

**THE EFFECTIVENESS OF A RISK BASED SUPERVISION MODEL AS ADOPTED
BY THE KENYAN CAPITAL MARKET**

By

LILLIAN CHEBET MISOI

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DECLARATION AND APPROVAL

DECLARATION

The research project is my own work and to the best of my knowledge it has not been presented for the award of a degree in any university or college. No part of this work should be reproduced without the author's consent or that of Kabarak University.

Lillian Chebet Misoi

GMB/NBE/1201/09/12

Date

APPROVAL

This research project has been submitted for examination with our approval as Kabarak University Supervisors.

Mr. Firtz Mulumia Gerald Oketch

Date

Dr. Irene Asienga

Date

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ABSTRACT

Risk based supervision (RBS) is a structured approach that concentrates on the identification of potential risks faced by firms and the assessment of the financial and operational factors in place to minimize and mitigate those risks. Risk Based Supervision aims at promoting transparency, providing early warning signals and encouraging the regulated entities to self-evaluate their position at regular intervals. Little research has been done on the effect of RBS as adopted by the capital market so far. It was with this background that this study tried to cover the effectiveness of a risk-based approach model as adopted by the capital markets of Kenya. This study adopted descriptive research design. A census was conducted on all compliance officers at the Capital Market Authority and all the compliance and risk managers of 17 Stock brokerage firms in Nairobi, Kenya. This translated to a total of 38 respondents. A self-administered semi-structured questionnaire was administered to the respondents, thereafter data capture, cleaning and analysis was done using SPSS-V19 and Microsoft Excel. Reporting of the study findings was done in form of tables, graphs, pie charts and narrative texts. The findings of the study concluded that despite independence of RBS successes from the level of its implementation at 95% precision, the impact of RBS on various aspects including risk profiling, corporate governance, inspections, success of identification and model identification was noted and appreciated by the respondents' firms. Further, it was established that the number of days and staff needed for inspections are dependent on Risk Based Approach (RBA) at 95% level of precision with a positive correlation. The findings also revealed that there exists a general dissatisfaction with the impact of RBS on the training cost of the supervisors at the Capital Market Authority. It was recommended that there's need to associate the implementation RBS and its successes by committing firms towards implementation of RBS; exploring further the potentiality of RBA towards reducing the number of days and staff needed for inspections and need for more efforts to ensure that the training cost for the supervisors is made as lean as possible through the implementation of the RBA.

Keywords: Effectiveness, Risk-based Supervision Model, Capital Markets.

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LIST OF ABBREVIATIONS

CMA	-	Capital Market Authority
COSO	-	Committee of sponsoring organizations
EASRA	-	East African Securities Regulatory Authorities
FSA	-	Financial Services Authority
FSB	-	Financial Services Board
IOPS	-	International Organization for Pension Schemes
IOPS	-	International Organization of pension supervisors
MAS	-	Monetary Authority Singapore
IOSCO	-	International Organization of Securities Commissions
MBA	-	Master of Business Administration
PFSA	-	Polish Financial Supervision Authority
RBA	-	Risk Based Approach
RBS	-	Risk-Based Supervision
SC	-	Securities Commission
SEC	-	Securities and Exchange Commission
SPSS	-	Statistical package for the Social Sciences

DEFINITION OF TERMS

The definition of different risks exposed to by the intermediaries in the capital markets have been described as follows IOSCO (2009)

Systemic risk: Is the risk of collapse of an entire financial system or entire market, as opposed to risk associated with any one individual entity, group or component of a system that can be contained therein without harming the entire system.

Market risk: The risk that the investment will not be as profitable as the investor expected because of fluctuations in the market. Market risk involves the risk that prices or rates will adversely change due to economic/environmental forces.

Credit risk: The risk of loss resulting from counterparty default on borrowings and during settlement. Market intermediaries are faced with credit risk whenever they enter into loan agreements or extend credit, by for example buying shares on behalf of a client without making sufficient arrangement for funds.

Gaurav S (2014) describes a **Securities Market** as an economic institute within which takes place the sale and purchase transactions of securities between subjects of the economy, on the basis of demand and supply.

For the purpose of this study “The Regulator” refers to Capital Markets Authority (CMA) and it regulates the intermediaries licensed to operate in the capital market regime.

CHAPTER ONE

INTRODUCTION

This chapter covered the background of the study, the statement of the problem, the purpose of the study, the objectives, the research questions, and the justification of the study, the scope and the limitations.

1.1 Background

Securities markets have experienced considerable growth in recent years in terms of product development, innovations and advances in use of technology. Further, there has also been an increase in cross-border and cross-asset interactions. This has resulted into high exposures to various forms of risks which threaten the achievement of business objectives. It is in this regard that it is necessary for institutions to have a systematic approach in managing risks as it ensures that appropriate systems and structures are in place to increase the likelihood of achieving the business objectives (Reserve Bank of Malawi, 2012).

Risk based supervision (RBS) is defined as a structured approach that concentrates on the identification of potential risks faced by firms and the assessment of the financial and operational factors in place to minimize and mitigate those risks (IOPS, 2012). It aims at promoting transparency, providing early warning signals and encouraging the regulated entities to self-evaluate their position at regular intervals. In Risk Based Supervision, regulatory and supervisory resources are deployed in a more effective and efficient manner as it takes into consideration the risk profile of the individual financial institutions. On-site inspections are undertaken based on the level posed by each type of risk posed by the intermediary (IOSCO, 2009).

Risk based approach (RBA) to supervision as adopted by the capital markets employs methods such as sensitivity analysis, stress testing and other risk monitoring techniques to uniquely identify the likelihood of a negative occurrence of an event, its impact on the systems and processes of risk assessment and management as well as ways of minimizing or completely eliminating the occurrence of the same event. This therefore forms an important check on why the capital market and its intermediaries require to implement risk management systems to enable them manage all risks effectively and the use of a risk based approach model serves the reason (IOSCO 2009).

Risk Based Supervision is regarded to have evolved during the 1990s. However, its origins can be traced back to experiences coming out of a number of financial crises that occurred in the 1980s. Traditionally, supervisors focused on rule based system that relied on review of transactions and historical performance, covering all operational areas regardless of any demonstrated or probable weakness. Results were evaluated with little emphasis on systemic controls or risk management. Subsequently it was realized that Rule Based Supervision may not be an effective tool for preventing financial crisis. This realization has led to the emergence of the risk-based approach to supervision where emphasis is placed on the process rather than on individual transactions and market intermediary's treatment is based on its risk profile and ability to manage the risk (Thompson, 2008).

International Organization of pension supervisors (IOPS) toolkit for Risk based pension Supervision describes Risk based Supervision (RBS) as a structured approach which focuses on the identification of potential risks faced by financial institutions and the assessment of the financial and operational factors in place to manage and mitigate those risks. This process is crucial as it allows the supervisory authority to direct its resources towards the issues and institutions which pose the greatest threat. Given their limited resources, all supervisory authorities have to focus their attention in some way. What Risk based Supervision does is to make this process explicit rather than implicit, formal rather than ad hoc. Under Risk based Supervision, supervisory resources and attention follow identified risks in a forward looking fashion - rather than, for example, concentrating on institutions which have broken certain rules, or by following up on complaints. The key to Risk based Supervision is identifying where problems are going to occur in the future and not just looking at where they have happened in the past. Current compliance with regulatory requirements-although necessary- might not be sufficient to provide evidence that risks are being kept at or below a satisfactory level. Hence RBS is not just about checking that entities are complying with rules, but seeing if the way in which they are doing so means those risks are being mitigated properly and will continue to be so in future (IOPS, 2008).

The use of risk-based methods, which originated primarily in the supervision of banks, has increasingly been extended to other types of financial intermediaries, including pension funds,

insurers and now the capital market. "The trend toward risk-based supervision of stockbrokers is closely associated with major initiatives aimed at enhancing market integrity and investor confidence" (CMA, 2014).

Moving towards RBS is often accompanied by the deregulation of strict rules and a move towards a more 'prudential' approach to regulation, applying more high level principles. Yet RBS can be applied whether a rules-based or a principles-based form of regulation is in place (Smith, 2007).

The East African Communities secretariat through the Financial Sector Development Regionalization Project commissioned a regional study on Risk based Supervision. The study sought to assess what gaps or weaknesses existed in relation to the adoption of a harmonized risk based supervisory approach. It was concluded that while Kenya had the majority of elements of a risk based supervisory approach in place, Tanzania and Uganda were at the inception stage and Rwanda had yet to embark on adoption of risk based supervision (Cadogan Financial Ltd & Associates, 2013). The report further established that lack of predictable and sustainable funding of all the regulators – whether by government or by the market – will make application of risk based supervision very difficult, since such supervision is predicated on allocation of known and usually scarce resources to those firms presenting the highest risk to regulatory objectives; if funding is not predictable, resources will be unpredictable and allocation difficult (Cadogan Financial Ltd & Associates, 2013)

On a survey report (IOSCO, 2009), supervisors in various jurisdictions have traditionally focused on compliance based system that relied on review of transactions and historical performance, covering all operational areas regardless of any demonstrated or probable weakness. Results were evaluated with little emphasis on systemic controls or risk management. Subsequently it was realized that Compliance Based Supervision may not be an effective tool for preventing financial crisis. This realization has led to the emergence of the risk-based approach to supervision where emphasis is placed on the process rather than on individual transactions and market intermediary's treatment is based on its risk profile and ability to manage the risk.

