THE EFFECT OF RISK BASED SUPERVISION ON THE FINANCIAL PERFORMANCE OF PENSION SCHEMES IN KENYA

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DECLARATION

I declare that this Research Project is my original work and has not been submitted for an award of a degree in any other University for examination/academic purposes.

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DEDICATION

This research project is dedicated to my dear husband Moses for his love, encouragement and prayers. To my parents Mr.Symon Makau Alloise and Mrs. Magdalene Makau for all the support they have accorded me in my academic endeavors.

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ABSTRACT

An increasing number of African countries have recently initiated reform of their pension and social protection systems. Over the last decade, Kenya has also undertaken a major reform of parts of its pension system, specifically in the areas of risk management and pension schemes' supervision. Whereas the primary motivation for reform of pension systems in many countries worldwide has been to address the growing fiscal burden of pension liabilities, in Kenya the major driver for reform was to strengthen the governance, management and effectiveness of the existing pensions system.

This study sought to establish the effect of risk based supervision on financial performance of pension schemes in Kenya. The study was done on Kenyan pension funds at aggregate level using quarterly data on fund value as well as the asset classes in which the scheme funds were invested. The data was from between June 2008 through June 2013. Multiple regression model was used to determine the relationship between financial performance before and after the implementation of risk based supervision.

The findings of this research project have indicated that the implementation of risk based supervision has had a significant positive effect on the financial performance of pension in Kenya. The study concludes by indicating that the financial performance of pension funds in Kenya was better in the period after which risk based supervision was adopted and implemented and providing recommendations on the policy reforms.

TABLE OF CONTENTS

ABBREVIATIONS

DB   Defined Benefit Scheme

DC   Defined Contribution Scheme

NSSF   National Social Security Fund

OECD   Organization for Economic Co-operation and Development

PAYG   Pay-As-You-Go

RBA   Retirement Benefits Authority

RBS   Risk Based Supervision

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The pension industry in Kenya has grown rapidly over the last decade with pension schemes being ranked amongst the largest investors in both the money market and capital market. However, the capacity for pension schemes to generate sufficient resources to ensure an adequate income replacement for their members remains a concern. Many countries share an increasing awareness of the financial difficulties public retirement programs are facing with a growing list of beneficiary populations. Consequently the subject has become an important area of academic research and policy reform.

Under the Vision 2030 flagship project in Kenya, the financial services sector has been identified as a critical player in the economy and is expected to enable transformation of the economy through mobilization of required savings. The vision of financial services sector is to have "A vibrant and globally competitive financial sector driving high-levels of savings and financing Kenya's investment needs". It is the role of this sector to mobilize adequate savings to finance the envisaged increase in investments. The long-term objectives for the financial sector under Kenya's Vision 2030 include: improved access and deepening of financial services and products for a much larger number of Kenyan households and small businesses; mobilizing additional savings to support higher investment rates; greater efficiency in the delivery of financial services; enhanced stability in the system to ensure that all banks and other deposit-taking financial institutions can safely handle the public's savings; creating a better financial environment that will encourage stakeholder involvement in ways that allow for an attractive return on investment and protection of depositors' interest; and to make Kenya one of the ranked financial centres in "emerging markets" by 2030.

The government of Kenya noted that raising domestic savings would require comprehensive pension reform to raise National Social Security Fund (NSSF) coverage and include additional 0.6 million adults in contributory pension schemes, increasing deposits in the banking sector by attracting additional 2 million customers, extending informal finance to additional 2 million Kenyans, and driving efficiency gains in the banking sector. The financial sector flagship projects for the period 2008 to 2012, therefore, included among others developing and executing comprehensive model for pension reform.

1.1.1 Pension Reforms

An increasing number of African countries have recently initiated reform of their pension and social protection systems. Over the last decade, Kenya has also undertaken a major reform of parts of its pension system. Whereas the primary motivation for reform of pension systems in many countries worldwide has been to address the growing fiscal burden of pension liabilities, in Kenya the major driver for reform was to strengthen the governance, management and effectiveness of the existing pensions system (Raichura,2008).

Before the establishment of the Retirement Benefits Authority (RBA) in Kenya, the retirement benefits sector had little effective regulation and supervision. The interests of retirement scheme members and their beneficiaries were not sufficiently protected. There was concern about the design and financial viability of a number of pension schemes in the country. Poor administration and investment of scheme funds with particular concerns on concentrations of investment, particularly in property was observed across almost all pension schemes. Risk of mismanagement and misappropriation of members' funds was prevalent. Also, there was lack of disclosure and accountability across all pension schemes, including the National Social Security Fund (NSSF).

The enactment of the Retirement Benefits Act of 1997 and the establishment of the RBA in 2000 marked the beginning of a regulated, organized and more responsible retirement benefits sector in Kenya. Through the regulatory framework and policies, new legislation

has since been founded on the following tenets: improvement of protection of member's benefits and improvement of pension schemes' governance.

Based on the results of the reform to date, there is now a better appreciation on the part of policymakers of the potential of a well-developed pension system to contribute to economic growth and development of the country's capital markets and reform of the pension system is acknowledged as one of the key policy measures to achieving the country's Vision 2030.

The law has since placed greater emphasis on protection of members' benefits with key measures to safeguard members' benefits. The roles of scheme sponsors, trustees and professional advisors were clearly spelt out. The legislation guided the composition and election/nomination of trustees to include member participation of at least one-third of a board of trustees (later increased to at least 50% for defined contribution schemes).

1.1.2 Financial Performance of Pension Schemes

From a financial perspective, pension scheme performance can be assessed by evaluating the increase in income streams. The main sources of funding for pension schemes are the contributions received. Increases in contributions arise when there is an increase in scheme membership, upward adjustments in salaries or changes in rules relating to contribution rates. The other source of income is the net returns from the investment of these contributions. The net returns will increase where economic factors are favorable and where prudent investment decisions are made to diversify risks. An increase in income and reduction of expenses will lead to increase of the fund value. It is the increase in fund value that is used to determine the overall financial performance of a scheme. Pension schemes whose financial performance is healthy will generally be able to safeguard and grow members funds thereby be able to meet financial liabilities to members who retire (Muingo, 2007).

