

**A SURVEY OF INVESTMENT PRACTICES OF
PENSION FUND MANAGERS IN KENYA**

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BY

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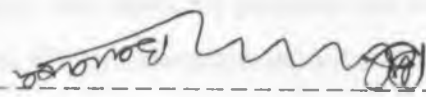
**A MANAGEMENT RESEARCH PROJECT
PRESENTED IN PARTIAL FULFILLMENT OF
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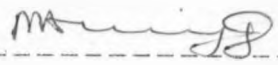
DECLARATION

This Management Project Paper is my Original Work and has not been presented for a degree in another University.

Signed  -----
Omonyo B. A.

Date 18-11-2003

This Management Project Paper has been submitted for examination with my approval as University Supervisor.

Signed  -----
Mr. Moses Anyangu

Date 19/11/03

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All praise is due to God the Almighty, without whose guidance and inspiration this study would not have been accomplished. Thanks and appreciation go to the Pension Fund Managers whose answers made this study a success.

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I acknowledge the contribution of the faculty lecturers who formed the panel that gave direction to this study. Finally, I am indebted to my family for having held prayers that were potent enough to see me through the course.

DEDICATION

I dedicate this study to John and Moses who, despite their age at the time of this study, game me comfort.

TABLE ABSTRACT

This study considered the investment practices of pension fund managers in Kenya. The study surveyed the practices of pension fund managers in an environment constrained by RBA investment guidelines. The findings of the study failed to establish a significant difference in asset allocation strategies of different fund managers. It however revealed that risk and return are the key considerations in investment.

The study identified market illiquidity as the main problem facing fund management. The sector had considerable growth both in size and scope over the study period. The findings were analyzed in juxtaposition with the theoretical and empirical framework and recommendations have been made to minimize deviations from what is expected of this sub sector. The study established that the regulations in place were general and not specific to the extent that a fund manager could easily manipulate them to meet their personal whims. The study thus highly advocates for more stringent regulation and the introduction of less costly investment vehicles.

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1 INTRODUCTION

1.1 Background

Fund managers are in the business of safeguarding and growing their portfolios through conscious and astute investment of the funds entrusted with them by their shareholders. They are professional practitioners whose advice and investment tactics and/or practices are relevant not just to themselves but also to the whole business community.

The term “investment” is defined as, “any medium by which placement of funds generally occurs with the expectation of preserving value and earning a positive return.” (AIMR 1999).

Reilly and Keith (2000) define “investment” as “...the current commitment of dollars for a period of time in order to derive future payments that will compensate the investor for (1) the time the funds are committed (2) the expected rate of inflation and (3) the uncertainty of the future payments.”

From a layman’s point of view, “investment is what one does with savings to make them increase over time.” Accordingly, the investor can be an individual, a government, a pension fund or a corporation.

Professional asset management firms are organized in two basic ways. In arguably the most straightforward structure, individuals as well as institutional investors, such as the sponsors of pension and endowment fund, make contracts directly with a management and advisory firm for its services. These services can range from providing standard banking services/transactions to advising clients on structuring their own portfolios to actually managing the investment funds themselves. A variation of this approach is the Asset Under Management (AUM) approach in which the management firm becomes the custodian of the investors’ capital, usually with full discretion as to how those funds should be invested. Each client of the management firm has a separate account.

A second general approach to asset management involves the commingling of investment capital from several clients. The investment company then invests a pool of funds belonging to many individuals in a single portfolio of securities. In exchange for this commitment of capital, the investment company issues to each investor new shares representing his or her proportional ownership of the mutually held securities portfolio, commonly known as a fund.

This study is compelled to lean towards the first structure with the justification that the second structure is not developed in Kenya. For that matter, we shall consider only pension funds under our study.

Fund managers are in a position of trust and must therefore discharge their fiduciary duty with sobriety and due diligence. The fund manager must act in the best interest of the shareholders or the fund owners. As such, a fund manager must act with discretion often recognizing that they are held and charged with a higher standard of care and a higher degree of knowledge than the average person. As a trustee, a fiduciary, the fund manager is instructed, "...to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested." Precisely, the fund manager must ascribe to the Prudent Man Rule as described in the case of *Harvard Vs. Amory* (AIMR 1999).

According to the U.S Investment Advisers Act of 1940, fund managers or Advisers cannot

- (i) employ any device or scheme to defraud any client or prospective client:
- (ii) engage in any transaction or course of business that may operate as a fraud or deceit upon any client or prospective client:
- (iii) engage in transactions as a principal or as an agent in a client's account without first disclosing the transaction to the client and receiving the client's consent:

- (iv) engage in any act or course of business that is fraudulent, deceptive or manipulative.

In *SEC Vs. Capital Gains Research Bureau*, the Supreme Court of the United States stated that the Adviser's Act reflects a Congressional recognition of the delicate fiduciary nature of an investment advisory relationship, and the intent to eliminate or at least to expose, all conflicts of interest. (AIMR 1999).

In Kenya, the business of fund management is beginning to grow at a commendable rate especially after the enactment of the Retirement Benefits Act of 2000. There are eleven registered pension fund managers as listed in the appendix.

The RBA Act itemizes the role of the fund managers as follows:

- (i) To advise the trustees on available investment vehicles and expected risk and returns for each vehicle.
- (ii) To make tactical asset allocation decisions based on the strategic asset allocation contained in the investment policy
- (iii) To undertake research at company, sector and country levels
- (iv) To manage the portfolio so as to ensure liquidity is available to meet the scheme's needs
- (v) To provide accurate and timely periodic reports to the trustees and the Authority on holdings and transactions.

RBA has developed investment Caps that serve as guidelines for fund managers. According to these guidelines, a manager should invest a maximum of

- (i) 5% of the fund in cash
- (ii) 30% of the fund in deposits
- (iii) 15% of the fund in Commercial paper and bonds
- (iv) 70% of the fund in government paper or quoted shares
- (v) 5% of the fund in unquoted shares
- (vi) 15% of the fund in offshore securities

- (vii) 30% of the fund in real property
- (viii) 100% of the fund in guaranteed investments

Consequently, investment practices of fund managers are constrained and require managers with impeccable skills to diversify and beat the market. RBA has also developed regulations pointing to the effect that a fund manager cannot invest more than 15% of the fund in any one particular quoted company and a manager cannot invest more than 3% of the fund in its sponsor.

Fund managers may temporarily violate these maximum limits in cases of asset revaluation, appreciation in market prices, bonus issues and transfers between classes. Before October 8, 2000, when the RBA act was fully enacted, fund managers followed an investment strategy that could be described as freewheeling opportunism. The managers used their own hunch and intuition without any regulation. Perhaps the only regulation that existed was that imposed by the Companies Act, which only stipulated how the directors of these funds were to carry out business particularly when it comes to insider trading and conflict of interest.

1.2 Statement of the problem

Fund managers often feel pressure from various constituencies to engage in social investing. The same fund managers also often feel pressure from several other constituencies to engage in relationship investing. Yet both social and relationship investing are never primary (though they may be incidental) considerations of investments that are equal in economic and financial terms (AIMR 1999). If not well designed, extremes of both social and relationship investing can drastically affect the performance of the fund as exemplified by NSSF's unconscious investment in the past years.

A pension fund has a set of future liabilities and those responsible for administering these liabilities want a money manager to construct a portfolio of assets that will match this

liability stream (Leibonitz 1986). As fund management is a fixed cost business, volume has been the Holy Grail, and there has been a huge temptation to offer the latest hot products. Most pension fund managers have been investing in stocks for the long term ignoring the possibility that when the stock market falls, it may fall so steeply that it may wipe a huge chunk of an investor's savings and leave him insufficient time to build them up again for retirement.

The pension fund industry has witnessed a major paradigm shift from defined benefit schemes to defined contribution schemes implying that individuals, and not their employers or the state, are to underwrite any risks of poor investing. Getting their investment policy wrong may mean having to work for more years! *They need a fund manager who is able to pick investments which the rest of the market has overlooked.* Investment theory postulates that it is not simple to come across a manager who can consistently outperform the market and therefore keep the value of the AUM rising in tandem with the guidelines of the fund sponsors.

The fund manager must always be careful to ensure that the value of the fund entrusted with them does not deplete, widely because they live on a fee and this fee is taken as a percentage of the Assets Under Management (AUM). The fee will go down in absolute terms if the value of the Assets Under Management goes down. Any fall in value of AUM will lead sponsors of the fund to take away their money from the manager thus further reducing the value of the AUM and therefore the manager's fee, ultimately leading to disintermediation. (The Economist, 5-11, July 2003)

This study seeks to establish how fund managers ensure that their funds do not depreciate in value and that they are not disintermediated in an environment constrained by RBA investment caps. Previous studies in this area have focused on measuring performance of fund managers and estimating the effect of RBA guidelines on reporting of fund performance. (Ng'ene 2001 and Wanyama 2001 respectively)

1.3 Objectives of the study

The objectives of our study are:

1. To identify the factors that fund managers consider in allocating the fund to assets within their recommended portfolio
2. To ascertain the investment practices of fund managers in Kenya.

1.4 Significance of the study

The study presents both normative and positive aspects of investment. Theoretical framework presents us with what ought to be done by fund managers. From the theoretical standpoint we move on to establish what fund managers do. This study seeks to inspire action- not to blind people with science. It is expected that with the political change over in Kenya, professionalism will more than ever be emphasized and fund managers who do not invest consciously will be in the limelight.