Hafeman, (2009) states the process of applying RBS framework involves establishing the objectives of the supervisory authority and consequently its risk focus: a risk-based approach requires the supervisory authority itself to be explicit about what types of risk it will focus its

resources on and which areas and institutions to which it will allocate less priority. This will be shaped by the authority's budget and resources, its statutory objectives, the nature of the regulatory scheme and the risk appetite of the supervisory authority.

1.2 A review of Risk based approach in several jurisdictions

In Thailand, Securities and Exchange Commission (SEC) uses Risk based approach to assess the overall risks of the intermediaries licensed and is based on the potential impact of the intermediary's business operations to the market. They have adopted a structured risk-based approach that takes into account both qualitative and quantitative factors. China on the other hand adopted a risk-based approach for supervision of market intermediaries and focuses more on compliance and prudence. The liquidity risk, market risk, financial risk, operational risk and compliance risk are considered to assess an intermediary. A risk rating system exists that rates intermediaries according to their risk-management capacities and divided into descending categories that totals 11 ranks. In Malaysia, the Securities Commission (SC) risk based supervision framework has been provided and enables the intermediaries to evaluate their risk exposures and introduce or improve upon necessary risk mitigating controls and to monitor their risk positions (IOSCO, 2009).

In South Africa, the Financial Services Board (FSB) has a risk-based supervision framework which measures the risk areas in the entities it regulates against the regulatory objectives. The Financial Services Board (FSB) evaluates institution's risk profile, financial condition, risk management process and compliance with applicable legislation; hence if the impact rating is high, then an intervention is proceeds (IOSCO, 2009). In Nigeria the Securities and Exchange Commission (SEC) is in the process of adopting a risk based supervision approach whose emphasis is placed on both systemic and non-systemic risks (Nigeria Sun, 2012).

The East African Securities Regulatory Authorities (EASRA), 2013 saw it necessary to implemented the risk-based supervision to aid in early identification of emerging risks and provision of a consistent framework for risk evaluation to develop sound regional capital markets.

In Kenya, the Capital Market adopted the risk based supervision in 2009 where it focused on risky operators for efficient use of resources. This followed by a requirement for the intermediaries to appoint a compliance officer. A risk profiling of the intermediaries was also adopted (Soft Kenya, 2010). The motivations achieved in adopting the Risk based Supervision (RBS) include improving the supervisory effectiveness by using scarce resources more efficiently, to address international organisational concerns especially when establishing an integrated financial authority, to adapt to changes in the overseen industry, to gain legitimacy following supervisory failure, to meet requirements imposed by legislation and to adapt to the changing nature of financial risks themselves as these become more complex and are increasingly transferred to individuals (Brunner *et al*, 2008),

Hafeman, 2009 states the process of applying RBS framework involves establishing the objectives of the supervisory authority and consequently its risk focus: a risk-based approach requires the supervisory authority itself to be explicit about what types of risk it will focus its resources on and which areas and institutions to which it will allocate less priority. This will be shaped by the authority's budget and resources, its statutory objectives, the nature of the regulatory scheme and the risk appetite of the supervisory authority. The adoption of the risk-based compels financial institutions to be more risk-oriented and to continuously strengthen their risk management systems (Guerrero, 2005).

1.3 Risks faced by capital market industry

The guidelines provided by (IOSCO, 2008) on the identification of risks faced by the Capital market industry bears the supervisory authority's objectives. This is important to the regulator as it helps to identify what risks could lead to a failure of its objectives and how these risks are correlated. The major risks that the market intermediaries face and for the purpose of this case study -stock brokers are the following;

Table 1 Types of risks faced by market intermediaries, IOSCO 2009

RISKS		
Portfolio risk	Entity risks	Systematic risks
Market risk	Operational risks	Risk of negative spillover effects from other industries
Counterparty risk	Legal and Regulatory risk	Risk of economic downturn
Liquidity risk		

Securities markets risk outlook report (IOSCO research department and IOSCO's committee 2014), outlines the process of implementing measures to manage and mitigate systemic risk that started with introduction of new principles to ensure that markets are fair, efficient and transparent therefore guiding securities regulators in conjunction with other financial market regulators on the implementation of the same.

Most jurisdictions have established some form of systems to provide for risk-based supervision and majority of them apply risk assessment methodologies in order to determine the appropriate degree of supervisory attention with respect to the licensed firms (IOSCO, 2009).

Risk Based Supervision aims at promoting transparency, providing early warning signals and encouraging the regulated entities to self-evaluate their position at regular intervals (Organization for Economic Co-operation and Development [OECD], 2005). The risk profile of each intermediary determines the supervisory programme comprising of off-site surveillance, targeted on-site inspections, prudential meetings and external audits and regulatory actions as warranted. A process of Risk Based Supervision involves continuous monitoring and evaluation of the risk profiles of market intermediaries in relation to their business strategies and exposures.

1.4 Risk base supervision as a tool for identifying risks.

This requires implementation of an effective and comprehensive risk management system that includes a proper organizational structure; policies; procedures; and limits for credit, market, and operational risk. Institutions are required to have an integrated approach to risk management that covers the risks internally as well as externally. (Brunner et al, 2008) establishes that the capacity of the institution to identify, measure, and manage all the relevant risks, would be reflected in the presence of a sound internal architecture of risk management that includes a reasonable risk

management strategy, evidence of Board involvement in risk management, the existence of risk management functions performed by competent, independent, and accountable professionals, and proper internal controls. When a central risk function coordinates the identification of risk, the value of risk management rises intensely (John J. Hampton, 2014).

1.5 Statement of the problem

Research has been done on risk based supervision. An example of two unpublished masters project done are; Ruth (2012) an MBA student in University of Nairobi did a research on the impact of Risk Based Supervision on the financial performance of pension funds in Kenya while Joseph (2009) an MBA student in University of Nairobi as well did a research on the effective role of the risk based supervision as adopted by the central bank of Kenya. The research gap presented on the latter research was on the effect of risk based supervision (RBS) on financial institutions whose business involves other activities regulated by other financial regulators. This included a bank which is engaged in stock brokerage activities whereas such business segments are regulated by the Capital Markets Authority (CMA) and not the Central Bank. The grey area presented was the effect of risk based supervision on the capital market's intermediaries. Little research has been done on the effect of Risk Based Supervision (RBS) as adopted by the capital market so far. It is with this background that this study tries to cover the effectiveness of a risk-based approach model as adopted by the capital markets of Kenya.

1.6 Main Objective

To determine the effectiveness of a risk based supervision model as adopted by the Kenyan capital market

1.7 Specific Objectives

- i. To establish if the level of implementation of RBS has impacted on the hitherto success or failure in supervision since its adoption by the Kenyan Capital Market.
- ii. To determine if the adoption of RBS has helped the Capital Markets Authority in reducing the number of days to be carried out doing inspections thus leading to effective approach to supervision.

- iii. To establish if the adoption of RBS has assisted the Capital Markets Authority in reducing the number of staff going out for inspections.
- iv. To determine if the adoption of RBS has led the Capital Markets Authority to increase the number of trained staff involved in RBS.

1.8 Research questions

- i. Has the level of implementation of RBS lead to success or failure in supervision since the adoption of RBS by the Capital Markets Authority?
- ii. In what way has the adoption of RBS helped the Capital Markets Authority in reducing the number of days to be carried out doing inspections thus leading to effective approach to supervision?
- iii. How has the adoption of RBS assisted the Capital Markets Authority in reducing the number of staff going out for inspections?
- iv. Has the adoption of RBS lead the Capital Markets Authority to increase the number of trained staff involved in RBS?

1.9 Significance of the study

This study sought to expand knowledge on the effectiveness of a risk based supervision model to the capital markets, the government and the stakeholders. The researcher anticipated that the study will look to justify the importance of risk based supervision approach and thus encourage the market participants in using the model effectively to address any potential risks. Further the study looked to identify the knowledge gaps and provide suggestions for further research.

1.10 Scope of the study.

This research covered the effect of the risk-based supervisory framework on the intermediaries licensed with CMA together with all the compliance staff of the CMA with a need to establish the effectiveness of a risk based supervision model as adopted by the Kenyan capital market. The study was covered from year 2009 to the year 2014.

1.11 Limitations and delimitations of the study.

The main limitation to the study was the fact that respondents failed to comply with the stipulated time for filling up the questionnaire. Besides, others partially filled the questionnaire prompting the researcher to plead further with them to complete answers.

On delimitation, the research was limited to the understanding of various risks posed in the capital market sector to which the population under study might be having different levels of understanding and interpreting risks. The choice of the study to be conducted within Nairobi stems from the fact that most Stockbrokerage firms are located in therein.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter looked at the various models that have been used to address risks as far as supervision is concerned as well as theories that concentrate on risk based supervision.

2.2 Theoretical review

Risk is the likelihood that an event can occur and negatively affect the achievement of certain objectives. Risk management on the other hand is the process that attempts manage the uncertainty that influences the achievement of those objectives with the aim of reaching those objectives and thus creating value for organizations in which it is applied (COSO, 2004). Risk-based supervision can be described as an approach to supervision where the degree of supervisory attention is dependent on the risk profile of the institution and where the resources of the supervisors are focused on the institutions that present the greatest risk to the financial system. The examiners would mainly concentrate their efforts on areas that pose the greatest risk to the institution (Guerrero, 2005).

