DETERMINANTS OF RETIREMENT BENEFITS SCHEMES FINANCIAL PERFORMANCE IN KENYA

BY

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DECLARATION

This project is my original work and has not been presented for award of a degree in any university.

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DEDICATION

I dedicated this project to my parents who have brought me this far by providing the much needed moral and financial support. To my friend Mercy who encouraged me to start on this noble course and for her unconditional support through the research period.

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ABSTRACT

The pension industry has been growing over the years .This is majorly because of the concern of social security after retirement concerns for the Kenyan work force. This has been so because a large task force of the Kenyan population is increasingly being employed in the private sector which has designated occupational pension schemes for the employees. This has been so because there is need to replace income after the active working years for a person who has been used to a pay check at the end of every month.

Therefore pension has come in handy to secure the future of the working population. The contributions being made to the pension scheme need to be prudently invested so as to generate good returns for the members which then form part of their benefits.

The study sought to examine the determinants of retirement benefits scheme financial performance in Kenya through the use of regression model that related the determinants and retirement benefits schemes financial performance in Kenya. The findings of the study suggest that all the determinants had a positive relationship with the schemes financial performance. The study thus suggests that all the determinants play a role in determining the schemes financial performance and more research should be done on the efficiency of the capital markets operations.

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LIST OF ABBREVIATIONS

APT	Arbitrage Pricing Theory
CAPM	Capital Asset Pricing Model
CSE	Colombo Stock Exchange
EMH	Efficient Market Hypothesis
GDP	Gross Domestic Product
IPS	Investment policy statement
IRA	Insurance Regulatory Authority
NSE	Nairobi Securities Exchange
NSSF	National Social Security Fund
NAV	Net Asset Values
RBA	Retirement Benefits Authority
SDF	Stochastic discount factor

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Investment performance is key to delivering returns to investors. Fund managers are entrusted with the savings to invest and grow them so as to deliver good returns to the investors. A majority of the funds invested by the fund managers is pensioner's savings. Pension is a sum of money paid regularly by the state or by trustees to an employee upon normal or ill- health retirement**.** Pensioners need a good return on their investments; pension funds normally thrive in an environment of low inflation due to stable monetary policies. However, development in the capital and money markets has brought new perspectives to this kind of thinking. Retirement Benefits Authority also intends to educate retirees as to how to apply their retirement benefits. (RBA News, 2002).

Kenyans are continuously being educated on the need for saving for tomorrow. Saving begins by investing well before the need for the money, arises. Investing of earnings leads to the growth of savings. To be able to achieve long-term goals in life many people save towards their old age when they will be less active to be able to make the money .There are various ways of saving towards retirement such as through savings in a bank account, purchasing a life insurance policy, setting up a pension fund either on individual basis or through a group arrangement for those in formal employment (MicroSave Africa, 2000)

Kenya being a British colony has adopted the British system in almost all spheres of lifestyle including the way of investing their money. An example is the formation of the National Social Security Fund (NSSF), which is similar to the state pensions of the

United Kingdom (UK). In addition the setting up of occupational pension funds in Kenya is borrowed from the UK (Mghali, 2003).

Fund managers are professionals whose role is to invest funds of various investors in asset classes that would maximize returns based on the investment policy they are adhering to. Fund managers can either actively invest the funds or passively invest them depending on the risk appetite of the investors. Active management of a portfolio by the fund manager is where they buy and sell assets with a view of making gains while passive management is where the assets are held to maturity (buy and hold strategy).

Active management involves substantially higher trading activity than a passive buy-and-hold approach – hence active management translates into significantly higher transaction costs (Keim and Madhavan (1997). Given that transaction costs are directly related to trade size, larger informationally motivated trades translate into higher explicit costs (i.e. brokerage commissions) and higher implicit costs (i.e. market or price impacts and opportunity costs).

The issue of portfolio asset size and the implications for investment performance has been acknowledged by academics, fund managers, asset consultants and investors as being of critical importance in selection process of investment managers. Size also has implications for performance related to transaction costs (the ease with which investment managers can successfully exploit information), performance measurement given Sharpe's (1991) arithmetic of active management, and the growth-rate of a manager (i.e. fund flows).

Size is also an important consideration for active managers in terms of Sharpe's (1991) 'Arithmetic of Active Management'. Sharpe (1991) asserts that on average, active

investors (in aggregate) cannot outperform the returns derived from passive investment strategies. The reasoning is that the performance of the index equals the weighted-average return of both active and passive investors before investment expenses.

Following the historic case of Enron Ltd in the United States of America (2001) where the pension fund was invested substantially in the employer's stock, it became, more necessary to have independent pension fund management and custodial services away from employers. In this case the employer had unlimited access to the pension fund and was totally invested in the group of companies owned by the employer thus pension funds were lost in these cases due to lack of independence from the employer.

To achieve the independent management of pension schemes away from employers it became necessary for legislation, which devolves the responsibilities of pension funds management to trustees from that of employers.

1.1.1 Pension Funds Overview in Kenya

In Kenya, employers or Trust Corporations set up pension funds under irrevocable trusts. This is done in accordance with following Acts of Parliament: Trustees (Perpetual Succession) Act Cap 164; Trustees Act Cap 167; Public Trustee Act Cap 168; Perpetuities and Accumulation Act 1984; Income Tax Act Cap 487 and Retirement Benefit Act, (1997). The Retirement Benefit Act, (1997) gave rise to the development of the Retirement Benefit Regulation for occupational schemes 2001. This became operational on 8th October, 2001. The regulations are intended to achieve separation of pension funds from the employee's funds. This is because in the past employers had unlimited access to the pension funds and would use it to improve their cash flows in the company. Some of the cases include Railway Corporation, Postal Corporation of Kenya Staff Retirement Benefits Scheme

The investment of the pension fund is the responsibility of the pension trustees. The Retirement Benefit Regulations (occupational retirement benefit schemes) 2001 provides an investment guideline under section 38. Prudent investment of pension funds is absolutely necessary in order to safeguard the pension fund member's interest. This should also enable trustees to achieve their role in discharging their responsibilities to members leaving the employer's service and/or retiring at old age. The fund managers investing in pension funds are governed by the Retirement Benefits Act, (1997). This Act has specific guidelines on the limits of exposures for each asset class it trades in. When the Retirement Benefits Act, (1997) was set up, it required all pension schemes to have a prudent investment policy in line with the investment guidelines provided there in and to appoint a fund manager to direct and assure trustees in investing pension funds. The question is how a fund invested by an insurance company is to be treated. From then on, Insurance companies have set up separate subsidiary companies to meet this legal requirement. However, on the actual investment, they follow the requirements of the Insurance Act.

Since the above developments are very recent, they have changed the way pension funds operate. It is therefore important to bring to light the factors affecting fund managers performance to facilitate knowledge for argument to invest with fund managers so as to harmonize the operation of pension funds in Kenya. The changes in the regulatory environment also mean that the sector has to change significantly to comply with the new requirements.

According to Appleby (1994), many firms conduct pension schemes either as separate trust funds where firm's contributions and the employee's contributions in a contributory scheme are invested and the scheme controlled by trustees or life office

schemes where a contract is made with a life assurance officer. In his study Mghali (2003) concluded that firms should conduct pension schemes where the employer contributes a certain percentage together with the employee contribution. These funds should then be invested and with trustees being in control of the fund. In his study on National Social Security Fund (NSSF) Mugweru (2001) recommended that investment department at NSSF should consist of professionals who adhere to proper investment policies and procedures. Kluwer (1996) suggest that the reason for a direct invested fund is to prepare that fund to meet its liabilities. Fund managers and insurance companies in Kenya carry out investments of pension funds in various ways. According to the Insurance Act Chapter 487 of the laws of Kenya, long-term business, which includes life and pension investment, they have to set up a statutory fund separate from the short-term business.

The assets in the statutory fund set up is required to be vested in trustees but kept in the name of the insurance company. The long-term nature of pension schemes has given rise to specific needs in the investment of pension funds. First is the need for stable returns as opposed to highest returns. Secondly there is need for security or safety of the fund as opposed to the best possible return. Two ways exist on how these funds may be invested one is guaranteed arrangement with insurance companies and the other is segregated arrangement with the fund managers. By paying a premium to the insurance company who guarantees a benefit at retirement. The insurance company takes the risk of investment; the premium is usually high resulting in unnecessary high cost of pension.This method has largely been discarded, as it is not cost effective.

