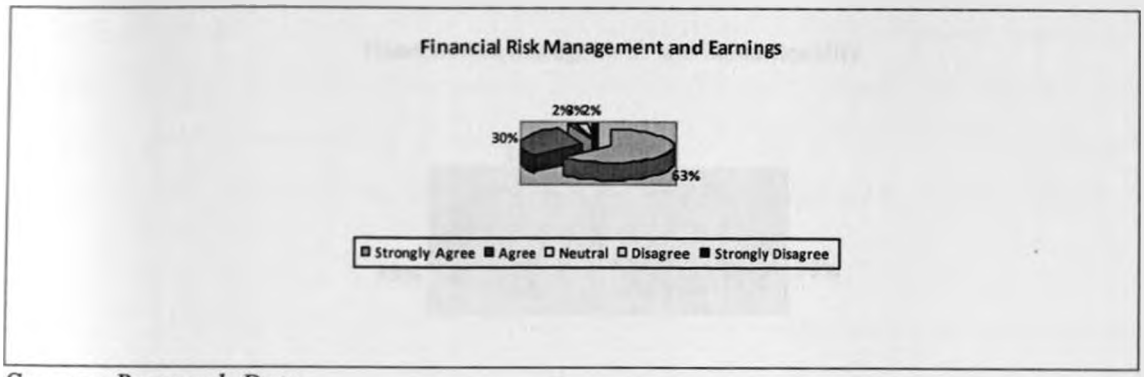
The study shows the views of respondents on whether the financial Risk management affects asset quality in Banks. According to the study 43.9% of the total respondents strongly agree that financial Risk management affects asset quality in Banks, 40.9% of the respondents agreed that the financial risk management affects asset quality in banks, 4.5% of respondents were neutral, 7.5% of the total respondents disagreed that the financial Risk management affects asset quality in banks, while 3% strongly disagreed that the financial risk management affects asset quality in banks. From Table and Figure above majority of the respondents strongly agreed that the financial risk management affects asset quality in banks

Table 5.1: Response to financial risk management affecting earnings by banks

	Frequency	Percent	Cumulative Percent
Strongly Agree	42	63.6	63.6
Agree	20	30.3	93.9
Neutral	1	1.5	95.4
Disagree	2	3.0	98.4
Strongly Disagree	1	1.5	100.0
Total	**66**	**100.0**	

Source: Research Data

Figure 5.1: Response to financial risk management affecting earnings by Banks



Source: Research Data

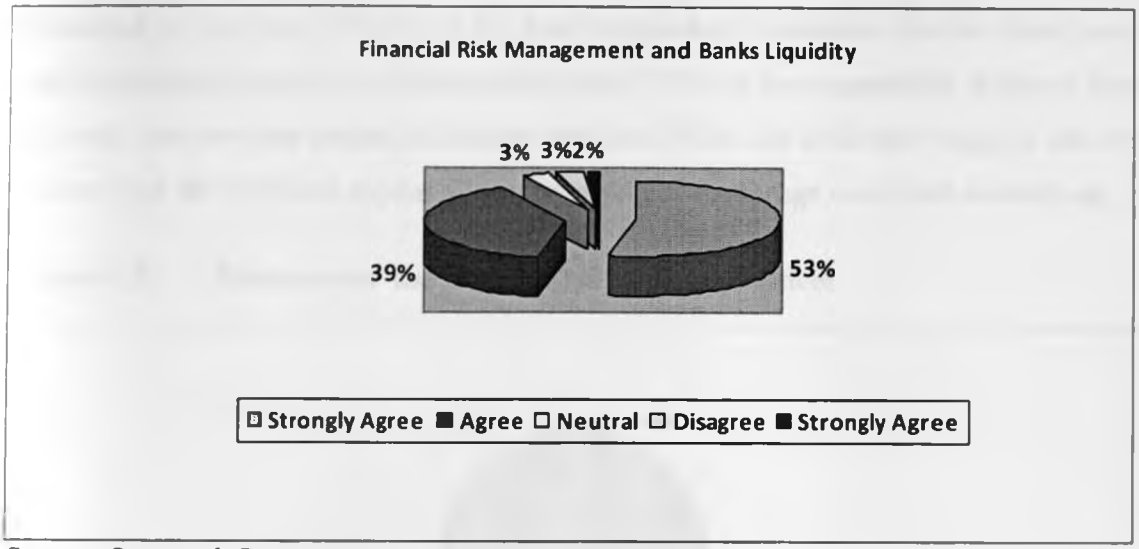
The study shows the views of respondents on whether Financial Risk Management affects Bank Earnings. According to the study 63.6% of the total respondents strongly agree that financial risk management affects bank earnings, 30.3% of the respondents agreed that the financial risk management affects bank earnings, 1.5% of respondents were neutral, 3% of the total respondents disagreed that the financial risk management affects bank earnings, while 1.5% strongly disagreed that the financial risk management affects bank earnings. From Table and Figure above majority of the respondents strongly agreed that the financial risk management affects bank earnings

Table 5.2: Response to financial risk management affecting banks liquidity

	Frequency	Percent	Cumulative Percent
Strongly Agree	35	53.0	53.0
Agree	26	39.9	92.9
Neutral	2	3.0	95.9
Disagree	2	3.0	98.9
Strongly Disagree	1	1.5	100.0
Total	**66**	**100.0**	

Source: Research Data

Figure 5.2: Response to financial risk management affecting banks liquidity



Source: Research Data

The study shows the views of respondents on whether Financial Risk Management affects Banks' liquidity. According to the study 53.0% of the total respondents strongly agree that financial risk management affects banks' liquidity, 39.9% of the respondents agreed that the financial risk management affects banks' liquidity, 3% of respondents were neutral, 3% of the total respondents disagreed that the financial risk management affects banks' liquidity, while 1.5% strongly disagreed that the financial risk management affects banks' liquidity. From Table and Figure above majority of the respondents strongly agreed that the financial risk management affects banks' liquidity.

4.4 Capital Allocation Practices

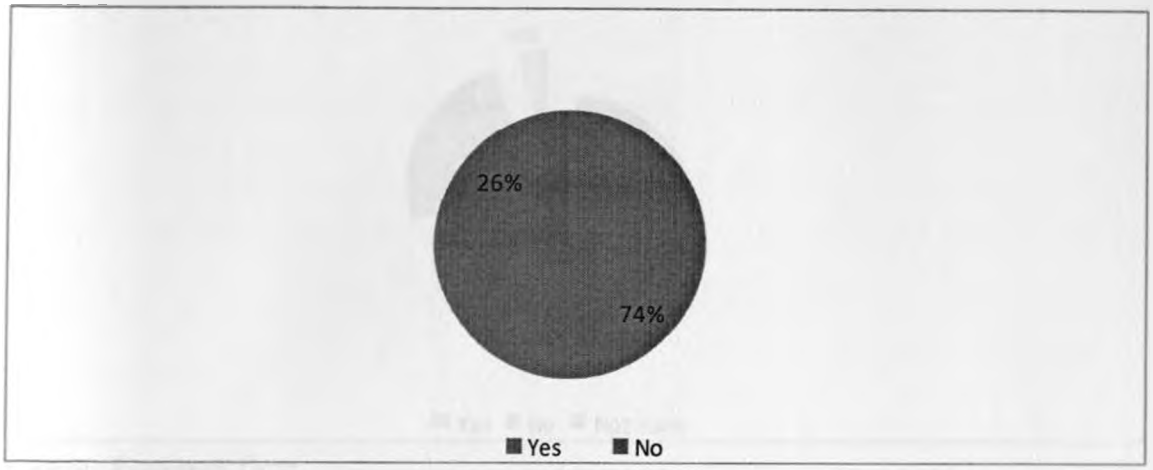
Table 5.3: Response on use of capital allocation practices