The shift towards risk based supervisory can be traced to the development of early warnings systems for the banks. The first system was the Capacity adequacy, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risks (CAMELS) system for risk rating adopted by the United States in the 1980's. In 1988, the Basel Committee on banking supervision implemented Basel 1 which was the capital adequacy accord that provided a risk-based supervision framework for assessing the capital adequacy of banks to cover credit risks. During the 1990s, a number of supervisors implemented the risk assessment and early warning signs with the Financial Service Authority (FSA) introducing the Rate model (Gregory & R, 2008). Subsequently, the Arrow risk Model was developed which helped in focusing of the high risk areas (Augustino, 2009).

A risk-based system will also deliver a systematic and structured means of assessing different types of risk, guaranteeing that idiosyncratic approaches to firm supervision are evaded and that potential risks are analyzed for the higher impact firms using a common framework. This will allow judgments about potential risk in different firms to be made using a common risk typology

on a common scale, (Central Bank of Ireland, 2010). The network theory has been used in risk assessment. The theory is backed by the representation of a network that reduces a system to an abstract structure.

2.2.1 FSA Arrow Model

The Financial Sector Authority (FSA) Arrow model is one of the models used in risk assessment and management. The main objectives of the model is to understand the firm's business and the market in which it operates; to assess the risks posed by the firm and to set the supervisory framework for the future (Jon & S, 2010). Supervisory review allows supervisors to evaluate an institution's assessment of its own risks and assure themselves that the processes are robust. Supervisors will have the opportunity to assess whether an institution understands its risk profile and is sufficiently capitalized against its risks. This pillar will encourage adoption of risk-focused internal audits, strengthened management information systems, and the development of risk management units. The broad elements of the supervisory toolkit include the regulations issued by the supervisor, including direct regulations focused on the risk management architecture and risk management procedures, a risk-based capital rule (in the environments where this is relevant), and a risk-scoring model that guides supervisory strategies and procedures. In addition, the supervisory agency will organize itself consistent with the requirements of these elements by establishing some units focused on managing the relationships with the supervised entities and other technical units more specialized in the measurement and analysis of different type of risks (Brunner et al, 2008).

2.2.2 The Craft model

Risk profiling as used on the Craft model seeks to identify and address potential risks that may affect the safety and soundness of a firm or the transparency and fair-dealing of its market conduct practices. This therefore implies that the model aims to reduce the risk of failure of institutions or of inappropriate behavior through increased supervision and is articulated through the impact and risk model relative to other institutions. The assessment of both the impact and risk ratings helps distinguish those institutions that may pose a higher threat to the achievement of the supervisory objectives (Jon & S, 2010). The Monetary Authority of Singapore (MAS) uses the Craft model to evaluate the risk of an institution. In this model, a combination of assessment of both risk and impact distinguishing those institutions that may pose higher threat to the

achievement of the supervisory objectives. The regulators use this model in assessing the risk presented together with the impact in identifying the most common risk the firm is likely going to be exposed to.

2.2.3 Network Theory

The network theory has been identified mostly with systemic risk. The biggest negative surprise that followed Lehman Brothers default was its effect on money market funds when one fund resulted to losing the value of investor's money hence the sector was hit by a wave of redemptions that powered instability in credit markets. Financial crisis thus shows how important it is to look at the links and connections in a financial system of a firm and therefore network theory helps by looking at how resilient the system is to contagion and what are the major triggers and channels of contagion (Fratzscher, 2011). Networks allow one to look beyond the immediate point of impact of a shock hence network analysis provides useful guide for analysis of systemic risk in stock brokerage firms.

2.2.4 Swam Theory

The Swarm theory which articulates that a single ant or bee isn't smart but their colonies are has been used in risk identification process. The story of the Airbus, an article on emerging risk strategies written by John, (2014); The Airbus which had a power8 program to deal with exposures affecting the launch of the 800-passenger A380 omitted the airport risk. A team of MBA candidates tackled the A380 as an Enterprise risk Management risk identification project and thus 2 students discovered airports' absence of readiness to handle huge aircraft. The rest of the students immediately "swarmed" by adding the risk to their own list. It is thus important that the regulators should incorporate the swarm theory into its efforts to improve risk identification. The collective wisdom of their "colonies" will give positive results in risk identification.

2.3 Empirical review

2.3.1 Implementation levels on the adoption of the risk based supervision

Market discipline ensures that the market is provided with sufficient information to allow it to undertake its own assessment of an institution's risks to areas that are highly risky. It is intended to strengthen incentives for improved risk management through greater transparency. This should allow market participants to better understand the risks inherent in each institution and

ultimately support institutions that are well managed at the expense of those that are poorly managed (Brunner et al, 2008).

Anthony, (2011) describes on how proactive regulatory creates a competitive advantage. He stresses the fact that technology is increasingly providing means for regulators to proactively address risks therefore calling for a risk-based approach to incentivize intermediaries to manage their own risks. Regulators are expected to be capable to assess the intermediary's capacity to manage their risks and determine the extent to which this could have an impact on the regulatory objectives of financial stability, investor protection and the upholding of market integrity. Regulators have to make subjective judgments based on the outcomes of these assessments on where and how to prioritize supervisory efforts.

The board and senior management play the central role in maintaining adequate risk oversight of the institution's business activities. They are responsible for implementing processes and controls to measure and manage a firm's risks, for ensuring its compliance with regulatory requirements, and for its dealing with customers and counterparties in a clear and fairly manner. The craft model was used to check on the quality of corporate governance, internal controls and risk management of the institution and the institution's dealings with its customers and counterparties with an aim of embracing a robust system which commensurate with the institution's type, scale and complexity of business and their related risks. Training of the supervisory and compliance staff in developing the breadth and depth of the expertise and experience of its risk and products was found necessary as helped to maintain a high degree of confidence in the quality of supervision (Jon & S, 2010)

2.3.2 Risk Based Supervision in reducing the timeframe for conducting inspections.

Supervisors or Inspectors perform Risk Based Supervision by looking at all the material risks that are faced by a financial institution and how it controls those risks. The supervisors would assess the riskiness of a firm by assessing the policies, processes and systems of the financial institution under review. In order to implement Risk Based Supervision effectively, supervisory agencies have some preconditions that must be met. These includes a review of the state of the

law, the structure of the supervisory agency, guidance and training for supervisors, a risk rating model and a measurement tool (Tony, 2009)

The outcomes of all the components of the risk assessment are summarized in a risk model which summarizes each of the risk and control the factors measured and condenses these into an overall risk assessment. More sophisticated models will assign weights to risks to reflect the fact that the implication of individual risks may diverge between financial institutions therefore reducing the overall time used for conducting inspections (Tony, 2009)

2.3.3 Risk Based Supervision in reducing the number of supervisors carrying out inspections

Different participants have different roles in risk management process. The board has the oversight role to give direction and ensure that management is following the direction that it has set while the management is to implement strategies and overall direction of the board. The External auditor will ensure that the firm presents fair and true view of its operations to the stakeholders. All these roles are essential to effective risk management and assessment of how the firm is controlling risks. While carrying out inspections under rule based, all these roles could only be supervised under guiding laws and rules rather than principles aided by the risk based supervision model. The risk based model would be used in offsite and onsite inspections therefore reducing the number of supervisors for each inspection to be carried out (Tony, 2009)

2.3.4 Risk Based Supervision and associated costs in training

To deal with the possibility of inconsistency further, regulators need to pay keen attention to initial and ongoing trainings and the provision of detailed guidance to supervisors. The guidance needs to extend to the attributes for each part of the control environment since supervisors and industry players will be making a transition from the objective rule based compliance assessments to more subjective risk assessment therefore ongoing and follow up training is essential. The supervisors are expected to perform a detailed analysis and comment formally on each risk identified. They are also expected to justify the ratings that have been assigned to each risk and control (Tony, 2009).

In Bulgaria, a special emphasis is placed on the regular training of regulatory staff on subjects related to financial theory and practice, risk management, relevant legal basis and information technologies which goes hand in hand with training costs (IOSCO, 2009).

2.4 Protection of both the financial system and the consumers of financial services

Market intermediaries have incentives to take risk that maximize profit and increase shareholders' return on invested equity. This gives rise to creation of risky portfolios of assets and over leveraging, which in turn becomes a concern for regulators in the absence of appropriate risk management and control systems. To create a balance there is a significant need to appropriately regulate financial services providers to safeguard the interests of investors and other creditors of the financial system.

Prudential supervision accordingly fulfils a vital role of ensuring that institutions are financially sound and in a position to discharge their obligations to the investors. There is an over-arching goal of building investor confidence in the financial system as a whole and strengthening the economic foundation of the country. Risk Based Supervision generally further refines this role of prudential supervision of the financial services sector.

In an environment where supervisors are faced with the scenario of regulated financial institutions becoming more complex and internationally active, and the international financial markets becoming more competitive, volatile and interconnected, regulatory and supervisory techniques cannot remain static. These must evolve to remain effective and this evolution has resulted in the risk based approach to supervision. Need for risk-based supervision therefore, primarily emerged due to the regulatory objective to protect both the financial system and the consumers of financial services.

According to (IOSCO, 2009) RBS is meant to lead to a better profiling of intermediary's risk position and its possible impact on the market; adjust the scope and intensity of supervision in relation to the level of risk exposed; integrated supervisory regimes-efficient use / effective allocation of scarce resources; a more pro-active approach; and promote confidence in the system as a whole.