The preceding studies in this area have been concerned with measuring performance of the fund managers and estimating the effect of RBA guidelines on the funds. This study is significant in presenting information that should have been key to those previous studies. For that matter, two types of studies are expected to span from this study. On the one hand will emerge studies seeking to establish whether there has been any difference in the performance of the fund managers. On the other hand will be studies attempting to explain whether there is a significant relationship between asset allocation and portfolio return. Variations of these studies are also likely to draw from our study. The study hopes to guide the formulation and implementation of asset management and allocation policies that will steer fund managers to higher echelons of performance.

2 LITERATURE REVIEW

2.1 Introduction

In this section the study presents the theoretical (untested) as well as empirical (tested) literature relevant to the subject of fund management. The first section presents the theoretical framework. The second section identifies empirical works that have been done on the subject.

2.2 Theoretical literature Review

Fiduciaries often feel pressure from various constituencies to engage in *social investing-investing with a view toward the social or political statements made by such an investment*. Some fund participants may want managers to invest only in those organizations that are “green” or “environmentally conscious”; other constituencies may ask for investing only in companies or countries that meet certain social or political criteria; still other constituencies may want to avoid certain products, such as tobacco or fire arms. Fund managers must keep in mind that the fiduciary duty of prudence is paramount and dictates that trustees judge investments according to the following criteria: *risk and return, asset diversification and cost conscious investing*. These principles should come first when making an investment decision. (AIMR 1999)

ERISA (Employee Retirement Income Security Act) guidelines address the issue of social investing directly. ERISA guidelines issued by the U.S Department of labour state that the ERISA prudence standard requires a fiduciary to make investment decisions first on grounds of economic and investment merit. *Consideration of social factors may be an incidental, but never primary, consideration of investments that are equal in economic and financial terms*. Pension funds may feel pressure to screen investments for social attributes. They must first adhere to fiduciary duties, however, and any specific investment guidelines stated for them in their governing statutes and plan documents. (*ibid*)

Relationship investing considers the potential of a company to produce greater returns if the fund takes an active approach in influencing the management of the company's affairs, either through the size of the fund's ownership position on its own or through combining its position with other ownership positions. Again, fiduciaries should consider the economic benefits of such an investment before engaging in relationship investing. This consideration should include the costs associated with the approach such as costs for attending shareholder meetings and actively monitoring the company affairs. Also, the level of investment necessary to establish influence in a corporation's affairs may be antithetical to the requirement for diversification of overall plan assets.

An investment strategy that attempts to influence a company's management is consistent with fiduciary duty if the fund manager concludes that there is a reasonable expectation that such attempts are likely to enhance the value of the plan's investment in the corporation. Before embarking on the construction of some optimal portfolio, fund managers must establish the objectives of the investors within the fund. Usually investors' objectives fall in the following categories:

- (i) Capital preservation
- (ii) Capital appreciation
- (iii) Current income
- (iv) Total return

These objectives change with the ages of investors as exemplified by the Ando Modigliani investor profile and the fund managers should take cognizance of this in their policy statements.

After establishing the objectives of the investors to the fund, fund managers should consider any *investment constraints such as liquidity needs, investment time horizon, legal and regulatory constraints, unique needs and preferences.* Fund managers should strive not to share a penny of their profits with the taxman.

(Invest it Magazine, summer 2002)

While constructing an investment strategy, fund managers generally make four decisions viz:

- (i) what asset classes to consider for investment
- (ii) what normal or policy weights to assign to each eligible asset class
- (iii) the allowable allocation ranges based on policy weights
- (iv) what specific securities to purchase for the fund

Studies on investment performance over time have come to conclusion that 85-95 percent of overall investment returns arise from the first and second decisions, the long-term asset allocation decisions. (Frank 2000)

Fund management is a profession with far reaching implications on any economy. Poorly managed funds can bring down large investors and the economy as a whole. *Actions of fund managers are analogous to butterflies and their wings; a butterfly flapping its wings in Busia may produce a chain of events that may lead to an inferno in Lamu!*

Therefore, *in accordance with the shingle theory, anybody who "hangs out a shingle" or depicts himself or herself to the public as being capable of providing such a service implies that s(h)e has the back office and other capabilities to perform the duties of an investment professional and thus should be held to a higher standard of care.*

(AIMR 1999)

Literature provides a plethora of portfolio management strategies. These strategies are itemized in the Financial Analysts Journal 42, no. 1 (1986) as follows:

a) Passive Management Strategies

These strategies assume that a manager cannot beat the market as the market is presumed to be informationally efficient. Under passive fund management, the manager follows simple buy and hold strategy, which involves finding investments with desired quality. Managers using this approach simply look for vehicles whose maturities or duration approximate their stipulated investment horizon to reduce price and reinvestment risk.

Alternatively, an indexing strategy is adopted by managers. This is a passive strategy that involves building a portfolio that will match the performance of a selected index such as the NSE 20-share index or the AIG 27- share index. Full replication is an indexing strategy that involves investing in all securities in the index in proportion to their weights in the index. This could be likened to *"follow the smart money technical strategy"*

b) Active Management Strategies

These set of strategies involve buying cheap and selling dear. The manager believes that s(h)e can beat the market implying that these strategies work best in inefficient market market frameworks or in strong form efficient markets. The main strategies here are interest rate anticipation, valuation analysis, credit analysis, yield spread analysis, bond swaps, sector rotation, Earnings /price momentum and style analysis.

Interest rate anticipation is perhaps the riskiest active management strategy because it involves relying on uncertain forecasts of future interest rates. The idea is to preserve capital when an increase in interest rates (extension risk) is anticipated and achieve attractive capital gains when interest rates are expected to decline (contraction risk). Such an objective is usually attained by altering the maturity (duration) structure of the portfolio (reducing portfolio duration when interest rates are expected to increase and increasing the portfolio duration when a decline in yields is anticipated).

With valuation analysis, the fund manager attempts to select investments based on their intrinsic value. In turn, the value of the investment is determined based on its characteristics and the average value of these characteristics in the market place.

Success in valuation analysis is based on understanding the characteristics that are important in valuation and being able to accurately estimate the yield cost of these characteristics over time.

A credit Analysis Strategy involves detailed analysis of the securities' issuer(s) to determine expected changes in their default risk. This involves attempting to project changes in the quality ratings assigned to securities by rating agencies. (Ashwin Paul C. Sondhi 1995), AIMR-1998

Yield spread Analysis assumes normal relationships exist between the yields for bonds in alternative sectors (e.g. the spread between high grade versus low –grade industrial or between industrial and utility bonds). A fund manager would therefore monitor these relationships, and when an abnormal relationship occurs, execute various sector swaps. The crucial factor is developing the background to know the normal yield relationship and to evaluate the liquidity necessary to buy or sell the required issues quickly enough to take advantage of the temporary abnormality, (Dialynas and Edington 1992).

Bond swaps involve liquidating a current position and simultaneously buying a different issue in its place with similar attributes but having a chance for improved return. Swaps can be executed to increase current yield, to increase yield to maturity to take advantage of shifts in interest rates or the realignment of yield spreads, to improve the quality of a portfolio, or for tax purposes.

A sector rotation strategy involves positioning the portfolio to take advantage of the market's next move. This means emphasizing or overweighting (relative to the benchmark portfolio) certain economic sectors or industries in response to the next expected phase of the business cycle. As the economy moves to a trough, financial stocks excel; as the economy recovers, capital goods excel, at the peak, basic industries excel.

As the economy goes into a recession/decline, consumer staples excel. (Susan E. Kuhn, 1994).

Earnings momentum/price momentum strategies are used because the market at times seems to reward the stocks of companies whose earnings have steady, above average growth or whose prices are rising due to market optimism.

Returns-based style analysis is an attempt to explain the variability in the observed returns to a security portfolio in terms of the movements in the returns to a series of benchmark portfolios designed to capture the essence of a particular security characteristic. Style Analysis determines the combination of long positions in a collection of passive indexes that best mimics the past performance of a security portfolio. (William F. Sharpe 1992).

2.2.1 Dedicated Portfolio Strategies

Because of an increase in the interest rate volatility and the needs of many institutions, there has been a growth in the use of matched-funding techniques ranging from pure cash matched dedicated portfolios to portfolios involved in contingent immunization. Dedication refers to portfolio management techniques that are used to service a prescribed set of liabilities. A pension fund has a set of future liabilities and those responsible for administering these liabilities want a money manager to construct a portfolio of assets with cash flows that will match this liability stream. Such a “dedicated” portfolio can be created in several ways. The most conservative of these is a pure cash matched dedicated portfolio. The objective of this is to develop a portfolio of bonds that will provide a stream of payments from coupons, sinking funds, and maturing principal payments that will exactly match the specified liability schedules. Dedication with reinvestment is the same as the pure cash-matched technique except it is assumed that the bonds and other cash flows do not have to exactly match the liability stream. Any inflows that precede liability claims can be reinvested at some reasonably conservative rate. (Martin L. Leibonitz 1986)

Instead of using a passive strategy, an active strategy, or a dedicated portfolio technique, a fund manager (after client consultation) may decide that the optimal strategy is to immunize the portfolio from interest rate changes. This technique attempts to derive a specified rate of return (close to the current market rate) during a given investment horizon regardless to what happens to market interest rates.

2.2.2 Asset Allocation Strategies

A fund manager usually manages a combination of different portfolios. The equity portfolio is part of a balanced portfolio that contains holdings in various long and short-term debt securities such as T-bills and bonds – in addition to equities. The fund manager must consider more than just the composition of the equity or bond components of the portfolio. The manager must determine the approximate mix of asset categories in the entire portfolio. Fund managers must deeply be involved in the process of asset allocation in order to attain superior performance. As lottery fans say, if you are not in, you can't win!

