THE EFFECTIVENESS OF RISK BASED SUPERVISION AS ADOPTED BY THE CENTRAL BANK OF KENYA

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DECLARATION

This Research Project is my original work and has not been submitted for any other Degree qualification of this nature or to any other University or Institution of Learning.

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This project has been submitted with my approval as University supervisor.

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DEDICATION

This study is dedicated to my parents Mr. George Misati Momanyi and Mrs. Alice Warau Kabiru who made sacrifices in making sure I receive good education, and Priscah and Nicole for their unconditional love, support, patience and understanding throughout this MBA period.

God blessings and favour be upon them always

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May God bless you all!

ABSTRACT

This study was carried out to achieve two objectives namely, to establish the effectiveness of Risk Based Supervision as adopted by the Central Bank of Kenya and challenges experienced during the implementation of this supervisory methodology.

The primary data on the effectiveness of risk-based supervision was obtained from Bank Supervisors at the Central Bank of Kenya. The data was analyzed using Ms Excel statistical package and SPSS to obtain perspectives of cost elements incurred during the implementation, the benefits and challenges experienced with the adoption of the new methodology. The results realized from the study showed that risk based supervision led to reduction in number of days in inspecting a commercial bank, the number of staff per inspection team were reduced from an average of six supervisors to three, increase in training costs as supervisors are continuously trained and attached in other regulatory institutions abroad and educating risk managers in commercial banks.

Hence the overall conclusion was that there is significant cost savings to Kenya government, as it has not intervened to resuscitate problematic banks in the recent past since Central Bank adopted Risk Based Supervision. Though it should be noted that a collapse of commercial banks cannot be prevented by strong regulation and supervision alone, other economic factors may trigger insolvency among the commercial banks.

The study also identified other grey areas that need research particularly on financial institutions engaged in activities regulated by more than one financial regulator, for instance a bank engaged in stock brokerage, insurance, real estate and asset financing. Challenges relating to information asymmetry faced by regulators continue to be an inherent impediment to achieving a sound and stable financial sector.

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APRA	– Australian Prudential Regulatory Authority
BCPS	– Basel Core Principles of Banking Supervision
CAMEL	– Capital, Assets, Management, Earnings and Liquidity
FSA	– Financial Services Authority
FSI	– Financial Stability Institute
IMS	- Information Management System
MAC	– Monetary Affairs Committee
OSFI	– Office of Superintendent of Financial Institutions
RBS	– Risk Based Supervision

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CHAPTER ONE

INTRODUCTION

1.1 Background

Banks have plenty of motives for developing risk-based practices and risk models. In addition, regulators made this development a major priority for the banking industry, because they focus on 'systemic risk', the risk of the entire banking industry made up of financial institutions whose fates are intertwined by the density of relationships within the financial system. The risk environment has changed drastically. Banking failures have been numerous in the past. In the recent period, the number has tended to decrease in most countries. Regulators have been very active in promoting pre-emptive policies for avoiding individual bank failures and for helping the industry absorb of failures when they happen. To achieve this, regulators have totally renovated the regulatory framework for measuring and controlling the risks of individual player (*Bessis, 2005*).

Risk based supervision is a regulatory methodology that lays strong emphasis on understanding and assessing the adequacy of bank's risk management systems which are in place to identify, measure, monitor and control risk in an appropriate and timely manner. It is a structured process aimed at identifying the most critical risks that face each an institution/company and through a focused review by the supervisor to assess the company's management of those risks and the company's financial vulnerability to potential adverse experience (*Bessis, 2005*).

Thus, risk based supervision may be defined as a supervisory approach that is designed to identify activities and practices of greater risk to the soundness of banks and accordingly deploying supervisory resources towards the assessment of how those risks are being managed by banks. The risk-based supervision is an integral part of Basel II Accord (*Basel Committee of Bank Supervision, 2006*).

Over time, bank supervisory organizations have modified their approaches and adopted techniques that are risk-based or risk-focused in an effort to better achieve their mandates. That is because there has been recognition that: banking has become a more complex business, and banking groups have diverse business and risk management models, and Supervisory resources, including staff, are scarce and need to be deployed as effectively and efficiently as possible to meet supervisory aims (*Bessis, 2005*).

Historically, bank supervision has focused primarily on compliance, which is on finding contraventions to banking laws, rules and regulations regardless of materiality. Bank inspectors relied extensively on transaction testing such as reconciling data, counting cash and securities, and other detailed checking. In many cases, this exercise has done little more than duplicate the external audit process. This approach is very resource intensive (therefore expensive) and often ineffective (*MAC Review, 2008*).

Regulations have several goals: improving the safety of the banking industry, by imposing capital requirements in line with banks' risk; leveling the competitive playing field of banks through setting common benchmarks for all players; promoting sound business and supervisory practices. Regulations have a decisive impact on risk management. It promotes better definitions of risks, and create incentives for developing better methodologies for measuring risks. They impose recognition of the core concept of the better capital adequacy principle and of 'risk-based capital', stating that banks' capital should be in line with risks, and that defining capital requirements implies a quantitative assessment of risk (*Bessis, 2005*).

Regulations imposing capital charge against risks are a strong incentive to improve risk measures and controls. They set minimum standards for sound practices, while the banking industry works on improving the risk measures and internal models for meeting their own goals in terms of bets practices of risk management (*Financial Stability Institute Connect, 2008*).

In recent years, a number of supervisory agencies (including the Central Bank of Kenya) have adopted a risk-focused approach to emphasize the assessment of risk when evaluating their banking institutions. Risk-focused supervision emphasizes effective planning and scoping in order to customize examinations to suit the size and activities of financial institutions. It concentrates supervisory resources on areas that expose an institution to the greatest degree of risk (*East AFRITAC 2008*).

The assessment of the effectiveness of risk management has become even more important as new technologies, product innovation, size and speed of financial transactions have changed the nature of the banking sector. In response to these changes the supervisory approach has been refined, and the skills of examiners have been upgraded. In-line with international best practice, Central Bank of Kenya (CBK) has revamped its supervisory policies, procedures and practices in order to provide a dynamic, efficient, structured and risk-oriented prudential supervision framework (*Central Bank of Kenya, 2004*).

Getenga (2003) observed that a number of aspects of Central Bank of Kenya regulations that are in need of significant improvement. The category of supervisory areas that critically require improvement is the area of enforcement. He further observed that Central Bank of Kenya needs to adopt new approaches in effecting the enforcing its legal mandate.

The goal of protecting the financial system can be best achieved with four basic safeguards, i.e. self-governance, adequate disclosure, legal powers and competent supervision (*Grant, 1993*). Effective supervision promotes cautious self-governance. It also compels adequate disclosure, ensures existence of strong legal frameworks, and provides competent oversight (*Getenga, 2003*). However, it should be noted that bank failures transcends effective supervision or overzealous supervisors as economic factors and systemic risks may trigger bank failures (*Mugo, 2001*).

In his limitations of study, Getenga (2003) indicated that there is need to compare Central Bank of Kenya regulatory approach with other regulatory authorities. Further, he recommended that Central Bank of Kenya should adopt a risk based approached that is benchmarked against best international practices. In so doing, the approach is expected develop a sharper focus in identifying the amount of risk in commercial banks and trigger a prompt corrective action from Central bank of Kenya.

1.2 Statement of the Problem

Effective risk management is the hallmark of successful financial institutions. Due to the nature of the business, the success of financial institutions depends on the security, privacy, and reliability of services backed by robust operational practices and supervision. From the foregoing, an effort has been made by the Central Bank of Kenya in adoption of risk-focused banking supervision to enhance effectiveness. It is anticipated that the adoption of this methodology will reduce the regulatory resources required to supervise commercial banks. This supervisory methodology is a cognate element in the implementation of Basel II framework as advocated by Bank of International Settlement and the World group. The challenge in identifying the administrative costs that would have a material impact on banking supervision in the medium and long term continues to subsist to the Bank.

A study in Chile on the adoption of risk-based supervision observed refined and early identification of risk on the regulated financial institutions, in addition the solvency levels improved from 18% to 26% above 20% benchmark set by Basel Committee of Bank Supervision, (*Superintendecia De Valores y Seguros of Chile, 2006*). Other hand, a survey on the adoption and implementation of risk-based supervision by the Denmark Pension Regulatory Authority opined that the methodology was not cost effective and largely relied on supervisor's judgment. Further, the survey could not ascertain the basis of the assumptions adopted while arriving in a number of conclusions on the amount, direction and level of risk unlike the traditional methodology that was prescriptive, (*Danish Financial Supervisory Authority, 2004*).

Thus, in line with above discussion this comparative study will seek to establish effectiveness of risk based supervision over the traditional supervision methodology.

1.3 Objective of the Study

The study seeks to assess the efficacy of risk based supervisory approach adopted by the Central Bank of Kenya.

1.4 Importance of the Study

The findings of this study will be of significance to the following stakeholders:

The Regulator (Central Bank of Kenya)

Central Bank of Kenya being the principal regulator for commercial banks in Kenya will learn from other regulatory jurisdictions challenges relating to weak supervisory approach and / or regulatory forbearance. The flexible approach adopted by the U.S. regulatory authorities that allowed creation of 'innovative products' that led to some financial institutions create opaque products. The study will assist the Central Bank of Kenya in early identification of emerging risks at individual banks and on a sectoral basis and explore possibility of remedial intervention.