2.5 Research gaps and summary.

According to (Reserve Bank of Malawi, 2012) gaps were identified that demonstrate the need for enhancing risk management in financial institutions. There exist inadequate risk management policies and procedures, particularly for systemic risks. Joseph (2009) an MBA student in University of Nairobi did an unpublished research on the effective role of the risk based supervision as adopted by the central bank of Kenya where the gap presented was on the effect of risk based supervision (RBS) on financial institutions whose business involves other activities regulated by other financial regulators. In this case a bank with a stock brokerage arm is regulated by the Capital Markets Authority on that particular area. This research therefore aimed to assess the impact by objective i, ii, iii and IV. Risk-based supervision, can improve regulator's efficiency and effectiveness of regulatory processes by optimum utilization of supervisory resources. It also promotes a proactive compliance culture among market intermediaries. Development of sufficient regulatory capacity that ensures its effective implementation is however, a challenge to this supervisory approach. With all its challenges, the successful implementation of a focused, proactive and efficient risk-based supervisory methodology that is able to evolve as the markets further develop (dynamic in character), is imperative in achieving the regulatory objectives of capital and financial stability, the maintenance of market integrity and the protection of investors. There is need for culture to embed the risk based approach across the whole organization (Black, 2008).

2.6 Conceptual Framework

The focus of this study is to establish the effectiveness of risk based supervision as adopted by the Kenyan capital market. A conceptual framework guides a study since it consists of ideas synthesized for the purpose of organizing thinking and providing study direction Chinn and Kramer, (1999). This study will be guided by a conceptual framework as illustrated in figure shown on the next page.

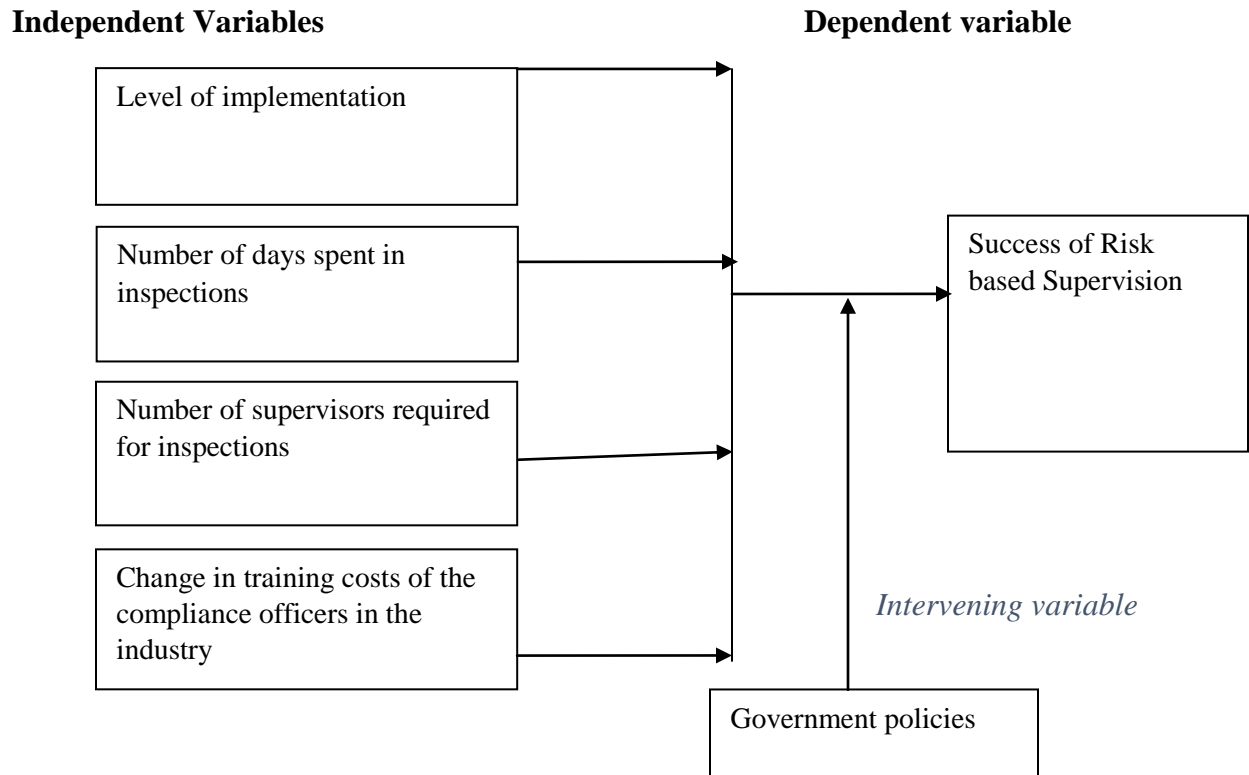


Figure 1 Conceptual Framework, Source: Author (2014)

2.6.1 Dependent Variable

In this study the dependent variable is success of RBS (Risk Based Supervision) whose results will be assessed by comparing the performance of the regulator in achieving its supervisory objectives before and after the adoption.

2.6.2 Independent Variables

For the purpose of this study, the selected independent variables are four which includes level of implementation, number of days spent in inspections, number of supervisors required for inspections and lastly the change in training costs of compliance officers. This research will look into how these independent variables vary and to what extent is their impact as far as the risk based supervision was adapted by the Capital Market of Kenya.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used basing on the research design, target population, data collection procedures, data collection instruments, reliability and validity of instruments and data analysis.

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the conceptual structure within which research will be conducted; it constitutes the blue print for data collection, measurement and analysis (Kothari, 2004).

In this study, descriptive research design was adopted because the sampled elements and the variables that were being studied were simply being observed as they were without making any attempt to control or manipulate them. The same design was used by the Polish Financial Supervision Authority on their paper “Towards risk based supervision” (PFSA, 2008).

3.3 Target Population

A census was conducted on this study seeing it took into account the population of all compliance officers at the capital market authority and all the compliance and risk managers of all the 17 Stock brokerage firms in Nairobi, Kenya, out of a total of 21 firms as indicated in Appendix 3. This brings to a total of 38 respondents (Population of 34 at the stock brokerage firms and 4 at the CMA). Kothari (2005) indicates that where members of a target population are considered, it becomes more representative of the population of interest. It satisfies the requirements of efficiency, representatives, reliability and other factors like size of the population and of the questionnaire considering the time available for the completion of the study. The 4 brokerage firms that did not form part of this study were either under statutory management or newly licensed. Under statutory management was Discount securities and Ngenye Kariuki while those that were newly licensed in the course of this year were Equity Investment Bank and CBA Capital Limited.

3.4 Data Collection Instrument

Primary sources of data was used in the study. The primary data consisted of a number of items in structured questionnaire that were administered to the respondents. The appropriateness of using questionnaires as an instrument was due to the fact that it facilitated collection of data from a large sample within the given time and free from bias of the researcher since answers to the questions will be in the respondents' own words as suggested by (Kothari, 2004).

The questionnaires were delivered to the respondents' place of work where each respondent was given a week for filling upon which it was collected. The questionnaire was accompanied with a covering letter explaining the purpose of the study, assuring on confidentiality and use of the study results.

3.5 Validity and Reliability of Research Instruments.

Mugenda & Mugenda,(2003) suggests that reliability is the degree to which instruments yield consistent results of data after research. To ensure the validity and reliability of the questionnaire used for the study, even number of experts were consulted to look at the questionnaire items in relation to its ability to achieve the stated objectives of the research, level of coverage, comprehensibility, logicity and suitability for prospective respondents.

3.6 Data Collection Procedure

This is a census and the researcher sought the permission from the stock brokerage firms selected to administer the instruments after getting an introduction letter from Kabarak University. The data collection instruments were distributed to the identified population through the assistance of supervisors of various sections. They were collected after five days and edited for completeness. Before collection, the researcher counterchecked the levels of completion of the questionnaires and enquiries for any assistance in case the respondents wanted more information about filling the research instruments.

3.7 Data Analysis

According to (Mugenda & Mugenda, 2003) data analysis is the process of bringing order, structure and meaning to the mass of information collected. Data analysis methods employed will involve quantitative and qualitative procedures. Data collected from the questionnaire was

coded, edited to detect errors and omissions to enhance accuracy and precision. The data to be analyzed involved the use of both descriptive and inferential statistics to enable the researcher describe and examine the relationship between the variables. Descriptive statistics involved frequencies and percentages whereas inferential statistics involved the use of regression and chi-square analysis. These was achieved through the use of Statistical Package for Social Sciences (SPSS-V19).

Multiple regression analysis was done to test whether the regression model holds under;

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e$$

Where,

Y = Success of the RBS

X₁= Implementation level

X₂= Days spent in inspections

X₃= Supervisors required for inspections

X₄= Change in training costs

The study also sought to establish the relationship between the dependent variable (Successes of Risk Based Supervision) of the study and the independent variables Commitments to implementation of RBS, number of days to conduct an inspection, number of staff required to conduct an inspection and training costs of the compliance officers. This was done at 95% level of precision using chi-square test. The choice of Chi-square to test for independence was arrived at since the dependent and independent variables involved were categorical. The analyzed data was presented by use of bar charts, tables, graphs, narrative texts and pie charts.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings to the effectiveness of a risk based supervision model as adopted by the Kenyan capital market. All the thirty eight (38) respondents who were targeted for the study were successfully interviewed; hence a 100% response rate was achieved.