1.1.3 Risk Based Supervision and Financial Performance of Pension Schemes

Risk based regulation can lead to better performance through improved performance measurement and accountability as it reveals the sources of success and failure in regulatory decision making and evaluation can feed back into improvements to future decisions (Peterson and Fenslin, 2011). This approach may require more information to make decisions, but thus may achieve better decisions based on a more complete assessment of their consequences (Weiner, 2010). Efficient pension fund governance and risk management improves performance of the fund and creates trust among the stake holders (Stewart, 2009). Therefore, with the adoption of RBS, it is therefore expected that the financial performance of pension funds will improve.

The main effects that regulation might have over financial institutions includes the ability to enhance growth and increase the scale of operations, improvement of financial performance, strengthening of financial practices, encouragement of good governance, improvement of control and reporting procedures, among others (Carrasco, 2006)

1.1.4 Pension Schemes in Kenya

1.1.4.1 Risk-Based Supervision

Risk Based Supervision demonstrates the benefits of moving away from an approach based on strict compliance, specific rules, and quantitative controls towards an approach that puts more emphasis on the identification and management of relevant risks. For a long time, regulators within the financial sector have used a rule based system and more or less relied on financial analysis using ratios as a tool of supervision. Subsequently, it has been realized that relying on financial ratios alone may not be an effective tool for preventing financial crisis in the pension schemes. This has led to the emergence of the risk based approach to supervision which is aimed at promoting transparency, providing early warning signals and encouraging the regulated entities to self-evaluate their position at regular intervals (Odera, 2010)

RBA, through the Risk-Based guideline no. 2 in 2010, issued guideline, in accordance with section 55(3) of the Retirement Benefits Act, on the implementation of risk based supervision for better governance and administration of all retirement benefits schemes in

Kenya. The goal is to measure the solvency of DB schemes and the investment risk of DC schemes, applying a risk score to each scheme which then determines the supervisory response. Pension schemes were required to take note of the processes which would be applied by the RBA in implementing risk based supervision. They were further required to fill truthfully and accurately the interrogatories which will provide the basic information for assessment of the pension scheme's risk level. The interrogatories will then be filled annually by all schemes as a statutory requirement.

1.1.4.2 Corporate Governance and Board Composition

Prudent management of the retirement schemes is one of the pillars of corporate governance and directly affects the performance of pension schemes. Pension fund governance has featured in many discussions by the Organisation for Economic Co-operation and Development (OECD) over the last decade. Good governance has been cited as one of the key facets that contributes to the effective development of private pension schemes as it leads to improved investment performance and retirement benefits (Stewart & Yermo, 2008). OECD developed pension fund governance guidelines explores the governance structures and mechanisms that need to be in place to ensure good governance of pension schemes (OECD, 2009).

One of the key components on the governance structures under the pension fund guidelines is the governing body. The governing body is vested with the responsibility is to administer the pension fund and ensure the adherence to the terms of the arrangement and the protection of the best interest of plan members and beneficiaries (OECD, 2009). Trustees are persons nominated to act on behalf of pension fund members on their behalf with respect to pension scheme decision making. Under the trust form; it is the trustees who legally own the pension fund assets (OECD, 2008). Trustees must therefore, administer the trust assets in the sole interest of the plan participants, who are the beneficiaries from the investment of those assets according to the trust deed.

The pension industry in Kenya is dominated by individual trustees i.e, only about 90 out of 1300 (as at 2013) retirement schemes have corporate pension trustees. Out of the 90, 23 are Individual Pension Plans (IPP) schemes which are required by law to appoint corporate trustees (Mutuku, 2013). The Retirement Benefits Act and Regulations

stipulate that 50% of the trustees in defined contribution schemes shall be elected by members while the other 50% are selected by the sponsor. In defined benefits schemes, 2/3 of the trustees are selected by the sponsor while the other 1/3 is elected by members. The minimum number of trustees in DC is 4 while in DB is 3. The law further stipulates that the maximum number of trustees is 9 for both the DB and DC schemes and trustees are allowed to serve for a period of three years with possible re appointment.

The knowledge and understanding of the board of trustees contributes greatly to the smooth operation of a pension scheme. The complexity of a trustee's fiduciary duty has created a need for a clear understanding of their roles and responsibilities. The investment of a retirement scheme assets can be considered the single most important function of a trustee and at the same time the greatest area of exposure in case of negligent performance. Thus, in August 2011, the RBA launched the Trustee Development Programme Kenya (TDPK) to train and certify Scheme Trustees in line with Regulation 8 (c) (iii) which states that:"a scheme or a corporate trust shall have in the Board of trustees at least one member who has been vetted by the Authority to provide trust services."

1.1.4.3 Preservation of Benefits

Another major reform in the pension industry was with regards to the preservation of members' benefits. The Retirement benefits Act and subsequent regulations placed greater emphasis on protection of members' benefits through the imposition of design and viability checks, minimum funding requirements for defined benefit schemes and restrictions on adverse amendments to members' benefits. One of the key measures to safeguard members' benefits was the separation of roles between scheme sponsors, trustees and professional advisors. In particular, in-house investment and custody of scheme funds which was the norm before 1997 was no longer allowed under the Retirement Benefits Act with all schemes required to appoint external professional investment managers and custodians registered by the RBA.

Investment guidelines were set out in the new Regulations which prescribed maximum limits on the amounts that may be invested in various asset categories including property and offshore investments. These were aimed at reducing concentration of risks and achieving more diversification of assets. Other regulations to improve the protection of

member's benefits include: reduction in the period for full vesting of benefits initially from five years to three years and currently one year; compulsory preservation of a portion of benefits on leaving service before retirement; clarification on treatment of death benefits under trust based schemes; requirement for legally enforceable contribution schedules, penalties and interest on late contribution payments and criminalization of non-remittance of employee contributions deducted from pay; prescribed time period within which benefit payments to be processed (30 days) and provision for interest on late payments; protection of members' benefits on winding ups and liquidation of schemes or scheme sponsors.

1.1.4.4 Financial Reforms in the Retirement Benefits Industry

Until 1997, the pension industry in Kenya was virtually unregulated. Only a few regulations relevant to retirement benefits were scattered in the Income Tax Act and the Trustees Act which governed the industry. There were no specific regulations on investments, other than that exempting all those schemes registered with income tax from the withholding tax imposed on investment income.