The Banks

The Kenyan Commercial Banks will tremendously find this study, vital in understanding the Regulators supervisory stance in a number of situations. For instance, CBK may decline to approve a banks product application without citing any particular reason. From this study, commercial banks will understand possible reasons as to why an application for their innovated product was declined or accepted.

Policy Makers and Researchers

Developments in the global arena will an integral part of Kenya's preparation towards adoption of Basel II. As such, the global financial turmoil has caught many policy makers unawares of the challenges posed by uncontrolled product innovations. Further, the Policy makers at the Ministry of Finance will be informed about advancements made by Central Bank in supervising Commercial banks and the challenges it is facing. This will inevitably inform the Treasury mandarins to set the correct regulatory tempo. For researchers this will be a fertile ground for further research.

Bank Customers

Bank customers who have deposited or saved money (monies) with the commercial banks will derive comfort that CBK has a better oversight on commercial banks. Assurance derived from the Central Banks that supervisory process is good with regard to stability and efficiencies of the financial institutions; this will allow the public to save their money in Commercial Banks. Since the Banking business is based on customer confidence, whenever that confidence is eroded the Bank customers may leave banking institution in droves.

CHAPTER TWO

LITERATURE REVIEW

2.1 Traditional Form of Supervision

Beck et al (2003) highlight a number of theories that deal with the effectiveness of banking supervision. The competing theories hold differing views on which bank supervisory approaches work best. Due to information and transaction costs, core theories of public policy and regulation imply that official supervision of banks can improve the corporate governance of banks (*Atkinson*, 1993).

Traditionally, supervisors worked to ensure the soundness of banks by developing a comprehensive set of rules and regulations geared to result in practices that would limit or mitigate the risks of operations. In many countries, supervisors conducted examinations of all banks on a periodic basis, often once a year. They also carried out off-site reviews of regulatory reports, financial and other information, on a periodic basis (*Financial Stability Institute Connect*, *2008*).

Subsequent to such examinations and reviews, supervisors assessed the banks and in some cases rated the banks. For instance, in the United States, ratings were arrived at using an approach that emphasized the valuation of assets, particularly the loan portfolio, while also taking into consideration assessments of other factors such as capital, earnings, liquidity and management (*Financial Stability Institute Connect*, *2008*).

One of the principal objectives of the process was to assess the banks' compliance with legislative and regulatory requirements, and through this approach, minimize the risk of failure. This traditional type of supervision has been described as rules-based or compliance-based (*Financial Services Authority, 1998*).

One of the Central Bank Kenya's principal functions is the maintenance of a stable and sound banking system. Under the Central Bank of Kenya Act and the Banking Act, the

Central Bank has been vested with responsibility and powers of supervision and control over financial institutions (*Central Bank of Kenya, 2007*).

The legal basis for regulatory and supervisory functions over the financial system derives from the Banking Act and some sections of the Building Societies Act. In particular, Part VII of the Banking Act empowers the Central Bank to carry out on-site examinations and to intervene in the management where necessary (*Banking Act, 2008*).

Under section 32 of the Banking Act and section 63(A) of the Building Societies Act the Central Bank may at any time and from time to time, and shall, if so directed by the Minister of Finance, cause an examination to be made by any person authorized by it, in writing, of any institution or building society and of its books, accounts and records. The person conducting the examination shall submit his report to the management of the Central Bank; and the report shall draw attention to any breach or non-observance of the requirements of the law and regulations and any irregularity in the manner of conduct of the business of the institution or building society being inspected. Furthermore, the report shall assess the examined financial institution's ability to manage the risks inherent in its business and clearly guide the management of the Central Bank on the future monitoring of the financial institution (*Central Bank of Kenya , 2008*).

The table 2.1 shows a comparison between the traditional and risk-based approach to supervision:

Table 2.1 A comparison between the Traditional and Risk based Supervision.

Traditional Approach	Risk- Based Approach
Transactions-based testing	Process-oriented
Point-in-time assessments	Continuous assessments
Standard procedures	Risk-profile driven procedures
Historical performance	Forward looking indicators
Focuses on risk avoidance	Focuses on risk mitigation

Source: Bank of International Settlement, 2006

2.2 Empirical Studies on Risk Based Supervision

In Chile, the Superintendencia de Bancos institutions Finanieras (SBF) (the banking authority) adopted risk based supervision as a methodology of supervising banking institutions in the year 2000. The SBF adopted Risk Based Supervision methodology adopted anchored on a Canadian Supervision model. The model emphasized on solvency of the banking institutions and market discipline. In 2005, SBF conducted a survey to determine the benefits, challenges and whether the methodology of supervision (Risk Based Supervision) achieved its intended objectives in supervising banks and microfinance institutions in Chile.

The survey noted a huge increase in costs for the year 2000/2001 these costs was attributed to training of its bank supervision teams and consultancy fees levied. A significant portion of the costs was also related to acquisition of new Information Technology (I.T) infrastructure. The IT infrastructure enabled Chilean Banking authority to collate and analyze filed bank returns in a timely fashion. The capital expenditures caused a massive budgetary distortion for SBF.

In addition, between 2000 to 2004 there was an improvement in solvency levels among banks in Chile. As banks assumed more risks the regulations required them to increase capital base to cushion them against the potential risks. Banks became stronger and started expanding their operations into other South America countries. Risk assessment of banks became sharper as problematic banks were identified early and SBF evoke prompt corrective actions. This process required fewer highly trained bank inspectors to conduct the inspections. The SBF bank supervision department budget decrease by half in 2002/2003 financial year as most operations were automated and previous staff keying the returns were deployed. However, implementing Risk Supervision was not without challenges ranging from resistance to adoption of the methodology by long serving staff and dynamism in financial innovation (*Superintendecia De Valores y Seguros of Chile, 2006*).

A study on adoption and implementation of Risk Based Supervision in Denmark Pension Regulatory Authority (*Danish Financial Supervisory Authority, 2004*), observed that substantial amount of capital outlay is required at the commencement; training of supervision teams on new ways of supervision and acquisition of the appropriate software for data analysis and report generations is very critical. This comes at a cost. The methodology is not cost effective and largely relied on supervisor's judgment. Further, the survey could not ascertain the basis of the assumptions adopted while arriving in a number of conclusions on the amount and level of risk unlike the traditional methodology that was prescriptive.

The study of risk-based supervision is based on risk and return theory. This theory assumes investors are risk averse, meaning that given two assets that offer the same expected return, investors will prefer the less risky one. Thus, an investor will take on increased risk only if compensated by higher expected returns. Conversely, an investor who wants higher returns must accept more risk. The exact trade – off will differ by based on individual risk aversion characteristics (*Pandey, 2008*).

The source of regulations lies in the differences between the objectives of banks and those of the regulatory authorities. Expected profitability is a major incentive for taking risks. Individual banks' risks create 'systemic risk', the risk that the whole banking system fails. Risk taking is a normal behavior of financial institutions, given that risk and expected return are so tightly interrelated. Because of the protection of bank depositors that exists in most countries, banks also benefit from 'quasi-free' insurance, since depositors that exist impose a real market discipline on banks. The banking system is subject to 'moral hazard': enjoying risk protection is an incentive for taking more risks because of the absence of penalties (*Bessis, 2005*).

Sometimes, adverse conditions are incentives to maximize risks. When banks face serious difficulties, the barriers that limit risks disappear. By additional risks, banks maximize the chances of survival. The higher the risk, the wider the range of possible outcomes, including favourable ones. At the same time, losses of shareholders and managers do not increase because of limited liability (agency problem) (*Bessis, 2005*).

With financial innovation, deregulation and globalization have contributed to making banking business more complex and potentially riskier. This has presented new challenges to bank supervisors with respect to the structuring of their ongoing supervision. In response, supervisors have developed new methods and processes for monitoring and assessing on an ongoing basis. Particular attention is paid in this regard to improving the quality of bank examination and to the development of systems that can assist supervisors and examiners in identifying changes, particularly deterioration, in banks financial condition as early as possible. Amongst the new initiatives that have been taken or are being taken in this development of more formal, structured and quantified assessments not only of the financial performance of banks but also of the underlying risk profile and risk management capabilities of individuals institutions (*Ranjana, 2000*).

Moving to a risk-based approach entails a departure from 'one-size-fits-all' requirements that are applied uniformly to all banks regardless of their size or risk profiles. The trend towards risk-based approaches tends to be accompanied by a move away from prescriptive rules-based approaches in favor of principles-based guidance that governs the way banking institutions carry on their business (*Australian Prudential Regulatory Authority, 1998*).

Supervisors have long focused on identifying risks and devoting resources to those areas of a bank's business that carry greater risk. The difference between the traditional and the risk-based approach is that, in the latter case, there is more structure and process to identifying and quantifying not only the risks faced by a bank but also the quality of the risk management and internal controls surrounding those risks. Risk-based supervisory approaches vary from bank to bank and jurisdiction to jurisdiction, in terms of structure and methods adopted by supervisors and in terms of how explicitly they are formulated (*Santos, 2006*).