4.2 Results

4.2.1 Level of Implementation

The respondents were asked to name the risks presented in financial institutions that threatens the proper functioning of the firm based on their working experience. Majority of the respondents mentioned operational risks (72%) while 44% mentioned market risks. Others mentioned regulatory risks (32%) with credit risk, legal risks, liquidity risk mentioned by (24%) of the respondents. Reputational risk was mentioned by 20% of the respondents while systematic risk was mentioned by 12%.

The respondents were further asked to name the risks exposed by stock brokers and their impact on the firm. Ten different types of risks were mentioned with respective impacts each. These included liquidity risk, operational risk, market risk, reputational risk, systematic risk, regulatory risks, business risk, fraud risk, strategic risk and legal risk. Some of the impacts of liquidity risks included the aspect of the company becoming insolvent, failures of the company to meet its obligations as it falls due and eventually closure of the firm. Other risks and their impacts as mentioned by the respondents generally pointed out the vulnerability that the firms may be exposed to fraud leading to the loss of earnings and investors' funds, mismanagement of accounts and the risk of facing litigation charges. These findings are consistent with that by Brunner *et al*, (2008) who reiterated that market discipline allows market participants to better understand the risks inherent in each institution and ultimately support institutions that are well managed at the expense of those that are poorly managed. Such discipline was evident from the findings that had majority of the respondents rate highly the level of commitments towards implementation of RBS

On a 5 point Likert scale ranging from poor to excellent, more than half of the respondents (56%, n=21) rated the commitments put in place to ensure implementation of RBS as good (See **Figure 2**). Sixteen percent (n=6) said that the commitment is very good while 28% (n=11) gave a lower rating of fair. At 95% level of precision, commitments towards implementation of RBS and success of RBS had a Chi-square value of $\chi^2=2.846$ and a significance value of $Pr > \chi^2=0.584$. The Chi-square results confirm insignificant relationship between commitments towards implementation of RBS and its success.

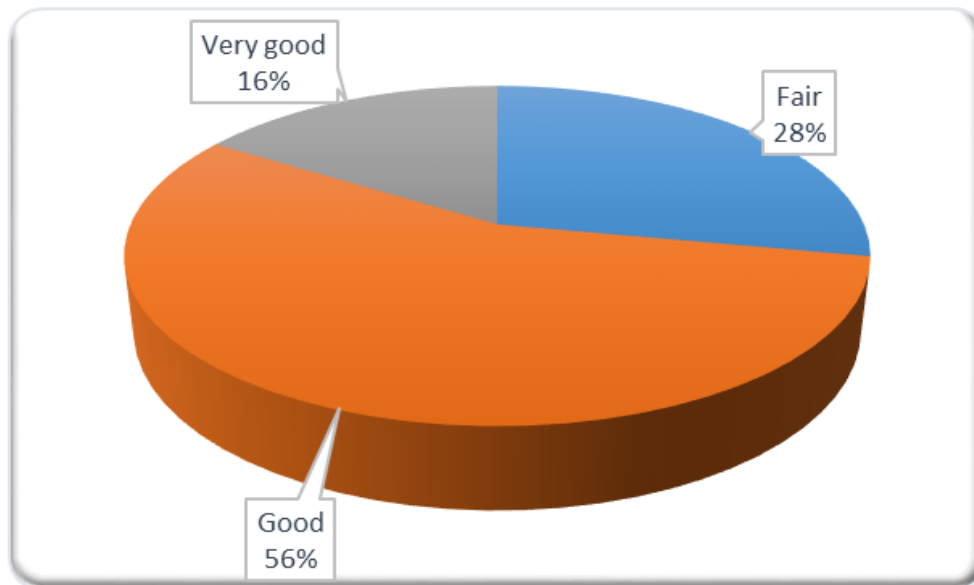


Figure 2 Rating of the commitments towards implementation of RBS, Author (2014)

Before the implementation of the RBS, the firm was most exposed to liquidity risk compared to other risks. This is evident as presented in the findings in **Table** below. More than half (72%) of the respondents either rated the exposure as high (56%) or very high (16%). Based on the Chi-Square value findings, the firms were insignificantly exposed to the following risks before RBS Credit risk (Sig. 0.313), Liquidity risk (Sig. 0.931), Operational risk (Sig. 0.308), Regulatory risk (Sig. 0.069), Legal Risk (Sig. 0.516), Reputational risk (Sig. 0.498) and Systematic risk (Sig. 0.730). However, the firm was significantly exposed to market risk before RBS (Sig. 0.001). In terms of level of exposure, the firm was most exposed to liquidity risk followed by systematic risk, then legal risk, reputational risk, credit risk, operational risk and regulatory risk.

Table 2 Level of firms exposed before RBS

	Very low (%)	Low (%)	Moderate (%)	High (%)	Very high (%)	χ^2	$Pr > \chi^2$
Market risk			56	36	8	18.043	0.001
Credit risk	4	8	16	40	28	11.592	0.313
Liquidity risk	4	4	20	56	16	3.058	0.931
Operational risk			44	52	4	4.808	0.308
Regulatory risk	8	4	28	60		11.706	0.069
Legal Risk		16	32	40	12	5.221	0.516
Reputational risk	8		52	32	8	5.364	0.498
Systematic risk	8	4	48	28	12	5.258	0.730

Source, Author (2014) i

It should be further noted that all the respondents (100%, n=38) agreed that the risk based approach has significantly helped in identification of the risks as listed in **Table** . Asked to explain further how RBA has facilitated this, the respondents generally reiterated that RBA makes it possible and easy to identify and manage various forms risks early enough.

From the Chi-Square tests, Risk Based Approach has an insignificant impact on risk profiling (Sig. 0.910), inspections (Sig. 0.909) and corporate governance (Sig. 0.345) (See **Table**). From the significance values, the impact Risk Based Supervision is insignificant on all the three aspects (risk profiling, corporate governance, inspections)

Table 3 Impact of RBS on risk profiling, corporate governance and Inspections

	No affect	Minor affect	Neutral	Moderate affect	Major affect	χ^2	$Pr > \chi^2$
Risk profiling	0%	4%	0%	48%	48%	0.998	0.910
Corporate governance	0%	4%	20%	52%	24%	6.748	0.345
Inspections	0%	4%	0%	40%	56%	1.004	0.909

Source, Author (2014) ii

Further, based on success of identification, the respondents rated the effect of RBS on following aspects as presented in **Table** below. The impact of RBS has been insignificant on knowing client process (Sig. 0.220), corporate governance (Sig. 0.276) and financials (Sig. 0.180). However, its ability to identify operational processes has been significantly evident (Sig. 0.018).

Table 4 Success of identification

	No effect	Minor effect	Neutral	Moderate effect	Major effect	χ^2	Pr> χ^2
Know your client process	4%	20%	12%	44%	20%	10.682	0.220
Corporate governance	4%	32%	16%	36%	12%	9.845	0.276
Operational processes	0%	12%	24%	44%	20%	15.270	0.018
Financials	0%	12%	20%	40%	28%	8.889	0.180

Source, Author (2014) iii

Also, based on model in identification, RBS has had an insignificant impact in identifying client process (Sig. 0.944), corporate governance (Sig. 0.796), financials (Sig. 0.196) and operational processes (Sig. 0.187) (See *Table 5*)

Table 5 model in identification

	No effect	Minor effect	Neutral	Moderate effect	Major effect	χ^2	Pr> χ^2
Know your client process	4%	8%	8%	28%	52%	2.836	0.944
Corporate governance	4%	28%	32%	32%	4%	4.632	0.796
Operational processes	0%	4%	8%	40%	48%	8.776	0.187
Financials	0%	0%	12%	36%	52%	6.045	0.196

Source, Author (2014) iv

These findings reveal that firms note and appreciate the positive changes brought about with the implementation of RBA. Similarly, according to Anthony, (2011) proactive regulatory creates a competitive advantage. Anthony, (2011) thus calls a risk-based approach to incentivize intermediaries to manage risks.

4.2.2 Number of Days Spent In Inspections

The study further sought to establish the number of days it took before and after RBS to conduct an inspection, offsite preparation and risk profiling (See Figure 3). Before RBS implementation, majority of the respondents (72%, n=28) mentioned that it took either one week or more to conduct offsite preparation while 60% (n=23) mentioned that it took a similar period to conduct an inspection. After the implementation of the RBS, it is evident from the findings that there was a tremendous improvement in the number of days it took to conduct risk profiling and inspection. Majority (80%, n=30) mentioned that it took 3 days or less to conduct risk profiling while 92% (n=35) mentioned that it took a similar period to conduct inspection.