Through the Retirement Benefits Act (1997) and subsequent regulations of 2000, the investment guidelines of pension funds were came into force. The core purpose of constituting the Retirement Benefits Act and Retirement Benefits Regulations was to deal with the problems that the industry was facing at the time. All existing and new pension schemes, unless founded under a written law, were required to be established under an irrevocable trust, be distinctly separated and maintained from any other funds under the

control and influence of the sponsors, engage the services of various external professional services providers among them fund managers, custodians, auditors, actuary all who would provide necessary expert advice to trustees.

These provisions which were enshrined in the Retirement Benefits Act were intended to protect the interests of the members of a scheme by way of limiting access to the scheme funds by the employer and to protect members from any adversities i.e double jeopardy that would occur if an employer's business were to collapse thereby exposing the employees to loss of jobs as well as their entire retirement savings which would sink with the sponsors' business.

The investment regulation in Kenya requires that unless a scheme opts to invest in a guaranteed fund (deposit administration) or pooled fund, investments of pension scheme funds require to be allocated guided by a stipulated percentage limit for each asset class. Such limits can only be exceeded under special cases beyond the control of the scheme i.e: increase in market price of assets, bonus issues, and transfer of investment from one asset class to another. The duration of time that pension schemes can hold investments above the required ceilings is limited to ninety days. Pension schemes are also required to rebalance their investment portfolio within the ninety days.

The Retirement Benefits Authority does not specify the assets in which scheme should invest in but rather provides guidelines on the asset classes. The pension scheme has the discretion to select the assets that they deem best suitable to give the best optimal return in accordance to the scheme's fundamentals.

Trustees are thus obliged to set up a prudent investment policy that documents the objectives and targets of the scheme. Fund managers are then appointed by trustees to fortify the trustees' decisions by strategically allocating the pension fund based on more factual reasons prevailing in the investment market.

The investment portfolio that a fund holds at a particular time is dictated by its unique profile of the fund that is generally expressed by the following: demographic characteristics of the scheme membership, projected long-term flow of contributions, the pension scheme's liabilities as at when they fall due, and the trustees objective for real rate of return.

Legislation requires that a prudent approach of investment be adopted by pension schemes. Pension scheme investments must therefore constitute a well-diversified and well-dispersed portfolio (Chirchir, 2007).

1.2 Research Problem

The sustainability of pension schemes, which is reflected by the schemes' ability to generate sufficient revenues to meet their costs and benefit obligations both in the in the medium- and long- term, can be facilitated by related the sector reforms. In Kenya a range of regulatory and institutional reforms have been put place over the last decade to

ensure proper governance and sustainability of pension schemes in the country. The most far-reaching reform was the enactment of the Retirement Benefits Act of 1997 whose main objective was to regulate and supervise the establishment and management of retirement benefits schemes and to develop the retirement benefits sector in the country. Corporate governance has attracted much attention in the recent past, however, focus has now started to shift to pension fund governance and credibility of pension systems. Kihunyu (2005) investigated the effect of the RBA Act 2000 on the risk of investments held by pension funds in Kenya which was his main objective. His findings identified that pension funds were yet to comply with the investment guidelines with the RBA guidelines investment guidelines 2001. He also noted that investments done by pension funds were now more stable and less risky as opposed to before the regulations came into place and that the risks of variability of returns had been reduced due to the professional advice. Njuguna (2010) carried out a study on the impact of risk based supervision in the financial performance of pension funds in Kenya. The study revealed that the adoption of Risk based supervision has had a significant positive impact on the financial performance of pension funds and recommended that Risk Based Supervision should be adopted by all pension schemes in Kenya and implemented fully.

Kihanya (2005) investigated the effect of the RBA Act 2000 on the risk of investments held by pension funds in Kenya which was his main objective. His findings identified that pension funds were yet to comply with the investment guidelines with the RBA guidelines investment guidelines 2001. He also noted that investments done by pension funds were now more stable and less risky as opposed to before the regulations came into place and that the risks of variability of returns had been reduced due to the professional advice.

Despite the studies carried out on performance of pension schemes, there are a few studies that have attempted to explain the effect of risk based supervision on the financial performance of pension funds. This has resulted in the availability of very limited literature in the country. This study therefore seeks to establish the effect of risk based supervision on the financial performance of pension schemes.

1.3 Objective of the Study

To investigate the effect of risk based supervision on the financial performance of pension schemes in Kenya.

1.4 Value of the Study

The findings of this study will be helpful to the regulator as it will contribute towards the formulation of better polices that will be relevant towards supporting good corporate governance structures in pension scheme boards thereby facilitating a transparent, effective and efficient system of governing and administration of pension schemes in Kenya.

Secondly, Boards of Trustees will be able to evaluate and assess their performance of and thus apply the necessary governance structures from the findings of this study to improve financial performance of their pension schemes.

Thirdly, the findings of this study are aimed at enlightening members on how changes in the retirement benefits industry will assist in improving the performance of their scheme and safeguarding their retirement benefits and further have confidence in their trustees and the regulator.

Finally, researchers within the pension industry will also find the study resourceful as it will improve on their existing body of knowledge and provide a basis for research on the implementation of a similar methodology in other developing economies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will discuss an overview of the literature reviewed providing a basis for the study and the concepts. The chapter also highlights theories guiding the study, previous studies conducted and new developments related to the study and provide an overview of key ideas for the study.

2.2 Theories on Financial Performance

The evaluation of financial performance of pension schemes is based on a number of theories upon which the proposed study is anchored on.

2.2.1 Agency Theory

The agency theory is one of the theories that has been applied in corporate governance. It was developed by Jensen and Meckling (1976). According to the authors, corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the corporation such as the board, managers, shareholders and other stakeholders and spells out the rules and procedure for making decisions on corporate affairs. By doing this it provides the structure through which the company objectives are set and the means of attaining those objectives and to monitoring performance.