In light of the dramatic institutional and technical changes that are sweeping the banking industry, the continuing debate among economists and regulators as to what kind of regulatory framework produces the most efficient banking system takes on more meaning. The dominant view among economists, as represented by the typical money and banking texts is that banking regulation is necessary to promote an efficient banking system. However, there exists a strong and increasingly influential free banking school which argues that, for the most part, government banking regulation is at best unnecessary and at worst leads to not only banking monopolies generated through legal barriers to entry but also, at worst, a less stable banking system (*Hickson,1996*).

Bank regulations should be based on the recognition of the fact that monitoring banks is costly and necessarily imperfect; that there are incentive problems facing the government bureaucrats; and government bureaucrats may be at a further disadvantage relative to those in the private sector as a result of the limitations in the salaries which government can pay. The extent of these problems may vary from country to country, so that a regulatory structure that is appropriate in one may not be in another (*Stiglitz, 1993*). The benefits of risk-based supervision are many and varied. The approach provides a framework that establishes a common terminology and approach to evaluating risk and risk management in financial institutions. Unlike traditional supervision, which focuses on the internal operations of a single institution, risk-based supervision considers external factors affecting not only individual banks but also the banking system as a whole. The approach is flexible enough to be applicable to all financial products and services and to all types of financial institutions from large banks to small credit unions. The greater emphasis is put on early identification of emerging risks at individual institutions and on a sector-wide basis, following a risk assessment, the supervisor is better placed to decide on the intensity of the future supervision having obtained a better understanding of a bank's risk profile. The intensity of supervision and the amount and focus of supervisory action increases in line with the perceived risk profile of a bank. The approach enables the supervisor to display more consistency in carrying out supervisory responsibilities and to assess more systematically whether banks continue to meet the minimum criteria for authorization. From the supervisor's perspective, the allocation of its own resources according to risk, devoting more supervisory effort to those banks that have a high-risk profile, becomes more efficient. It enables the supervisor to target and prioritize the use of resources (*Bank of International Settlements, 2006).*

Bank supervisors at the Central Bank of Kenya, like other bank supervisors worldwide, have recognized the need to keep pace with the changes brought about by technological advances and financial product innovation in the banking industry. In their quest to reassess the way bank supervision is conducted and to explore ways to improve the effectiveness and efficiency of the supervisory process. Banks supervisors from Kenya, Tanzania and Rwanda, requested East Africa Technical Assistance Programme (East AFRITAC) help to shift their supervision approach from the traditional checklist approach of determining compliance with banking laws and regulations towards the risk-based approach that is built upon a thorough understanding of the bank's businesses and risk management processes. Later three other East AFRITAC countries: Ethiopia, Eritrea and Malawi also decided to embrace the new supervision approach in a phased manner (*East AFRITAC, 2008*).

Adoption of Risk Based Supervision (RBS) - RBS lies at the heart of Pillar II-Supervisory Review of Basel II. It is a proactive approach aimed at deterring potential threats to the stability of institutions. Basel Core Principles for Effective Banking Supervision (BCPBS) also explicitly require banks to have a comprehensive risk management process. The BCPBS number nineteen obligates bank supervisors be satisfied that banks and banking groups have in place a comprehensive risk management process (including Board and senior management oversight) to identify, evaluate, monitor and control or mitigate all material risks and to assess their overall capital adequacy in relation to their risk profile. These processes should be commensurate with the size and complexity of the institution *(Bank of International Settlements, 2006).*

Under a risk – focused approach, the resources directed to assessing a banking organization's management processes are generally are increased. At the same time, the review of individual transactions ('transactions testing') conducted during an examination or inspection is adjusted depending on the quality of management practices and the materiality of the activities or functions being reviewed. This approach aims to optimize and better focusing transaction testing activities. An appropriate level of transactions testing, nonetheless, is still performed to verify: the adequacy of, and adherence to, internal policies, procedures and limits. Secondly, the accuracy and completeness of management reports and financial records and finally verify the adequacy and reliability of internal control systems (*East AFRITAC, 2008*).

The introduction of Risk Based Supervision (RBS) would require the Central Banks to reorient their organizational set up towards RBS and put in place an efficient risk management architecture, adopt risk focused internal audit, strengthen the management information system, and set up compliance units. The banks would also be required to address Human Resources Development (HRD) issues like Manpower planning, selection and deployment of staff and their training in risk management and risk based audit. It is evident that change management is a key element in RBS and the Central Banks should have clearly defined standards of corporate governance, well-documented policies and efficient practices in place so as to clearly demarcate the lines of responsibility and accountability so that they align themselves to meet the requirements of Risk Based Supervision (*Bank of International Settlement, 2006*).

2.3 Effectiveness of Risk-Based Supervision

The operational efficiency of commercial banks can be measured in many ways. One measure is in terms of the elasticity of bank deposits with respect to advances that is the percentage increase in a bank's deposits following a one per cent increase in the advances of the banking system as a whole. Another measure arises out of an evident linkage between banking efficiency and banking growth (*Khusro, et al, 2007*).

The over-arching objectives of banking supervision are two fold: one is to ensure the safety and soundness of banks and banking groups, and secondly, to protect the stability of the financial system. That is to forestall systemic risks. In general terms, a risk-based supervisory approach is intended to result in an effective and efficient process for monitoring and assessing, on an ongoing basis on the safety and soundness of banks (*Basel Committee of Bank Supervision, 2003*).

A risk-based process seeks to achieve an accurate assessment of individual banks' financial condition and managerial strength, on an ongoing basis, in order to facilitate a prompt and timely response to emerging problems. The objective of the Risk based supervision is to provide an effective process to assess the safety and soundness of regulated financial institutions. This is achieved by evaluating an institution's risk profile, financial condition, risk management processes, and compliance with applicable laws and regulation (*Basel Committee of Bank Supervision, 2003*).

There is a growing consensus that under modern capitalism, at least for large firms with widely diversified ownership, there is a separation of ownership and control; shareholders, neither directly, through the proxy mechanism, nor indirectly, through the takeover mechanism, exercise effective control. Banks through their threat not to renew credit, often exercise far more influence, and serve as the most effective monitors of bank management (*Stiglitz,1993*).

Changes in the environment in which financial institutions operate are having a significant impact on the way they conduct their business. Advancement in technology, telecommunications, and markets has changed the way banks collect, measure and manage their risks. Banks today are using increasingly reliable estimates of the Credit risk associated with particular borrowers. Banks are seeking to quantify in a more reliable manner their exposures to operational risks, or the risk of losses stemming from failures in the internal process or systems or from damage caused by an external disruption. Technological advances and financial product innovation result in changing risk profiles of financial institutions and require improvements in management systems and the way these institutions are supervised (*Fed Reserve System, 1997*).

One thing that bank supervisors would wish to have is an approach that would help them focus and dedicate supervisory resources to identify areas of greater risk to banks' soundness and safety; and identify higher-risk banks. Once those areas and the banks are identified, supervisory attention is turned to assessing those risks and how they are mitigated. The key to effective Risk Based Supervision is to identify primary risks affecting a bank and to evaluate the significance of those risks for the bank in question and then deploy supervisory resources more efficiently to address those identified risks. Risk Based Supervision thus meets the supervisor's wish in rationalizing the scarce supervisory resources. This partly explains the reason why supervisors are now moving towards this approach (*Santos, 2006*).

Indeed best practice standards such as Basel II and Core Principles enshrine the basic principles now commonly found in different forms of Risk Based Supervision. For instance, Basel II requires banks to design and implement effective risk management systems. Similarly, supervisors are required to assess those systems as to their effectiveness (*Basel Committee of Bank Supervision, 2003*).

2.4 The Risk Based Supervisory Process.

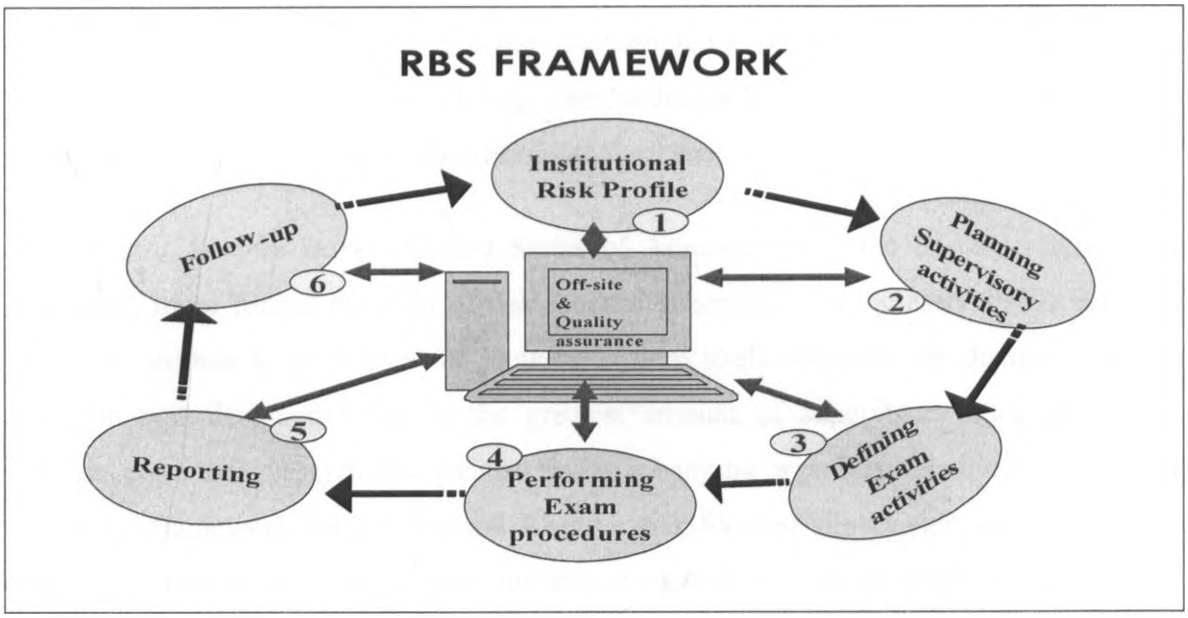
Risk Based Supervision is an ongoing supervision process whereby risks of a bank are assessed and an appropriate supervisory plan designed and executed in an efficient manner.