1.1.2 Performance Measurement

For the majority of investors, investment performance is ultimately the most important factor in determining which mutual fund to invest in. A mutual fund's performance can be measured in several different ways, depending on its investment objectives. Whether a fund aims for long term growth, current income, or a combination of the two, investors can track fund performance and judge profitability by following changes in share price or net asset value (NAV), Calculating total return and Figuring yield

While each calculation enables investors to compare a fund's performance to similar funds offered by different companies, there is no simple calculation for comparing funds to individual securities, because each return is figured differently depending on the type of investment.

The NAV method is also the only accurate means of accounting for cash placed into, or taken out of, an investment portfolio. New investments in the portfolio are made at the closing NAV on the day of the investment. Similarly, money taken out of a portfolio is taken out at the NAV on the day of the withdrawal. In either case, because a fund’s shares increase or decrease with the flow of investments, accurate performance measurement is assured. Remember, the net asset value equals the value of the fund investments divided by the shares outstanding.

1.2 Statement of the Problem

One key aspect in the management of pension funds is investment decisions. Pension trustees are in a dilemma as to which way to go in investing pension funds to optimize returns without taking a lot of risk. In making decision as to which way to take while

investing the members' contributions, they have to consider an investment vehicle which will optimize returns.

Pension being a benefit which is used to replace income to the retiree after leaving active employment is a key benefit which needs to be invested with care to as to optimize the return. On a monthly basis the employer together with the employee contributes towards the pension scheme. The appointed fund managers/insurance company then takes the money and looks for viable investment vehicles which will be able to generate the much needed optimal returns. Investments being a risk means the fund manager have to take risks in investing these funds. There are a number of variables which are considered by the pension scheme trustees before investing these funds. These include the provisions of the investment policy statement, the RBA asset class limits, the amount of funds available for investment, the political environment, the current inflation rates, and the political environment they invest in.

The question that is frequently asked by trustees of pension funds is whether it is better to invest with fund managers or insurance companies. It is therefore vital to extensively study, analyze the present gaps in order to assist pension fund trustees and the government of Kenya to realize better returns. This research intended to evaluate the factors influencing retirement benefit schemes financial performance.

Several studies have been conducted on fund management performance on pension funds. In Kenya, Kihunyu (2005) investigated the effect of the RBA Act 2000 on the risk of investments held by pension funds in Kenya as the objective for his study. The findings were that pension funds were yet to comply with the investment guidelines with the RBA guidelines investment guidelines 2001. The findings also indicated 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.

Keizi (2008) also investigated the challenges facing fund managers of retirement benefits in Kenya. His objective was to find out the challenges faced by fund managers in executing their duties. One many of the challenges found out in the study was that there was limited focus on investment performance and the investment products available for investment were few.

1.3 Objectives of the study

1.3.1 Main Objective

The objective of this research is to establish the determinants of retirement benefits scheme's financial performance in Kenya.

1.4 Significance of the study

This study will go a long way in improving the performance of pension schemes in Kenya in terms of getting positive returns. The various stakeholders in the pensions industry will gain immensely from this study key among them are:

The members of the scheme will gain as a result of improved performance by the fund managers managing their pension fund. Retirement Benefits Authority will gain by getting more RBA levy since the levy is a percentage of the total fund value as a result in growth

The government will use the results of the study to come up with more efficient legislations which will safeguard the growth and future of the pension industry. This will

in turn attract more savers and investors into the sector leading to the growth of the industry.

The economy will improve due to positive performance out of fund managers prudent investment decisions, pension funds play an important role in the performance of the financial sectors. Currently the pension benefits are in excess of 420 billion and it is a major lender to the government through the purchase of government securities.

The trustees are going to benefit by having an insight on the factors to look at when appointing the fund manager so as to get better returns out of the member funds. This will help trustees avoid the legal mitigation that may be instituted to them by the members of the scheme in case of dismal performance

This study will also contribute to filling knowledge gap in the academic fields, research institutions, learning institutions and individuals. The findings will also be beneficial to pension administrators in advising pension trustees to make informed decisions on investment of pension funds.

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 Theoretical Review

2.2.1 Agency Theory

Stakeholder theorists who argue for the primacy of shareholder interests typically cite the famous dictum from *Dodge Bros. v Ford* that "the corporation exists for the benefit of the shareholders" (Boatright 1994 and Goodpaster 1991) as evidence of a restraint on the discretion of management. It follows from agency theory that the fiduciary responsibility of corporate managers is to the shareholder. Shareholders receive returns only after other corporate claimants have been satisfied. In other words, shareholders have a claim on the corporation's residual cash flows. Since the shareholder's claim is consistent with the purpose of the corporation to create new wealth, and the shareholders are allegedly at greater risk than other claimants, agency theorists reason that corporate directors are singularly accountable to shareholders (Brickley et. al. 2001).

According to Hawley and Williams (1996), the central problem in corporate governance then becomes to construct rules and incentives (that is, implicit or explicit 'contracts') to effectively align the behavior of managers (agents) with the desires of the principals (owners). However, the desires and goals of management and shareholders may not be in accord and it is difficult for the shareholder to verify the activities of corporate management. This is often referred to as the agency problem.

2.2.2 Stakeholder Theory

The shareholder model of corporate governance relies on the assumption that shareholders are morally and legally entitled to direct the corporation since their ownership investment is an extension of their natural right to own private property. Berle and Means (1932) point out that the notion the shareholders govern the corporation is largely a fiction: "Typically, executives have the greatest power." Etzioni (1998) questions whether "executives can and should be made more accountable and responsive to some groups other than themselves, and which groups this should include."

Freeman's (1984) seminal book on stakeholder theory posits that successful managers must systematically attend to the interests of various stakeholder groups. This "enlightened self-interest" position has been expanded upon by others (Donaldson and Preston 1995 and Evan and Freeman 1983) who believe that the interests of stakeholders have intrinsic worth irrespective of whether these advance the interests of shareholders.

Under this perspective, the success of a corporation is not merely an end in itself but should also be seen as providing a vehicle for advancing the interests of stakeholders other than shareholders.

Etzioni (1982) supports the stakeholder view. He accepts the moral legitimacy of the claim that shareholders have certain rights and entitlements because of their investment,

but he maintains that “the same basic claim should be extended to all those who invest in the corporation.” This includes: employees (especially those who worked for a corporation for many years and loyally); the community (to the extent special investments are made that specifically benefit that corporation); creditors (especially large, long-term ones); and, under some conditions, clients.

A prominent critic of stakeholder theory is Goodpaster (1991) who argues that a multi-fiduciary stakeholder approach fails to recognize that the “relationship between management and stockholders is ethically different in kind from the relationship between management and other parties (like employees, suppliers, customers, etc.)” Goodpaster contends that managers have many nonfiduciary duties to various stakeholders but their fiduciary duties are only to shareholders.

Boatright (1994) suggests that the shareholder-management relation is not “ethically different” and there is no reason in principle to adopt the distinction between fiduciary and nonfiduciary duties and the distinction between shareholders and other constituencies. He states that:

2.2.3 Arbitrage Pricing Theory

The Arbitrage Pricing Theory (APT) was developed primarily by Ross (1976a, 1976b). It is a one-period model in which every investor believes that the stochastic properties of returns of capital assets are consistent with a factor structure. Ross argues that if equilibrium prices offer no arbitrage opportunities over static portfolios of the assets, then the expected returns on the assets are approximately linearly related to the factor loadings. (The factor loadings, or betas, are proportional to the returns’ covariances with the factors.)

Ross' (1976a) heuristic argument for the theory is based on the preclusion of arbitrage. Ross' formal proof shows that the linear pricing relation is a necessary condition for equilibrium in a market where agents maximize certain types of utility. The subsequent work, which is surveyed below, derives either from the assumption of the preclusion of arbitrage or the equilibrium of utility-maximization. A linear relation between the expected returns and the betas is tantamount to an identification of the stochastic discount factor (SDF).

The APT is a substitute for the Capital Asset Pricing Model (CAPM) in that both assert a linear relation between assets' expected returns and their covariance with other random variables. (In the CAPM, the covariance is with the market portfolio's return.) The covariance is interpreted as a measure of risk that investors cannot avoid by diversification. The slope coefficient in the linear relation between the expected returns and the covariance is interpreted as a risk premium. Such a relation is closely tied to mean-variance efficiency.

2.2.4 Random Walk Theory

There has been myriad of empirical research done into whether there is predictability in stock prices

Short-Run and Long-Run Serial Correlations and Mean Reversion

Lo and MacKinley (1999) suggest that stock price short-run serial correlations are not zero. They also propose that in the short-run stock prices can gain momentum due to investors 'jumping on the bandwagon' as they see several consecutive periods of same direction price movement with a particular stock. Shiller (2000) believes it was this effect that led to the irrational exuberance of the dot-com boom. However, in the long-run this does not continue and in fact we see evidence of negative autocorrelation. This has been

dubbed ‘mean reversion ‘and although some studies (e.g. Fama and French (1988)) found evidence of it, its existence is controversial as evidence has not been found in all research.Chaudhuri and Wu (2003) used a Zivot-Andrews sequential test model to increase test power, thus decreasing the likelihood that previous results were a result of data-mining and obtained better results. To date, this method has not been widely adopted.