The average shareholder, for example, has no indepth knowledge of the investments industry or how to pension schemes are managed..They therefore appoint trustees who are presumed to be experts in the field to represt their needs and interests. This delegation of authority to trustees creates an agency problem i.e a problem determining managerial accountability. In delegating authority, the shareholders lose, to a large extent, their ability to influence managerial decision making. The trustees may prefer to pursue long term investment strategies for the security of retirement benefits while the shareholders

may have preferred short term investment strategies of the scheme funds for short term gains. Trustees may also increase their remuneration while the shareholders would not have preferred the same.

Good corporate governance is recognized as an important aspect of an efficient private pension system, enhancing investment performance and benefit security (Stewart and Yermo, 2008). It is beneficial to corporations and also bolsters the level of market confidence and integrity and strengthens financial stability. In addition, good corporate governance can also have positive impact to the corporation such as creating trust amongst all stakeholders, reducing the costs of overregulation, and facilitates supervision.

The agency theory is therefore relevant to this study as inappropriate governance structures and incentives of pension schemes may result in financial losses as a result of risks such as moral hazard and adverse selection. Pension schemes have grown significantly over the last decade and are consequently responsible for such a large pool of investment funds, hence many opportunities and risks dominated by the various financial instruments and financial market crises.

2.2.2 Resource Dependency Theory

This theory argues that the goal of an organization is to minimize its dependence on other organizations for the supply of scarce resources in its environment and to find ways of influencing them to make resources available. The theory focuses on the role that directors play in providing or securing essential resources to an organization through their linkages to the external environment. (Jones, 2010)

Organizations attempt to manage their transactions with the environment to ensure access to the resources they depend on. The strength of one organization's dependence on another for a particular resource is a function of the following factors: how vital the resource is to the organization's survival and the extent to which other organizations control the resource. Pension schemes, for example, need the expertise of fund managers and custodians for the purposes of investing scheme assets. Actuaries are also necessary to provide advice on the funding position of the pension schemes and insurance

companies are also important for the provision of annuities for members retiring from the scheme.

The greater the dependence of one organization on another, the weaker it is and the more powerful organization can take advantage of the dependent one if it chooses to do so. Organizations thus attempt to manage their resource dependence and control their access to scarce resources through development of strategies.

2.2.3 Independent Supervision Theory

The theory argues that creating an independent agency is a useful mechanism for balancing market and political failures. This view holds that if supervisors are independent from the government and if supervisors have proper incentives, then this reduces the likelihood that politicians will use the supervisory agency to induce financial institutions to funnel credit to favoured ends. Similarly, if the supervisory agency is independent from financial institutions and if supervisors have proper incentives, then this lowers the probability that financial institutions will capture supervisors .Thus, the independent supervision view proposes a compromise to create a supervisory agency that has the resources to overcome information asymmetries but that is sufficiently independent so that it avoids political/regulatory capture. Under these conditions, independent supervision can enhance the corporate governance of financial institutions and lower firms' external financing obstacles. (Beck et al 2003)

2.2.4 Neoclassical Theory

The classical financial theory offers a normative prescription for pension fund asset allocation that rejects the widely adopted portfolio selection theory in favour of close asset and liability matching Exley, Mehta, and Smith (2003). There has been a lot of literature on alternative methods of defined benefit (DB) pension provision much of which takes the view of scheme members, or their trustees.

The existing neoclassical economic theory in the area of DB pension schemes began with the work of Black (1980) and Tepper (1981), but draws on the pioneering work of Modigliani and Miller (1958). In the United Kingdom, Exley, Mehta, and Smith (1997) have also done some more recent work on the same theory.

According to Exley, Mehta, and Smith (2003), they give the following results: that the cost of providing a DB pension scheme is independent (to first order) of the way it is funded, or whether it is funded at all. In particular, shareholders do not gain from an equity investment policy over bond investment. Secondly, the second-order effects include the credit risk of the scheme (including the risk of discontinuance), and also the possibility of leakage of surplus to members in the form of enhanced benefits. These are affected by the asset mix of the scheme. However, these effects are all zero sum, in that a gain to members is a loss to shareholders, and vice versa. Thirdly, the other second-order effects include various frictional costs, including transaction costs, capital raising and distribution costs, fund management fees, agency costs and tax and for various reasons, most of these suggest there is a very substantial joint gain to members and shareholders from investing a pension scheme in government or corporate debt securities.

The authors conclude that neoclassical theory is a very elegant theory. The main conclusion for investment is that members and shareholders have a joint advantage in holding debt securities. However, this conclusion is at obvious variance with current practice, at least in the United Kingdom, where the majority of pension schemes hold a very significant part of their assets in equities.

2.2.5 Political / Regulatory Capture Theory

This theory argues that politicians do not maximize social welfare. They maximize their own welfare (Hamilton, et al., 1988; Buchanan & Tullock, 1962; Becker, 1983). Thus, politicians may induce financial institutions to divert the flow of credit to politically connected firms, or powerful financial institutions may "capture" politicians and induce official supervisors to act in the best interests of financial institutions rather than in the best interests of society (Becker &Stigler, 1974; Stigler, 1975; Rajan & Zingales, 2003). This political/regulatory capture theory suggests that direct official supervision of financial institutions may actually reduce the efficiency with which financial institutions allocate credit. Specifically, while powerful official supervision may increase the flow of credit to a few well-connected firms, the political/regulatory capture theory holds that powerful supervision will hurt the availability of credit to firms in general.

2.3 Determinants of Financial Performance of Pension Schemes

2.3.1 Volatility

French (2012) stated that volatility (risk) of an asset class affects the returns of an investment. Low volatility is associated with potential low returns while the vice versa is also true. The researcher advocates the asset allocation for retirement savings should consists of a wide range of assets including cash, bonds, property and equities (shares), whose overall impact will be to have a medium risk portfolio. The age profile of a pension scheme contributes to the degree of risk that a pension scheme would be willing to take in order to realize optimum returns.

2.3.2 Portfolio Weights

Block and French (2002), showed that the weighting of individual securities within the portfolio. The weight that a portfolio manager assigns to a given security in a portfolio can make a contribution to return that is just as important as the security selection and investment timing decisions. The researcher found that fund managers tended to hold consistent in constructing and maintaining equal weights in management on retirement benefits funds.

2.3.3 Interest Rates

Flannery and James (1984) in their study on the effect of interest rate changes on the common stock returns of financial institutions found that returns on equities are found to be positively correlated with interest rate changes. This implies that where retirement funds are invested in equities and the money market, both asset classes will lose if interest rates decrease and the vice versa would hold true if there was an increase in interest rates.