The framework consists of six key steps, each of which requires the preparation of specific documentation. These activities are depicted in the Chart 1 below as it relates to RBS steps (*Basel Committee of Bank Supervision, 2003*).

Inherent risk is intrinsic to a business activity and arises from exposure and uncertainty from potential future events. Inherent risk is evaluated by considering the degree of probability and the potential size of an adverse impact on an institution's capital or earnings. There are eight elements (building blocks) which are analyzed using data gathered from statistical returns, on-site supervisory visits and a range of other sources. The eight 'building blocks' are: counterparty default risk, balance sheet and market risk, insurance risk, operational risk, liquidity risk, legal and regulatory risk, strategic risk, contagion and related party risk (*Summers, 2007*).

These eight elements are rated in absolute terms, taking into account industry averages. Each element is then weighted as to its significance in the institution's risk portfolio and then aggregated in order to generate an overall inherent risk-assessment. The main steps of the supervisory process are; Analysis of Commercial Bank's risks, planning for the inspection, Action (Coordinating the onsite activities), documenting the findings, reporting and follow-up of recommendations proposed. Although the steps appear sequential, updating of the risk management is a dynamic process requiring frequent reassessments at various stages of the supervisory process (*Basel Committee of Bank Supervision, 2003*).

Chart 1. Risk Based Framework.



Source: Bank of International Settlement, 2006

Core Principle number nineteen of the Basel Committee on Banking Supervision (Basel Committee) requires bank Inspectors to have regular contact with bank management; and a thorough understanding of the institution's operations. The supervisor should require banks to notify regulator of any substantive changes in their activities or any material adverse developments, including breach of legal and prudential requirements. The institutional profile should be updated continuously to keep track of significant developments that occur in-between on-site examinations cycles (*Basel Committee of Bank Supervision, 2003*).

The Supervisory Plan represents a bridge between the institution's risk assessment, which identifies significant risks and supervisory concerns, and the supervisory activities to be conducted. A comprehensive supervisory plan is prepared for each bank (by the Desk Officer/ Offsite Officer) annually and updated as appropriate. The plan should demonstrate that supervisory concerns identified through the risk assessment process and the deficiencies noted in the previous examination are being, or will be, addressed. To the extent that the institution's risk management systems are adequate, the level of supervisory activity may be adjusted. The planning horizon to be covered by the plan is generally 18 months (*Federal Reserve System, 1997*).

Although risk-based approaches applied by different supervisors are broadly similar, they vary depending on a number of various factors, including the mandates of the supervisory agencies. Some of these jurisdictions that have adopted Risk Based Supervisory approaches include; Australia, Canada, Hong Kong, The Netherlands, The United Kingdom and The United States America (*Bank of International Settlement, 2006*).

The Federal Reserve Bank - United States of America began the implementation of a structured, more formal program of risk-focused supervision in the early 1990s, and that program continue to evolve as the banking system itself continues to change. The new approach was designed to focus the greatest amount of supervisory attention on the business areas that represent the greatest risk to a banking organization's overall condition. The basic framework for the Federal Reserve risk-focused supervision consists of four principal activities that are carried out in a continuous cycle as follows:- gaining an understanding of the institution through a detailed risk assessment, developing the supervisory plan, executing the supervisory plan and reporting the results; and determining and communicating the overall condition of the banking organization and addressing supervisory concerns. The main objective of this kind of approach is to sharpen the supervisory focus on those areas that pose the greatest risk to the soundness of banking organizations, and on the assessment of management processes to identify, measure, monitor, and control risks (*Federal Reserve System, 1997).*

In Canada, the Office of the Superintendent of Financial Institutions (OFSI) implemented risk-based approach to supervision over a period of two years commencing in 1997. The objective of the supervisory process was to assess the safety and soundness of regulated financial institutions and intervene on a timely basis where OSFI considers an institution's practices to be imprudent or unsafe. The Supervisory Framework sets out a disciplined, risk-based approach to supervision, that uses the work of an institution's Oversight functions, where appropriate, to understand how effectively an institution manages its risks. The assessment of an institution's safety and soundness is built on an understanding of the institution, its industry, and its environment. Based on this understanding, an institution's significant activities are identified. Both qualitative and quantitative factors are used to assess the materiality or significance of an activity to the achievement of the institution's objectives and strategies. The assessment of the overall risk management is judgemental and is based on a sound understanding of the activity, the risks inherent in the activity, and the effectiveness of the institution's mitigation, taking into account the unique circumstances of the institution (*Office of the Superintendent of financial institutions, 1999*).

In the United Kingdom, the Bank of England introduced the Risk Assessment, Tools & Evaluation (RATE) framework that is currently being used by the Financial Services Authority (FSA) as a formal and comprehensive risk assessment of individual banks. The objective of the framework is to increase the effectiveness of supervision by making it risk-focused, and to have a systematic approach to ongoing dynamic supervision. It is used to determine customised supervisory action for an individual banking institution based on a systematic risk assessment, and to determine the intensity of supervision based on the score assigned to the institution. The framework is based on the concept of determining a supervisory period for each individual institution, during the course of which the key elements of RATE are addressed and implemented. The supervisory period ranges from six months to three years depending on the risk profile of the institution. However, evaluations of material changes that could affect the assessment, the progress by the bank on the action plan and the progress with the supervisory objective are undertaken annually for each institution (*Financial Services Authority, 1998*).

The Hong Kong Monetary Authority (HKMA) implemented risk – based supervisory approach similar to the US one, on the recommendation of the Hong Kong Banking Sector Consultancy Study, completed in 1998. The objective was to address a perceived need to raise the supervisory process to a more effective level, by better evaluation of banking risks and risk management processes. The risk-based approach to supervision consists of a structured methodology designed to establish a forward-looking view on the risk profile of Authorised Institutions (AIs). The framework emphasizes effective planning and examiner judgement, customises examinations to suit the size and activities of AIs and concentrates examiner resources on areas that expose the AIs concerned to the greatest degree of risk.

The risk assessment exercise consists of four phases: (i) gathering of information, including on-site visits; (ii) defining functional business lines; (iii) preparing the risk matrix and (v) completing the risk assessment narrative.

Sufficient information is gathered to understand fully the business activities and risk management systems conducting one or more on-site visitations to the AI to obtain the required information or to clarify information already received. In phase two, functional business lines and the relative significance of activities are properly identified by adopting as far as possible the AI's own classification of its different businesses, since the internal management information reports are likely to be compiled on the same basis (*Hong Kong Monetary Authority, 1999*).

2.5 Challenges of Implementing Risk Based Supervision

In order for a supervisory agency and the supervised banking industry to benefit from a risk- based approach, there are several other challenges that the need to be overcome. These challenges relate to element of risk based supervision they include;-

The scarce availability of skilled and experienced technical staff has been major hindrance among regulatory authorities. The challenge for all supervisory authorities, and particularly emerging market supervisory authorities, is to equip front-line supervisors with the knowledge, skills and abilities they need to make their transition to risk –based framework as smooth as possible. Building a robust risk-based supervisory regime requires substantial time and resources and necessitates a material shift in the way supervisors and bank management think about risk and risk management. Supervisors need to have a deep understanding of the business areas and operations of the bank, the inherent risk of those businesses and the risk mitigating / management processes in order to make the risk assessments (*Federal Reserve System,1997*).

Risk based supervision involves making subjective assessment of the risk and risk management practices. Those supervisors need to have the necessary skills and deficient to determine, for example, on banks' assessments, and onus is on the supervisors to justify their assessments. This situation requires that the supervising agencies management have the necessary processes in place to conform and support the live supervisor's assessment (*Supervisory Framework, OSFI 1999*).

2.6 Supervisory Judgment Elements of a Risk-Based Supervisory Framework

A risk-based supervisory framework facilitates the assessment of risks and controls at the level of the individual bank or banking group (this can be termed the 'probability of default' dimension). Further, it takes into account the relative significance of an individual bank or banking group to the overall financial system (the 'impact' dimension) (*Financial Stability Institute Connect, 2008*).