In determining the asset mix of portfolio, managers use various strategies as follows:

2.2.2a Integrated Asset Allocation Strategy

This strategy separately examines the capital market conditions and the investors' objectives and constraints. These factors are then combined to establish the portfolio asset mix that offers the best opportunity for meeting the investors' needs given the capital market forecast. The actual returns from the portfolio are then used as inputs to an iterative process in which changes over time in the investor's objectives and constraints are noted along with changes in capital market expectations. The optimal portfolio is then revised based on this update of investor needs and capital market expectations.

(William F. Sharpe, 1987)

2.2.2b Strategic Asset Allocation Strategy

This strategy is used to determine the long-term policy asset weights in a portfolio. Long-term average asset returns, risk and covariances are used as estimates of future capital market results. Efficient frontiers are generated using these historical return information

and the investor decides which asset mix is appropriate for his or her needs during the planning horizon. This results in a constant mix asset allocation with periodic rebalancing to adjust the portfolio to the specified asset weights. This strategy is similar to integrated asset allocation strategy but does not have feedback loops i.e. once the asset mix is obtained, the manager does not constantly attempt to adjust the allocation according to temporary changes in market and investor circumstances. Thus, strategic allocation defines the basic nature of the trade-off between opportunity and safety that confronts the investor (D. Don Ezra, 1998).

2.2.2c Tactical Asset Allocation Strategy

Tactical Asset Allocation constantly adjusts the asset class mix in the portfolio in an attempt to take advantage of changing market conditions. These adjustments are driven solely by perceived changes in the relative values of the various asset classes; the investor's risk tolerance and investment constraints are assumed to be constant over time. This strategy is frequently based on the premise of mean reversion, which holds that whatever a security's return has been in the recent past, it will eventually revert to its long term average (mean) value. Intuitively, trees do not grow to the sky!

Tactical asset allocation is an inherently contrarian method of investing – the investor adopting this approach will always be buying the asset that is currently out of favour- on a relative basis, at least- and selling the asset with the highest market value. Adjustments in the asset class mix in the portfolio depends on the general level of volatility in the capital markets, the relative size of the equity and fixed income risk premiums and changes in the fundamental macroeconomic environment (Charles H. Dubois, 1992).

Tactical asset allocation is simply an application of Newton's law of gravity, which seems to work in two ways in financial markets. What goes up must come down; it also appears over time that what goes down may come back.

2.2.2d Insured Asset Allocation Strategy

This strategy results in continual adjustments in the portfolio allocation. Insured asset allocation assumes that expected market returns and risks are constant over time, while the investors' objectives and constraints change as his or her wealth position changes. Rising portfolio values increase the investors' wealth and consequently his or her ability to handle risk, which means the investor, can increase his or her exposure to risky assets. This strategy is sometimes called a constant proportion strategy because of the shifts that occur as wealth changes. (Reilly, 2000)

2.3 EMPIRICAL LITERATURE REVIEW

There is evidence that investor sentiment may indeed predict stock returns. By investor sentiment is meant the mean allocation to stocks in the recommended portfolio. Fund managers must burn the midnight oil to ensure that their mean allocation to securities in their recommended portfolio yields superior returns. Constrained by the RBA investment caps, Fund managers find mathematical tools such as linear programming and forecasting and simulation invaluable useful. AIMR 2000 finds that investor sentiment is a reliable contrary indicator for future S&P 500 returns, confirming the findings of Bernstein and Pradhuman (1994). Clarke et al (1989) showed that combining the level of various groups provides a good tool for forecasting future S&P 500 returns. They contend that the information reflected in the coefficient of determination of these sentiments can add substantial value to a tactical asset allocation program.

Charles (1985) presents an expert opinion on "how to win the loser's game". He sets forth a bunch of questions that investors should answer as part of the process of constructing an investment policy statement. These questions generally border on the investors' knowledge and risk- return considerations.

Wall Street journal (1990) displays the risk categories and suggested asset allocation for Merrill Lynch clients. For the group of clients who are conservative for income, Merrill Lynch prescribes 30%, 60%, and 10% investment of the fund in stocks,

bonds and cash respectively. For clients who are conservative for growth, they recommend 60%, 30%, and 10% investment of the fund in the respective asset classes. For clients who are willing to take on moderate risk, they recommend 50%, 40% and 10% respectively, investments in stocks, bonds, and cash. For those clients who are willing to take on aggressive risk, Merrill Lynch recommends 60% investment in stocks, 40% in bonds and nothing in cash. The moral here is that fund managers must measure the risk preferences of their clients before committing funds to various investment vehicles. Managers must undertake deliberate policies and research aimed at establishing their clients' investment objectives bearing in mind the provision of the soft dollar standards.

From time to time, managers must revise the policy statements to take account of changes in investor objectives. If this is not done, the fund might easily under perform. No pain, no gain. No risk, no reward!

Christopher (1997) presents a case for tax concern in asset allocation. Investment planning is inevitably complicated by the tax code; taxes complicate the situation even more if international investments are part of the portfolio. Taxable income from interest, dividends or rent is taxable at the investor's marginal tax rate. Ibbotson Associates (1998) present the findings of the study of the effect of taxes and inflation on investment returns for the period between 1926-1998. The study shows that before taxes and inflation, returns were as follows:

Common stocks	11%
Bonds	5%
Tbills	3.8%
Municipal bonds	6.0%

After tax returns were as follows:

Common stocks	8.2%
Bonds	3.6%
Tbills	2.7%

Municipal bonds 6.0%

When both tax and inflation were considered, common stocks had a return of 4.9%, bonds 0.4%, bills -5% and municipal bonds 2.9%. This historical analysis demonstrates that for taxable investments, the only way to maintain purchasing power at the time of inflation is to invest in common stocks. An asset allocation decision for a taxable portfolio that does not include a substantial commitment to common stocks makes it difficult for the portfolio to maintain real value over time. (Reilly & Keith 2000)

Ibbotson Associates (1998) also finds that stocks far outperformed treasury bills during the 30 years through 1997 but stocks often did worse than Tbills when held for shorter periods during those 30 years.

Wall Street Journal (1992) and Ibbotson associates (1998) illustrate the year by year volatility of stock returns and show that stocks have sometimes earned returns lower than those of Tbills for extended periods of time. Sticking with an investment policy and riding out the difficult times can earn attractive long rates of return. Dow Jones and Co. Inc. (1993) further recommend investment in stocks. They present data over 71 years spanning from 1926-1998. They show that for the 71 years, stocks have been a more reliable source of income than either bonds or bills.

Howell (1992) gives investment a cultural touch. In the study of investments between 1990 and 1991, they conclude that the British prefer equities and Germans prefer bonds. In this study, they compared pension and mutual funds for four countries viz United States, United Kingdom, Germany and Japan. The U.S had only 29% of the fund invested in bonds compared to the U.K with 12%. For domestic equities, the U.S had 41%, U.K 54%, Germany 9% and Japan 22%.

A significant consideration in designing a portfolio is to establish the correlation among the securities in the portfolio. This is meant to enable the fund manager diversify away all or considerable amounts of idiosyncratic (unsystematic) risk.

Cholerton et al (1986) have used the concept of correlation coefficients to explain the risk-return trade off for international bond portfolios. Bruno (1974) also explains that risk reduction in a portfolio is possible through rational and international diversification.

Financial Times (2000) presents comparative data for 60 large pool schemes in Kenya, Europe and USA. The data reveal that in Kenya, 50.2% of the fund is invested in real estate compared to 7.0% in Europe. Equity only formed 11.8% of the fund compared to 34.2% and 53.1% in Europe and USA respectively. Bonds and bills took up 16.3% of the Kenyan fund while they took up 12.6% and 22.7% of the European and American funds respectively. Offshore investments only formed a paltry 5.5% of the Kenyan fund compared to 26.5% and 11.1% of the European and USA funds respectively.

David Aaron Partnership, independent Financial Advisers in the U.K have compiled the results of a study surveying the top 36 funds in the U.K. Here we provide a synthesis of a few of their findings:

TABLE 1: David Aaron Survey

FUND NAME	FUND SIZE	MANAGEMENT STYLE
Aberdeen Fixed Interest Unit Trust & Aberdeen high Yield bond	£ 1542m	<ul style="list-style-type: none"> -Asset allocation is driven opportunistically by availability in particular asset categories and by scrutinizing different markets to seek competitively priced assets -Risk control is through diversification at sector level -Stock selection is based on in-depth credit analysis

Artemis U.K Smaller Companies	£ 145m	<ul style="list-style-type: none"> -Investment philosophy seeks to exploit market inefficiencies in order to generate maximum returns consistent with minimum downside risk -Management style is by the flexible approach recognizing both growth and value and identifying both sectors and companies likely to be re-rated -The investment decision is based on absolute returns, along with limited analysis of the index-relative considerations.
Baring UK Smaller Companies	£ 47m	<ul style="list-style-type: none"> -Investment process is designed to identify under-recognized growth opportunities in an inefficient market -Stock Picking style selection is used to generate out performance -The fund manager carries out fundamental research and reviews four key issues i.e. growth potential, management, value creation and valuation -The principal aim of the company analysis is to identify the potential for positive and negative earnings surprise relative to consensus estimates
BWD Rensburg UK Smaller Companies	£ 64m	<ul style="list-style-type: none"> -Management Style is through Stock picking -To maintain a long term growth bias, the manager balances this with exposure to less economically sensitive defensive growth stocks

The overall findings of their research showed that for the 36 funds studied, investment strategy was largely influenced by risk-return considerations. None of the funds surveyed had more than 10% of their fund invested in any one company. The funds showed a mixture of asset selection styles with majority using fundamental analysis and a few ascribing to technical analysis. There was also a considerable number that used a combination of these two asset selection styles.