Fama (1998) argues that investors initially over or under-react to the information and the serial correlation explained above is due to them fully reacting to the information over time. The phenomenon has also been attributed to the ‘bandwagon effect’.Hirshleifer discusses ‘conservatism’ and argues that “under appropriate circumstances individuals do not change their beliefs as much as would a rational Bayesian in the face of new evidence” (Hirschleifer, 2001:1533). He asserts that this could lead to over-reaction or under reaction.

2.2.5 Efficient Market Hypothesis Theory

Do the market prices of stocks listed in the Stock Exchange consistently reflect all the relevant Information available on them? The answer to this question is not only of paramount importance to investors but also to policy makers. The implications are enormous for foreign and local investors who make their decisions based on current market values and expected risk-return trade-offs that are associated with such investments. Stakes are equally high for policy makers who consider the stock primary vehicle for transforming the economy to economic prosperity (Abeysekera, 2001).

The EMH has been one of the most actively researched areas in finance over the last three decades. The general conclusion from numerous studies in developed countries, beginning with Fama (1965) is that the weak-form of market efficiency holds and that no

exploitable patterns in past trading records exist. More recently, however, a number of studies have raised questions about the degree of prevailing market efficiency and have pointed to some market inefficiencies based on observations such as autocorrelation, the small-firm effect, the January-effect and the weekend-effect. Lo and McKinlay(1988), and Fama and French (1988) observed some autocorrelation of share prices, indicating that the prices do not follow a random walk.

Evidence from stock markets in developing countries, however, is mixed. For instance, Dickson and Muragu (1994) found evidence consistent with the EMH in their study of the Nairobi Stock Exchange, while Barnes' (1986) study of the Kuala Lumpur stock exchange provided only limited support of the weak form of the EMH. Zychowicz et al. (1995) concluded that on the Istanbul stock exchange, daily and weekly returns diverge from a random walk, while monthly returns are consistent with weak form market efficiency.

With the substantial growth in emerging markets, many studies have recognized the important institutional, developmental and cultural differences that exist between stock markets in industrialized and developing countries. Although, Asian stock markets have made impressive strides in recent years, very little is known about the behavior of these emerging markets compared with the vast quantity of research information available on developed country es' stock markets. Only a few studies on Asia related to this topic are available. These include Bailey et al. (1990), Annuar (1994), Mun and Kee (1994), Chan et al. (1992), Chan et al. (1996), Laurence (1996) and Berry et al. (1997).

2.3 Determinants of fund management performance

2.3.1 Investors Professional skills in making investments

Shiller (1993) observed that many investors, have neither the skill nor they do have neither ability for interpreting data nor the ability to interpret results of operations. It implies that their decision is not guided by relevant factors and they make decisions on the basis of advice received or their decisions are guided by inappropriate or inadequate knowledge. Phillip (1995) found that the investors derive benefit from their education in so far as their behavior tends to change; changing behavior changes the process of their choice making.

2.3.2 Fund size and returns

The importance of fund size, total assets under management and investment performance has certainly captured widespread attention, and sparked debate amongst industry participants.Active management involves substantially higher trading activity than a passive buy-and-hold approach – hence active management translates into significantly higher transaction costs (Keim and Madhavan (1997)). Given that transaction costs are directly related to trade size, larger informationally motivated trades translate into higher explicit costs (i.e. brokerage commissions) and higher implicit costs (i.e. market or price impacts and opportunity costs).

While implicit costs are more difficult to measure than explicit costs, the relative size of the trade and the investment style of a trader have an important bearing on the magnitude of implicit trading costs. Size is also an important consideration for active managers in terms of Sharpe's (1991) 'Arithmetic of Active Management'. Sharpe (1991) asserts that on average, active investors (in aggregate) cannot outperform the returns derived from passive investment strategies. The reasoning is that the performance of the index equals

the weighted-average return of both active and passive investors before investment expenses. Accepting Sharpe's (1991) law concerning the aggregate return of investors equating to the market return, by definition, active management must be a zero-sum game.4 Given that larger fund manager's account for a higher proportion of the total market, Sharpe's law concerning active management must act as a disadvantage, *ceteris paribus*. Hence, the probability of a large manager achieving superior returns to the market must decline as their relative size increases.

Size should also become an issue (eventually) for successful and growing asset managers. The literature strongly supports the relationship between past performance and fund inflows. This phenomenon, where investors 'chase' past performance, has been documented in both Australian (e.g. Sawicki (2000)) and U.S. markets (e.g. Gruber (1996) and Zheng (1999)).Perold and Salomon (1991) and Beckers and Vaughan (2001) highlight the irony that is likely to eventuate for successful active managers. Given the empirical evidence, superior past performance translates into a growth in total assets under management and an increase in revenue (where management fees equate to a fixed percentage of assets under the investment manager's control). Where fund inflows are significant and the manager's total size increases, incumbent investors are likely to be averse to future increases in the size of portfolios, given the likelihood of diseconomies of scale. An increase in the size of funds under management eventually leads to higher trade sizes, higher trading costs, lower flexibility in the management of portfolios and lower portfolio performance (Perold andSalomon (1991)). As a consequence of their size, larger managers may then have a higher propensity to invest in small-cap stocks (see Golec (1996)), which exhibit lower levels of liquidity and higher transaction costs, and this may also adversely impact on portfolio returns.Beckers and Vaughan (2001) report

that a sizable increase in the asset base of funds translates into a material decrease in alpha and the information ratio.

The literature evaluating fund performance on the basis of asset size reports mixed findings.Grinblatt and Titman (1989b) find evidence of smaller U.S. mutual funds outperforming large funds on a risk-adjusted basis, gross of expenses. However, an interesting finding is that smaller funds are generally concentrated in the best performing aggressive growth class.

Therefore, in terms of their results, performance may not necessarily be wholly a function of fund size, but rather investment style. Yet, after consideration of expenses, portfolio performance is indifferent on the basis of asset size. Other studies have reported the absence of a significant relationship between risk-adjusted performance and size. In the U.S. these include Grinblatt and Titman (1994) and Cicotello and Grant (1996). Dahlquist, Engstromand Soderlind (2000) also report similar results for Swedish mutual funds, and Droms and Walker (1994) document the absence of a relationship between size and performance for international mutual funds. In Australia, the evidence supports the majority of studies

confirming that fund performance is unrelated to portfolio size (Bird, Chin and McCrae(1983), McCrae (1998), and Sawicki (2000)).

2.3.3 Portfolio management strategies (Actively vs Passively Managed Funds)

Over the decades there has been much debate about the ability of mutual funds to outperform the market when performance is measured with Jensen's (1969) alpha. Early research by Friend,Brown, Herman, and Vickers (1962), Sharpe (1966), and Jensen (1968) indicated that mutual fund managers not only have difficulty beating the market but frequently perform at a level inferior to the market. Although some later studies such

as Alexander and Stover (1980), Kon (1983), Chang and Lewellen (1984), and Ippolito (1993) have found results more favorable to funds, the average fund still appears to show no above-normal performance. For example, Volkman (1999) found that while the average fund had no ability to select undervalued stocks and a negative ability to time the market, a few individual funds did display a persistent ability to select undervalued investments. Malkiel (1995) found that survivorship bias is more important than previously realized and concluded that funds have in aggregate underperformed benchmark portfolios even before considering fund expenses. Carhart(1997) controlled for common factors influencing returns and found that they generally explained persistence in performance. Carhart's only unexplained persistence existed in significant underperformance of the worst funds.

There is another factor important to the performance evaluation issue, 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. Because stock indexes, such as the S&P 500 Index, that are commonly used for performance evaluation are often value weighted (market-cap weighted), their use as benchmarks for evaluating non-value-weighted portfolios may fail to adequately identify fund performance. Strongin, Petsch, and Sharenow (2000) show that an actively managed portfolio's performance is determined not by the success of its managers' security analysis but rather by high concentration of risk in a value-weighted benchmark.