	Frequency	Percent	Cumulative Percent
Yes	49	74.2	74.2
No	17	25.7	100.0
Total	**66**	**100.0**	

Source: Research Data

The study shows the use of capital allocation practices by the bank to manage credit risk. According to the study 74.2% of the total respondents indicated that the bank uses capital allocation practices to manage credit risk, 25.7% of the respondents indicated that the bank does not use capital allocation practices. From the table and figure it can be inferred that the bank uses capital allocation practices to manage credit risk in the bank.

Figure 5.3: Response on use of capital allocation practices



Source: Research Data

Table 5.4: Influence of capital allocation practices on the performance of Banks

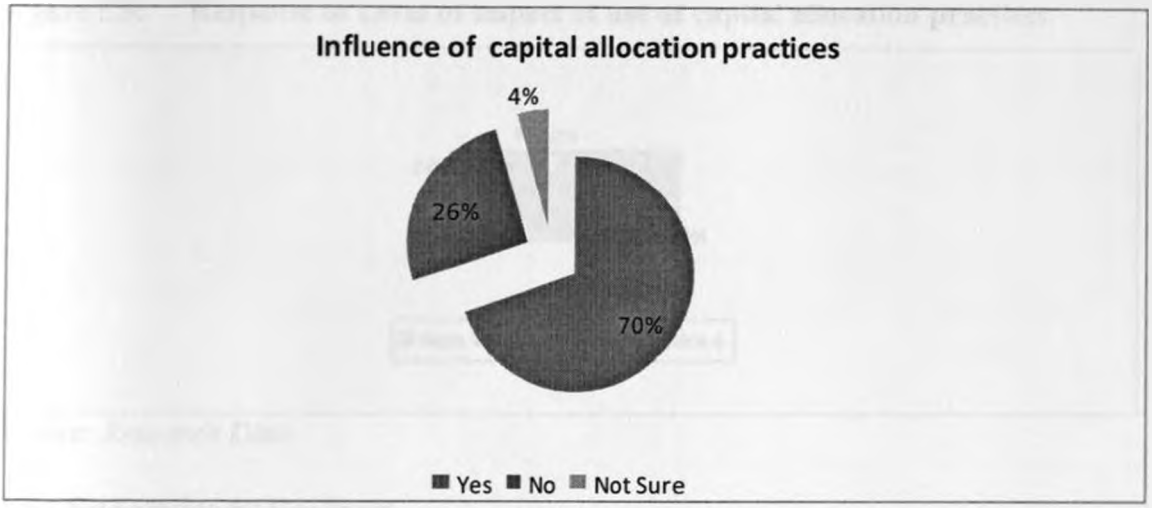
	Frequency	Percent	Valid percent	Cumulative Percent
Yes	46	69.6	69.6	69.6
No	17	25.7	25.7	95.3
Not Sure	3	4.5	4.5	100
Total	**66**	**100**	**100**	

Source: Research Data

The study shows the response on whether the management of financial risk through capital allocation practices influences the performance of Banks. According to the study 69.6% of the total respondents indicated that the management of financial risk through capital allocation practices influence the performance of Banks, 25.7% of the respondents

indicated that the management of financial risk through capital allocation practices influence does not the performance of Banks, while 4.5% indicated that they were not sure. From the table and figure it can be inferred that the management of financial risk through capital allocation practices influence the performance of Banks.

Figure 5.4: Respondents' rating on their experience as domestic workers



Source: Research Data

4.4.1 Level of Impact of use of Capital Allocation Practices

Table 5.5: Response to Level of impact of use of capital allocation practices

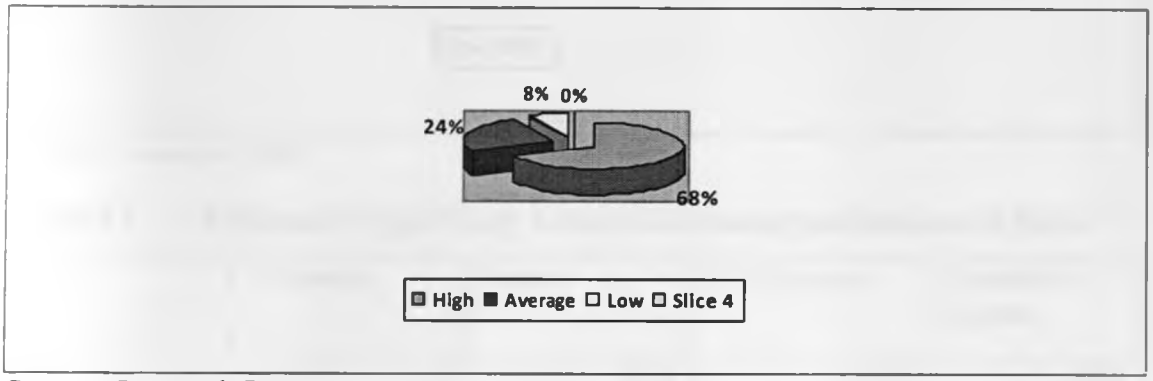
	Frequency	Percent	Valid percent	Cumulative Percent
High	45	68.1	68.1	68.1
Average	16	24.2	24.2	92.3
Low	5	7.5	7.5	100
Total	**66**	**100**	**100**	

Source: Research Data

The study shows the level of influence of use of capital allocation practices by the bank to manage credit risk. According to the study 68.1% of the total respondents indicated that the level of influence of use of capital allocation practices by the bank to manage

credit risk is high, 24.2% of the respondents stated that the influence is average while 7.5% of the total respondents indicated that influence of use capital allocation practices by the bank to manage credit risk is low. From the table and figure it can be inferred that level of influence of use of capital allocation practices by the bank to manage credit risk is high.