2.4 Summary of Literature Review

The main conclusions that can be drawn from the literature review are:

1. Fund managers judge investments according to the following criteria; risk and return, Asset diversification and cost conscious investing.
2. Social factors may be incidental, but never primary, consideration of investments that are equal in economic and financial terms.
3. Fund managers must construct an investment policy/strategy bearing in mind liquidity needs, investment time horizon, legal and regulatory constraints, any unique needs and preferences of the shareholders.
4. Investor sentiment may indeed predict stock returns.
5. For taxable investments, the only way to maintain purchasing power at the time of inflation is to invest in common stocks.
6. Stocks often under perform when held for shorter periods
7. Preference for a specific asset class is a function of a manager's culture
8. Diversification is key in reducing portfolio risk
9. Tactical asset allocation is apparently preferred especially when combined with fundamental analysis.

3. RESEARCH METHODOLOGY

3.1 Research Design

The study used the survey/exploratory research design owing to its capability to address the objectives. The population of study comprised all the registered pension fund managers in Kenya. There are 11 registered pension fund managers in Kenya.

3.2 The study sample

The study sample comprised all registered pension fund managers according to RBA. There are 11 registered Pension fund managers as itemized in appendix II of this project report. The sample was easily accessible as all of them were based in Nairobi. The study excluded NSSF from the sample because by the time of the study, they were not covered by the RBA act since they were under the ministry of Labour. RBA covered funds registered under the ministry of Finance.

3.3 Data Collection and Sources

Primary data was collected using questionnaires interspersed with a focused interview. The questionnaires were hand delivered to the respective fund managers who provided answers. On the basis of the answers provided, further clarification was arranged for through a focused interview. In light of the research design, open-ended questions were used in the questionnaire construction. To ensure validity and reliability of the questionnaire, it was pretested based on the study objectives. A significant source of secondary data was the RBA's website.

3.4 Data Analysis

The analysis used tables, charts and graphs extensively. These were handy in contrasting fund sizes and the amounts allocated to each asset class over time. The study also used descriptive statistics mainly percentages in describing the asset allocation of the fund

4. DATA ANALYSIS AND FINDINGS

This chapter we analyzes the data collected using the tools of analysis itemized in chapter 3. The analyses is divided into sections as follows:

4.1 PRELIMINARY ANALYSIS MANAGER

4.1.1 ABSOLUTE VALUE ANALYSIS

Table 2: Fund & Scheme Sizes (2001-2002)

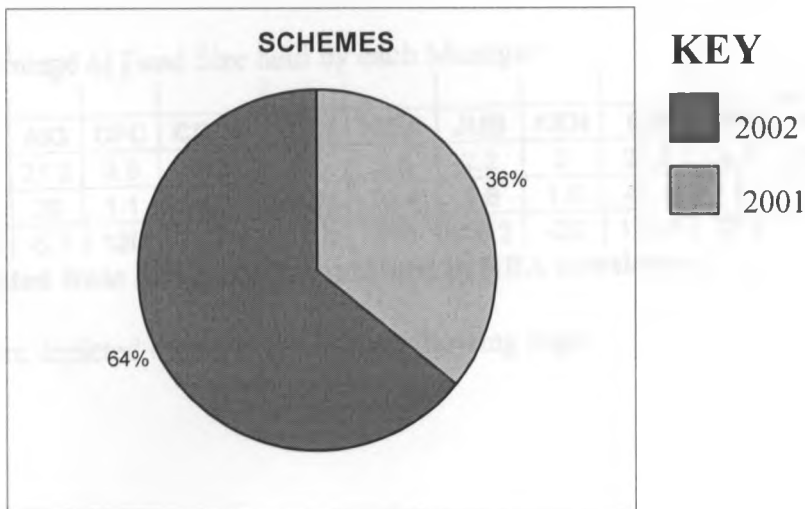
FUND MANAGER	FUND SIZE (Kshs.)		SCHEMES	
	2001	2002	2001	2002
1. AIG	10,493,000,000.00	14,175,200,000.00	62	98
2. CFC	252,200,000.00	760,900,000.00	31	32
3. COOP	1,640,600,000.00	2,344,700,000.00	49	66
4. GEN	3,818,400,000.00	6,444,200,000.00	23	39
5. ICEA	1,253,000,000.00	7,409,000,000.00	15	211
6. JUBILEE	1,084,000,000.00	1,257,200,000.00	56	62
7. KENI	1,015,400,000.00	1,105,100,000.00	64	82
8. OM	11,000,000,000.00	34,000,000,000.00	3	135
9. SIMS	1,447,500,000.00	3,535,200,000.00	13	53
10. BARCLAY TRUST	17,578,100,000.00	-	121	-
TOTAL	49,582,200,000.00	71,031,500,000.00	437	778

Data source: RBA newsletters and questionnaires

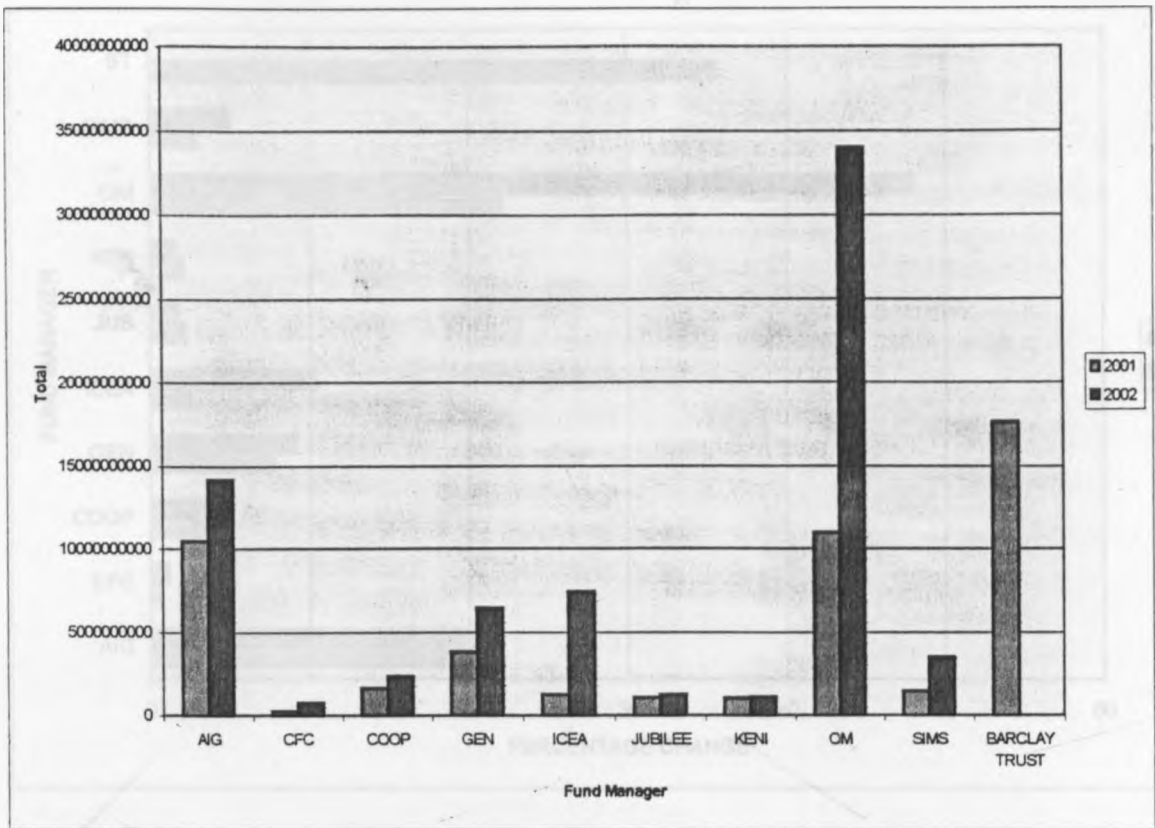
NB – Barclay trust transferred their entire fund to OM in 2002

These data can be depicted using Comparative bar chart and the pie chart shown below:

Graph 1: CHART COMPARING NUMBER OF SCHEMES FOR 2001 AND 2002



Graph 2: FUND SIZES BY FUND MANAGER FOR 2001 AND 2002 IN KSHS.



The bar graph shows that during 2001, Barclay Trust had the largest fund size and CFC had the smallest. The graph also shows that for 2002, Old Mutual had the largest fund size with CFC still having the least. The pie chart indicates that the number of schemes managed grew from 437 in 2001 to 778 in 2002.