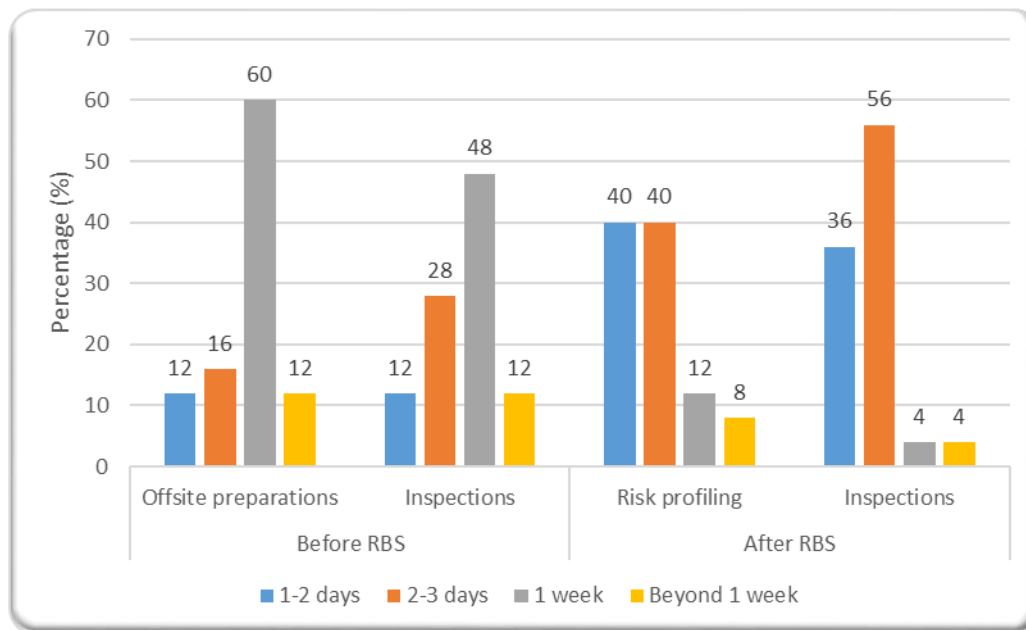


Figure 3 Number of Days for Inspection, Offsite Preparation and Risk Profiling, Source, Author (2014)

The outcomes of all the components of the risk assessment are summarized in a risk model which summarizes each of the risk and control the factors measured and condenses these into an overall risk assessment. This finding is in agreement with that by Tony, (2009) who noted that more sophisticated models will assign weights to risks to reflect the fact that the implication of individual risks may diverge between financial institutions therefore reducing the overall time used for conducting inspections.

Based on reducing the number of days, the respondents were asked to rate the number of days it took to conduct an inspection (see Figure 4). Majority (68%, n=26) stated that there was either a moderate or major improvement on the number of days. However, 1 in every 5 respondents (20%, n=8) mentioned that the improvement was minor while 4% (n=2) mentioned that there was no improvement.

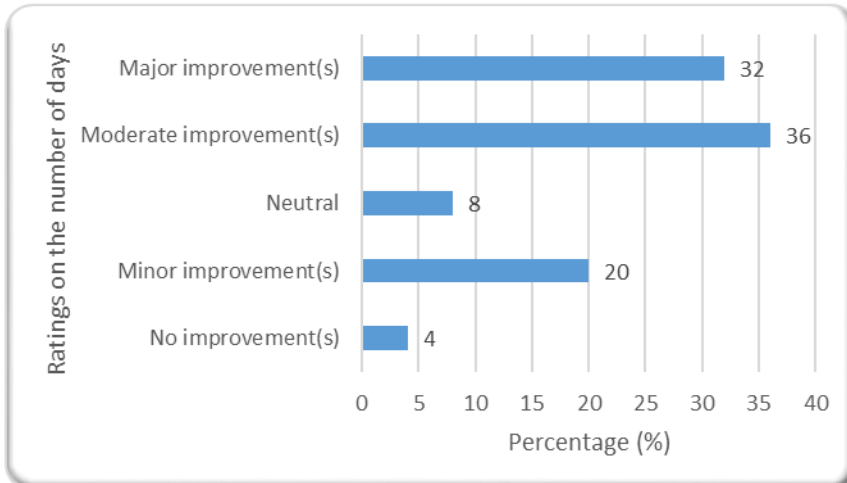


Figure 4 Rating on the number of days. Source, Author (2014)

4.2.3 Number of Inspection Supervisors

Likewise, the study sought to establish the number of supervisors it took to conduct offsite preparation, risk profiling and inspection before and after the introduction of RBS (See *Figure 5*). It should be noted that before the introduction of RBS, 20% (n=8) and 24% (n=9) of offsite preparation and inspections took 4 and more supervisors to conduct, respectively. However, after the introduction, it took not more than 3 supervisors to conduct risk profiling and inspection. Majority of the cases took one or two days to conduct risk profiling (40% (n=15) and 52% (n=20) respectively) and inspection (4% (n=2) and 88% (n=33) respectively) after the introduction of RBS.

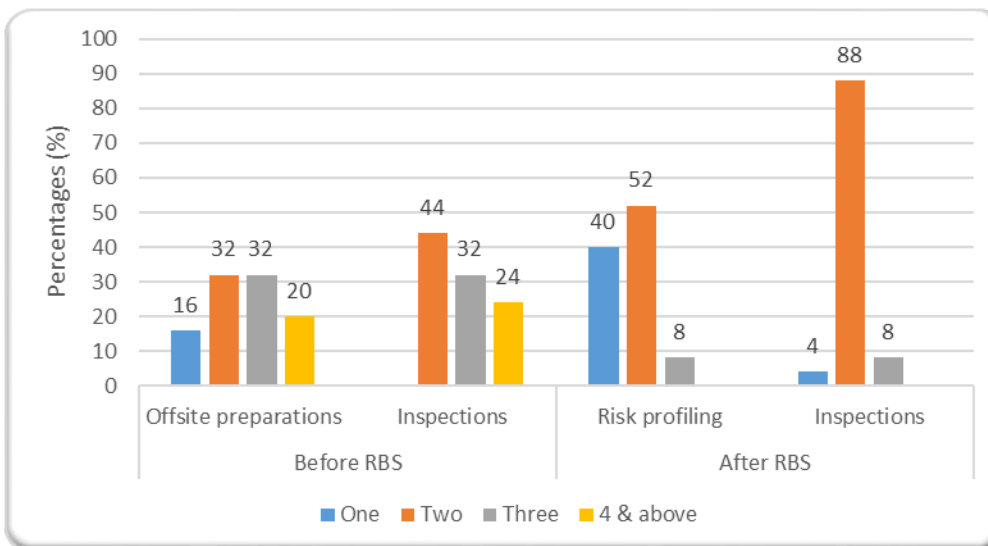


Figure 5 Number of Supervisors. Source, Author (2014)

In terms of reducing the number of staff required to conduct an inspection, nearly half of the respondents noted improvements that they termed as moderate (24%, n=9) and major (24%, n=9) (See **Figure 6**). However, 20% (n=8) termed the rating as minor while 8% (n=3) noted to improvement.

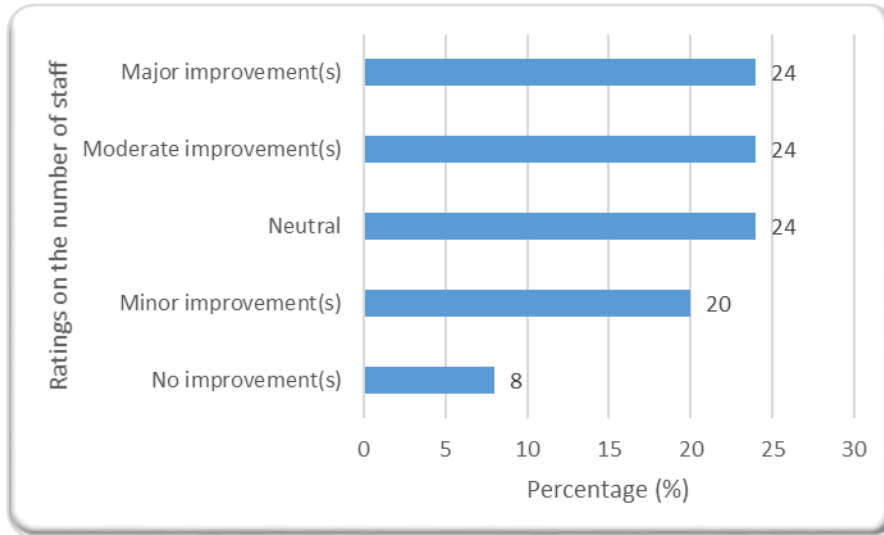


Figure 6 Ratings on the number of staff. Source, Author (2014)

These findings are in agreement with the study by Tony, (2009) who noted that risk based model used in offsite and onsite inspections reduces the number of supervisors for each inspection to be carried out.

4.2.4 Training Costs

Likewise, the study sought to establish the impact of RBS in terms of reducing the training costs of the compliance officers (See **Figure 7**). It should be noted that more than half of the respondents (64%, n=24) stated that there were either minor (52%, n=20) or no improvements (12%, n=5) of any kind. Only 16% (n=6) noted major (4%, n=2) and moderate improvement (12%, n=5).