Figure 5.5: Response to Level of impact of use of capital allocation practices



Source: Research Data

4.5 Supervisory Reviews

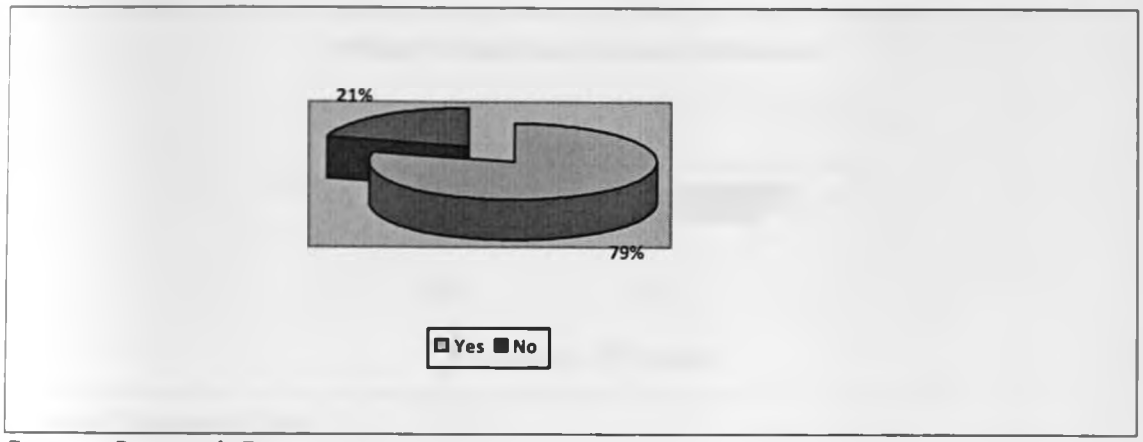
Table 5.6: Response to the bank's use of Supervisory Reviews

	Frequency	Percent	Valid percent	Cumulative Percent
Yes	52	78.7	78.7	78.7
No	14	21.2	21.2	100
Total	**66**	**100**		

Source: Research Data

The study shows the response of respondents on whether the bank uses supervisory reviews to manage financial risk. According to the study 78.7% of the total respondents indicated that the bank uses supervisory reviews to manage financial risk, 21.2% of the respondents stated that the bank does not use supervisory reviews to manage financial risk. From the table and figure it can be inferred that the bank uses supervisory reviews to manage to financial risk.

Figure 5.6: Response to the bank's use of Supervisory Reviews



Source: Research Data

Table 5.7: Response to supervisory reviews influencing performance of banks

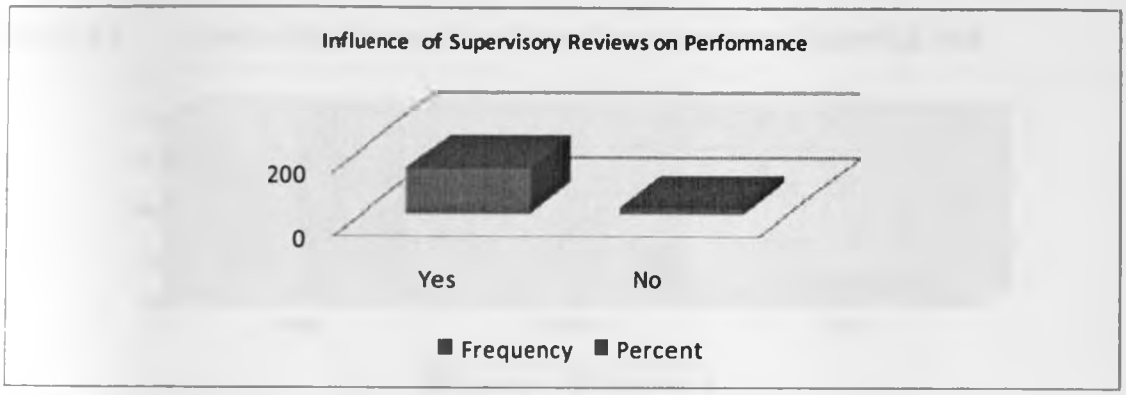
	Frequency	Percent	Valid percent	Cumulative Percent
Yes	57	86.3	86.3	86.3
No	9	13.6	13.6	100
Total	**66**	**100**		

Source: Research Data

The study shows the response of the respondents on whether supervisory reviews influence financial performance of Bank. According to the study 86.3% of the total respondents indicated that supervisory reviews influence financial performance of Bank 13.6% of the respondents stated that supervisory reviews does not influence financial performance of Bank. From the table and figure it can be inferred that supervisory reviews influence financial performance of Bank.

Further it can be observed that out of a possible positive response of 66 respondents, 57 respondents responded positively by asserting that indeed supervisory reviews do influence the financial performance of commercial banks. 9 of the respondents do not believe that supervisory reviews influence the performance. These, however comprise on 9% of the respondents interviewed.

Figure 5.7: Response to supervisory reviews influencing performance of banks



Source: Research Data

Table 5.8: Level of influence using supervisory reviews to manage financial risk

	Frequency	Percent	Valid percent	Cumulative Percent
High	45	68.1	68.1	68.1
Average	16	24.2	24.2	92.3
Low	5	7.5	7.5	100
Total	**66**	**100**	**100**	

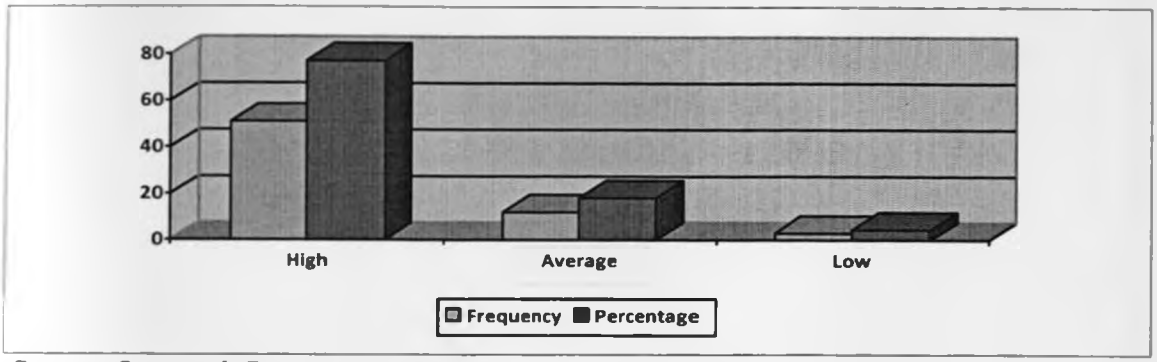
Source: Research Data

The study shows the level of influence using supervisory reviews to manage financial risk. According to the study 77.2% of the total respondents indicated that the level of influence of using supervisory reviews to manage financial risk is high, 18.1% of the respondents stated that the level of influence of using supervisory reviews to manage financial risk is average, while 4.5% of the total respondents indicated that the level of influence of using supervisory reviews to manage financial risk is low.

From the table it can therefore be positively inferred that the level of influence of using supervisory reviews to manage financial risk is high given that a higher percentage of the respondents felt this way. The graph that follows clearly indicates this.