4.1.2 RELATIVE VALUE ANALYSIS

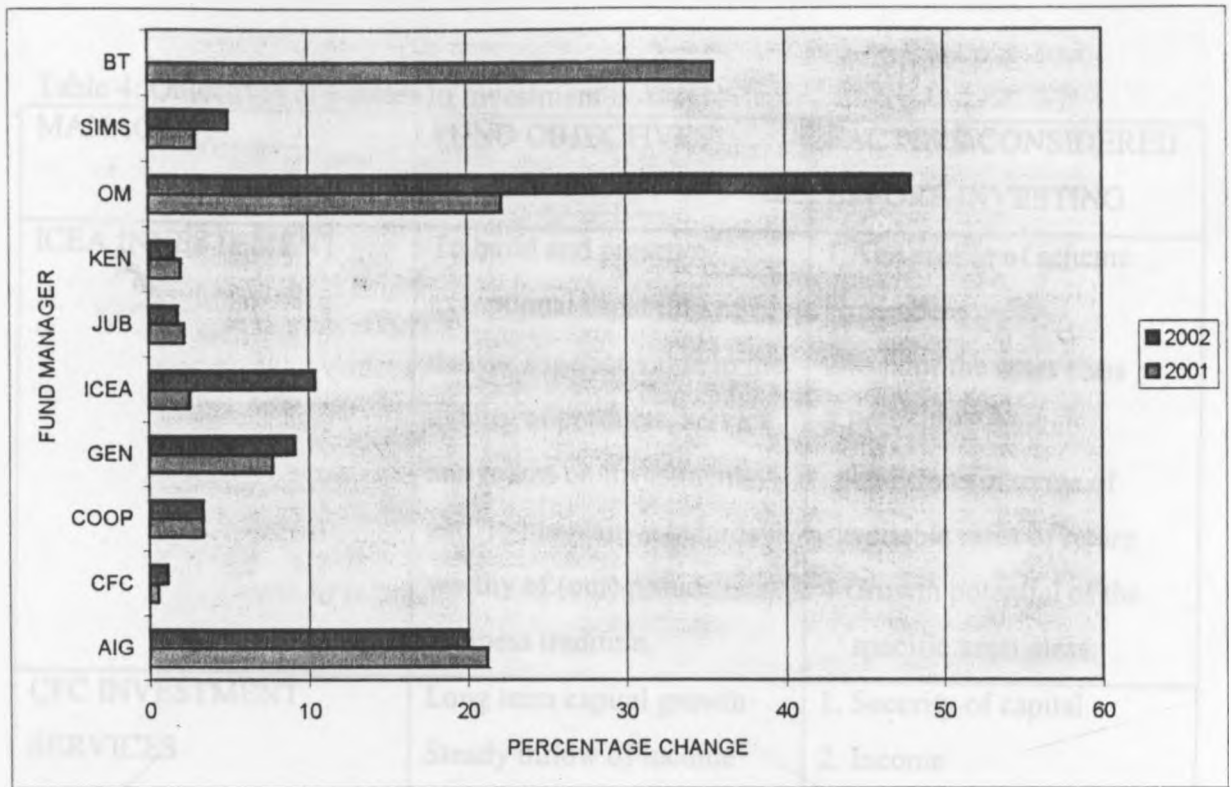
Table3: Percentage of Fund Size held by each Manager

Year	AIG	CFC	COOP	GEN	ICEA	JUB	KEN	OM	SIMS	BT	TOTAL
2001	21.2	0.5	3.3	7.7	2.5	2.2	2	22.2	2.9	35.5	100
2002	20	1.1	3.3	9.1	10.4	1.8	1.6	47.9	5	-	100
% Change	-5.7	120	0	18.2	316	-18.2	-20	115.8	72.4	-	-

Data calculated from information contained in RBA newsletters

These data are depicted on the graph in the following page:

Graph 3: Relative Fund Sizes



The graph shows that ICEA had the largest percentage increase in fund size over the period followed by CFC. Old Mutual grew in fund size by 115.8% largely due to the transfer of Barclay trust fund to Old Mutual during the period. COOP Trust fund size, as a percentage of the total fund size remained unchanged over the period while AIG lost 5.7 percentage points in their fund size during 2002. Kenindia Assurance lost 20% percentage points in fund size as a percentage of the entire market in 2002.

4.2 ANALYSIS OF FUND OBJECTIVES & FACTORS CONSIDERED BEFORE INVESTING IN ANY ASSET CLASS BY FUND MANAGER.

Table 4: Objectives & Factors in Investment

MANAGER	FUND OBJECTIVES	FACTORS CONSIDERED BEFORE INVESTING
ICEA INVESTEMENT	To build and preserve exceptional capability to deliver superior value in the quality of products, service and return on investments and to maintain standards worthy of (our) proud business tradition.	<ol style="list-style-type: none"> 1. Age profile of scheme members 2. Risk of the asset class 3. Prevailing market conditions in terms of available rates of return 4. Growth potential of the specific asset class.
CFC INVESTMENT SERVICES	<p>Long term capital growth</p> <p>Steady inflow of income</p> <p>Overall wealth creation</p>	<ol style="list-style-type: none"> 1. Security of capital 2. Income 3. Risk 4. The law (RBA regulations) 5. Trustees/ clients guidelines
KENINDIA ASSET MANAGEMENT	To get the optimum return on the invested retirement benefit fund without compromising on the safety of the capital and liquidity.	<ol style="list-style-type: none"> 1. Return on investments 2. Safety of the capital 3. Liquidity of the asset class.
GENISES	To give superior returns to (our) clients based on a well researched and controlled environment.	<ol style="list-style-type: none"> 1. Client circumstances e.g. liquidity, size, risk tolerance and regulations.

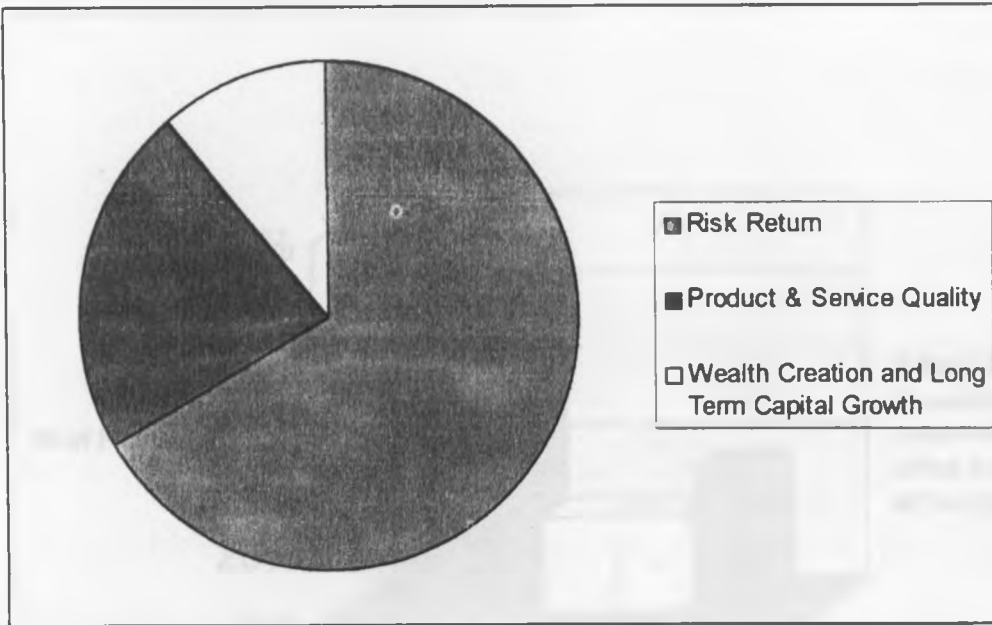
STANBIC INVESTMENT	Capital preservation	1.Risk 2.Client needs 3.Liquidity
AIG	Maximize returns and manage risk, ensure liquidity of funds.	1.Potential returns 2.Risk profile 3.Liquidity
COOP TRUST	Achieve an optimum balance between risk and Return	1.Client age profile 2.Client risk profile 3.Overall risk and return.
OLD MUTUAL	Investment excellence characterized by consistent superior performance. First class services through the same world-class service delivery available to clients throughout the group worldwide.	1.Fundamental value 2.Comparison of price & future value 3.Diligent and disciplined research.

Data source: extracted from questionnaires

The table indicates that of the managers surveyed, 75% expressly stated their fund objective to be striking a balance between risk and return. 25% expressly stated their fund objective to be provision of product and service quality. 12.5% stated that their objective was wealth creation and longterm capital growth.

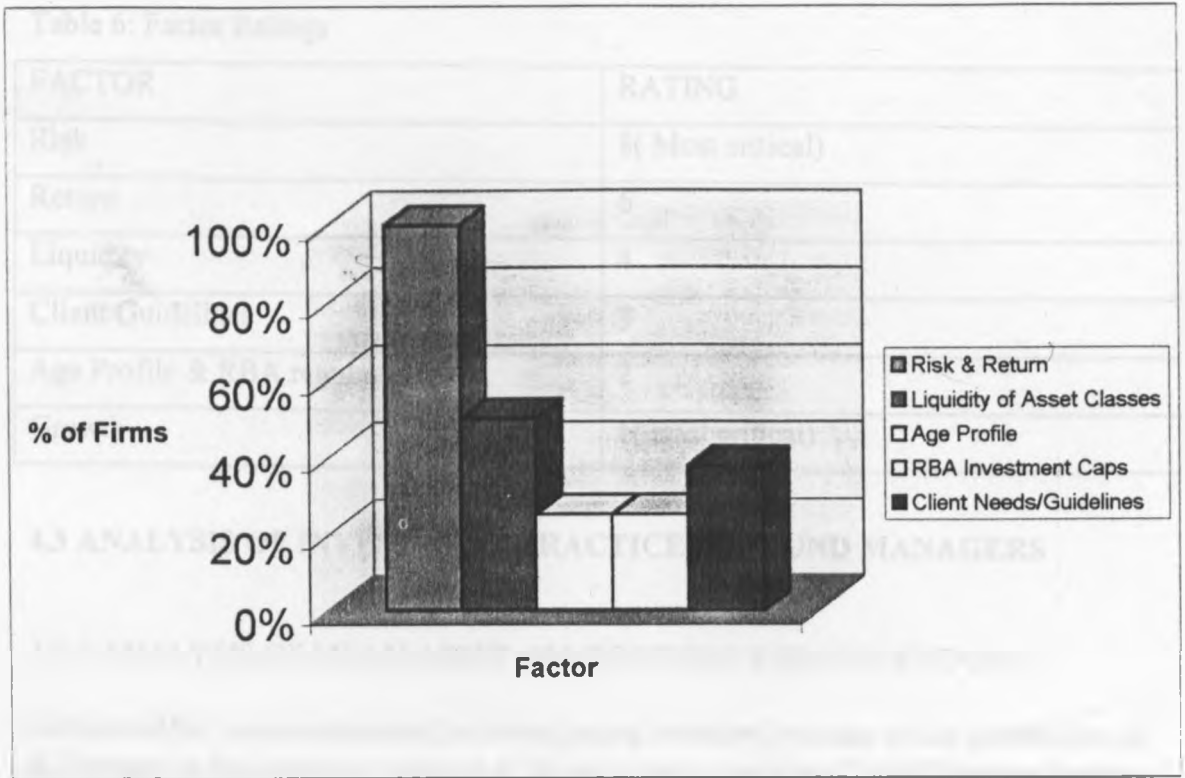
This is shown on the chart below:

Graph 4: Comparison of Fund Objectives



For the factors considered before investing, all the firms surveyed stated that risk/return are key factors. Only 25% of the managers stated the age profile of the scheme members as a factor. 25% quoted RBA investment guidelines as being a factor in their investment strategy. 50% of the managers stated that they considered liquidity of the asset class before investing. 37.5% considered client guidelines/needs before investing. These information is represented on the chart as shown:

Graph 5: Relative importance of the Factors in investment



Using sign test (+, -) to determine the ratings of the factors, a plus sign is used to indicate that the manager considers the factor and a minus sign is used to indicate that the manager does not consider the factor in asset allocation.