2.3.4 Investment Horizon

This is the planned liquidation date of the investment or substantial part of it. This concept is best supported by the yield curve. A normal yield curve (that is upward sloping) suggests that long term bonds are sold at higher yields than short term bonds. Horizon needs to be considered when investors choose between assets of various maturities, such as bonds, which pay off at specified future dates, considering that this has an impact on the financial performance of specified portfolios. (Blake et al.,1999)

2.3.5 Regulations

Investment guidelines issued by RBA to regulate the way in which trustee of retirement benefit schemes invest retirement funds. This affects financial performance of the funds as an investment manager is restricted from investing, for example, more than 70% in listed equities (OECD, 2006)

2.4 Empirical Studies

A number of studies carried out globally focus on financial performance of pension funds and have consequently produced mixed results.

In a study carried out on "The Determinants of Performance of Pension Funds in Kenya" (Oluoch, 2013), the researcher made the following conclusions: the relationship between fund value and returns among pension funds in Kenya are is not strong meaning that the improvement in the value of pension funds is not used as leverage for higher profitability. Improvement in fund values does not translate to higher returns. The relationship between assets and returns is also found to be weak leading to the conclusion that the assets acquired by the pension schemes do not translate into higher returns. If the relationship were strong then it would mean that the assets available in the pension funds are used to generate income for the generation of income for the benefit of the contributors.

In a study conducted by (Gitau, 2010) on strategies to improve pension fund efficiency in Kenya, he identified Risk based supervision as one of the key elements of pension regulation and efficiency. He also cited that pension funds in the United Kingdom are more operationally efficient compared to their OECD counterparts in Kenya as a result of adopting a risk based supervision approach that focuses more on the ability of the pension funds to abide by the trust documents and monitor their activities (Blome et al., 2007). In a communicative validation of his empirical findings using a focus group of 24 pension fund trustees to clarify the non-significant relationships among most of the investigated relationships, he sought to find out why the risk variable performed so poorly. The focus group identified that the respondents suggested that there were no guidelines relating to

risk management for Kenyan pension funds only a liberal discretion is granted to fund managers.

A study carried out in 2009 on 34 banks on the effectiveness and challenges facing the implementation of RBS as adopted by the central bank of Kenya identified that RBS 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 techniques and criteria to avoid supervisory risk of failure to assess the risks accurately and timely (Barth et al 2002). The results from his research indicated that bank supervisors considered the risk based methodology to have improved evaluation of risks among financial institutions, followed by a reduction in costs and early identification of emerging risks in that order whereas improved reporting of focus assessment of financial institution was not much of an important benefit. However, he also identified various challenges during the implementation process. in his study ,he found out that the challenge of competing demand for scarce resources was the most prevalent followed by competence in human resources and change in orientation of management thinking. The study also revealed that the highest costs were incurred in the training of staff and acquisition of information technology infrastructure (Momanyi, 2009).

Dan´ıelsson et al. (2002) studied the impact of risk based supervision on a financial institution's preference for alternative risk management systems. They modelled the bank as a principal–agent relation between a bank's board of directors (principal) and a dedicated risk manager (agent), where the bank was subjected to risk regulation. They considered two alternative categories of risk management systems, one with fine risk monitoring and the other with coarse risk monitoring. These systems were based on the IRB and standard approaches, respectively. They then reached three main results. First, in the absence of regulatory supervision, financial institutions prefer the higher quality fine system, if the direct costs of such a system are sufficiently low. Second, the addition of regulation may cause the financial institutions to reverse this choice, i.e. financial risk regulation provides incentives for banks to implement a lower quality risk management system than they would in the absence of regulation. Finally, when the supervisor decides

to affect the implementation of the system, he affects asset volatility and hence introduces procyclicality.

A study on adoption and implementation of RBS in Denmark Pension Regulatory Authority (Danish Financial Supervisory Authority, 2004), observed that a 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 generation is very crucial. This comes as 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.

In Chile, the superitendencia de Bancos institutions Finanieras (SBF) the banking authority, adopted RBS as a methodology of supervising banking institutions in the year 2000. The SBF adopted RBS methodology anchored on the Canadian model. The model emphasised on the solvency of the banking institutions and market discipline. In 2005, SBF conducted a survey to determine the benefits and the challenges and whether the methodology of RBS achieved its intended objectives in supervising banks and micro finance institutions in Chile. The survey noted a huge increase in costs for the year 2000/2001. These costs were attributed to training of its bank supervision teams and consultancy fees levied. A significant proportion of the costs were also related to acquisition of new infrastructure. The IT infrastructure enabled Chilean Banking authority to collate and analyse filed bank returns in a timely fashion. The capital expenditures caused a massive budgetary distortion for SBF.

In a study conducted by (Njuguna, 2010) on the agency problems and the resolution mechanisms among pension schemes in Kenya, he recommended the effective supervision of pension schemes citing that RBA should focus on plans which focus on legal compliance, financial control and supervision of managers. He further recommended increased resilience on modern and effective risk management; industry-wide risk management for pension funds and other institutions involved in the provision of retirement income should be promoted. In conclusion, he suggested that a study should

be undertaken to establish the effectiveness of governance and supervision of retirement benefit schemes in Kenya.

2.5 Summary of Literature Review

Since the enactment of the Retirement Benefits Act in 1997 which later saw the establishment of the Retirement Benefits Authority, major reforms have seen improved governance structures as well as more controls in ensuring that members' interests are protected. A focus on outcomes, or on risks rather than rules, has clear resonance with the search for better regulation. Risk Based Supervision methods are gaining acceptance as they offer the prospect of advantages relative to other approaches. They provide a forward looking paradigm around which to provide supervision that offers the promise of reduced risk and potential efficiency gains.

Risk based methods will enable better allocation of scarce resources thus improving performance. Evidence of the impact of risk-based based supervision is yet to be established but preliminary conclusions can be drawn from the far it has gone. However, several challenges are being faced during its implementation and which should not by any means be underestimated (Brunner et al., 2009).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter consists of the research methodology that was used in conducting the study. The research methodology outlines the procedures used in conducting the study which is basically the research design, population, data collection and methods of analysis which are described.