The risk assessment process highlights both the strengths and vulnerabilities of an institution, and provides a foundation from which to determine the level and extent of supervisory attention, including the scope of on-site examinations and off-site monitoring (*Financial Stability Institute Connect, 2008*).

A 'stylized' risk-based supervisory framework involves the following elements: Identifying significant operations, such as business lines, entities or processes, Risk identification and assessment for significant operations, risk management, controls and mitigants, Net risk and Overall assessment (*Financial Stability Institute Connect, 2008*).

Risk-based supervision entails mechanisms to assess banks' likelihood of default and the implications of defaulting. In other words, supervisors need to identify the key risks that banks face and assess the significance of those risks. The introduction of a risk-based system usually focuses on evaluating the risk profile of each bank or banking group in the financial system and, developing a supervisory program for each bank or banking group, based on their individual risk profile (*Federal Reserve System, 1997*).

An important dimension that many supervisory agencies have incorporated into their risk-based system is determining the systemic importance of each bank or banking group, and factoring that element into the development of the supervisory program. Systemically important banks, all other things being equal, attract greater supervisory attention (and resources) than non-systemically important banks, (*Federal Reserve System, 1997*).

Financial regulations should be based on the recognition of the fact that monitoring banks can be costly and necessarily imperfect, that the monitoring agencies face severe information problems; that there are incentive problems facing the government bureaucrats; and that the government bureaucrats may be a further disadvantage relative to those in the private sector as a result of the limitations in the salaries which the government can pay. The extent of these problems may vary from country to country, so that regulatory structure that is appropriate in one may not be appropriate in another jurisdiction (*Bessis, 2005)*.

The Risk Based Supervision helps in early identification of emerging risks at individual banks and on a sectoral basis or system wide issues. The systemic risks associated with the contagion because of interrelated of the financial sector can be 'nib at bud' early enough. Furthermore, this methodology provides a better appreciation to supervisors of the characteristics of the banks' business for risks they face and the quality of their management (*Summers, 2007*).

In conclusion, moving to an approach that emphasize prudential standards can create significant challenges for front – line supervisors (*Bank of International Settlement, 2006*). This is because they need to rely much more on professional judgment and critical analysis and less rules –based compliance criteria, in order to make proper risk assessment. However, *Danish Pension Regulatory Authority* observed that the risk-based methodology was not cost effective. This study seeks to establish the effectiveness of risk based supervision as adopted by the Central bank of Kenya.

CHAPTER THREE

RESEARCH METHOLOGY

3.1 Research design

The study utilized a census survey research design for data collection in order to gather information on the effectiveness of the risk based supervision over the traditional method of supervision and as well, as establish the challenges facing the Central Bank of Kenya in adoption of risk based supervision.

3.2 Population

The population for this study was derived from thirty-four (34) bank supervisors at the Central Bank of Kenya. The bank supervisors were grouped into four teams handling a portfolio of commercial Banks. Each portfolio (see appendix II) are categorized into three (3) tiers based on their core capital, as large, medium and small banks categories. The criterion of using core capital as a measure of size of the institutions is justified on the premise that Central Bank may not be willing to divulge information on other parameters due to policy restrictions.

3.3 Data collection

The study relied on two types of data, primary and secondary data. Primary data was collected through semi-structured questionnaires from Central Bank of Kenya Bank Supervisors. The open-ended questions were aimed at obtaining qualitative data on improvement initiatives being employed by the Central Bank of Kenya as well as get other suggestions from the respondents. The closed questions were aimed at obtaining quantitative data for statistical analysis.

The questions were both closed and open-ended to allow the respondents to express their views without undue limitation. Secondary data on the other hand will be obtained from

Annual Bank Supervision reports, periodical reports, past speeches and presentations delivered.

The questionnaire was divided into four parts. Part A was designed to collect the respondents' general information on awareness, benefits and costs, challenges and resource availability. Part B was designed to collect data on the integration level of Risk Based Supervision aspects. Part C sought to establish challenges faced by Central Bank of Kenya in implementing the Risk Based Supervision.

The full questionnaire covering effectiveness of Risk Based Supervision was five pages long. It was be accompanied by an explanatory covering letter, which was to assure the confidentiality of responses. Each questionnaire was numbered to facilitate follow-up procedures.

The questionnaire used various question forms including those requiring yes/no answers, numerical estimates, ranking of alternatives, closed-form questions adopting a likert scale and open-ended questions. The drop and pick later method was used in order to ensure that the researcher was available to clarify some questions that were not be clear to the respondents.

3.4 Data analysis and presentation

Data collected through the questionnaires was edited for accuracy, uniformity, consistency, and completeness and arranged to enable coding and cross tabulation before final analysis. Coding and cross tabulation of data was followed to enable the responses to be statistically analyzed. Descriptive and inferential statistics was used to analyze data. Descriptive statistics was also be used to rank the various measures of effectiveness of Risk based approach. These parameters included cost verses the benefits, the duration of an inspection per institution, the number of inspectors conducting an inspection and challenges faced with the risk based approach. The measures of central tendency (mean) and dispersion (standard deviation) were used to achieve these objectives. This was achieved by use of Microsoft Excel. and Statistical Package for Social Science (SPSS) (version12.0) programs.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

This chapter discusses the study findings. The data analysis was guided by two objectives: one, the effectiveness of Risk Based Supervision methodology as adopted by the Central Bank of Kenya and two, the critical challenges encountered during the implementation of Risk Based Supervision. From the initial target population of thirty-four bank supervisors at the Central Bank of Kenya, twenty responded. This represented a response rate of fifty-eighty (58) percent. All bank supervisors have been grouped into five teams headed by a portfolio manager, as indicated in table 4.1.1.

4.1 Grouping of commercial banks

The target bank supervisors were categorized into portfolios supervising a number of commercial banks under their purview.

Table 4.1.1 Grouping of commercial banks

Number of portfolio teams	Frequency	Total	Percentage (%)
2	9	18	41 %
2	8	16	36%
1	• 10	10	22%
Total	**27**	**44**	**100%**

Source: Research data

From the study as summarized in table 4.1.1, there were 2 portfolios teams with 9 banks each representing (41%) of commercial banks, two portfolio teams with 8 banks representing 36% and one portfolio with 10 (22%) of commercial banks in Kenya.

Further commercial banks are either locally owned or by multi-nationals. The results on the ownership structure for commercial banks in Kenya are summarized in Table 4.2

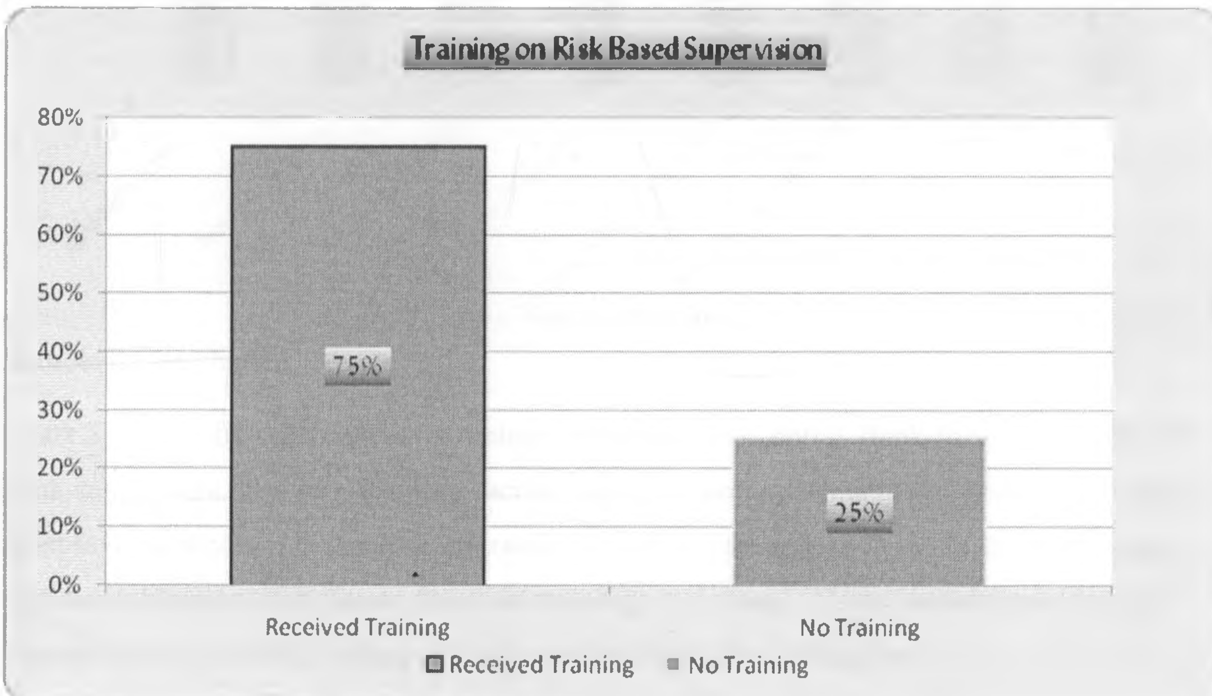
Table 4.1.2 Ownership structure of Commercial Banks

Ownership Structure	Frequency	Percent
Locally	16	80 %
Multinational	4	20 %
Total	**20**	**100 %**

Source: Research Data

Results indicate that, 16 out of 20 (80%) were locally incorporated in Kenya whereas 4 banks (20%) were multinationals.