2.3.4 Security Selectivity and Market Timing

It is important that portfolio managers be evaluated on both security selection ability and market timing skill. Furthermore, it has become standard practice to model selectivity and

timing simultaneously. Jensen (1968, 1969) formulated a return-generating model to measure performance of the managed portfolios. The model is:

Rp, = ttp + Bp R^ + u^ (1)

Where Rp, is the excess (net of risk-free rate) return on the pth portfolio. R^ is the excess (net of risk-free rate) return on the market portfolio, Op is a measure of security selection skill, Bp measures the sensitivity of the portfolio to the market return, Up, is a random error which has expected value of zero and t denotes time. This specification assumes that the risk level of the portfolio under consideration is stationary through time and ignores the market timing skill of the managers. Indeed, portfolio managers may shift the overall risk composition of their portfolio in anticipation of broad market price movements. Fama (1972) and Jensen (1972) addressed this issue and suggested a somewhat finer breakdown of performance.

Treynor and Mazuy (1966) added a quadratic term to equation (1) to test for market timing ability. They argued that if a manager can forecast market returns, he will hold a greater proportion of the market portfolio when the return on the market is high and a smaller proportion when the return on the market is low. Thus, the portfolio return will be a non linear function of the market return

2.3.5 Firms Capital Structure

The point of departure for all modern researches on firm's capital structure is the Modigliani and Miller (1958) proposition which states that in a world of perfect capital market and no taxes, a firm's financial structure will not influence its cost of capital. Consequently, the proposition submitted that firms in a given risk class would have the same applicable discount rate, differing based on "scale factor" only and would be unaffected by financial gearing. (Weston and Copeland, 1998).However, Brigham and

Gapenski (1996) argue that an optimal capital structure can be attained if there exist a tax sheltering benefits provided an increase in debt level is equal to the bankruptcy costs. They suggest that managers of the firm should be able to identify when the optimal capital structure is attained and try to maintain it at that level. This is the point at which the financing costs and the cost of capital (WACC) are minimized, thereby increasing firm value and performance.

The agency theory initially put forward by Berle and Means (1932) also contributes to the capital structure decision. According to the theory, agency conflicts arise from the possible divergence of interests between shareholders (principals) and managers (agents) of firms. The primary duty of managers is to manage the firm in such a way that it generates returns to shareholders thereby increasing the profit figures and cash flows (Elliot and Elliot, 2002). However, Jensen and Meckling(1976) and Jensen and Ruback (1983) argue that managers do not always run the firm to maximize returns to shareholders. As a result of this, managers may adopt non-profitable investments, even though the outcome is likely to be losses for shareholders. They tend to use the free cash flow available to fulfill their personal interest instead of investing in positive Net Present Value projects that would benefit the shareholders. Jensen (1986) argues that the agency cost is likely to exacerbate in the presence of free cash flow in the firm.

2.3.6 Firms Age

The age of a firm may also have an impact on firm's performance, hence the introduction of a controlled variable, AGE in this study. Stinchcombe (1965) argues that older firm's can achieve experience- based economies and can avoid the liabilities of newness. We expect a positive relationship between age and firm's performance. Research in organizational behavior suggests that top management characteristics affect corporate

decisions and, in particular, the firm's ability to take risks which may have a critical impact on its performance. In an influential paper, Vroom and Pahl (1971) establish that older managers are more likely to avoid risky decisions. Consistent with this notion, Child (1974) observes that older managers tend to stick to cautious low-growth strategies, while younger managers are more eager to pursue innovative high-growth policies. Likewise, Wiersema and Bantel (1992) reveal that executive age has a negative influence on the rate of corporate change. More recently, Antia et al. (2010) uncover that managers with shorter horizons (who are likely to be older) prefer investments offering relatively faster payback at the expense of long-term value creation.

2.4 Review of empirical studies

Much of the academic literature on performance measurement has focused on the persistence of returns or upon the market timing abilities of managers of US mutual funds. This work has its roots in the early work of Jensen (1968) and has been extended by Carhart (1997) and Wermers (2003), among many others. On the whole the results of the vast majority of the studies in this area suggest that managers of US mutual funds neither display market timing ability, nor can they perform on a consistent basis over time. In the UK, studies by Blake and Timmermann (1998), and by Giles, Wilson and Worboys (2002) find that positive performance persistence is absent amongst managers of UK mutual funds (known as unit trusts in the UK), though studies do indicate that negative performance persistence is common.

Our focus in this paper is on the performance of managers of UK pooled pension fund assets. Far fewer studies with respect to this aspect of the investment management industry have been conducted. Given the importance of the UK's occupational pension industry, it is perhaps a little surprising that so little work has focused on the performance

of the fund managers charged with managing these assets. According to the last ONS release on the issue, the market value of the long-term assets held by the UK's pension funds is just over £800bn, representing about 80% of the annual GDP of the UK economy. At the same time, the pension assets that comprise these pooled funds had a market value of around £400bn (BNY Russell Mellon CAPS survey). This means that they account for around half of all pension assets in the UK. The need to focus on this important industry is perhaps even more crucial at the moment, given that the vast majority of Defined Benefit scheme's are in deficit. Watson Wyatt recently estimated that the combined deficit of the UK's defined benefit pensions industry is £130bn, which implies that the average UK scheme is now facing a deficit of around 15%.

Some studies have been conducted that have looked at the performance of individual pension schemes. Brown, Draper and McKenzie (1997) investigated the performance persistence of UK pension fund managers2. Using a sample of 232 individual company pension schemes between 1986 and 1992 and another consisting of 409 funds from 1986 to 1992 that retained the same manager over these samples, Brown *et al* concluded that there was limited evidence that the managers were able to achieve a persistent performance. A result, broadly in keeping with persistence studies conducted using alternative fund manager universes.

Blake, Lehmann and Timmermann (1999) examined the asset allocation decisions of 364 individual, UK company pension schemes using data that spanned the period from 1986 to 1994. The criterion they used in identifying the sample was that each fund should have been managed by the same manager over this period, and that this manager should also have been responsible for the asset allocation of the fund over this uninterrupted period, in other words these were balanced mandates. Using this sample Blake *et al* found

"surprisingly" little variation in the performance of these schemes, or in the strategic asset allocation decisions that they made over time. In addition they found that the vast majority of time variation in returns was due to the strategic asset allocation decisions, very little of the variation was due to stock selection. They concluded that the empirical regularities that they observed were most likely due to the legal and economic environments under which these managers operated.

Using the quarterly returns on a much larger sample (2,175) of segregated UK pension schemes spanning the period from 1983 to 1997 Thomas and Tonks (2001) investigate the performance of UK equity portfolios managed by investment managers, in contrast to the performance of the balanced portfolios investigated by Blake *et al*. Thomas and Tonks' conclusions were consistent with those of Blake *et al*. The variety of techniques used to assess the quality of fund performance all suggested a very narrow cross-sectional dispersion in returns, which suggested that the managers were all "closet trackers". They also conclude that on the whole there were negative returns to both selectivity and to market timing.

Finally, Tonks (2005) suggests that the results of Brown *et a*l and of Blake *et al*, might suffer from survivorship bias, since both studies impose the restriction that the pension scheme examined should have the same manager over the sample period. Instead, Tonks looks at the performance of pension funds irrespective of whether the management changed over the 1983 to 1997 sample period used. Examining the performance of 2,175 UK equity funds over this sample, Tonks found evidence to suggest that there was indeed performance persistence at least at the one year horizon.

Smith and Goudzwaard (1970) analyzed the relevance of education to investment management and found that education does not have a clear effect on the performance of

graduates in as fund managers. Chevalier, Ellison (1999), however, using cross sectional data, found strong evidence between age and education as explanatory variables for fund performance, measured as risk-adjusted excess returns, even after adjusting for behavioural differences and selection biases. From pension schemes and mutual funds to banks and other financial institutions; portfolio decisions rest with the fund managers. There has been a growing concern that these managers adopt investment strategies, which are very similar. One possible explanation of this phenomenon may be found in the incentives schemes related to performance (Masood, Tunaru2006). Another explanation is based on herding, a concept from behavioral finance. For the latter existing literature focuses on herding due to either managers (Scharfstein, Stein 1990), inefficient information transmission (Banerjee 1992,Bikhchandani et al. 1992, Welch 1992) or free riding in information gather (King 1995). Fama (1980), Lazear and Rosen (1981) show that a manager's investment decision can be influenced by career concerns.Holmstrom (1982a,b) confirms their conclusion but argues that it is only one of a number of other factors that influence the investment decision process.

Following this line of reasoning, Scharfstein, Stein(1990), Zwiebel (1995), Morris (1997), Avery,Chevalier (1999) argue that the career concern factor leads to herd behavior in the fund manager community. Golec (1996) finds that the portfolio return is affected by the manager's tenure, age, and MBA status. Chevalier, Ellison (1997) emphasize that career issues of mutual fund managers play a significant role in their decisions about risk.

Brown *et al.* (1992) argue that results of persistence will appear spuriously in samples limited to surviving mutual funds. Their argument is that to choose high-risk strategies and survive in the first half of the sample period is likely to lead to above average returns.