3.2 Research Design

Rajendra (2008) defines research design as the linkage and organization of conditions for collection and analysis of data in a manner that aims at combining relevance to the research purpose with economy in the procedure. He further argues that research design focuses on the structure of an enquiry, which leads to the minimization of the chance of drawing the wrong casual inferences from the data.

A comparative study was used to compare the financial performance of the period before and after implementation of RBS. A sample was selected to draw conclusions as the study population was large and this was to enable the sample representative to reliably project the larger population.

3.3 Population

The population of the study comprised of 1,232 occupational pension schemes as per the list of registered schemes on the RBA website as at 30th September 2014.

3.4 Sample Design

The entire population was be divided into four strata based on a range of fund values, that is, below Kes.200M, between Kes.200M and Kes.500 M, between Kes 500M and Kes 1B and Over Kes.1B. From each stratum 10 schemes was selected randomly to ensure that each of the schemes has an equal chance of being selected. The study sample was 39

selected occupational retirement benefits schemes registered by RBA and were chosen using stratified sampling technique.

The pension scheme selected must be a segregated Pension scheme which have been in existence for the last 5 years and must have used the same fund manager over the period of study. The schemes were then stratified based on their fund value as at 30th June 2013.

3.5 Data Collection

Secondary data was collected for the study. The returns and asset allocation data was obtained from RBA and the schemes' fund managers. The data comprised of the total assets as invested under various asset classes at the end of each half-year period.

3.6 Data Analysis

A multiple regression model will be used to analyse the data. The regression analysis was done using the regression model below:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \varepsilon$$

Where;

Y is the financial performance of pension funds and this is measured using Return on Scheme Investments (ROI); ROI= (Current Period Fund value-Previous Period Fund Value)/Previous Period Fund value

α is a constant

β_i are the regression coefficients

x_1, is the weight of cash in the fund

x_2, is the weight of fixed deposit in the fund

x_3, is the weight of fixed income in the fund

x_4, is the weight of Government securities in the fund

x_5, is the weight of quoted equities in the fund

x_6, is the weight of unquoted equities in the fund

x_7, is the weight of immovable property in the fund

x_8, is the weight of offshore investment in the fund

ε is the error term

A 95 % confidence level was used to determine the statistical significance of the constant terms, α and the coefficient terms, β_i. R-Square (Co-efficient of Determination) was used to establish how much of the variability of fund returns can be caused or explained by the independent variable over time. Analysis of Variance (ANOVA) was be used to determine the linear relationship among the variables in the regression model. The analysis was done using the statistical package SPSS version 17.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter describes how data was analysed; the present results and provides interpretation on the findings of the study. The tables and charts of findings is presented as follows, impact of RBS on financial performance of pension funds, grouping of pension schemes, investment structure, skills and competency, risk based supervision and other factors affecting the implementation of RBS.

Secondary data was obtained from pension schemes to on the investment portfolio as well as the total fund values for the various schemes. The to enhance consistency, criteria for selection was to ensure that the schemes have been in existence over the last 5 years and must have maintained the same fund manager in the same period.

4.2 Findings

The main objective of the study was to investigate the effect of risk based supervision on the financial performance of pension schemes in Kenya. To achieve this, quantitative data was collected for each of the pension schemes and analyzed in two stages: investments prior to and after the implementation of RBS by the RBA. Descriptive statistics, R-Square (Coefficient of Determination) and Analysis of Variation (ANOVA) were obtained pre- and post-implementation of RBS.

The output and findings of the analysis have been presented in the tables below:

4.2.1 Descriptive Statistics and Statistical Significance

Mean, standard deviation and skewness for each asset class was determined. This was to analyze the investment strategies before and after implementation of RBS.

Table 4.1: Descriptive Statistics Output Table Prior to Implementation of RBS

Statistics

	Cash_Deposits	Corporate_Bonds	Fixed_Deposits	Government_Securities	Offshore_Investments	Other_Investments	Quoted_Equities	Unquoted_Equities	Immovable_Property	Return_On_Investments
N Valid	39	39	39	39	39	39	39	39	39	39
Mean	.020000	.040513	.032051	.564103	.041538	.004872	.311538	.000513	.001795	.046667
Std. Deviation	.0218849	.0228207	.0185216	.0623537	.0225410	.0158731	.0727121	.0032026	.0112090	.1242098
Skewness	2.795	.298	.679	-.655	-.507	3.375	2.206	6.245	6.245	1.307
Std. Error of Skewness	.378	.378	.378	.378	.378	.378	.378	.378	.378	.378

Source: Research Findings

Table 4.2: Descriptive Statistics Output Table After Implementation of RBS

Statistics

	Cash_Deposits	Corporate_Bonds	Fixed_Deposits	Government_Securities	Offshore_Investments	Other_Investments	Quoted_Equities	Unquoted_Equities	Immovable_Property	Return_On_Investments
N Valid	39	39	39	39	39	39	39	39	39	39
Missing	0	0	0	0	0	0	0	0	0	0
Mean	.018462	.058462	.093077	.497692	.028718	.004103	.267949	.012564	.025897	.039744
Std. Deviation	.0096077	.0195392	.0449066	.0832391	.0220262	.0178765	.0554019	.0421600	.0757669	.0544584
Skewness	.511	.540	.198	.750	.016	4.233	3.711	4.397	3.132	.540
Std. Error of Skewness	.378	.378	.378	.378	.378	.378	.378	.378	.378	.378

Source: Research Findings

As shown in Tables 4.1 and 4.2 above, the skewness across the various asset classes has shifted significantly after the implementation of RBS. The skewness of Cash Deposits has changed from 2.795 to 0.511 compared while Immovable Property has shifted from

6.245 to 3.132. This result indicates that there is greater diversification by pension schemes across asset classes after the implementation of RBS.

4.2.2 Regression Output: Coefficient of Determination

The impact of the variation over time was determined by the regression of the total fund returns against investments in various asset classes. R-Square was used to explain variability of returns on investments as explained by the weighted assets over time.