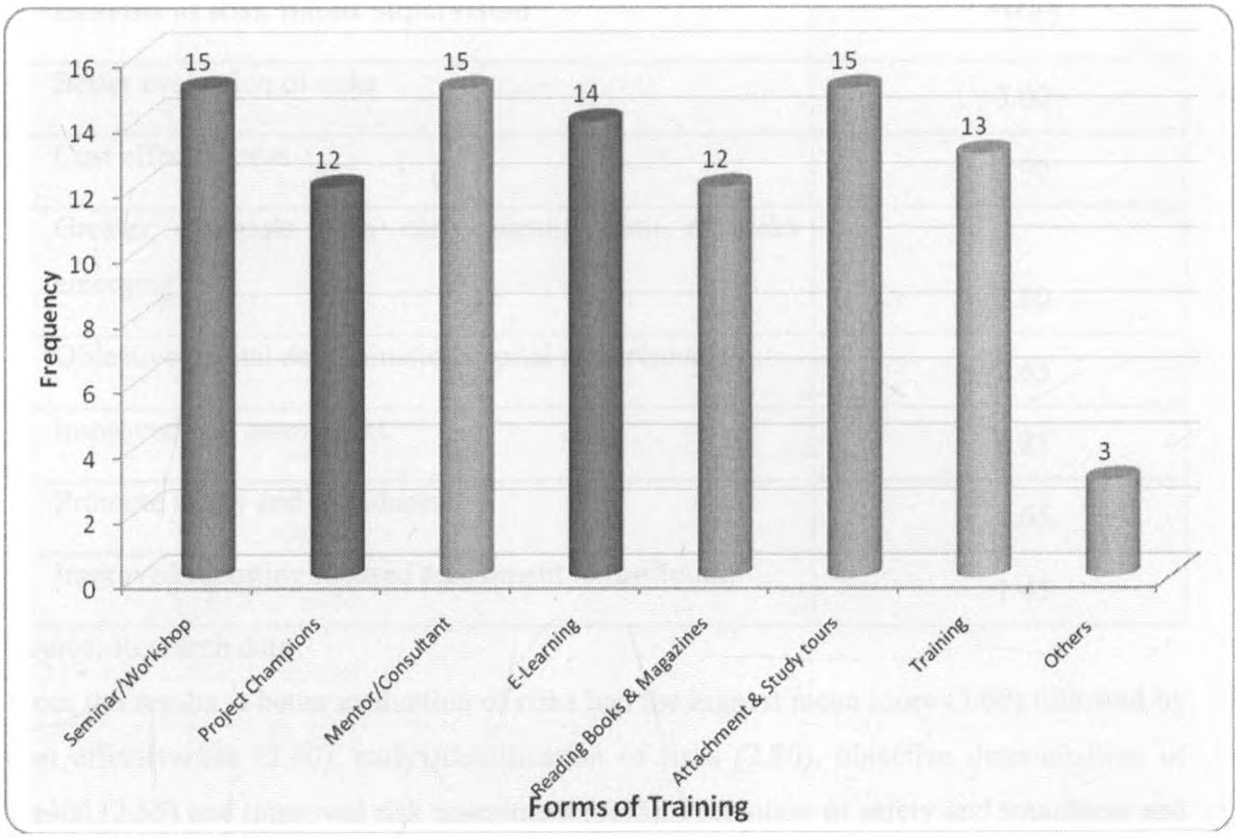
Chart 2 Training of Central Bank of Kenya Bank Supervisors



Source: Research Data

The results from chart 2 indicate that 75% (15 out of 20 respondents) had received training in risk-based supervision while 25% (5 out of 20) had not received any form of training.

Chart 3 Forms of Training



Source: Research data

Chart 3 shows different modes of training deployed by Central Bank in upping skills of bank supervisors. Use of e-learning facility, seminars and attachment and study tours were most favored mode of training as indicated by 100% of the respondents. It should be noted that a combination of different forms of trainings were used. These include use of project champions, consultants, reading of books and watching documentaries.

4.2 The benefits of Risk Based Supervision

Respondents to the study were asked to indicate what benefits have been achieved since the Risk Based Supervision was adopted. The inherent benefits were ranked on a likert scale with "Strongly agree" scoring 5 whereas "Strongly disagree" scoring 1 point. These results are here analyzed and summarized in Table 4.2.1

Table: 4.2.1 Benefits of Risk Based Supervision over Traditional Method of Supervision

Benefits of Risk Based Supervision	Mean
Better evaluation of risks	3.00
Cost effectiveness	2.90
Greater emphasis on early identification of risks emerging	2.80
Objective capital determination capital requirements	2.65
Improved risk assessment	1.85
Promote safety and soundness	1.65
Improved reporting focused assessment to institution	1.45

Source: Research data

From the results, a better evaluation of risks had the highest mean score (3.00) followed by cost effectiveness (2.90), early identification of risks (2.80), objective determination of capital (2.65) and improved risk assessment (1.85). Promotion of safety and soundness and improved reporting focused assessment to institution had mean scores (1.65) and (1.45) respectively.

The results from the research indicate that bank supervisors consider risk based methodology to have improved evaluation of risks among the financial institutions, followed by reduction in costs and early identification of emerging risks in that order. Whereas improved reporting of focused assessment of financial institution was not that important benefit.

Risk based supervision places strong emphasis on understanding and assessing the adequacy of each bank's risk management systems, which are in place to identify, measure, control and monitor risk in an appropriate and timely manner. It is an ongoing process whereby the risks of a bank are assessed and an appropriate supervisory plan is designed and executed in an efficient manner. Its key characteristic is flexibility (Barth, 2002).

4.3 Costs incurred during Implementation of risk bank supervision

The respondents were asked to indicate to what extent the different costs influenced the implementation of Risk Based Supervision. The costs ranged from "very critical" to "not critical". These costs were ranked on a likert scale with "very critical" scoring 5 points and "not critical" scoring 1 point. The results of significant costs incurred are indicated in the table 4.3.1

Table 4.3.1 Cost incurred during the implementation of risk based supervision

Costs elements	Mean
Training of staff	3.15
Acquisition of information technology infrastructure	2.70
Recruiting additional staff	2.70
Development of models	2.53
Development of databases	2.40
Training of commercial banks risk managers	2.21
Consultants and experts	2.11

Source: Research data

The study revealed that highest cost was incurred in the training of staff with a mean of 3.15, costs borne to acquire information technology infrastructure and recruiting staff came second with a mean of 2.70. The development of models for calibrating risk had a mean of 2.53, development of databases (2.40), training of commercial bank risk mangers (2.21) and costs for consultants and experts (2.11).

4.4 Implementing the Risk Based Supervision

Implementation of risk-based supervision was a gradual process and done in different ways. From the study, 14 out of 20 (70%) of the respondents indicated that the Central Bank of Kenya chose staff training as a preferred implementation methodology, whereas attachment, use of external consultants and project champions each were suggested by 10% of the respondents. As indicated in Table 4.4.1

Table 4.4.1 Implementation methodology of Risk Based Supervision

Implementation Methodology	Frequency	Percent
Staff training	14	70%
Attachments/ study tours	2	10%
External consultants	2	10%
Use of project champions	2	10%
Total	**20**	**100**

Source: Research data

4.5 Understanding the institution

The risk based supervision is an ongoing supervision process whereby risks of a bank are assessed and an appropriate supervisory plan designed and executed in an efficient manner (Santos, 2006). The risk-based supervision consists of several incremental steps, in which each step significantly influences the succeeding steps.

From the responses, all the respondents 20 out of 20 (100%) indicated that they always strive to have a good understanding of the commercial banks in their portfolio. This step was identified to be critical to tailoring the supervision program to meet the characteristics of the bank and adjusting that a program on an ongoing basis as circumstances change. The information identified about commercial banks that are updated on a regular basis is shown in the Table 4.5.1

Table 4.5.1 Information required on a regular basis

Type of Information	Frequency	Percent
Current and prospective risk profiles of commercial banks	20	100%
Key issues and supervisory findings	20	100%
Assessing management strength	18	90%
Financial performance	20	100%

Source: Research data

From table 4.5.1 study shows that 20 out of 20 (100%) respondents indicated that they develop an institutional profile that communicates the understanding of the institution, identify key issues and evaluate financial performance. Whereas 90% of the respondents indicated that they assess the strength of management.

4.6 Preliminary Assessment of an institution

Preliminary assessment ensures supervisory activities are always focused on the areas of greatest risk to a commercial bank (Bessis, 2006).