4.5.1 Level of influence using supervisory reviews to manage risk

Table 5.9: Level of Influence of using reviews to manage financial risk



Source: Research Data

4.6 Financial Disclosures

Table 5.10: Response to use of disclosures technique to manage financial risk

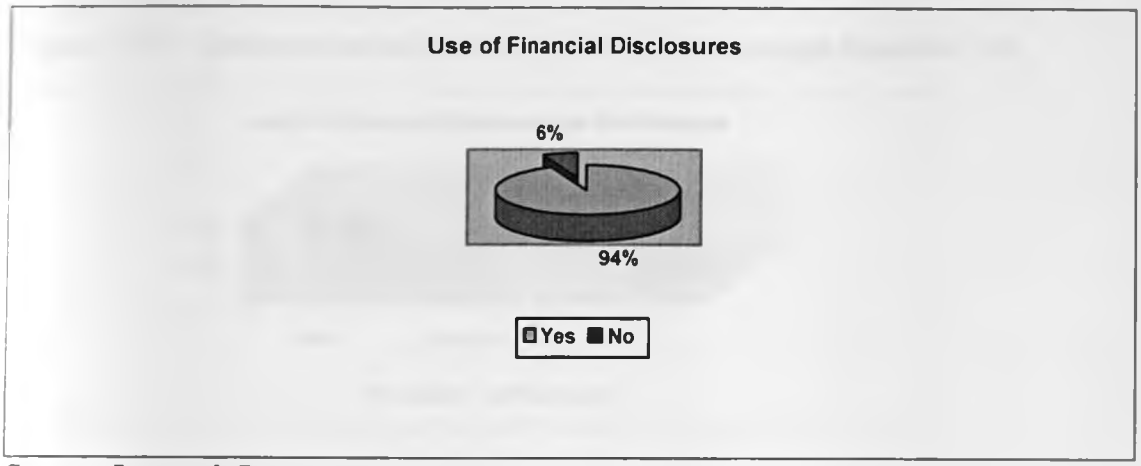
	Frequency	Percent	Valid percent	Cumulative Percent
Yes	62	93.9	93.9	93.9
No	4	6	6	100
Total	**66**	**100**		

Source: Research Data

The study shows the response of respondents on banks use disclosures technique to manage financial risk. According to the study 93.9% of the total respondents indicated that the bank use disclosures technique to manage financial risk, while 6% of the respondents stated that the bank does not use disclosures as financial risk management technique. From the table it can be concluded that the bank uses disclosures technique to manage financial risk.

The graph that illustrates this clearly shows that an absolute figure at 94% shows that a majority of the respondents indicated that the bank definitely uses disclosures technique to manage financial risk. 6% of the respondents however do not feel that way.

Figure 5.10: Response to use of disclosures technique to manage financial risk



Source: Research Data

Table 5.11: Response to level of influence of disclosure to manage financial risk

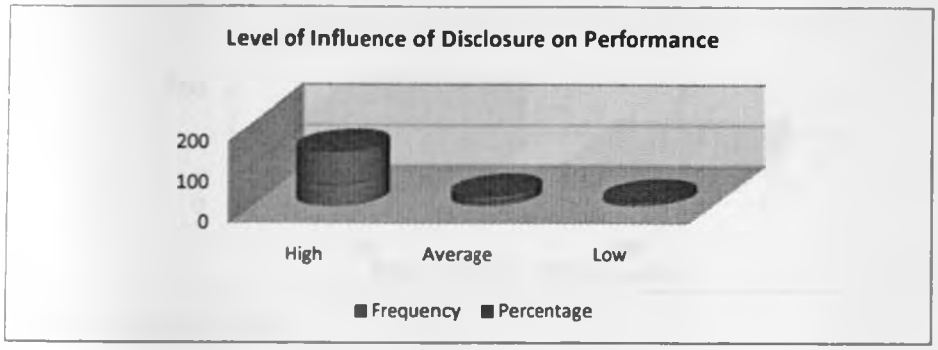
	Frequency	Percent	Cumulative Percent
High	53	80.3	80.3
Average	9	13.6	93.9
Low	4	6.0	100.0
Total	**66**	**100**	

Source: Research Data

The study shows the level of influence of disclosures on financial risk management by the Bank. According to the study 80.3% of the total respondents indicated that level of influence of disclosures on financial risk management by the Bank is high, 17% of the respondents stated that the level of influence of disclosures on financial risk management by the Bank is average, while 7% of the total respondents indicated that the level of influence of disclosures on financial risk management by the Bank is low. From the table it can be inferred that the level of influence of disclosures on financial risk management by the Bank is high.

4.6.1 Response on Influence of Disclosures to Manage Financial Risk

Figure 5.11: Response on influence of disclosures to manage financial risk



Source: Research Data

4.7 Funded and Non-Funded Technique

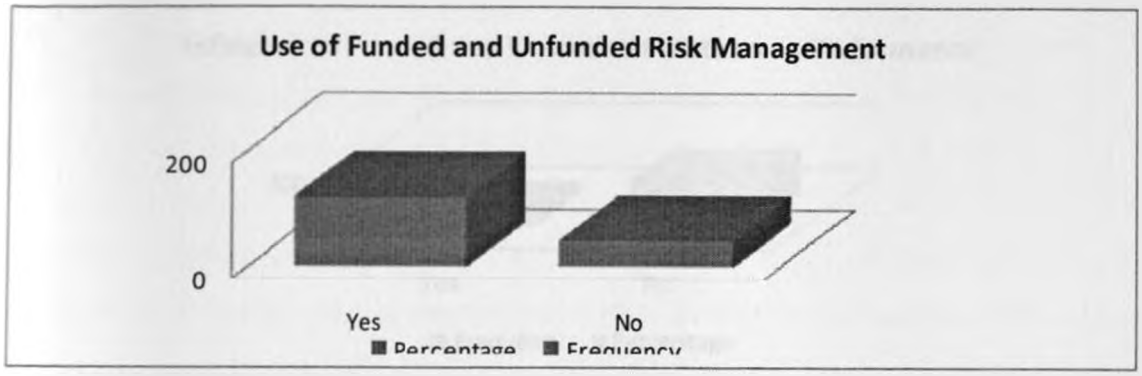
Table 5.12: Response on using funded/unfunded technique to manage risk

	Frequency	Percent	Cumulative Percent
Yes	48	72.5	72.5
No	18	27.3	100
Total	**66**	**100**	

Source: Research Data

The study above shows responses of respondents on whether the bank uses funded and unfunded technique to manage financial risk in the Bank. According to the study 72.5% of the total respondents indicated that the bank uses funded and unfunded credit protection as a financial risk management, while 27.3% of the respondents stated that the Bank does not use funded and unfunded credit protection scheme as financial risk management techniques. From the table it can be concluded that the bank uses funded and unfunded credit protection as a financial risk management technique.