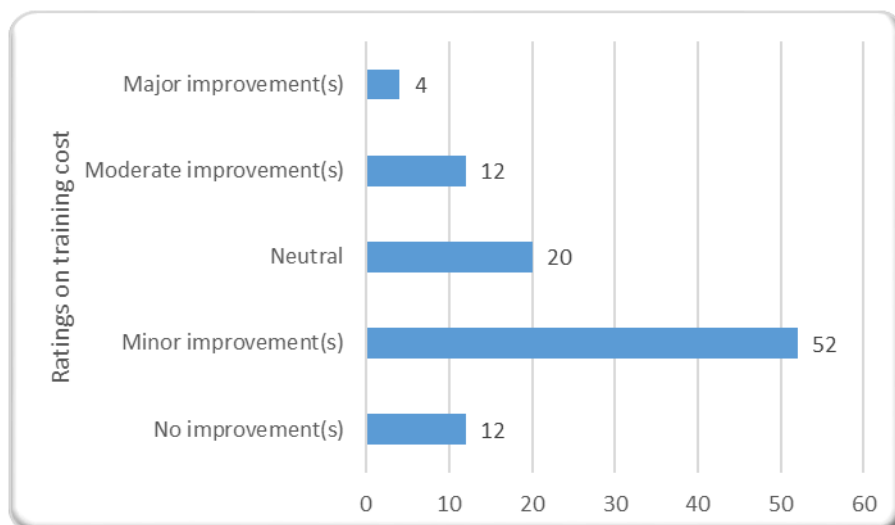


Figure 7 Ratings on training cost. Source, Author (2014)

The potentiality of RBA has therefore not been fully exploited towards reducing the training cost of the supervisors. According to IOSCO, (2009), a special emphasis should be placed on the regular training of regulatory staff on subjects related to financial theory and practice, risk management, relevant legal basis and information technologies which goes hand in hand with training costs.

4.2.5 Successes of Risk Based Supervision

The study findings also established that the successes of risk based supervision on Kenyan Capital Market are rated by the majority as good (64%, n=24). Twelve percent (n=5) think that the successes are very good whereas 24% (n=9) rated the successes are fair (See *Figure 8*). The responses to the successes of risk based supervision had a standard Error of Mean of 0.120, a standard Deviation of 0.600 and a variance of 0.360.

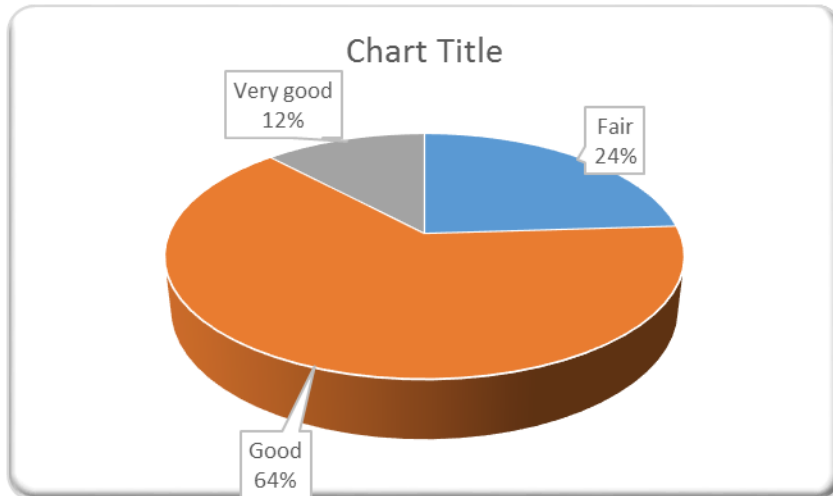


Figure 8 Successes of Risk Based Supervision. Source, Author (2014)

4.3 Regression Analysis

From the findings on the regression analysis as presented in *Table 6*, the following regression equation was adopted.

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e$$

$$Y = 1.093 + 0.178x_1 + 0.185x_2 + 0.199x_3 - 0.033x_4 + 0.478$$

The r square value of, $r = 0.589$, indicates that when all the variables are combined, the multiple linear regression model could explain for approximately 58.9% of the variations in successes of RBS.

Whereby;

X₁: Commitments to implementation of RBS

X₂: Number of days to conduct an inspection

X₃: Number of staff required to conduct an inspection

X₄: Training costs of the compliance officers

Table 6 Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<i>(Constant)</i>	1.093	.478		2.289	.033
Commitments to implementation of RBS	.178	.143	.198	1.246	.227
Number of days to conduct an inspection	.185	.094	.382	1.961	.064
Number of staff required to conduct an inspection	.199	.091	.426	2.173	.042
Training costs of the compliance officers	-.033	.091	-.055	-.363	.720
<i>a. Dependent Variable: Successes of risk based supervision</i>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.767 ^a	.589	.506	.422	

Source, Author (2014) v

The findings as shown in **Table 6** indicates that all the independent variables (except Training costs of the compliance officers) are positively correlated with the success of RBS. Training costs of the compliance officers has a negative correlation with RBS success (-0.033). However, the correlation is only significant between the number of staff required to conduct an inspection (p-value 0.042) and RBS success.

4.4 Test of Association (Chi-Square test)

The study also sought to establish the relationship between the dependent variable (Successes of Risk Based Supervision) of the study and the independent variables Commitments to implementation of RBS, number of days to conduct an inspection, number of staff required to conduct an inspection and training costs of the compliance officers (See **Table 7**). This was done at 95% level of precision.

The following null hypotheses were tested:

H₀: Commitments to implementation of RBS influences the success of RBS

H₀: Number of days to conduct an inspection influences the success of RBS

H₀: Number of staff required to conduct an inspection influences the success of RBS

H₀: Training costs of the compliance officers influences the success of RBS

Table 7 Pearson Chi-Square Tests

Pearson Chi-Square Tests		
		Successes of RB supervision
Commitments to implementation of RBS	Chi-square	2.846
	df	4
	Sig.	0.584
Number of days to conduct an inspection	Chi-square	15.658
	df	8
	Sig.	0.048*
Number of staff required to conduct an inspection	Chi-square	20.642
	df	8
	Sig.	0.008*
Training costs of the compliance officers	Chi-square	7.399
	df	8
	Sig.	0.494

**. The Chi-square statistic is significant at the .05 level.*

Source, Author (2014) vi

A significant relationship was established between the successes of Risk Based Supervision and number of days to conduct an inspection (p-value 0.048) and number of staff required to conduct an inspection (p-value 0.008). This is because the two variables had p-values less than $\alpha = 0.05$ thus the null hypothesis was rejected. It was therefore concluded that: number of days to conduct an inspection and number of staff required to conduct an inspection have significant influence on the success of RBS at 95% level of precision.

However, commitments to implementation of RBS (p-value 0.584) and training costs of the compliance officers (p-value 0.494) relate to RBS have an insignificant relationship with RBS success. This is because the two variables had p-values greater than $\alpha = 0.05$ thus the null hypothesis was accepted. It was therefore concluded that: commitments to implementation of RBS and training costs of the compliance officers relate to successes of RBS by chance at 95% level of precision

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the discussion to the findings of the study, conclusion and recommendations based on the results.

5.2 Summary

5.2.1 Level of Implementation

It was noted that all the respondents (100%) agreed that the risk based approach has significantly helped in identification of the risks. Asked to explain further the explanations generally reiterated the fact that RBA makes it possible and easy to identify and manage various forms risks early enough. 56% rated the commitments as good while 16% said it's very good.

The study also sought to establish the impact of RBA on various aspects. Risk Based Approach has had insignificant impact on risk profiling (Sig. 0.910), inspections (Sig. 0.909) and corporate governance (Sig. 0.345). Further, based on success of identification, RBS has insignificant impact on making it possible to know client process (Sig. 0.220), corporate governance (Sig. 0.276) and financials (Sig. 0.180). However, its ability to identify operational processes has been significant (Sig. 0.018). Also, based on model in identification, the findings established that RBS has had an insignificant impact in identifying client process (Sig. 0.944), corporate governance (Sig. 0.796), financials (Sig. 0.196) and operational processes (Sig. 0.187).

5.2.2 Number of Days Spent In Inspections

Before RBS implementation, majority of the respondents (72%) mentioned that it took either one week or more to conduct offsite preparation while 60% mentioned that it took a similar period to conduct an inspection. After the implementation of the RBS, 80% mentioned that it took 3 days or less to conduct risk profiling while 92% mentioned that it took a similar period to conduct inspection. It is evident from the findings that there was a tremendous improvement in the number of days it took to conduct risk profiling and inspection. Further, at 95% level of confidence a significant relationship was established between the successes of Risk Based Supervision and number of days to conduct an inspection (p-value 0.048).

5.2.3 Number of Inspection Supervisors

Likewise, it was noted that before the introduction of RBS, 20% and 24% of offsite preparation and inspections took 4 or more supervisors to conduct, respectively. However, after the introduction, it took not more than 3 supervisors to conduct risk profiling and inspection. Majority of the cases took one or two days to conduct risk profiling (40% and 52% respectively) and inspection (4% and 88% respectively) after the introduction of RBS. At 95% level of confidence a significant relationship was established between the successes of Risk Based Supervision and number of supervisors needed to conduct an inspection (p-value 0.008).

5.2.4 Training Costs

Likewise, the study sought to establish the impact of RBS in terms of reducing the training costs of the compliance officers. More than half of the respondents (64%) stated that there were either minor (52%) or no improvements (12%) of any kind. Only 16% noted major (4%) and moderate improvement (12%). From these findings, it is evident that there exists a general dissatisfaction with the impact of RBA on the training cost of the supervisors. Actually, at 95% level of confidence it was noted that training costs of the compliance officers (p-value 0.494) is independent of RBA success.

5.3 Conclusion

Despite independence of RBA successes from the level of its implementation at 95% precision, the impact of RBA on various aspects including risk profiling, corporate governance, inspections, success of identification and model identification was noted and appreciated by the respondents/ firms. The number of days and staff needed for inspections are dependent on RBA at 95% level of precision with a positive correlation. There exists a general dissatisfaction with the impact of RBA on the training cost of the supervisors at the Capital Market Authority.