Table 4.6.1 Risk Assessment tools

Risk Assessment tool used	Frequency	Percent
Risk matrix	15	75%`
Risk assessment narrative	5	25%
Total	**20**	**100%**

Source: Research data

The supervisors at the Central Bank of Kenya conduct periodic risk assessment. The risk assessment highlights both the strength and vulnerabilities of a bank and provides a foundation for determining the supervisory activities to be conducted.

The preferred risk assessment tool is risk matrix as it was chosen by 15 out of 20 (75%) respondents and risk assessment narrative by 5 out of 20 (25%) respondents, as shown in table 4.6.1 above.

4.7 Planning and scheduling supervisory activities

From the study, 16 out of 20 (80%) respondents identified a supervisory plan represents a bridge between the institutions risk assessment, which identifies significant risks and supervisory concerns, and the supervisory activities to be conducted. A comprehensive supervisory plan is prepared for each bank by off – site bank supervisory annually and updated as appropriate. While 4 out of 20 (20%) respondents indicated that they use Inspection manual to conduct their supervisory work.

Table 4.7.1 Planning and scheduling supervisory activities

Planning and scheduling activities	**Frequency**	**Percent**
Supervisory plan	16	80%`
Inspection manual	4	20%
Total	**20**	**100%**

The plan demonstrates that supervisory concerns identified through the risk assessment. An institution with a low risk profile will normally be subject to a less intensive supervisory plan. Nevertheless, a minimum level of supervisory is required a cross all institutions to keep abreast of changes in the business (Federal Reserve 1997).

4.8 Defining and Examination Activities

The focus of on-site examination activities is identified in a supervisory plan, is oriented to a top-down approach that includes a review of the level of transaction testing (Federal Reserve, 1997).

Table 4.8.1 Defining and examination activities

Defining and Examination activities	**Frequency**	**Percent**
Identify risky areas	15	75%`
No response	0	20%
Total	**20**	**100%**

The study findings indicate, 15 out of 20 (75%) of the respondents identified the focus of the on-site and outlines the procedures to be performed in relation to the risk areas to be reviewed during an examination. While 5 out of 20 (25%) did not answer the question.

4.9 Performing Examination Procedures

The study revealed, 14 out of 20 (60%) of the respondents indicated that the examination procedures should be tailored to the characteristics of each institution. While 6 out of 20 (40%) of the respondents use historical information to perform an examination.

Table 4.9.1: Performing examination procedures

Performing examination procedures	**Frequency**	**Percent**
Based on characteristics of the institutions	14	60%`
Use of historical information	6	40%
Total	**20**	**100%**

According to Bessis, 2005, the procedures should be designed keeping in mind size, complexity, and risk profile of the bank and should focus on developing appropriate documentation to adequately assess management's ability to identify, measure, monitor and control risks. Procedures are completed to a degree necessary to determine whether institutions management understands and adequately controls the levels and type of risks that are assumed.

4.10 Reporting

The final step in risk-based supervision is communication of findings and recommendations to the examined bank and to undertake subsequent follow-ups on any enforcement action or agreed action plans (*Federal Reserve, 1997*).

Table 4.10.1: Reporting

Reporting	**Frequency**	**Percent**
Publishing of Inspection report	0	0%`
Not publishing inspection report	20	100%
Total	**20**	**100%**

The respondents generally, indicated that the report with appropriate comments regarding deficiencies noted in the institution's risk management systems produced at the end of the inspection. The study noted 20 out of 20 (100%) of the respondents indicated that the examination report must be confidential between the institution and the supervisory authority and therefore not to be published.

4.11 Challenges Central Bank faced during the implementation of risk based supervision.

Risk based supervision requires supervisors to have abilities to effectively evaluate risk management systems and practices employed by banks. Supervisors thus need to develop and implement robust risk assessment techniques and criteria to avoid supervisory risk of failure to assess the risks accurately and timely (Barth, 2002).

Table 4.11.1 Challenges facing Central Bank of Kenya while implementing the risk based supervision

Challenges experienced with implementation of Risk Based Supervision by Central Bank of Kenya	Mean
Competing demands for resources	3.86
Human resources competences	3.71
Change management/ Paradigm shift	3.64
Model development and Validation	3.64
Technology and system infrastructure	3.43
Retaining competent staff at the CBK	3.43

Source: Research data

From results, it indicates that the challenge of competing demands for scarce resources had the highest mean score (3.86) followed by competence in human resources (3.71), change in orientation of management thinking (3.64), Model validation, acquisition of technology and retaining key staff had 3.64, 3.43 and 3.43 respectively.

4.12 Recommendations to fully implement Risk Based Supervision by the Central Bank of Kenya

A summary of recommendations to fully implement risk-based supervision in Kenya include; one, the Central Bank of Kenya should seek technical and financial support from development partners (like International Monetary Fund, World Bank, Bank of International Settlements etc). The Technical expertise is crucial for the success of risk-based supervision; identification of risks requires many years of experience and exposure among bank supervisors. These competencies are not readily available in third world countries.

Central bank should involve the regulated institutions when developing the supervisory framework. The respondents took note of the pace of product innovation in the ever-evolving financial system. Regulators tend to lag in keeping up with the pace of innovation. Therefore, a close partnership amongst all the players is vital in achieving a robust regulatory framework.

Respondents also recommended that the central bank should enhance the terms of service in order to retain their best staff in technical areas. Experience has shown that supervisory staffs easily cross over to commercial banks. With the introduction of risk based supervision, commercial banks desire to have qualified personnel to boost their risk management practices have since increased.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

This chapter provides the summary of the study findings, conclusions and recommendations arising thereof. The chapter concludes with limitations to the study, and suggestions for further study.

5.1 Summary of the study findings

The study revealed that in the opinion of bank supervisors, risk based supervision has greatly improved supervision of commercial banks. The supervisors noted with advent of globalization, quest by financial institutions to spread their footprint across the East African region and entry of West African banks poses supervisory challenges to Central Bank of Kenya. Respondents were of the view that regulatory bodies in the East Africa region should engage in cross border joint inspections to supervise institutions with regional presence.

The study further found out that the number of days inspecting an institution reduced dramatically, from an average of one-and-half months to an average of three weeks. In an inspection cycle, bank supervisors are supposed to conduct pre-inspection, planning, scheduling of activities and examination to handing a draft report to management of the supervised institution. In addition, the study noted a reduction of bank supervisors in inspection from an average of six to an average of three per inspection. This was made possible by the supervisory teams focusing on key risky areas with the help of a robust Information Technology (I.T.) software.

Respondents were generally of the view that since adoption of risk-based supervision resulted into faster identification of risks in various commercial banks under the purview of bank supervisors. Supervisors were able to single out problematic banks early and prompt corrective action was undertaken to avoid systematic risks spreading in the financial sector.

The study confirmed that the risk-based supervision is a judgmental and subjective approach. The calibration of various risks facing an institution under supervision is based on their perception from experience gained over a number of years. It was noted bank supervisors are continuously trained and exposed to jurisdiction that have implemented this methodology.

5.2 Conclusions

Risk based supervision as discussed in the foregoing sections has advantages to both supervisors and supervised banks. It helps supervisors to effectively and efficiently align their scarce resources with risk profiles of the banks, and at the same time allows supervised banks to be creative and better manage risks inherent in their activities. It also requires supervised banks to adopt risk based audit in their activities which help build effective risk management culture in the banking industry.

Comparatively, the traditional method of supervision was based on past financial transactions and events. The past events have nothing to do with the determination direction of risk. The traditional methodology assumes one-size-fits. In contrast, risk based supervision assesses current and future risks that an institution faces. For every bank a supervisory plan is crafted/ designed to determine how it manages its risks and a commensurate supervisory approach deployed.

It should be understood that risk-based supervision is not designed to solve the problems of failing banks but rather the special usefulness of risk-based supervision is to identify ahead of time risks that may cause serious problems in the future and to assess the ability of bank management to deal with the risks identified. This is the overarching objective of risk based supervision.

5.3 Limitations of the Study

1. All respondents were bank supervisors of the Central Bank of Kenya. For objectivity, the research work should have incorporated "regulatees" (commercial banks) amongst list of respondents.
2. The study did not compare the risk based supervision used by other regulators. A comparison of supervisory practices embraced by other financial regulatory authorities could have provided useful insights for Central Bank of Kenya to improve its framework.
3. It is difficult to precisely do a cost-benefit-analysis for risk based supervision. Bank supervisors are continuously trained and attached to regulatory jurisdictions where this methodology is practiced. As such costs, costs are borne by the regulator in training is substantial and benefits cannot be easily determined.
4. Although the collection of the data was administered using questionnaire which was dropped and picked later. The collection of data should have complemented with focus group discussion to generate more exploratory information and increase the accuracy of the findings.

5.4 Recommendations for further research

This study explored the effectiveness of risk based supervision methodology by the Central Bank of Kenya (CBK). Further, research could have carried out to contrast the regulatory approach used by the CBK with those of other peers in the region, or in the developing countries.

A study could cover all financial institutions since dysfunction in one of segment of financial market may result lead to a contagion to affect all other sectors. The research should be extended to supervisory methodology used by an integrated regulator that supervises insurance companies, investments and commercial banks.