If these funds continue their high risk strategy and continue to survive, they are also likely to achieve above normal returns in the second half of the sample. Therefore, only using a sample of surviving funds biases result toward finding performance persistence. The degree of this bias, amongst other factors, depends on the fraction of managers who drop out of the sample and whether their characteristics differ systematically from surviving managers.

Khan and Rudd (1995) use a sample of 300 equity and fixed-income mutual funds within sample periods running from 1983-1987 for equity funds and 1986-90 for fixed income funds. They then test performance persistence in 1988-93 for equity funds and 1990 to 1993 for fixed income funds. They use a variety of performance metrics based on 'alphas' *(i.e. risk adjusted returns)* plus style analysis. Their persistence analysis is based on contingency table analysis. They do not find any equity fund performance persistence but did find fixed income fund performance persistence even after controlling for fund style and management fees.

Using a sample of surviving and non-surviving funds between 1971-1991, Malkiel (1995) finds some evidence of performance persistence during the 1970s. However, the phenomenon does not continue through the 1980s. This suggests that conclusions about the importance of survivorship may be sensitive to the time period studied. He provides evidence that using a sample consisting entirely of surviving funds creates an upwards-bias in apparent performance.

Quigley and Sinquefield (1998) use a similar approach by constructing portfolios, ranked by deciles, on the basis of relative performance in a given year. They then compare the performance of each of these portfolios in the next year. They have a large sample taken from the Micropal database of all equity UK unit trusts that were in existence between

1978 and 1997; a total of 752 funds. They include only those trusts that are classified as having objectives of Growth and Income, Growth, Equity income or smaller companies. They construct tests of performance persistence both before and after adjusting for risk. The difference between the average of the portfolio's performance at extremes of the deciles is positive over subsequent years but adjustment for transactions costs eliminates any gains. A variety of market and factor-based risk adjustments are then applied which wipe out any positive gains but lead to the conclusion that only poor performance persists.

Bird, Chin and Macrae(1983) examine the investment performance of Australian superannuation funds and their managers over a period from 1971 to 1981. They examine the Sharpe, Treynor and Jensen indices as potential benchmarks. They conclude that the three different metrics do not lead to differences between the funds and managers in their study.

The process of adjusting for risk does not alter the perceived performance of funds and managers in the first half of the study but does make a difference to the relative rankings in the second half. They find no evidence that managers perform consistently over time.

Sawicki and Thomson (1999) examine the performance of Australian rating agencies' lists of approved funds as opposed to the ones not included on the list (the 'non-gratae') in terms of differences in actual subsequent performance. They utilise research company data on the performance of 500 managed funds over a six-year period from 1989 to the end of 1994 along with lists of approved funds each year. They also examine the impact of selecting funds on the basis of past performance and did not find significant evidence of performance persistence. The ranking was conducted over successive three-year intervals and no examination of shorter performance intervals was undertaken.

Sawicki and Ong(2000) examine the performance of 97 Australian wholesale funds using monthly data over the period 1983-1995. They use a conditional benchmark approach which permits time varying measures of risk or 'betas'. Tests using successive three-year periods indicate that there is little consistency in performance from period to period.

2.5 Conclusion

This chapter covers the theoretical review of the study which provides an overview of how Fund Management and its performance is important in making an impact in the retirement benefits sector in Kenya. Empirical studies provide experiences and lessons from other jurisdictions which are particularly instructive in enhancing the reliability and relevance of the study**.**

The fund management performance identifies some of the important determinants that influence the performance of fund managers in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter shows how the data was collected to address the objectives in chapter one and fill the research gaps in chapter two. It is organized into the research design, target population, sample frame and sampling techniques, data collection, and data analysis. The period of study is between years 2005 to 2011 to establish the determinants of retirement benefits schemes financial performance in Kenya during this period.

3.2 Research Design

This study made use of descriptive research design. Marsh (1982) argues that quantitative surveys can provide information and explanations that are adequate at the level of meaning. While recognizing that survey research has not always been good at tapping the subjective dimension of behavior.Mugenda&Mugenda (1999) notes that a survey research attempts to collect data from members of a population and describe existing phenomena by asking individuals about their perception, attitudes behavior or values.

The descriptive research was meant to enhance a systematic description that is as accurate, valid and reliable as possible regarding the responses on the factors affecting the performance of fund managers.

3.3 Population

The target population of this research was the total number of retirement benefits schemes registered by the Retirement benefits Authority to operate in the market between the financial periods 2006- 2011 which was 1,600 in number.

3.4 The Sample size

This study made use of simple random sampling whereby the registered retirement benefits schemes in the country were sampled to get a representative sample. The sample was gotten randomly so as to get the most representative findings from the 1,600 registered schemes in the country by the Retirement Benefits Authority.The sample chosen for the purpose of this study was 60.

3.5 Data Collection Methods

The study employed various survey instruments for data collection mainly:

A simple structured questionnaire was administered to the retirement benefits scheme of the pension funds selected in the sample. The instrument consisted of two parts. Part A consisted of items eliciting general information about the company and part B consisted of items relating to the study objectives. The instrument consisted of closed and open-ended questions. The questionnaire helped capture ways of operations, management style, level of expertise, resource availability such as technology, financial performance of the company and number of years of operation the fund manager has been in existence. The choice of a structured questionnaire was due to its ease of administration, analysis and time saving nature. Reason for e-mailing was that it was faster to tabulate and edit the responses through the electronic media and it was also cheaper and reduced biasness. Closed ended questions in the questionnaire helped to standardize and quantify responses from the research. The open-ended questions in the questionnaire ensure that in-depth data that is detailed and explorative of all aspects of the variable(s) under study is obtained.

Secondary data will also be used in this study and this will be obtained from audited financial statements of pension schemes under the management of the fund managers.

3.6 Data Collection Procedures

The questionnaire is to be administered electronically. Where this is not possible a hard copy will be sent to the respondent. An explanatory letter requesting for the information will accompany the questionnaire. The researcher will then communicate to the respondent on the agreed completion date to ask for feedback.

3.7 Data analysis and presentation

After all primary data is collected; the researcher will classify it in accordance with the variables. Statistical Package for Social Scientists (SPSS) data analysis program will be utilized to generate inferential and descriptive statistics**:** mean, standard deviation, frequencies, charts and percentages from the respondents to establish the relative importance and weight for each of the variables. MS. Excel spreadsheet tools will be utilized in presenting the quantitative data. The presentation will be reflected in line and bar charts to depict the relationships and trends between the dependent and independent variables.

Regression analysis will be used for the purpose of explaining the relationship between the fund manager's performance which is the independent variable and the dependent variables.The model will be in this form.

$$Y' = a + b_1X_1 + b_2X_2 + b3X3 + b4X4 + b5X5 + b6X6 + b7X7 + \varepsilon.$$

Where;

Y=Retirement benefits financial performance
X1=Portfolio Management Strategies
X2=Risk of asset class
X3 =Selectivity and timing
X4=fund managers competence/skills expertise
X5=Level of trustee financial literacy

X6=Level of trustee remuneration

X7=Fund size under management

ε=Error term

Each of the variables will be analyzed using the regression formula and coefficients will be derived which will have a relationship with the fund managers financial performance. A positive coefficient will mean that the variable has a direct correlation with the retirement benefits financial performance while a negative coefficient will mean that the variable has an indirect and opposite relationship with the fund performance.

3.8 Data validity and reliability

Reliability of data is important so as to yield accurate results which are going to be of better use. Issues to address when evaluating the validity of a study include the likelihood that a question will be misunderstood or misinterpreted by the respondent. The instruments like questionnaires to be used will be thoroughly structured so as to make it more valid in collecting data. Information will be collected through standard procedures and well structured questions in order to enhance consistency

A pilot study will be conducted initially to identify errors and weak areas in the questionnaire. The errors will then be eliminated and the weak areas will be improved on to provide greater clarity to the respondents. An expert opinion will also be sought to verify the validity of the content. The final questionnaire will then be used for data collection.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSIONS AND FINDINGS

4.1) Introduction

This chapter describes the analysis of data followed by a discussion of the research findings. The findings relate to the research questions that guided the study. Data was analyzed to find out the determinants of retirement benefits scheme financial performance in Kenya. Data was obtained from self administered questionnaires, completed by 30 trustees (n=30) out of the 60, a 50% response rate. Secondary data was also used for the purposes of this study.

A total of 60 questionnaires were issued, however, only 33 were received and out of the 33 only 30 questionnaires were usable for this study and met the required inclusion criteria as discussed in the previous chapter.

4.2 Data Analysis and findings

The data collected was analyzed using percentage, mean and mode, and linear regression and was presented by use of bar graphs, pie charts and tables.