Table 5: Generation of factor ratings

	Client needs/ Guidelines	Risk	Growth	Age Profile	RBA Regulation	Liquidity	Return
ICEA	-	+	+	+	-	-	+
CFC	+	+	-	-	+	-	+
KENI	-	+	-	-	-	+	+
GENESIS	+	+	-	-	+	+	-
STANBIC	+	+	-	-	-	+	-
AIG	-	+	-	-	-	+	+
COOP	-	+	-	+	-	+	+
OM	-	+	-	-	-	-	+
TOTAL	3	8	1	2	2	4	6
+S/Rating							

From the table above, the factors can be rated and listed in order of importance as follows:

Table 6: Factor Ratings

FACTOR	RATING
Risk	8(Most critical)
Return	6
Liquidity	4
Client Guidelines	3
Age Profile & RBA regulations	2
Growth	1(least critical)

4.3 ANALYSIS OF INVESTMENT PRACTICES OF FUND MANAGERS

4.3.1 ANALYSIS OF MEAN ASSET ALLOCATIONS FOR 2001 AND 2002

In this section, we are interested in investigating whether the mean of the distribution of differences in the allocated values is 0. So we create a sample of the differences between 2001 and 2002 asset allocations as shown in table 7. It is expected that if there is no difference between the % mean asset allocations for the 2 years, then sometimes 2001 will have a higher value and sometimes 2002 will have a higher value. If one year had consistently larger allocations, then the mean of the distribution of the differences will not be 0.

We use m_d to indicate the mean of the population of the distribution of the differences. So the hypotheses are as follows:

$H_0: m_d = 0$ i.e there is no difference between the mean asset allocation for 2001 and 2002

$H_1: m_d \neq 0$ i.e there is a significant difference between the mean asset allocations for both years

∴ A two tailed test.

The test statistic is student's t statistic calculated from the following formula:

Paired t Test

$$t = \frac{\bar{d}}{s_d / \sqrt{n}}$$

There are n-1 degrees of freedom and \bar{d} is the mean of the difference between paired or related observations.

S_d is the standard deviation of the distribution of the differences between the paired of the related observations.

$$S_d = \sqrt{\frac{\sum d^2 - \left(\frac{\sum d}{n}\right)^2}{n-1}}$$

n is the number of paired observations

We use the paired t Test because: -

- i. The fund managers were the same for both years.
- ii. Fund allocation for a succeeding year depends on the portfolio performance in the preceding year.
- iii. Both 2001 and 2002 asset allocations depend on the RAB investments guidelines.

We assume that the distribution of the population of differences is normal.

TABLE 7: % MEAN ALLOCATIONS

ASSET	2001	2002	d Difference	d ²
Cash	4.0	3.5	0.5	0.25
Fixed Deposits	9.4	6.1	3.3	10.89
Fixed Income	4.4	6.8	-2.4	5.76
Govt Securities/ Quoted Equity	39	45.5	-6.5	42.25
Unquoted Equity	1.3	5.2	-3.9	15.21
Off Shore	2.6	2.2	0.4	0.16
Immovable Property	4.7	4.5	0.2	0.04
Guaranteed Funds	30.5	27.94	2.56	6.55
Other	1.8	0.004	1.796	3.23
		SUM	-4.044	84.34

Data source: RBA newsletters

$$\bar{d} = \frac{\sum d}{n} = \frac{-4.044}{10} = -0.4044\%$$

$$S_d = \sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{n}}{n-1}} = \sqrt{\frac{84.34 - \frac{(-0.4044)^2}{10}}{10-1}} = 3.061\%$$

$$t = \frac{\bar{d}}{\frac{S_d}{\sqrt{n}}} = \frac{-0.4044}{\frac{3.061}{\sqrt{10}}} = -0.418$$

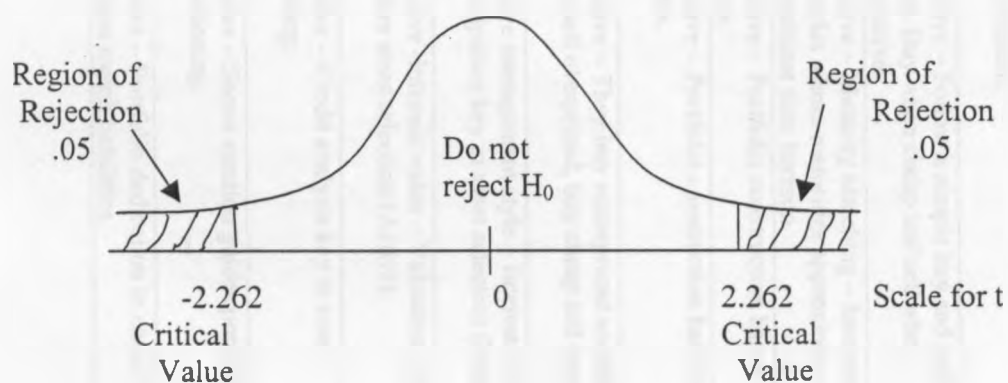
$$n = 10$$

$$df = 10 - 1 = 9$$

$$\alpha = 0.05$$

From tables, critical value = 2.262

Decision rule is to reject H_0 if the computed value of t is less than -2.262 or greater than 2.262



Since calculated t is $\ll |2.262|$ we fail to reject H_0 and conclude that at 95% confidence level, there is no difference between the mean asset allocations for 2001 and 2002.

Directly implied in this is that there was no change in fund manager sentiment and asset allocation strategy between the two years. Table 7 indicates a tendency towards investment in government securities/ Quoted Equity and guaranteed funds.

4.3.2 ANALYSIS OF PORTFOLIO MANAGEMENT AND INVESTMENT STRATEGY BY FUND MANAGER

Table 8: Management & Investment Styles

	MANAGER														MANAGEMENT STYLE Q2	INVESTMENT STRATEGY Q3		
	AIG	CFC	COOP	GEN	ICEA	KENI	OM	SIMS										
a)	0	1	0	1	0	1	0	1	1	1	0	1	0	1	0	1	Passive management style – One cannot beat the market as the market is assumed to be efficient.	Integrated asset allocation – Capital mart conditions, shareholders objectives & constraints examined separately in establishing asset mix.
b)	0	1	0	0	1	1	0	1	0	1	0	0	0	1	0	1	Passive – Follow a simple buy and hold style. Buy when cheap and sell when expensive.	Integrated – Portfolio revised continuously in light of all changes in shareholder objectives and constraints.
c)	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	Passive – Maturity Matching – Invest in vehicles whose maturities approximate investment time horizon.	Strategic – Periodic rebalancing of asset allocation to adjust portfolio to specified asset weights.
d)	0	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	Passive – Portfolio construction based on an index.	Strategic – Long term policy asset weights are determined in the portfolio.
e)	0	1	0	1	0	1	0	0	0	1	0	1	0	1	0	1	Passive – Portfolio construction based on an index.	Tactical – Constant adjustment to class mix in portfolio to take advantage of market charges.
f)	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	0	Passive – They buy underpriced securities and sell overpriced, buy cheap sell dear.	Tactical – Shareholder risk tolerance and investment constraints are assumed to be constant over time.
g)	1	-	1	-	1	-	0	-	1	-	1	-	1	-	1	-	Active management style – Interest rate anticipation key in asset selection (bonds).	
h)	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	Active -Intrinsic value – Valuation analysis before asset selection (Active).	
i)	1	-	0	-	0	-	1	-	1	-	1	-	1	-	1	-	Active – Credit analysis key in asset picking.	
j)	1	-	0	-	0	-	0	-	1	-	1	-	1	-	0	-	Active – Sector rotation guides portfolio positioning.	
k)	0	-	1	-	1	-	1	-	1	-	1	-	1	-	0	-	Active – Portfolio dedication to ensure returns match liabilities.	

KEY

0 1 means the respondent answered No to question 2 and Yes to question 3 on the questionnaire

0 - means the responded answered No to question 2 but there was no question in question 3

4.3.2a ANALYSIS OF MANAGEMENT STYLE

The table shows that of the firms surveyed, only 12.5% felt that the market was efficient and therefore they could not beat it. 12.5% followed a simple buy and hold policy. All the managers surveyed indicated that maturity matching was key in the management of their portfolio. None of the managers constructed their portfolio based on an indexing strategy. 62.5% of the managers indicated that they were actively involved in searching underpriced assets while 87.5% of the managers selected their portfolio based on interest rate anticipation.