Figure 5.12: Response on using funded/unfunded technique to manage risk



Source: Research Data

Table 5.13: Response funded and unfunded practices influencing the performance

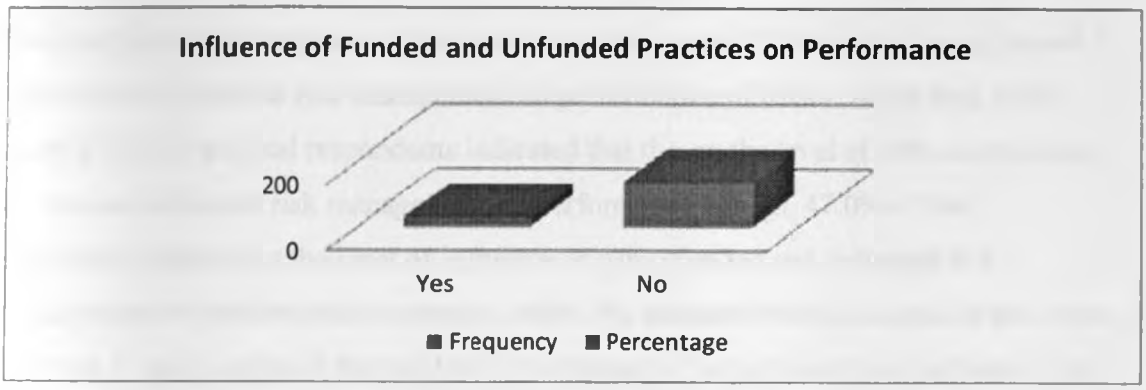
	Frequency	Percent	Cumulative Percent
Yes	54	81.1	81.1
No	12	18.1	100
Total	**66**	**100**	

Source: Research Data

The study above shows responses of respondents on whether management of financial risk through funded and unfunded practices influence the performance of Banks. From the study 81.1% of the total respondents stated that the management of financial risk through funded and unfunded practices influence the performance of Banks, while 18.1% said that the management of financial risk through funded and unfunded practices influence the performance of Banks. From the study it can be concluded that for majority of the respondents acknowledged that management of financial risk through funded and unfunded practices influence the performance of Banks.

From the study it can be concluded that for majority of the respondents acknowledged that management of financial risk through funded and unfunded practices influence the performance of Banks.

Figure 5.13: Response funded and unfunded practices influencing the performance



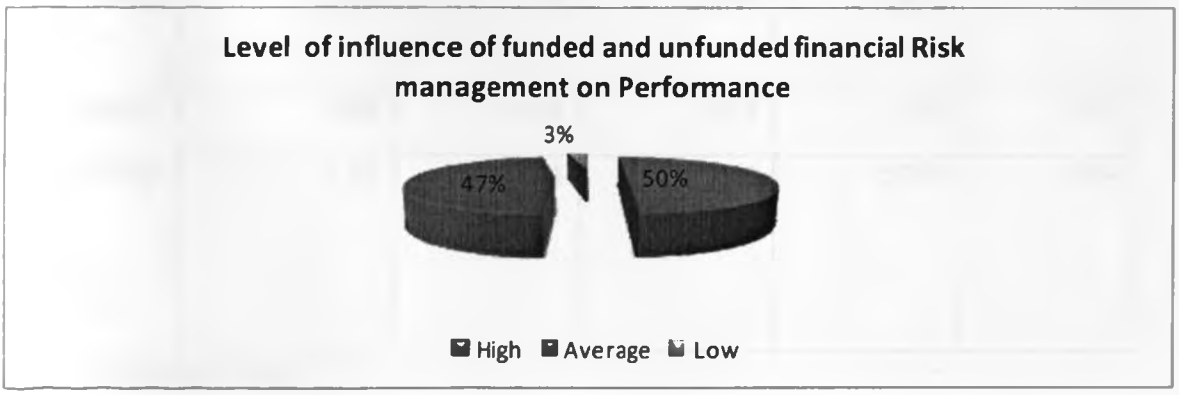
Source: Research Data

Table 5.14: Response to use of funded and non-funded technique on performance

	Frequency	Percent	Cumulative Percent
High	33	50	50
Average	31	47	97
Low	2	3	100
Total	**66**	**100**	

Source: Research Data

Figure 5.14: Response to use of funded and non-funded technique on performance



Source: Research Data

4.7.1 Response to Funded and Non-funded technique on Performance

The study shows the response of respondents on the level of influence of using funded and unfunded financial risk management on performance of banks. According to the study 50.0% of the total respondents indicated that the on the level of influence of using funded and unfunded risk management on Performance is high, 47.0% of the respondents stated that the level of influence of using funded and unfunded risk management on performance is average, while 3% indicated that the impact is low. From the table it can be inferred that the level of influence of using funded and unfunded risk management on performance is high.

4.8 Relationship between the Independent and Dependent Variable

Table 5.15: Relationship between the Independent and DependentVariables

Model	Unstandardized Co - efficients		Standard Co - efficients		
	B	Std. Error	Beta	T	Sig
Constant	.726	.291		2.491	.016
Capital Allocation	.074	.070	.141	1.065	.292
Supervisory Review	.106	.056	.246	1.891	.064
Disclosures	.084	.059	.001	.010	.992
Funded and Non Funded Schemes	1.27	.061	.266	2.066	.044

Source: Research Data

4.8.1 Regression between Independent and Dependent Variables

Table 5.16: Regression between Independent and Dependent Variables

Model	Statistics			
	R	R2	Df	Error of the Estimates
Capital Allocation	.478[a]	.492	.1	.001
Supervisory Reviews	.549[a]	.301	1	.406
Disclosures	.575[a]	.315	1	.410
Funded and Unfunded Schemes	.677[a]	.362	1	.122

Source: Research Data

b. Dependent Variable: Performance of Commercial Banks

Level of Significance: 0.05

The study above determines whether the coefficients on the Independent Variable (capital allocation, Supervisory Reviews, Disclosures and Funded and Unfunded Schemes) is different from 0 so that the independent variable is having an effect on dependent variable (Performance of Commercial Banks) or if alternatively any apparent differences from 0 is just due to random chance. While holding the correlation coefficient (r) value at between plus and minus one (-1.00 and +1.0). The study used the significance level of alpha = .05 (95%), degrees of freedom (df) of 1 and two-tailed test.

According to the regression model, the relationship between capital allocation and financial risk management correlation coefficient (r) is .478 and the coefficient of determination (r2) is 0.492 which means that 49% of financial performance of banks is influenced by the capital allocation practices. Since the correlation of 0.49% is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between capital allocation practices and financial performance of Banks.

Based on the regression model, the relationship between supervisory reviews and financial risk management correlation coefficient (r) is .549 and the coefficient of determination (r2) is 0.301 which means that 30% of financial performance of commercial Banks can be related to use of supervisory reviews. Since the correlation of 0.301 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between use of supervisory reviews and financial performance of commercial Banks.

From the regression model indicating the relationship between financial disclosures and financial risk management, the correlation coefficient (r) is .575 and the coefficient of determination (r2) is 0.315 which means that 31% of financial performance of banks is influenced by the financial disclosures practices. Since the correlation of 0.31% is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between financial disclosures practices and financial performance of Banks.

According to the regression model, showing the relationship between funded and unfunded schemes and financial risk management, the correlation coefficient (r) is .677 and the coefficient of determination (r2) is 0.362 which means that 36% of use of funded and unfunded schemes and financial risk management can be used to predict the performance of commercial Banks. Since the correlation of 0.362 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between the use of funded and unfunded financial risk management and financial performance of commercial banks.

The study above therefore clearly shows that the coefficients on the Independent Variable that is Capital Allocation, Supervisory Reviews, Disclosures and Funded and Unfunded Schemes) is different from 0 so that the independent variables will in no doubt have an effect on the dependent variable, the Performance of Commercial Banks.