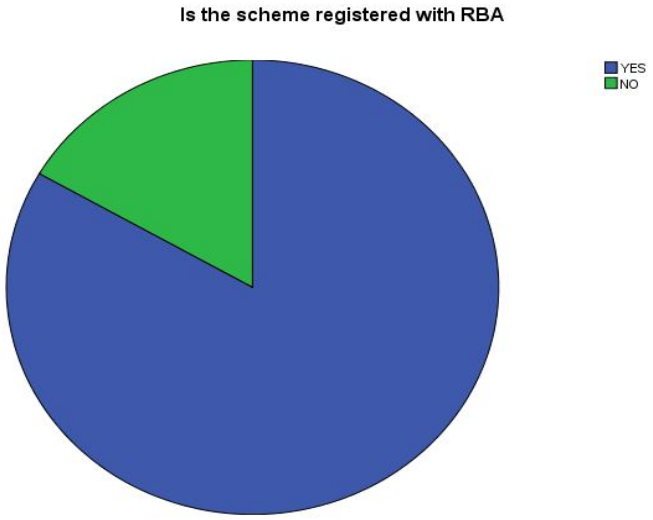
4.2.1 Registration of Scheme with the Retirement Benefits Authority

As indicated in Table 4.2 below, of the entire 30 respondents representing the schemes, 25 schemes were registered by the retirement benefits authority while 5 of them were not registered by the retirement benefits authority. This shows that a majority of the schemes have complied with the Retirement Benefits Authority and that they had met the set standards in terms of the asset classes set by the Retirement Benefits Authority.

Registration status of the scheme with the Retirement Benefits Authority

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	25	83.3	83.3	83.3
	NO	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Figure 4.2



Source: Research findings

4.2.2 Period the Retirement Benefits Schemes have been in existence

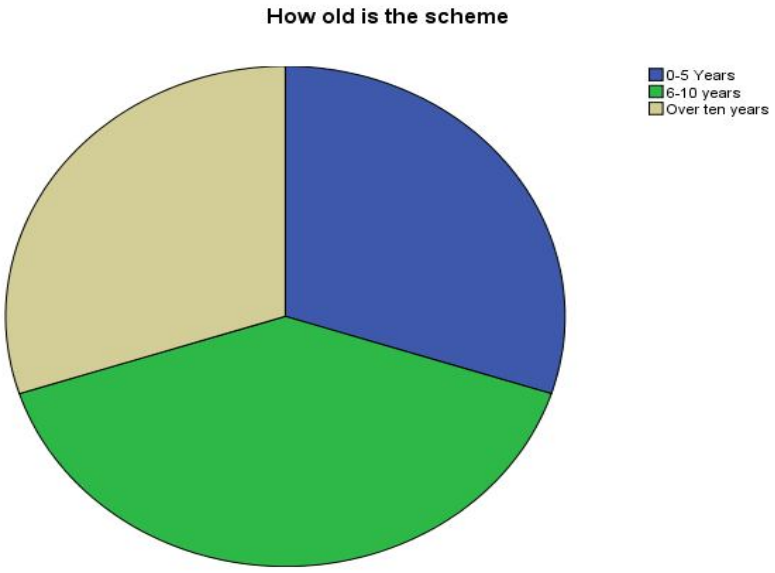
As indicated in Table 4.3 below, of the 30 schemes, 9 representing (30%) have been in existence for less than five years, 12 schemes representing (40%) have been in existence for between 6 and ten years, while 9 schemes representing (30%) have been in existence for more than 10 years. This showed the study was fairly representative because the number of years in existence for the schemes was homogenous . The findings of the

returns for an average of a three year rolling period showed no difference in returns in comparison with the number of years in existences.

Number of years in existence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5 Years	9	30.0	30.0	30.0
	6-10 years	12	40.0	40.0	70.0
	Over ten years	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Figure 4.3 Size of portfolio



Source: Research Findings

4.2.3 Size of fund portfolio and returns over the period

As indicated in figure 4.4 below, of the entire 30 schemes, 8 representing (26.7%) had fund value of 0-100 Million, 9 representing 30% had between 100-200 million, 5 representing16.7% had fund value between 200-300 million, 4 representing 13.3% had fund value between 300-400 million, 1 (3.3%) had between 400-500 million while 3 representing 10% had over 500 million in fund value. This showed a homogeneous representation of schemes with the different fund values

Fund Value

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-100	8	26.7	26.7	26.7
	100-200	9	30.0	30.0	56.7
	200-300	5	16.7	16.7	73.3
	300-400	4	13.3	13.3	86.7
	400-500	1	3.3	3.3	90.0
	500-over	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

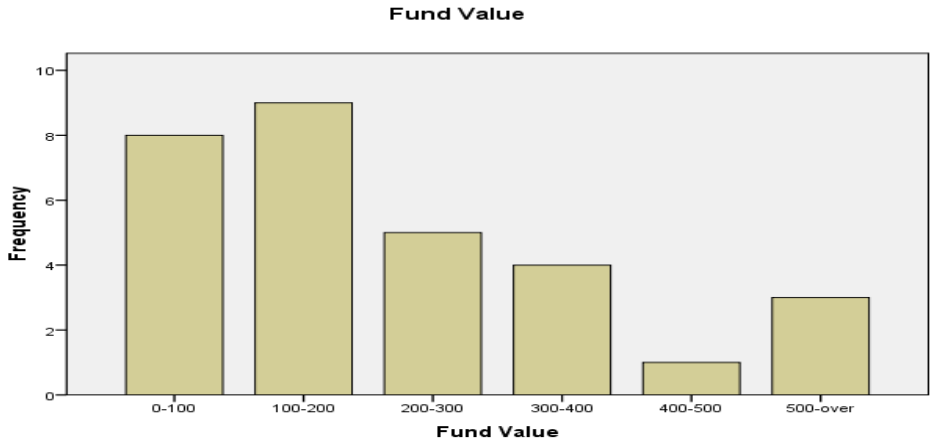


Figure 4.4

Source: Research Findings

4.2.4 Schemes fund value and annual average returns

The findings of the average returns for the schemes with the various fund values are as shown below. This shows that there is a positive relationship between the fund size and the returns over time.This positive relationship is strong and is because of the synergy generated as a result of being able to diversify.

Figure 4.5

Fund Value	Average returns
0-100	9
100-200	10
200-300	12
300-400	12.5
400-500	15
over 500	14

Source: Research Findings

4.2.5 Age profile for scheme members.

From the findings of the research the average member of the schemes sampled are as shown below. The age group 20-29 had 27%, 30-39 had 24%, 40-49 had 29%,50-59 had 17% while 60-69 had 3%. This showed why most schemes invested their funds in government securities which are deemed to be safer. There is a positive relationship between the risk appetite and the age of members in the scheme. From the findings there is a strong positive relationship because most of the members are above age forty and they prefer to invest in the government securities which are less risky.

Figure 4.6

Age brackets	Number of members	Percentage
20-29	2000	27%
30-39	1800	24%
40-49	2200	29%
50-59	1300	17%

60-59	200 7500	3%

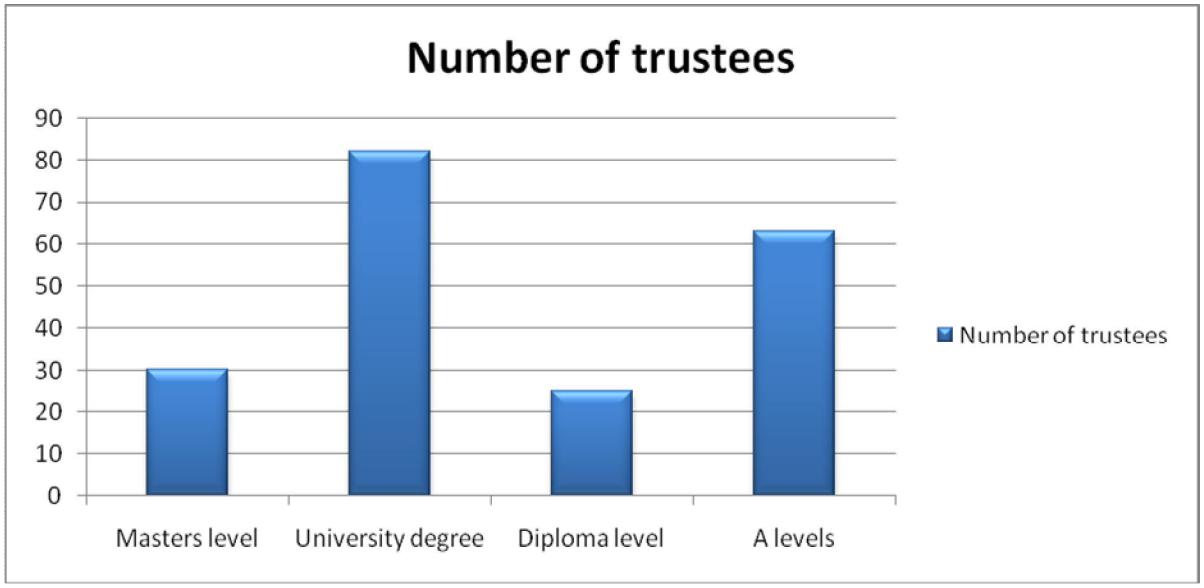
Source: Research Findings

4.2.6 Level of education for the trustees of the schemes.

An average of the sampled schemes had their trustees with the following professional qualifications as shown in table 4.7. This showed that a majority of schemes elect trustees with university degrees with a financial background. Most of the members believe that if the trustees are well versed with financial knowledge then they can be able to make informed decisions regarding investments and how they can be able to maximize member returns.