Table 4.3: R-Square prior to Implementation of RBS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619[a]	.383	.191	.1117064

a. Predictors: (Constant), Immovable_Property, Corporate_Bonds, Offshore_Investments, Quoted_Equities, Unquoted_Equities, Fixed_Deposits, Government_Securities, Other_Investments, Cash_Deposits

Source: Research Findings

As shown in Table 4.3 above, the value of R-square is 0.383. This statistic explains how much of the variation in the value of the dependent variable (Returns on Investment) is explained by the regression model.

Table 4.4: R-Square After Implementation of RBS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768[a]	.589	.462	.0399566

a. Predictors: (Constant), Immovable_Property, Corporate_Bonds, Unquoted_Equities, Cash_Deposits, Quoted_Equities, Offshore_Investments, Other_Investments, Government_Securities, Fixed_Deposits

Source: Research Findings

As shown in Table 4.4 above, the value of R-square is 0.589. This statistic explains how much of the variation in the value of the dependent variable (Returns on Investment) is explained by the regression model.

From Tables 4.3 and 4.4 above, RBS has had an impact on the asset allocation criteria across pension schemes.

4.2.3 Regression Output: Analysis of Variation (ANOVA)

Table 4.5: ANOVA prior to Implementation of RBS

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.224	9	.025	1.998	.077[a]
	Residual	.362	29	.012		
	Total	.586	38			

a. Predictors: (Constant), Immovable_Property, Corporate_Bonds, Offshore_Investments, Quoted_Equities, Unquoted_Equities, Fixed_Deposits, Government_Securities, Other_Investments, Cash_Deposits

b. Dependent Variable: Return_On_Investments
Source: Research Findings

Table 4.6: ANOVA After Implementation of RBS

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.066	9	.007	4.621	.001[a]
	Residual	.046	29	.002		
	Total	.113	38			

a. Predictors: (Constant), Immovable_Property, Corporate_Bonds, Unquoted_Equities, Cash_Deposits, Quoted_Equities, Offshore_Investments, Other_Investments, Government_Securities, Fixed_Deposits

b. Dependent Variable: Return_On_Investments

Source: Research Findings

As shown in Tables 4.5 and 4.6 above, the linear relationship among the variables in the regression was determined by examining the Analysis of Variance (ANOVA) results obtained from the analysis in the two time periods. The value of the F-statistic and its significance level was noted under both cases. The value of F was found to be statistically significant at a level of less than 0.05, suggesting that there is a linear relationship among the variables.

4.2.4 Regression Output: Correlation Coefficient

Table 4.7: Correlation Coefficient prior to Implementation of RBS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.740	.325		-2.274	.031
	Cash_Deposits	3.741	1.651	.659	2.266	.031
	Corporate_Bonds	1.297	.959	.238	1.352	.187
	Fixed_Deposits	1.877	1.208	.280	1.553	.131
	Government_Securities	.663	.404	.333	1.641	.112
	Offshore_Investments	.090	.856	.016	.105	.917
	Other_Investments	2.111	1.652	.270	1.278	.211
	Quoted_Equities	.703	.321	.412	2.191	.037
	Unquoted_Equities	-10.110	10.709	-.261	-.944	.353
	Immovable_Property	-1.646	2.586	-.149	-.637	.529

a. Dependent Variable: Return_On_Investments

Source: Research Findings

Table 4.8: Correlation Coefficient After Implementation of RBS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.015	.091		-.167	.869
	Cash_Deposits	-.235	.801	-.041	-.293	.771
	Corporate_Bonds	-.147	.350	-.053	-.421	.677
	Fixed_Deposits	.945	.201	.779	4.695	.000
	Government_Securities	-.030	.101	-.047	-.302	.765
	Offshore_Investments	-.191	.340	-.077	-.562	.579
	Other_Investments	-.701	.416	-.230	-1.685	.103
	Quoted_Equities	-.010	.143	-.010	-.071	.944
	Unquoted_Equities	.307	.182	.238	1.690	.102
	Immovable_Property	.088	.137	.123	.642	.526

a. Dependent Variable: Return_On_Investments

Source: Research Findings

As shown in Tables 4.7 and 4.8 above, the value of the constant can be determined by studying the results of the coefficients. All asset classes are statistically significant at 5%.

4.3 Summary and Interpretation of Findings

From the analysis of data, there has been a shift in the investment strategies across asset classes after the implementation of RBS. Thus, there has been more diversification across the various asset classes of segregated schemes. This indicates that indeed RBS has had a positive effect of the financial performance of pension funds. This is mainly due to the fact that better risk evaluation and diversification has led to the improvement on mitigation strategies thus increasing the level of returns. Although there was an improvement in the financial performance of pension funds after adoption of RBS, the

impact is still not intense. Thus, there is still room for improvement and exploration by the various industry players.

The shift in skewness on the investment of all asset classes for the two periods demonstrates that boards of trustees have embraced and adopted greater diversification in their investment policies and strategies. Thus the average returns have increased considerably over time while achieving some level of control of risks within the scheme investments.

The Coefficient of Determination was determined to establish how much of the variability of fund returns can be caused or explained by asset allocation over time. The R Square values shifted from approximately 38% to 59% before and after implementation of RBS. This shows that the weighted combination of the asset classes explained the variance of the fund returns. The R-Square value also indicates that investment managers of segregated schemes have adopted an active approach to management of the funds and employed greater diversification to spread risk.

Preliminary assessment reveals that most pension schemes have adopted a methodology towards risk based supervision of their pension schemes. This is highly recommendable as risk management requires a tool that will assist in frequent identification of risks, monitoring and formulation of strategies in mitigating the identified risks. Further, the findings indicate that RBS has led to better evaluation of risks as they can easily be identified and updated through the risk assessment tool. All these improvements have led to the main objective of promoting the safety and soundness of pension funds. Though the adoption of RBS has had a positive impact on management of pension funds, there are many other factors that hinder its implementation and mainly stem form inadequate resources. These challenges should not be underestimated as the required skills and capabilities require integration of work groups and resources in improving the efficiency of RBS.

Yermo et. al (2010) in their study concerning the performance of pension funds in Japan and the USA found that the returns of pension schemes were a function of the strategic

approaches of the pension fund managers.The main goal of that study was to assess the relative performance of different investment strategies among pension funds. The study combined a stochastic analysis of the performance of different investment strategies for different payout options with a historical analysis to test the findings of the stochastic simulation with actual market data from Japan and the United States. The stochastic model using simulations of returns of the different asset classes (cash, bonds and equities) generates, depending on the form of the payout phase, stochastic simulations of income at retirement.