Valuation analysis i.e. analysis of intrinsic value was conducted by all the managers surveyed. 75% of the managers indicated they carried out credit analysis before picking on the asset mix. 60% of the managers used sector rotation strategy in positioning their portfolio in the market. All but one of the managers used portfolio dedication strategy to ensure that their returns matched their liabilities. Generally, results indicated that all the managers used a blend of passive and active styles in managing their portfolios.

4.3.2b ANALYSIS OF INVESTMENT STRATEGY

All the managers surveyed indicated that they examined capital market conditions, shareholders' objectives and constraints separately in establishing asset mix; implying an integrated asset allocation strategy. Virtually all the managers revised their portfolios continuously in light of all changes in shareholder objectives and constraints again pointing towards the use of an integrated asset allocation strategy. 87.5% of the managers used strategic asset allocation strategy with periodic rebalancing of asset mix to adjust their portfolio to specified asset weights. Using this strategy, 87.5% of the managers indicated that they determined longterm policy asset weights in their portfolio.

87.5% of the managers also indicated the use of Tactical asset allocation in which constant adjustments to class mix in portfolio was carried out to take advantage of market changes. None of the managers surveyed assumed constant shareholder risk tolerance and investment constraints. Overall, managers used integrated asset allocation intertwined with strategic asset allocation. Although they used tactical asset allocation this was not in its pure form as this strategy assumes that shareholder risk tolerance and investment constraints be held constant over time.

4.4 ANALYSIS OF THE PROBLEMS EXPERIENCED IN ASSET ALLOCATION BY FUND MANAGER

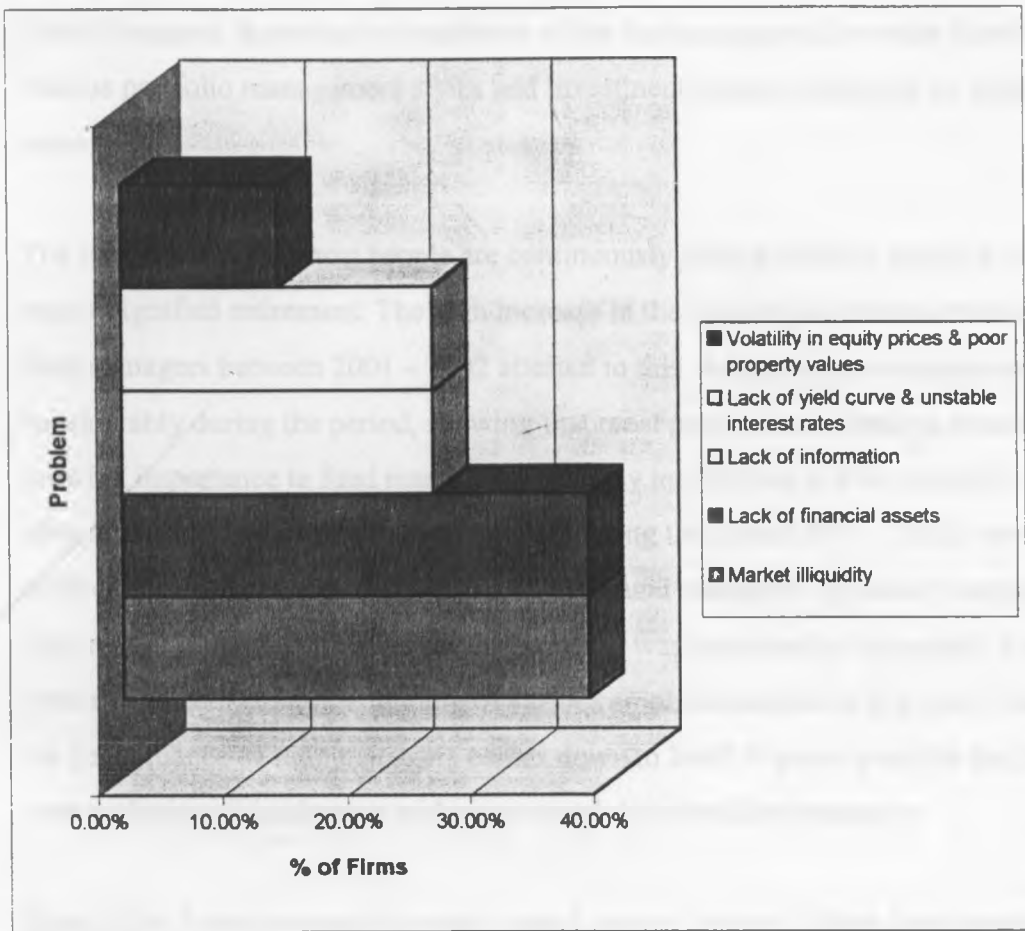
Table 9: Problems in Fund Management

FUND MANAGER	PROBLEMS EXPERIENCED
OLD MUTUAL ASSET MANAGERS	Market illiquidity
COOP TRUST	- *
AIG	<ol style="list-style-type: none"> 1. Lack of creditable and reliable information 2. Financial market illiquidity 3. Insufficient corporate debt issue. 4. Lack of innovative financial products such as asset backed securities and derivatives
STANBIC	Limited number of assets.
CFC	<ol style="list-style-type: none"> 1. Unstable interest rates 2. Volatile equity prices 3. Poor property values 4. Lack of a reliable yield curve.
GENESIS	<ol style="list-style-type: none"> 1. Market illiquidity 2. Lack of knowledge by clients 3. Lack of advanced instruments such as derivatives
KENINDIA	- *
ICEA	<ol style="list-style-type: none"> 1.RBA Investment guidelines 2.Unstable interest rates 3.Lack of a yield curve to enable interest rate projection.

Data source: data extracted from questionnaires

- * No problem was cited by the fund manager

The results indicate that of the managers surveyed, 37.5% identified market illiquidity as a hindrance to investment, 37.5% identified lack of a wide variety of financial assets as a problem, 25% quoted lack of information in the market while 25% quoted lack of a yield curve and unstable interest rates as a problem. 12.5% quoted volatility in equity prices and poor property values as a problem.



5. CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

This study was conducted in the area of Fund Management with specific reference to pension fund management in Kenya. The study has revealed in detail the different factors that pension fund managers consider in allocating the fund to various asset classes. The study also sought to establish the independence/dependence of asset allocation by the Fund Managers. Based on the responses of the fund managers, the study identified the various portfolio management styles and investment strategies adopted by different fund managers.

The study shows that most people are continuously joining pension schemes in order to earn a dignified retirement. The high increase in the number of schemes managed by the fund managers between 2001 – 2002 attested to this. Assets under management also grew considerably during the period, showing that most people are increasing attaching growing importance to fund management and by implication to their future life – life after retirement. The study established that during the period 2001 – 2002, there was no difference in mean asset allocation among the fund managers - generally implying that fund manager sentiment and allocation strategy was the same for the period. This finding seems to be confirming the finding of various empirical studies in this area - that much of the performance of fund managers comes down to luck! It is also possible that the two – year analysis was inadequate and more years' data would be necessary.

None of the firms surveyed expressly stated current income as their fund objective. The most predominant objective was capital preservation (striking a balance between risk and return). The study findings do not seem to support the findings of Christopher (1977) and Ibbotson Associates (1998) that tax concern is an important consideration in asset allocation. The study however does support the findings of David Aaron Partnership (2002) that risk-return considerations are key influences on the investment strategy.

Analysis of the problems faced by fund managers indicate that there is need for financial market deepening and widening. These can be achieved most through enhanced financial market liberalization. The results indicate that pension fund managers use a blend of passive and active styles in managing their portfolios. This again supports the findings of David Aaron Partnership (2002). All the firms surveyed use integrated asset allocation intertwined with strategic asset allocation. The results do not indicate the use of tactical asset allocation in its purest form as none of the firms surveyed held shareholder risk tolerance and investment constraints constant over time – the basic ingredient of tactical asset allocation.

5.2 RECOMMENDATIONS

5.2.1 ASSET ALLOCATION

The current asset allocation of fund managers are determined by the RBA investment caps enumerated in chapter 1 of this report. Putting 70% of the fund in quoted equity appears to be casting aside an old investing saw: don't put all your eggs in one basket! For defined-benefit pension funds, liabilities are correlated to wage growth and inflation and therefore long-dated inflation linked bonds would be a better match than equities. If the stock market plummets with 70% of the fund in it, it may be impossible for the managers to meet their maturing liabilities.

It is advisable that stocks be used only when the investors' time horizon is long enough as to do away with stock market volatility. Equivalently, pension funds with higher proportion of near retirement employees should not invest 70% of their fund in stocks but rather, 70% in short term highly liquid assets. Most schemes are hybrid, usually between defined benefit and defined contribution. Managers of these schemes will require a compromise between bonds and equities implying that the 70% rule may be a little inconsiderate for such funds.

The RBA rules do not consider the clientele effect in the pension funds. Fund managers manage assets for schemes that are conservative for income, conservative for growth, those willing to take on moderate risk and those willing to take on aggressive risk. The Caps should recognize these clienteles and should formulate commensurate caps to suit each category of schemes. The regulation that fund managers can invest 100% of their AUM in guaranteed investments is risky particularly given that the regulator defines these investments to be deposits with insurance companies where the company agrees to give back the sum deposited with an agreed rate of interest after some time.