Education level	Number of trustees	Percentage
Masters level	30	15%
University degree	82	41%
Diploma level	25	13%
A levels	63	32%

Figure 4.7



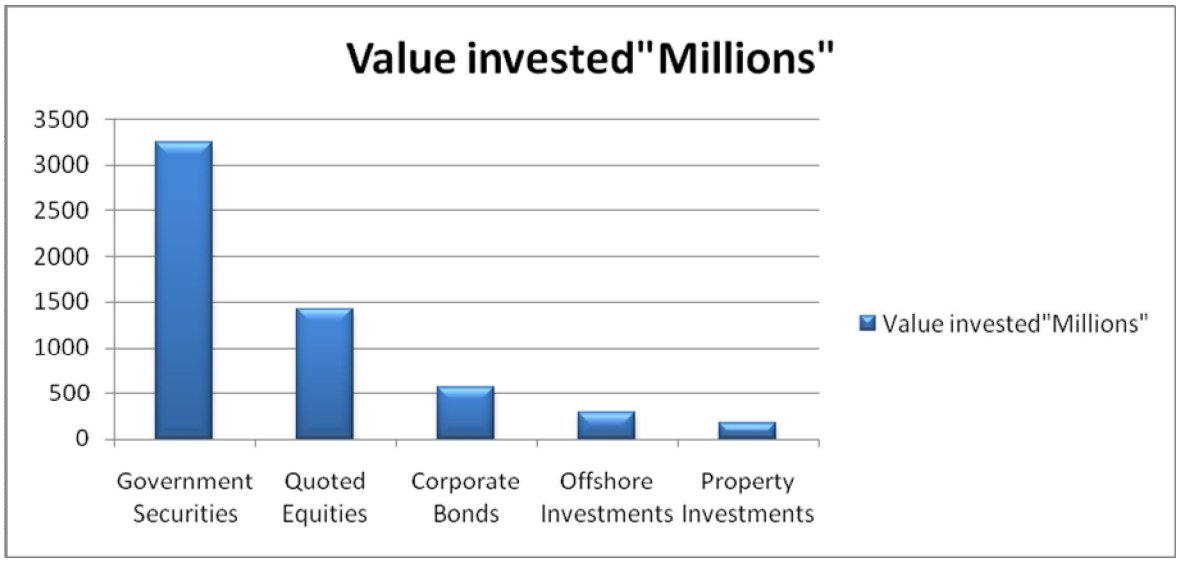
Source: Research Findings

4.2.7 Proportions of funds invested in the various asset classes.

An analysis of how the schemes funds were invested was done and the findings according to the various asset classes were as shown below.An average was done on the schemes fund values and the proportion of how the funds were allocated to the various asset classes.Government securities had the highest percentage at 57%, followed by quoted equities at 25%, corporate bonds had 10% while offshore and property investments had 5 % and 3% respectively.

The findings show that a majority of the schemes have taken the conservative approach of investing in assets perceived to be safer i.e. the government securities. This also shows because of the age of the members a majority being in the age group of 40-59 they prefer modest investments which are safer so as to safeguard their benefits. The younger age group of 25-39 prefers riskier investments as was demonstrated by the age group of 20-29 which was at 27%.

Asset class	Value invested “Millions"	Percentage
Government Securities	3249	57%
Quoted Equities	1425	25%
Corporate Bonds	570	10%
Offshore Investments	285	5%
Property Investments	171	3%



Source: Research Findings

Figure 4.7

4.2.8 Determinants of retirement benefits Schemes financial performance in Kenya

Regression analysis was used in finding out the relationship between the various identified determinants in relation to the financial performance of retirement benefits schemes in Kenya. Below are the results of the regression analysis in relation to the financial performance of retirement benefits schemes in Kenya.

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.925	8	16.241	5.298	.001[a]
	Residual	64.375	21	3.065		
	Total	194.300	29			

Predictors: (Constant), Fund size under management, selectivity and timing,Number of years in operation, Level of trustee remuneration, risk of asset class, Professional qualifications, Portfolio management strategies, Level of trustee financial literacy

b. Dependent Variable: Schemes financial performance

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-5.447	4.576		-1.190	.247
Portfolio management strategies	2.371	.509	.824	4.656	.000
risk of asset class	.634	.449	.198	1.411	.173
selectivity and timing	.665	.445	.229	1.494	.150

Professional qualifications	.063	.592	.016	.107	.916
Number of years in operation	.021	.272	.013	.077	.940
Level of trustee financial literacy	.022	.379	.010	.058	.954
Level of trustee remuneration	.114	.319	.051	.356	.726
Fund size under management	.414	.313	.203	1.321	.201

Source: Research Findings

a. Dependent Variable: Schemes financial

performance

The regression function will look like this

Y=0.824 X1+**0.198**X2+**0.229**X3+**0.016**X4+**0.013**X5+**0.01**X6+**0.051**X7+**0.203**X8

This regression function shows there is a positive correlation between all the determinants and the schemes financial performance. The portfolio management strategies, selectivity and timing are the coefficients with the strongest positive correlation with the schemes financial performance.

4.2.9 Procedures followed by the trustees in investing the schemes funds

There was a variety of answers to the procedures followed by the various trustees in investing the schemes funds. However it was clear that for most trustees they have fully dedicated the investment function to the investment managers who are guided by the investment policy statement which is a legal document is guiding the scheme on how their funds should be invested. Most of the trustees said they expected the fund managers to invest in investments which generate high returns. Other respondents said as much as

they expected high returns they expected the fund manager to invest a proportion of the funds in investments which are less riskier and those that are easy to sell in case of the members who are about to retire for the purpose of paying the members.

4.2.11 Factors other than the ones indicated as determinants in the questionnaire that affect the performance of the schemes financial performance.

From the respondents some factors other than the determinants already identified came out strongly as some of the other factors which may influence the financial performance of the schemes.

The trustees considered the global economic conditions as crucial in determining how the Kenyan economy is going to perform. They cited the recent 2008-2009 global financial crisis which affected the general world economy .This crisis also shrank the gains which had been made by the retirement benefits schemes as most investments incurred losses.

The respondents also deemed it important to analyze the political situation in the country before investing in any sector. They gave an example of the post election violence and how it affected the stock market negatively affecting the schemes financial performance.

The long term strategies adopted by the scheme determine the strategies to be adopted by the fund managers in investing the schemes funds. This goes a long way in delivering good returns to the scheme.

The trustees cited the government regulations as some of the factors which affect the performance of retirement benefit schemes. Some regulations cited was where the government allowed deferred members to withdraw some of their benefits before retirement. This occasioned losses in some schemes' since the funds had been locked up in long term investments.

4.3 Summary and Interpretation of Findings

There are a number of determinants which affect the financial performance of retirement benefits schemes in Kenya as seen from the study. From the study a good number of schemes are registered by the Retirement Benefits Authority which shows that the pensions industry is well regulated by RBA to ensure compliance to the set investment guidelines. This helps the schemes in complying with the set regulatory rules like submission of contributions by a particular date and the maximum asset class limits set .This compliance check list with the regulator on overall improves the performance of pension schemes.

The schemes with bigger fund values had better returns over a three year rolling period. Funds with over 400 million were doing a return of 15% and above this shows that the scheme investment can be pegged on how big the fund is. This is because of the ability to be able to diversify the investments to get optimal returns. These findings differ from those of Cheng,Hong, Huang and Kubik (2004)who found out that fund size and performance are strongly negatively associated. Droms and Walker (1994) find no relationship between fund size and performance in their study of international mutual funds.