A similar study carried out by Njuguna (2012) revealed that the calculated values for both the fund values and contributions were slightly higher than the critical test for the sample reviewed thus indicating that RBS has had a positive impact of the financial performance of pension funds. This was attributed mainly to the fact that better risk evaluation led to improve on mitigation strategies thus increasing the level of returns. The researcher however concluded that the extent of adoption of RBS was still at its preliminary stages and that there still remained room for improvement and exploration to an acceptable level.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The objective of the study was to determine the effect of risk based financial performance of pension schemes in Kenya. Data collected from secondary sources was analyzed and the respective information was discussed in narrative form and the output of the analysis presented in tables. The findings of this research project indicate that the financial performance of pension funds in Kenya was better in the period after which RBS was adopted and implemented. The improvement in diversification across asset classes over the years as well as periodic returns indicate that pension funds have become better managed and there has been more growth in the net assets of pension funds following the adoption of RBS.

There are pension schemes that have a guaranteed investment structure as observed during the data collection exercise. This is mainly because most pension schemes are still growing and therefore not large enough to be invested aggressively and independently. Furthermore, most pension schemes are cautious on capital preservation and therefore risk exposure is kept at a minimum level to ensure that these reserves are not depleted. The remaining schemes that have invested in segregated arrangements have been in the market for quite a while and have therefore accumulated a larger pool of funds thus giving them an edge to be able to invest aggressively as they can easily be able to cushion negative returns due to their diversified portfolio.

However, more needs to be done in improving risk management and awareness to boards of trustees through training on risk evaluation and mitigation techniques as well as investment strategies. This therefore means that there is room for improvement in the foreseeable future. In addition, the findings of this study also serve to indicate that the objectives for which RBS was adopted have been achieved to an extent with respect to the financial performance of pension funds. Nevertheless, using experience from other

countries as indicated by IOPS, there is need for pension industry players to consider and continuously strive to use the guide as provided by the regulator.

5.2 Conclusions

This study provides some illumination on the effect of RBS in the performance of pension schemes in Kenya. It further indicates that the financial performance of pension funds have improved over the period in which RBS was adopted and implemented not withstanding all the limitations that have come as a result of this. This improvement may be attributed to the positive fundamental change brought about by risk RBS holding other economic and social factors constant.

Though the adoption of RBS has had a positive impact on management of pension funds, there are many other factors that hinder its implementation and mainly stem form inadequate resources. These challenges should not be underestimated as the required skills and capabilities require integration of work groups and resources in improving the efficiency of RBS.

RBS is important in the management of pension schemes however, it is not is very not designed to solve problems. It is largely aimed at identifying risks and assessing the ability of a pension fund to mitigate such risks. Nevertheless, risk management should be a priority to all managers of pension funds mainly because the public requires an assurance of sustainable income at the point of retirement.

In summary, the implementation of RBS faces various challenges which should not be overlooked by the regulator and industry players. Empowering of boards of trustees through Trustees Development Programme as well as incorporation of a systematic and transparent framework into the risk based process could assist in making informed decisions on the allocation of pension scheme resources.

5.3 Recommendations for Policy

Introduction of statutory requirements for a code of conduct which should be aimed at enhancing governance procedures and decision making formation of risk management committees. This will enable the regulator to underscore the importance of skill and competency in enhancing risk management within boards of trustees of pension schemes.

The introduction of risk based audit by the regulator at least annually to monitor the progress of pension schemes and ensure compliance in all aspects. The crafting of pension scheme regulations that have strict penalties on pension scheme trustees who fail to adhere to the provisions of the regulator on risk supervision and management will also ensure proper implementation of RBS.

The introduction of risk analysis models for segregated pension schemes. These models will enable boards of trustees to identify the risks facing their schemes, determine their risk appetite and tolerance levels and determine how to mitigate the risks that they have least tolerance.

A policy on the composition board of trustees of pension schemes should be introduced to encourage the inclusion of have corporate trustees in addition to the individual trustees. This will ensure that the pension schemes are run in a more professional manner. Also the inclusion of an independent investment advisor to the board of trustees' committees will help the trustees understand their financial risks as well as investment risks.

There is need for RBA to relax the quantitative asset restrictions which limits the fund managers' ability to make investment decisions based on the risk-return analysis. Fund managers should be allowed to fully exercise active management of the funds without strictly adhering to the investment guidelines provided by RBA, but only use them as a guide as different schemes have different risk appetite and risk tolerance.

5.4 Limitations of the Study

Conversions of public pension schemes from DB to DC schemes inline government policy in June 2011 and subsequent splits of pension schemes assets led to decrease in fund values. Huge transfers-in from other pension schemes also led to a considerable increase in the fund value of schemes which further affected the overall returns. Other factors such as increases in scheme membership, growth of the economy, change in regulations and withdrawals by members from the scheme could have led to an increased or lowered the fund value thereby affecting the financial performance of pension schemes.

Some of the fund managers were unsure about the confidentiality of data upon being exposed to the researcher. Availability of more data would have given a better representation of the population given analysis of a larger sample.

The study was restricted to analysis of returns of segregated retirement benefit schemes which account for only 37% of the retirement benefits schemes in Kenya. The balance of 63% invests in guaranteed funds issued by insurance companies whereby it is difficult to determine the asset allocation for each of the guaranteed funds since it is not a statutory disclosure requirement under the Insurance Act.

The study could also have sought the opinions of other stakeholders' such custodians, and scheme actuaries to have a wider perspective of the study.

5.5 Suggestions for Further Research

There is scope for further research in the following areas in regard to RBS.

A study on the impact of RBS on the financial performance of other financial sectors and how it compares to the retirement benefits sector.

Its impact on the governance structure of pension funds as recent studies in the financial sector have consistently advocated for corporate governance as a major aspect of risk management.

Evaluation of the various risks facing pension schemes from different perspectives, including governance, capabilities, resources, control, financial growth and operations to identify the most prevalent.

A study on the impact of RBS on the financial performance of pension schemes under deposit administration and how it compares to the segregated schemes.

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