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APPENDIX I: LETTER OF INTRODUCTION

Joseph Charles Momanyi

P.O Box 75398 - 00200

Nairobi.

Tel: 0722 - 140252

Email: cjmomanyi@gmail.com

Dear Respondent,

MBA RESEARCH PROJECT

I am a post graduate student at the University of Nairobi pursuing an MBA – Finance course. In partial fulfilment of the course requirements, I am undertaking a research on "THE EFFECTIVENESS OF THE RISK BASED SUPERVISION AS ADOPTED BY CENTRAL BANK OF KENYA"

Being one of the respondents, I kindly request you to fill the attached questionnaire. The information requested is needed purely for academic research purpose and will therefore be treated with utmost confidentiality. Further, your name will not be mentioned in the report and findings of the study, shall upon request, be availed to you.

Your assistance in facilitating the same will be highly appreciated, thank you.

Yours faithfully,

Charles Momanyi

STUDENT

Mirie Mwangi

SUPERVISOR

APPENDIX II: QUESTIONNAIRE Questionnaire No: _

This questionnaire is designed to collect data on "The effectiveness of Risk Based Supervision methodology as adopted by the Central Bank of Kenya". Collected data shall be used for academic purposes only, and thus shall be treated with strict confidence. Your participation in facilitating this study is highly appreciated.

A. General

Name of Respondent: ____

1. How many Commercial Banks are in your portfolio? ____________________

2. Of the Commercial Banks in your portfolio how many:-

(a) Locally incorporated with the headquarter based in Kenya or ☐

(b) Locally incorporated subsidiary of a multinational bank? ☐

(Indicate on the boxes appropriately)

3. Have you received any training on Risk Based Supervision?

Yes ☐ No ☐

4. If no, proceed to question 6.

5. If yes, what form of training did the Central Bank adopt to raise awareness and expertise among the technical staff?

	Yes	No
a) Seminar/ workshops	☐	☐
b) Project Champions	☐	☐
c) Mentor/ Consultant	☐	☐
d) Project Teams	☐	☐
e) E- learning	☐	☐
f) Reading books & Magazines	☐	☐

g) Attachment & Study Tour ☐ ☐

h) Training ☐ ☐

i) Other specify ....

....

6. What are some of the benefits you have achieved since Risk Based Supervision was adopted over the Traditional method of Supervision? *Tick appropriately.*

	Benefit	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
a)	Better evaluation of risks	[ ]	[ ]	[ ]	[ ]	[ ]
b)	Cost effective use of resources through a sharper focus on risk	[ ]	[ ]	[ ]	[ ]	[ ]
c)	Greater emphasis on early identification of emerging risks	[ ]	[ ]	[ ]	[ ]	[ ]
d)	Objective capital requirements	[ ]	[ ]	[ ]	[ ]	[ ]
e)	Competitive edge tool	[ ]	[ ]	[ ]	[ ]	[ ]
f)	Improved Risk assessment	[ ]	[ ]	[ ]	[ ]	[ ]
g)	Promote safety and soundness	[ ]	[ ]	[ ]	[ ]	[ ]
h)	Improved reporting of risk focussed assessment to institutions	[ ]	[ ]	[ ]	[ ]	[ ]
i)	Others *(specify)*	[ ]	[ ]	[ ]	[ ]	[ ]
		[ ]	[ ]	[ ]	[ ]	[ ]
		[ ]	[ ]	[ ]	[ ]	[ ]

7. What extent did the following costs impact on implementation of Risk Based Supervision?

Tick appropriately.

Cost		Not Critical	Least Critical	Critical	Quite Critical	Very Critical
a)	Model development	[ ]	[ ]	[ ]	[ ]	[ ]
b)	Model validation	[ ]	[ ]	[ ]	[ ]	[ ]
c)	Training Staff	[ ]	[ ]	[ ]	[ ]	[ ]
d)	Staff compliment	[ ]	[ ]	[ ]	[ ]	[ ]
e)	Outsourcing Skills and Expertise	[ ]	[ ]	[ ]	[ ]	[ ]
f)	Database development	[ ]	[ ]	[ ]	[ ]	[ ]
g)	Acquisition of System Infrastructure	[ ]	[ ]	[ ]	[ ]	[ ]
h)	Others, *specify*	[ ]	[ ]	[ ]	[ ]	[ ]

8. What did the Central Bank of Kenya deploy in implementing of Risk Based Supervision? *Kindly tick as applicable*

- Set up a steering committee ☐
- Involve external consultants ☐
- By use of Project Champion ☐
- Continuous Training ☐

9. How effective is the Risk Based Supervision methodology as compared to Traditional Supervision methodology?

a) Has the number of days per supervision increased or reduced (in any case), what are the possible reasons for the change____

____

b) Has the number of staff per team increased or reduced, if so, what are reasons for the change

____

____

c) Have the quality of supervision reports in terms of precision in identifying risks?

____

10 What are other measures/parameters that are used by Central Bank of Kenya to determine effectiveness or efficiency of Risk Based Supervision?

____

____

B. The Risk Based Supervisory Process

11 Analyses.

11.1 Does your team maintain an institutional overview?

Yes ☐ No. ☐

11.2 If yes, what approach do you use in assessing and ascertaining institutional overview?

a) Current and prospective profiles ☐

b) Key issues and Supervisory findings ☐

c) Assess management strength ☐

d) *Other please specify* ______________________

12 Preliminary Assessments

12.1 In conducting your preliminary assessment have you team adopted:-

a) Risk Matrix ☐ Yes No ☐

b) Risk Assessment Narrative) ☐ Yes No ☐

c) Other Tool ______________________________

12.2 If yes, briefly state some of the salient features of the mentioned tool?

____

13 Planning and Scheduling of Supervisory activities

13.1 Before a team is engaged in an inspection, what sources of information do consider?

____

____

13.2 What is the significance of your preparatory work to the final output?

____

14 Defining and examination activities

14.1 While conducting an inspection / examination do you consider? *Select appropriately.*

a) Management ability to manage risk ☐ Yes No ☐

b) Procedures to be followed ☐ Yes No ☐

c) An understanding of the overall bank ☐ Yes No ☐

d) Any other parameter (*Specify*)?

15 Reporting, Follow-up and Monitoring

15.1 Future capital levels commensurate with risk appetite of bank?

☐ Benchmarking with other banks

☐ Includes stress testing of earnings and asset growth

☐ Capital cushions against anticipated volatility

C. Challenges faced during the adoption of Risk Based Supervision

16. What are some of the challenges you faced during the adoption of Risk Based Supervision? (*Tick appropriately)*

Challenge		**Not Critical**	**Least Critical**	**Critical**	**Quite Critical**	**Very Critical**
a)	Implementation costs	[ ]	[ ]	[ ]	[ ]	[ ]
b)	Data collection	[ ]	[ ]	[ ]	[ ]	[ ]
c)	Change Management	[ ]	[ ]	[ ]	[ ]	[ ]
d)	Staff compliment	[ ]	[ ]	[ ]	[ ]	[ ]
e)	Skills and Expertise	[ ]	[ ]	[ ]	[ ]	[ ]

Challenge		Not Critical	Least Critical	Critical	Quite Critical	Very Critical
f)	Technology and System Infrastructure	[ ]	[ ]	[ ]	[ ]	[ ]
g)	Adverse selection by customers	[ ]	[ ]	[ ]	[ ]	[ ]
h)	Premature adoption	[ ]	[ ]	[ ]	[ ]	[ ]
i)	Others *(specify)*	[ ]	[ ]	[ ]	[ ]	[ ]

16.1 Please suggests recommendations to fully implement Risk Based Supervision in Kenya.

____

____

..............................**THANK YOU FOR YOUR CONTRIBUTION**..

APPENDIX III: DISTRIBUTION OF FINANCIAL INSTITUTIONS AMONG PORTOLIOS MANAGERS

	MANAGER 1	MANAGER 2	MANAGER 3	MANAGER 4	MANAGER 4
1.	Kenya Commercial Bank	Barclays Bank of Kenya	Standard Chartered Bank of Kenya Limited	Co-operative Bank of Kenya Limited	National Bank of Kenya Limited
2.	CITIBANK. N.A.	CFCStanbic Bank	Commercial Bank of Africa	Equity Bank Limited	Investments & Mortgages Bank
3.	Diamond Trust	Eco-Bank Limited	NIC Bank Limited	Bank of Baroda	Equatorial Commercial Bank
4.	Prime Bank	Imperial Bank	Bank of India	Bank of Africa	K-Rep Bank
5.	Development Bank	City Finance Bank	Fina Bank	Habib Bank A. G. Zurich	Gulf African Bank
6.	Giro Bank	Housing Finance Corporation of Kenya	African Banking Corporation	Oriental Commercial Bank	Chase Bank
7.	Savings & Loan	Middle East Bank	Consolidated Bank of Kenya	Southern Credit Banking Corporation	Victoria Commercial Bank
8.	Habib Bank Ltd.	Dubai Bank	Credit Bank	Family Bank Limited	Transnational Bank
9.	Guardian Bank		Paramount Universal		Fidelity Commercial Bank
10			First Community Bank		

Source: Central Bank of Kenya

28th December, 2008