It is also evident from the findings that to a large extent the portfolio management strategies determine how the scheme returns are going to look like. There is a strong positive correlation between the financial performance and the strategy adopted by the investment managers. 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. Because stock indexes, such as the S&P 500 Index, that are commonly used for performance evaluation are often value weighted

(market-cap weighted), their use as benchmarks for evaluating non-value-weighted portfolios may fail to adequately identify fund performance. These findings compare with those of Strongin, Petsch, and Sharenow (2000) which showed that an actively managed portfolio's performance is determined not by the success of its managers' security analysis but rather by high concentration of risk in a value-weighted benchmark.

There was a weak positive relationship between the age of a scheme and its financial performance. From the findings it shows that a scheme benefits by having the advantage of having been in the market for a long time and hence it has learned how to improve on its returns.These findings are similar to those of Stinchcombe (1965) who argues that older firm's can achieve experience- based economies and can avoid the liabilities of newness. We expect a positive relationship between age and firm's performance. Research in organizational behavior suggests that top management characteristics affect corporate decisions and, in particular, the firm's ability to take risks which may have a critical impact on its performance. In an influential paper, Vroom and Pahl (1971) establish that older managers are more likely to avoid risky decisions.

There was a weak positive relationship between the professional qualifications of the trustees and the schemes financial performance. Most schemes had trustees who had a financial background in the university degrees.The trustees thought that if they are educated and have a financial background then they can easily be able to know the decisions to take in terms of investing the scheme funds. These finding are similar to those of Phillip (1995) found that the investors derive benefit from their education in so far as their behavior tends to change; changing behavior changes the process of their choice making.

There was a strong positive relationship between the risk of asset class and the financial performance of the scheme. This was evident in that many schemes had a bigger portion of their funds invested in government securities which are less riskier yet they guarantee good returns. The findings also indicated that the younger age group prefers the more risky asset classes like the quoted equities and offshore investments.

There were other determinants other than the one in our model which the trustees thought it was important in determining the financial performance of the scheme. Factors such as the global economic performance, government regulations and the long term strategy of the scheme influence the performance of the scheme.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This research was done to find out the determinants of retirement benefits schemes financial performance in Kenya. The findings indicated that there are a number of determinants of retirement benefits financial performance in Kenya. It was also noted that there are a number of many other factors which affect the retirement benefits financial performance and the performance cannot be based on a definite number of factors.

5.2 Summary of Findings

The objective of the research was to determine the determinants of retirement benefits scheme financial performance in Kenya. The main objective was to determine the drivers of good financial performance for these retirement benefits schemes in Kenya. This was majorly due to the fact that members of these schemes need to have a good retirement benefit by the time they attain retirement and it's important that there benefits are invested well to earn good returns and to be able to perform well above the inflation rates. The sample was done on retirement benefits scheme operating in Kenya and data was obtained by way of issuing questionnaires to the trustees and also using secondary data like the published reports. The data was analysed by way of bars and charts. Regression analysis was also done to determine the relationship between the determinants and the retirement benefits scheme financial performance.

5.3 Conclusions

From the findings of this research it is evident that the there are a number of factors affecting the financial performance of retirement benefits in Kenya. It also emerged that

apart from the determinants identified herein there are also other factors such as political stability, government regulations, global economic outlook and long term strategies adopted by the scheme to take into consideration before investing. Investor's funds have to be rationally invested so that they can earn maximum returns. In this case the fund managers should use the powers at their discretion to rationally invest these funds so that they yield high returns.

5.4 Policy Recommendations

Based on these research findings the following are the recommendations to the various stakeholders.

The trustees of pension schemes should engage the services of a professional consultant to draft policies to guide the investment manager on the investment strategy of the scheme. This policy should take cognizance of the age structure of the employees and the various risk appetites for the employees. This will help in matching the assets and the liability profile for the scheme.

The trustees should also have a risk mitigation policy in place. The various inherent risks should be identified through consultative forums to identify them and also mitigate their effects. The trustees should also have a trustee liability cover to reduce their risk in case of any litigation issues which may arise.

There should be a policy in place to guide the government in policy making. The process should be consultative to ensure that the interest of the stakeholders is considered in making the regulations.

5.5 Limitations to the Study

Lack of adequate resources (time, finances) meant that the researcher was limited to a few areas of research. The lack of resources meant the researcher could not be able to reach to all the service providers of a pension scheme to be able to get a feedback from them on the determinants of schemes financial performance.

The respondents felt they needed to be thoroughly educated on the area of study before they could fill the questionnaire. Some of the trustees expressed the concern that they did not have data for their schemes since most of the data was with the appointed service providers.

There was a poor response in terms of returning the questionnaires. Out of the sample population only 50 % returned the questionnaires even after numerous follows by email and phone calls. This reduced the sample population though it was still representative.

5.6 Suggestions for Further Study

A study on the capital markets efficiency in ensuring that investors get good returns on their investments should be carried out. This study should look at the operations of the Nairobi Securities Exchange to find out if there is efficiency in the operations in terms of buying and selling of investments. It should also focus on the automation measures out in place to increase efficiency.

A study on the measures put in place to make sure that the fund managers take the right investment decision so as to maximize the shareholders wealth and to ensure that they are held accountable when they do not do so.

The research should be widened to include all investors i.e. the corporate and retail investors so as to determine factors which affect their investment returns. Some of the

investors can include the private equity funds, the venture capitalists and the foreign investors who have invested in Kenya's capital markets.

A study should be done on the performance of schemes which invest their funds with guaranteed arrangements and those who do the segrated arrangements to compare the two models of investments and see how they compare over a period of like 10 years. The study will help the trustees and sponsors of schemes to know which investment model is appropriate for them.

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APPENDIX I: LETTER OF INTRODUCTION

Rugut Vincent Kiprotich
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Nairobi
Email: Vincent.rugut@yahoo.com

Dear Respondent,

RE: INTRODUCTION LETTER FOR AN MSC RESEARCH PROJECT

I'm a postgraduate student undertaking a Master of Science in finance degree at the University of Nairobi. In partial fulfilment of the course requirements, I'm currently carrying out a research on

"**THE DETERMINANTS OF RETIREMENT BENEFITS SCHEMES FINANCIAL PERFORMANCE IN KENYA"**

As one of the respondents, I kindly request that you fill the attached questionnaire to enable me complete the research. The information you provide for this research will be treated with utmost confidentiality and is purely intended for academic purposes.

Your cooperation in completing the questionnaire will be highly appreciated.

Yours Faithfully,

Rugut Vincent — Dr Josiah Aduda

STUDENT — SUPERVISOR

APPENDIX II: QUESTIONNAIRE

QUESTIONNAIRE ON THE DETERMINANTS OF RETIREMENT BENEFITS SCHEME FINANCIAL PERFORMANCE IN KENYA

SECTION ONE: GENERAL INFORMATION

1. Is your retirement benefits scheme registered by Retirement Benefits Authority?

Yes

No

2. How long has the scheme been in existence?

Less than 5 years

6-10 years

More than 10 years

3. What has been the fund value of the schemes asset base over the years 2005-2011?

	Amount in Millions						
	2005	2006	2007	2008	2009	2010	2011
Non-current assets							
Current Assets							
Current Liabilities							
Equities							

4. What has been the size of the fund portfolio you have managed over the years and how many professionals were dedicated to the fund and what were the returns over the period?

	Amount in Millions						
	2005	2006	2007	2008	2009	2010	2011
Total Fund Value							
Dedicated portfolio managers							
Average returns on investments							

5. Indicate the percentage of employees under the various age groups indicated below?

	Number of staff						
	2005	2006	2007	2008	2009	2010	2011
20-29							
30-39							
40-49							
50-59							

6. Indicate the number of trustees with the various education levels indicated below

Masters Level and above _____

University Degree with a financial background _____

Diploma level _____

No specialized education other than A levels _____

7. Using a scale of 1-5 to represent the level of agreement where **1 represents Totally Disagree and 5 represents Totally agree** indicate your level of Agreement with the factors which affect your investment performance of pension funds by ticking the most appropriate box as related to the following statements?

	1	2	3	4	5
Investment policy statement (Portfolio management strategies)					
Risk of the asset class					
Market timing and selectivity					
Financial Literacy of the scheme trustees					
Fund managers competence/Professionalism					
Level of trustee remuneration					
Fund Size under management					
Trustees involvement in investment					

8. What are the procedures you follow in investing the Schemes funds?

_____

_____

_____

_____

_____

_____

_____

9. What other factors affect the performance of the Schemes funds?

_____

_____

_____

_____

_____

10. What proportions of the Scheme funds have been invested in these asset classes over the years 2005-2011?

	Number of staff						
Asset class	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Government Securities							
Quoted equities							
Commercial paper and Corporate Bonds							
Offshore Investments							
Property investments							
Totals							