Table 5.17: Regression between Financial Risk Management and Performance

Model	Statistics			
	R	R2	Df	Error of the Estimates
Capital Adequacy	.480[a]	.229	1	1.001
Asset quality	.557[a]	.321	1	.406
Bank Earnings	.670[a]	.367	1	.122
Bank Liquidity	.584[a]	.346	1	.499

Source: Research Data

The study above shows the relationship between Financial Risk Management and Bank Performance measures. While holding the correlation coefficient (r) value at between plus and minus one (-1.00 and +1.0), the study used the significance level of alpha = .05 (95%), degrees of freedom (df) of 1 and two-tailed test.

Based on the regression between financial risk management and capital adequacy, the correlation coefficient (r) is .480 and the coefficient of determination (r2) is 0.229 which means that 22% of capital adequacy is influenced by the financial risk. Since the correlation of 0.229 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between financial risk management and capital adequacy.

The regression between financial risk management and asset quality, the correlation coefficient (r) is .557 and the coefficient of determination (r2) is 0.321 which means that 32% of asset quality can be related to financial risk management. Since the correlation of 0.321 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between financial risk management and asset quality.

Based on the regression model between financial risk management and bank earnings, correlation coefficient (r) is .670 and the coefficient of determination (r2) is 0.367 which means that 36% of bank earnings can be related to financial risk management. Since the

correlation of 0.367 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between the financial risk management and bank earnings.

From the regression model between financial risk management and bank liquidity, the correlation coefficient (r) is .584 and the coefficient of determination (r2) is 0.346 which means that 34% of the bank liquidity can be related to financial risk management. Since the correlation of 0.346 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between the financial risk management and bank liquidity.

4.9 Chi-Square Test Model Summary

Table 5.18: Chi-Square Test Model summary; cross tabulation

Model	Change Statistics		
	Value	df	Asymp. Sig. (2 sided)
Capital Allocation	1.079[a]	1	.029
Supervisory Reviews	1.658[a]	1	.003
Disclosures	.008[a]	1	.013
Funded & Unfunded	1.099[a]	1	.034

Source: Research Data

The study above shows the relationship between capital allocation, Supervisory Reviews, Disclosures and Funded and Unfunded Schemes and performance of Banks. The study used a significance level (alpha) of .05 (95%).

Based on the study, the Pearson Chi-Square value for the various independent variables are as follows: capital allocation is 1.079, supervisory reviews is 1.658 ,disclosures is .008 and funded and unfunded schemes is 1.099; df (degree of freedom) are all 1 while the p-values are: capital allocation = .029 supervisory reviews = .003 disclosures = .013 and funded and unfunded schemes = .035.

This computed p-values were all less than $\alpha = 0.05$, which means the difference is statistically significant for each of the variables. Hence from the study it can be inferred that there is a positive relationship between capital allocation, Supervisory Reviews, Disclosures and Funded and Unfunded Schemes and performance of Banks.

4.10 Summary of Analysis

The study above was conducted to determine what influence does financial risk management have on the financial performance of commercial bank in Kenya. While regressing between financial risk management and the bank performance measures namely capital adequacy, asset quality, bank earnings and bank liquidity; all the co-efficient of determination (r2) were found to be positive at 0.229, 0.321, 0.367 and 0.346 respectively. Given that the correlations are all positive it has been concluded that the correlation is statistically significant. This implies that there is a positive relationship between financial risk management employed by banks and the financial performance measures.

In attempting to determine the relationship between the Independent and Dependent variable; through regression, the analysis has shown that 49% of financial performance of commercial banks is influenced by the capital allocation practices. Also 30% of the financial performance of commercial banks can be related to the use of supervisory measures with about 31% of the same performance being influenced by the financial disclosures practices. 36% of the use of funded and non – funded schemes and financial risk management can be used to predict the performance of commercial banks.

The computed p-values under the Chi-Square Test Model were all less than $\alpha = 0.05$, which means the difference is statistically significant for each of the variables. Hence from the analysis of the study it can be inferred that there is a positive relationship between the Financial Risk Management practices namely: Capital Allocation, Supervisory Reviews, Disclosures, Funded and Unfunded Schemes and the financial performance of commercial Banks.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this chapter was to discuss and draw conclusions and recommendations on the findings of the main objective of the study which was to examine the influence of financial risk management on financial performance on commercial banks in Kenya while the specific objectives and answers to research questionnaires pertained to the influence of risk aggregation and capital allocation practices, supervision and regulation, disclosures and funded and unfunded credit protection on financial performance of commercial Banks in Kenya.

5.2 Summary of the Findings

5.2.1 Capital Allocation Practices

The Research study established that banks use capital allocation practices to manage credit risk through utilizing a variety of methods to determine capital adequacy such as the value-at-risk, scenario analysis, Standardized Approach and internal ratings-based Approach to measure market risk, to determine how the value of a portfolio would be affected by various probable changes in market conditions, measure credit risk by reference to pre-set percentages of the risks attributable to individual claims and to determine the degree of risk inherent in institutions' individual credit exposures.

5.2.2 Supervisory Reviews

The research established that banks use supervisory reviews technique to manage credit risk by facilitating financial supervisors to collect information to complement the information available in public; to assist in clarifying a bank's credit risk profile as well as to better understand important credit risk management issues and to provide for early

detection in the intervals between on-site examinations, external audits, or supervisory visitation, enabling supervisors to take prompt action before problems become more serious.

5.2.3 Disclosures

The Research Study established that Banks also uses disclosures as financial risk management techniques through provision of sufficient timely and detailed information so as to allow market participants to develop a full and accurate picture of the bank's financial risk profile and to encourage potential borrowers to avoid seeking loans with little intention of repaying, while strengthening management's ability to refuse doubtful loan applications.

5.2.4 Funded and Non-funded Scheme

The Research established that banks use funded and unfunded credit protection as a credit risk management technique through funded credit protection under which the bank has recourse to cash or some other asset in order to recover the moneys owing to it and unfunded credit protection through guarantees and credit derivatives of a third party.

5.3 Discussions of the Findings

5.3.1 Capital Allocation

The Research finding that that banks use capital allocation to manage financial risk with the resultant effect on the performance of the banks, is based on the response of majority of the respondents (74.2%) and supported by the regression analysis (correlation coefficient (r) =.478, coefficient of determination (r2) = 0.492. Since the correlation of 0.49% is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between capital allocation practices and financial performance of Banks.

This was further supported by qualitative findings of the study that established that banks use a variety of practices to determine capital allocation such as the value-at-risk which determine the maximum loss that can occur in the value of a portfolio having a certain investment horizon under a certain probability ; sscenario analysis to see how the value of a portfolio would be affected by various probable changes in market conditions and internal ratings-based approach which use their own internal risk evaluations in setting the capital requirement applicable to particular exposures.

These findings are consistent with the views expressed in the Basel1 (1988) accord which targets a bank's capital holdings as a proportion of the credit risk of their on-balance-sheet and off-balance-sheet business. For this purpose, investment instruments were classified according to their risk, and a risk coefficient assigned to each group. The weighting formula for asset risk was intended to determine the capital coverage needed for a bank's exposure to credit risk.