5.4 Recommendations

There's need to associate the implementation of RBS and its successes by getting the firms to pay more attention and commitment towards adopting the RBA in all aspects of the business. There is also a need to explore further the potentiality of RBA towards reducing the number of days and staff needed for inspections as they are dependent on RBS and have a positive

correlation with each other. Furthermore efforts should be put in place to ensure that the training cost for the supervisors is made as lean as possible through the implementation of the RBS.

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APPENDICES

Appendix I: Study Questionnaires

SECTION A: LEVEL OF IMPLEMENTATION

1) According to your working experience, what risks are presented in financial institutions that threaten the proper functioning of your firm?

2) Please name the known risks exposed by stock brokers and their impact

3) How would you rate the commitments put in place to ensure implementation of RBS?

- i. Poor
- ii. Fair
- iii. Good
- iv. Very good
- v. Excellent

4) What was the level of firms exposed to the following risks before RBS in a rating of 1 to 5, 5 being the highest exposure level.

RISK FACTOR	1 (Very low)	2 (Low)	3 (Moderate)	4 (High)	5 (Very high)
Market risk					
Credit risk					
Liquidity risk					
Operational risk					
Regulatory risk					
Legal Risk					
Reputational risk					

Systematic risk					
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5) Has the Risk Based approach helped in identifying the above risks?

i. Yes

ii. No

6) If Yes please explain further

7) How would you rate the effects of RBS on following aspects

Effect of RBS On	No effect	Minor effect	Neutral	Moderate effect	Major effect
Risk profiling					
Corporate governance					
Inspections					

8) Based on success of risk identification, how would you rate the following aspects before the adoption of RBS?

Areas Prone To Major Risks	No effect	Minor effect	Neutral	Moderate effect	Major effect
Know your client process					
Corporate governance					
Operational processes					
Financials					

9) Based on success of risk identification, how would you rate the effect of RBS after its adoption?

Areas Prone To Major Risks	No effect	Minor effect	Neutral	Moderate effect	Major effect
Know your client process					
Corporate governance					
Operational processes					
Financials					

SECTION B: NUMBER OF DAYS SPENT IN INSPECTIONS

10) Before RBS how many days did it take to conduct an inspection?

Days	1-2	2-3	1 week	Beyond 1 week
Offsite preparations				
Inspections				

11) After implementation of RBS how many days does it take to conduct an inspection?

Days	1-2	2-3	1 week	Beyond 1 week
Risk profiling				
Inspections				

12) In terms of reducing the number of days it takes to conduct an inspection, how would you rate the effect of risk based supervision after its introduction compared to before?

- i. No improvement(s)
- ii. Minor improvement(s)

- iii. Neutral
- iv. Moderate improvement(s)
- v. Major improvement(s)

SECTION C: NUMBER OF INSPECTION SUPERVISORS

13) Before RBS how many staffs were required to conduct an inspection?

Days	1	2	3	4and above
Offsite preparations				
Inspections				

14) After implementation of RBS how many staffs were required to conduct an inspection?

Days	1	2	3	4and above
Risk profiling				
Inspections				

15) In terms of reducing the number of staff required to conduct an inspection, how would you rate the effect of risk based supervision after its introduction compared to before?

- i. No improvement(s)
- ii. Minor improvement(s)
- iii. Neutral
- iv. Moderate improvement(s)
- v. Major improvement(s)

SECTION D: TRAINING COSTS

16) In terms of reducing the training costs of the compliance officers, how would you rate the effect of risk based supervision after its introduction compared to before?

- i. Major increase
- ii. Minor increase

- iii. Neutral
- iv. Minor decrease
- v. Major decrease

SECTION E: SUCCESSES OF RISK BASED SUPERVISION (Dependent Variable)

17) How would you rate the successes of risk based supervision Kenyan capital market?

- i. Poor
- ii. Fair
- iii. Good
- iv. Very good
- v. Excellent

Appendix II: List of Member Firms NSE 2014

<p>Dyer & Blair Investment Bank Ltd Pension Towers, 10th floor, P.O. Box 45396 00100 Tel: 3240000/2227803/4/5 Fax: 2218633 Email: shares@dyerandblair.com Url: www.dyerandblair.com</p>	<p>Francis Drummond & Company Limited Hughes Building, 2nd floor, P.O. Box 45465 00100 Tel: 318690/318689 Fax: 2223061 Email: info@drummond.co.ke Url: www.drummond.co.ke</p>	<p>Ngenye Kariuki & Co. Ltd. (Under Statutory Management) Corner House, 8th floor, P. O. Box 12185-00400 Tel: 224333/2220052/2220141 Fax: 2217199/241825 Email: ngenyekari@wananchi.com Url: www.ngenyestockbrokers.co.ke</p>
<p>Suntra Investment Bank Ltd Nation Centre, 7th Floor, P.O. Box 74016-00200 Tel: 2870000/247530/2223330/2211846/0724-257024, 0733-222216 Fax: 2224327 Email: info@suntra.co.ke Url: www.suntra.co.ke</p>	<p>Old Mutual Securities Ltd IPS Building, 6th Floor, P. O. Box 50338- 00200 Tel: 2241379, 2241408 Fax: 2241392 Email: info.oms@oldmutualkenya.com Url: www.oldmutual.co.ke</p>	<p>SBG Securities Ltd CfC Stanbic Centre, 58 Westlands Road, P. O. Box 47198 – 00100 Tel: 3638900 Fax: 3752950 Email: sbgs@stanbic.com Url: www.sbgsecurities.co.ke</p>
<p>Kingdom Securities Ltd Co-operative Bank House, 5th Floor, P.O. Box 48231 00100 Tel: 3276940/3276256/3276154 Fax: 3276156 Email: info@kingdomsecurities.co.ke</p>	<p>Afrika Investment Bank Ltd Finance House, 9th Floor, P.O. Box 11019-00100 Tel: 2212206 / 2210178/2212989//343639 Fax: 2210500 Email: info@afrikainvestmentbank.com Url: www.afrikainvestmentbank.com</p>	<p>ABC Capital Ltd IPS Building, 5th floor, P.O. Box 34137-00100 Tel: 2246036/2245971 Fax: 2245971 Email: headoffice@abccapital.co.ke</p>
<p>Sterling Capital Ltd Barclays Plaza, 11th Floor, Loita Street, P.O. Box 45080- 00100 Tel: 2213914/244077/0723153219/0734219146 Fax: 2218261 Email: info@sterlingstocks.com Url: www.sterlingstocks.com</p>	<p>ApexAfrica Capital Ltd Rehani House, 4th Floor, P.O. Box 43676- 00100 Tel: 242170/2220517 Fax: 2215554 Email: invest@apexafrica.com Url: www.apexafrica.com</p>	<p>Faida Investment Bank Ltd Crawford Business park, Ground Floor, State House Road, P. O. Box 45236-00100 Tel: +254-20-7606026-35 Fax: 2243814 Email: info@fib.co.ke Url: www.fib.co.ke</p>

<p>NIC Securities Limited Ground Floor, NIC House, Masaba Road, P.O.Box 63046 – 00200 Tel: 2888 444 / 0711 041 444 Fax: 2888 544 Email: info@nic-capital.com</p>	<p>Standard Investment Bank Ltd ICEA Building, 16th floor, P. O. Box 13714- 00800 Tel: 2228963/2228967/2228969 Fax: 240297 Email: info@sib.co.ke</p>	<p>Kestrel Capital (EA) Limited ICEA Building, 5th floor, P.O. Box 40005-00100 Tel: 251758/2251893,2251815,2250082 Fax: 2243264 Email: info@kestrelcapital.com Url: www.kestrelcapital.com</p>
<p>Discount Securities Ltd. (Under Statutory management) Nairobi, P O Box 42489-00100 Tel: 2219552/38, 2773000 Fax: 2230987 Email: discount@dsl.co.ke Url: www.dsl.co.ke</p>	<p>African Alliance Kenya Investment Bank Ltd 1st Floor,Trans-national Plaza, P.O. Box 27639 - 00506 Tel: 2762610/ 2762628 / 2762000/ 2762557/ 0733333140 Fax: 2731162 Email: securities@africanalliance.co.ke Url: www.africanalliance.com</p>	<p>Renaissance Capital (Kenya) Ltd Purshottam Place ,6th Floor, Westland , Chiromo Road, P.O BOX 40560-00100 Tel: 3682000/3754422 Fax: 3632339 Email: info@rencap.com Url: www.rencap.com</p>
<p>Genghis Capital Ltd Prudential Building, 5th Floor, P.O Box 1670-00100 Tel: 8008561, 2337535/36, 2373984/968/969 Fax: 246334 Email: info@gencap.co.ke</p>	<p>CBA Capital Limited CBA Centre Mara Ragati Road Junction, Upper Hill, P.O. Box 30437-00100 Tel: 0202884000/+254 20 2884000 / 365, 0711056365 Fax: 0202734616</p>	<p>Equity Investment Bank Limited Equity Centre, Hospital Road, Upper Hill, P.O Box 75104 – 00200 Tel: +254-20-2262477 Mobile: +254-732-112477/+254-711-026477 Fax: +254 20 2711439 Url: www.equitybankgroup.com</p>