5.3.2 Supervisory Reviews

The research findings that banks use supervisory reviews technique to manage credit risk by facilitating financial supervisors to collect information to complement the information available in public is based on the response of majority of the respondents (78.7%) and supported by the correlation analysis (alpha = .05. (95%), df= 1 coefficient of determination (r2) = 0.301) which means that 30% of financial performance of commercial Banks can be related to use of supervisory reviews. Since the correlation of 0.301 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between use of supervisory reviews and financial performance of commercial Banks.

The above findings were further confirmed by qualitative finding which established that financial supervisors use a combination of methods to collect information, depending on their supervisory practices, the nature of the data, the number of institutions under review, their size and complexity, and the characteristics of the market and regulatory framework.

These research findings are in line with the views expressed Fofack, (2005) that supervisory information considered most relevant for credit risk includes: broad credit risk management information, including asset quality figures; internal control/internal audit statistics and other measures; trend and sector analyses; performance measures relating actual results to expected performance; and, economic capital allocated to credit risk and returns on this capital assist in clarifying a bank's risk profile, as well as to better understand important financial risk issues.

5.3.3 Financial Disclosures

The study findings that Banks uses disclosures as credit risk management techniques through provision of sufficient timely and detailed information so as to allow market participants to develop a full and accurate picture of the bank's financial risk profile is based on the response of majority of the respondents (93.9%) and supported by the regression analysis which yielded positive correlation coefficient (r) =.549, (r2) =0.301 and B coefficient = 0.611 confirming that The use of disclosure risk management is positively to financial performance of commercial Banks.

These quantitative findings are further strengthened by qualitative findings which established that fear of disclosure encourage potential borrowers to avoid seeking loans with little, if any, intention of repaying, and strengthen management's ability to refuse doubtful loan applications. Supervisory reporting systems provide for early detection in the intervals between on-site examinations, external audits, or supervisory visitation, enabling supervisors to take prompt action before problems become more serious. That to complement the information available in public and supervisory reporting, supervisors often collect additional information to assist in clarifying a bank's credit risk profile, as well as to better understands important credit risk management issues. The findings of the study are consistent with the views of Caprio, and summers (1993) that fear of disclosure of business dealings with the customer push borrowers to repay their loans, and strengthen management's ability to refuse doubtful loan applications.

5.3.4 Funded and Non-funded Schemes

The research findings that banks use funded and unfunded credit protection as a credit risk management technique through funded credit protection under which the bank has recourse to cash or some other asset in order to recover the moneys owing to it is based on the response of majority of the respondents (72.2%) and supported by the regression analysis (alpha = .05. (95%), Degrees of freedom (df) = 1, correlation coefficient (r)= .677 and the coefficient of determination (r2) = 0.362). Since the correlation of 0.362 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between the use of funded and unfunded financial risk management and financial performance of commercial banks.

These findings are further strengthened by qualitative findings indicating that banks and other lenders often transfer credit risk to liberate capital for further loan intermediation. In addition to selling loans outright, lenders are increasingly active in the markets for syndicated loans, collateralized loan obligations, credit default swaps, credit derivative product companies. The principle benefits of credit risk transfer are diversification and a reduction in the costs of raising external capital for loan intermediation.

The findings are in line with the observation of Kiyai (2003) that unfunded credit protection includes guarantees and credit derivatives. Unfunded credit protection involves an unsecured obligation of a third party. Since no specific asset is available by way of security in the context of unfunded credit protection, it follows that the rules focus on the creditworthiness and reliability of the provider and the validity and enforceability of that party's obligations.

5.4 Conclusion

5.4.1 Capital Allocation practices

At times banks use capital allocation practices to manage credit risk through utilizing a variety of methods to determine capital adequacy such as the value-at-risk, scenario analysis, Standardized Approach and internal ratings-based Approach to measure market

risk, to determine how the value of a portfolio would be affected by various probable changes in market conditions, measure credit risk by reference to pre-set percentages of the risks attributable to individual claims and to determine the degree of risk inherent in institutions' individual credit exposures.

5.4.2 Supervisory Reviews

Banks use supervisory reviews technique to manage credit risk by facilitating financial supervisors to collect information to complement the information available in public; to assist in clarifying a bank's credit risk profile as well as to better understand important credit risk management issues and to provide for early detection in the intervals between on-site examinations, external audits, or supervisory visitation, enabling supervisors to take prompt action before problems become more serious.

5.4.3 Disclosures

Banks o uses disclosures as financial risk management through provision of sufficient timely and detailed information so as to allow market participants to develop a full and accurate picture of the bank's financial risk profile and to encourage potential borrowers to avoid seeking loans with little intention of repaying, while strengthening management's ability to refuse doubtful loan applications.

5.4.4 Funded and Non-funded Scheme

In most times banks also use funded and unfunded credit protection as a credit risk management technique through funded credit protection under which the bank has recourse to cash or some other asset in order to recover the moneys owing to it and unfunded credit protection through guarantees and credit derivatives of a third party.

5.5 Limitations

This study is subject to various limitations associated with descriptive survey researches

The perception of the respondents for one is likely to be a significant factor when collecting data for analysis. The project paper's findings were solely based on the respondents comments and were ultimately used in coming up with the conclusions and recommendations mentioned herein. A bias or incorrect information given will tend to give incorrect information.

In addition, due to time and financial constraints the researcher did not carry out any interviews on the actual impact that financial risk management has had on the financial performance of the Commercial Banks. The researcher was studying the influences, and he had only two years to complete both coursework and the thesis. This could have limited the data available to the researcher since all the findings were based on questionnaires and the researcher's personal knowledge of the region under study.

Furthermore, the sample is small with only 66 respondents having giving positive feedback from the questionnaires administered out of a total of 86. It is however important to note that the sample included 18 credit managers who are based in the selected banks' head offices. These managers are the credit policy makers in these banks. They also participate in lending decisions particularly where the amounts requested are high. The sample is therefore considered representative.

The research relied on referral from mostly senior personal acquaintances in the banks to get to the relevant managers. Although this could have resulted to some selection bias, it enabled the researchers to introduce some elements of qualitative research that is collecting the completed questionnaires directly from the respondents and clarifying any issue that may not have been clear to the respondent, thus strengthening the reliability of our data.

Finally, out of the 86 questionnaires administered, it has been seen that most of the data gathered was mainly analyzed through feedback from respondents in the 'major' commercial banks. This includes Kenya Commercial Bank, Barclays Bank of Kenya, Equity Bank and CFC Stanbic Bank. This implies that more weight in terms of responses was relied on based on these banks. Other small banks, included in the sample like Habib

Bank had fewer respondents. More time and financial resources should be put in place to get a holistic view from these other banks.

5.6 Recommendations

There is need for banks to seek and obtain information consistently so as to permit them to detect potential problems at an early stage and identify trends not only for particular institutions, but also for the banking system as a whole, while also ensuring transparency of banking activities and the risks inherent in those activities, including credit risk.

There is need for Banks to frequently review aggregated risk in the face of the changing environment. This will be able to give an accurate picture of the institution's financial position and prospects enabling market participants and other users of information to make meaningful evaluations of banks.

It is essential that on balance sheet netting of mutual claims, reciprocal cash balances between the bank and the counterparty to create effective security and may accordingly be recognized as an acceptable form of credit risk mitigation.

There is need for banks to aim to achieve principle benefits of credit risk transfer such as diversification and a reduction in the costs of raising external capital for loan intermediation. Furthermore there is need for the bank to attain an equilibrium in which a lender transfer's credit risk until the costs of doing so exceed the benefits associated with lower capital requirements relative to the scale of the lending business.

5.7 Suggestions for Further Research

Due to the limiting factors mentioned earlier in this study, it was not possible to carry out a comprehensive research on each of the variables and determine in detail how each of these variables contribute to financial risk management. Therefore it is strongly recommended that further research on each of these variables be carried out. Other recommended areas of research include bank supervision and regulations and credit risk

analysis as they are central component in the effort to enhance financial risk management.

Further research may be directed towards the examination of how Kenyan banks have adopted the Basel 11 recommendations (Bank Committee of Banking Supervision, 2005) and how such recommendations have affected their financial and credit risk management. The recommendations stipulate the best practices of credit risk management. These include the involvement of the board of directors in approving and reviewing credit risk policies, documenting the banks credit procedures and the setting up a system for monitoring the overall composition and quality of the banks credit portfolio.

A multiple case study approach is recommended to provide an in-depth understanding of how and why certain actions have been taken to mitigate the non performing loan problem in Kenya. This approach is also expected to improve the reliability and validity of the research findings (Yin, 2003).

The research project mainly focused on the influences that financial risk management practices have had on the financial performance of the Commercial Banks. These practices are Capital Allocation practices, Supervisory Reviews, Disclosures and Funded and Unfunded Schemes. Further research should be carried out on the actual impact these practices have had on the financial performance of the Commercial Banks in Kenya.

To our knowledge, this study represents among the first attempts to examine the actions taken by bank managers to reduce the default rate and the perceived level of success of such actions in an emerging economy. Our findings report a strong positive relationship between the actions taken by the managers and their levels of success, suggesting that banks taking such actions may be able to reduce their levels of non - performing loans that undoubtedly affect their financial performance. Further research should therefore be done on other significant financial risk management practices that could potentially improve a banks profit levels other than the ones discussed in this paper.

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APPENDIX I: LETTER OF INTRODUCTION

Sample Letter of Introduction

01st OCTOBER, 2012

The Human Resources Manager,

XYZ Bank Ltd.

Nairobi.

REF: REQUEST TO COLLECT DATA FOR MBA RESEARCH PROJECT IN YOUR BANK.

I am a student at the University of Nairobi pursuing a master of Business Administration program. I am carrying out a research proposal on "The influence of Financial Risk Management on the Financial Performance of Commercial Banks in Kenya".
The focus of my research will involve use of interviews administered through questionnaires to the management and supervisory staff at random sampled from different commercial banks.

To undertake this study your feedback and suggestion is highly recommended.
I kindly request you to assist filling in the attached Questionnaire.

The information you give will be treated with strict confidence and will be used for academic purposes only.

Your assistance is highly appreciated.

Thank you.

Yours faithfully,
William Anguka

APPENDIX II: RESEARCH QUESTIONNAIRE

PART I - GENERAL INFORMATION

1. Name of the bank

.....

2. How long has your bank been operating in Kenya

Less than 5 years [ ] More than 5 years [ ]

3. What is your Gender?

Male [ ] Female [ ]

4. What is your age?

Between 18-25 [ ] Between 26-35 [ ] Between 36-40 [ ]

Between 41-44 [ ] Between 45-50 [ ] 50 and above [ ]

5. What is your highest level of education?

Secondary [ ] College [ ] University [ ]

Others [ ] specify.....

6. How long have you been worked in the banking industry?

1-2 Years [ ] 3-5 Years [ ] 6-8 Years [ ] 9-11 Years [ ]

12 and above [ ]

7. What is the level of financial risk management in your Bank?

0 - 10 [ ] 11 - 20 [ ] 21 - 30 [ ] 31 - 40 [ ] Over 40 [ ]

PART II – SPECIFIC QUESTION TO RESEARCH

A. PERFORMANCE OF COMMERCIAL BANKS

Please tick the numeric value corresponding to your personal opinion for each statement.

	Strongly Agree ⑤	Agree ④	Neutral ③	Disagree ②	Strongly disagree ①
Financial Risk Management affects capital adequacy in the banks					
Financial risk management greatly influences banks asset quality					
Financial risk management affects earnings by banks					
Financial risk management influences the banks liquidity					

1.0 In your view does financial risk management affect the Financial Performance of Banks?

Yes [ ] No [ ]

B. CAPITAL ALLOCATION PRACTICES

1.1 Does your Bank use capital allocation practices to manage financial risk in the Bank?

Yes [ ] No [ ]

1.2 If yes above, explain how the bank uses Capital allocation practices to manage financial risk in the Bank

.....

.....

1.3 In your considered opinion does the management of financial risk through capital allocation practices influence the financial performance of Banks?

Yes [ ] No [ ]

1.4 Explain how the management of financial risk through capital allocation practices influences the financial performance of Banks

.....

.....

1.5 In your considered view, using the following scale; rate the level of impact capital allocation practices have had on the management of financial risk in the bank

High [ ] Average [ ] Low [ ]

C. SUPERVISORY REVIEWS

2.1 Does your Bank use supervisory reviews to manage financial risk in the Bank?

Yes [ ] No [ ]

2.2 If your answer is yes above, explain how the bank uses supervisory reviews to manage financial risk in the Bank

.....

.....

2.3 In your considered opinion does the management of financial risk through capital allocation practices influence the financial performance of Banks?

Yes [ ] No [ ]

2.4 Explain how the management of financial risk through supervisory reviews influences the financial performance of Banks

.....

.....

2.5 In your considered view, using the following scale; rate the level of impact supervisory reviews have had on the management of financial risk in the Bank

High [ ] Average [ ] Low [ ]

D. DISCLOSURES

3.1. Does your bank use disclosures technique to manage financial risk in the Bank?

Yes [ ] No [ ]

3.2 If your answer is yes above, explain how the Bank uses disclosure to manage financial risk in the Bank

.....

.....

3.3 In your considered opinion does the management of financial risk through disclosure influence the financial performance of Banks?

Yes [ ] No [ ]

3.4 Explain how the management of financial risk through disclosure influences the financial performance of Banks

.....

.....

3.5 In your considered view, using the following scale; rate the level of impact disclosures have had on the management of financial risk in the Bank

High [ ] Average [ ] Low [ ]

E. FUNDED AND UNFUNDED CREDIT PROTECTION

4.1 Does your bank use funded and unfunded technique to manage financial risk in the Bank?

Yes [ ] No [ ]

4.2 If your answer is yes above, explain how the bank uses funded and unfunded technique to manage financial risk in the Bank

.....

.....

4.3 In your considered opinion does the management of financial risk through funded and unfunded practices influence the financial performance of Banks?

Yes [ ] No [ ]

4.4 Explain how the management of financial risk through funded and unfunded influences the financial performance of Banks

.....

.....

4.5 In your considered view, using the following scale; rate the level of impact funded and non-funded techniques has had on the management of financial risk in the Bank

High [ ] Average [ ] Low [ ]

THANK YOU FOR YOUR CO-OPERATION