Even though the law of bankruptcy gives pension funds a preferential claim in the event of liquidation, it is often expected that the proceeds from realization of the assets may not suffice to compensate pensioners especially given that they are just among along list of preferential debts and that they can only be paid after costs, charges and pre preferential debts in winding up are met. Liquidation is usually along process that will definitely eat into the time value of money to be paid to pensioners. The regulator should rethink about this generous allowance given that some fund managers have indeed all their fund in this class of investments. It is a given principle of behavioural finance that investors are usually overwhelmed with short-term success. The mere fact that deposits with the insurance companies yield higher and safer returns should not make us forget the Kenya National Assurance Saga.

5.2.2 REGULATIONS

The current regulations rely on the old legal maxim of *caveat emptor* - buyer beware. Much authority is given to trustees who may not be familiar with investment issues. RBA should take a precisely stringent control of the industry that will require pension fund trustees to become more professional in their relations with fund managers. The trustees should be legally required to familiarize themselves with investment issues and to set realistic objectives for their funds. Permissive accounting rules should not be left to allow managers to smooth out the effect of stock market volatility on their pension funds.

Firms must strictly account for all their pension assets at market prices and deficits must be deducted immediately from total gains and losses; surpluses must be added back, in line with other world standards (such as the FRS 17 to be affected in 2005). The CAMEL (Capital Adequacy Management Efficiency and Liquidity) test should not just be restricted to banks but should be extended to this industry by the regulator. Stricter corporate governance structures should be introduced in this sub sector to enable pensioners live a dignified life.

5.2.3 SOFTING ARRANGEMENTS AND MANAGERS FEES

Softing arrangements arise when a firm contracts another firm to offer a service to that other firm to enhance their operations. Fund managers get involved in softing arrangements when they contract another firm to carry out research on their behalf. The research is meant to enable the manager invest continuously and with near-full information. The regulator should require every manager to disclose softing arrangements and the amount paid for the acquisition of research information. Fund managers should also disclose any relationship with the research firm in order to enable trustees evaluate their objectivity. Fund managers' fees and softing arrangements should be given in absolute terms- in shillings and not only in percentages. This will enable fund sponsors to understand well how much they have paid over the period. When these are stated as a percentage, the picture is not as clear. A 0.25% manager' fees may translate into millions of shillings in absolute terms.

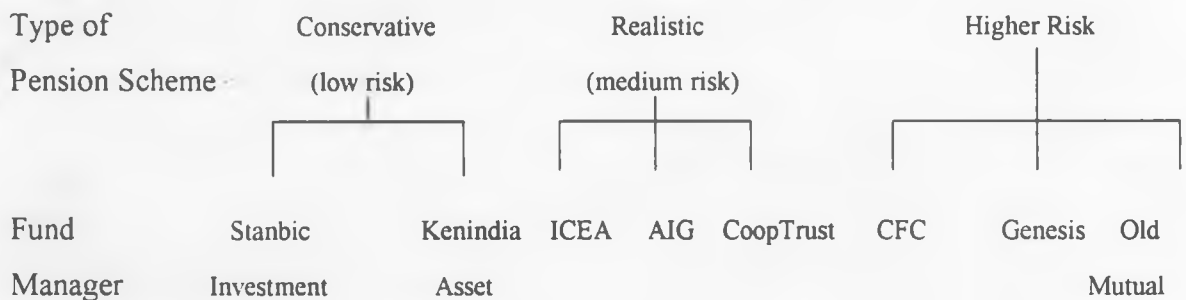
5.2.4 INVESTMENT OPPORTUNITIES

Most of the fund managers cited lack of financial assets as a major hindrance to their investment. As a recommendation, the stock exchange should allow fund managers to form hedge funds. Unlike conventional pension fund management, hedge funds can short shares – they sell them and buy them back later with luck at a lower price, so they can make money in falling markets; and they use leverage to profit from small pricing anomalies. The stock exchange should be used as an intermediary to foster good will in short selling.

Formation of hedge funds does not require sophisticated systems such as the Central Depository System to be in place. Another asset that should be introduced without much cost is the fund-of-funds. Fund managers should consolidate part of their fund to form a fund-of-funds with autonomous management. They can then be allotted shares in the fund-of-funds and earn the proceeds from its investments.

5.2.5 MULTIPLE FUND MANAGEMENT

Pension funds should be allowed to retain the services of different fund managers simultaneously. They should be encouraged to divide their fund between active and passive fund managers instead of heaping all their eggs in one basket. This will enable them strive to hit 2 birds with one stone- beat an index and yet make higher absolute returns. The following chart is derived from the fund objectives of different managers. It recommends to pension schemes which fund manager suits their 'income' or 'growth' requirements and their attitude to risk.



5.2.6 FUTURE RESEARCH

A fundamental conclusion drawn from this study is that the Kenyan Fund size is still much below expectation especially when compared with the liabilities of banks which currently approximate Kshs. 400 billion. Most of the people investing in banks are private individuals majorly from the Jua Kali sector who if given an opportunity and due sensitization, can push up the fund sizes to huge sums. It is a recommendation of this study that future studies in this area evaluate the extent to which private operators are saving with pension funds to enhance their retirement life. It is also a recommendation of this study that future works in this area concern the relationship between fund manager sentiment and the return on the fund.

5.3 LIMITATIONS OF THE STUDY

- (i) The outcome of the study cannot be generalized to mutual funds since the study was limited to pension funds.
- (ii) The data available were for a short period ruling out rigorous analyses such as F-tests which should have given more insight into the subject of study.
- (iii) The study did not obtain data from all the registered pension fund managers. Data for 3 of them were unavailable. The results may therefore not be generalized to these firms.

Year	2007	2008	2009	2010	2011	2012
Return						
Volatility						
Correlation						

APPENDIX I

QUESTIONNAIRE

PART I: BACKGROUND INFORMATION.

(PLEASE ANSWER THE FOLLOWING QUESTIONS AS APPROPRIATE.)

1. Company (Fund manager) name.....
2. Year of incorporation\registration.....
3. Number of schemes managed.....
4. Total size of the fund in Kshs.....
5. What are your fund objectives?

6. Please state your fund sizes over the past six years

YEAR	1997	1998	1999	2000	2001	2002
FUND SIZE (KSH)						

PART II: INVESTMENT AND ASSET ALLOCATION

1. What factors do you consider before investing in any asset class?

2. Please tick the statement(s) that is/are most suitable

- | | |
|---|-----|
| a) We assume that the market is efficient | YES |
| | NO |
| b) We follow a simple buy and hold strategy | YES |
| | NO |
| c) We invest in vehicles whose maturities approximate
Our investment horizon | YES |
| | NO |
| d) We build our portfolio based on NSE-20 share index | YES |
| | NO |
| e) We build our portfolio based on AIG-27 share index | YES |
| | NO |
| f) We usually buy cheap and sell dear | YES |
| | NO |
| g) Interest rate anticipation is key in our asset selection | YES |
| | NO |
| h) We select our assets based on their intrinsic value | YES |
| | NO |
| i) Credit Analysis is key in our asset selection | YES |
| | NO |

j) We position our portfolio to take advantage of the Market's next move i.e. based on sector rotation

YES
NO

k) We build our portfolios so that their returns match our liabilities

YES
NO

3. Please tick the statement (s) that best appl(ies)y to you

a) We examine separately the capital market conditions and our shareholders objectives and constraints in establishing asset mix

b) We continuously revise our portfolio in light of all changes that occur in the shareholder objectives and constraints

c) We periodically rebalance our asset allocation to adjust the portfolio to the specified asset weights

d) We usually determine long term policy asset weights in our portfolio

e) We constantly adjust our asset class mix in the portfolio in an attempt to take advantage of changing market conditions

f) In constructing our asset mix, the shareholders risk tolerance and investment constraints are assumed to be constant over time

j) We position our portfolio to take advantage of the Market's next move i.e. based on sector rotation

YES
NO

k) We build our portfolios so that their returns match our liabilities

YES
NO

3. Please tick the statement (s) that best appl(ies)y to you

a) We examine separately the capital market conditions and our shareholders objectives and constraints in establishing asset mix

b) We continuously revise our portfolio in light of all changes that occur in the shareholder objectives and constraints

c) We periodically rebalance our asset allocation to adjust the portfolio to the specified asset weights

d) We usually determine long term policy asset weights in our portfolio

e) We constantly adjust our asset class mix in the portfolio in an attempt to take advantage of changing market conditions

f) In constructing our asset mix, the shareholders risk tolerance and investment constraints are assumed to be constant over time

g) We believe that whatever a security's return has been in the recent past, it will eventually revert to its long term average value

h) We buy assets are currently out of favour on a relative basis, at least, and sell those with the highest market value

i) We believe that expected market returns and risks are constant over time but the investor's objectives and constraints change as their wealth position changes

4. Please state your five principal holdings as follows:

Company/Firm Name	% Holding
1.	
2.	
3.	
4.	
5.	

5. Please state the amount of the fund in Kshs you have invested in each of the following asset classes for the past six years as shown:

Asset Class	1997	1998	1999	2000	2001	2002
Real estate						
Quoted Equity						
Unquoted Equity						
Government Paper						
Cash						
Offshore						
Deposits						
Commercial Paper and Bonds						
Guaranteed Investments						

7. Please state the amount of the fund you invested in your sponsors over the past six years period as shown:

SPONSOR (S)	1997	1998	1999	2000	2001	2002
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

PART III: EXTRA INFORMATION

1. What problems do you encounter in portfolio construction and management?

2. Please provide any additional information that you think is relevant to this study.

Thank you for your cooperation in facilitating this study.

APPENDIX II

REGISTERED PENSION FUND MANAGERS IN KENYA (DECEMBER 2002)

1. African Alliance Kenya LTD., Afr.
2. AIG Global Investment Company (East Africa), AIG ✓
3. CFC Investment Services LTD., CFC
4. Co-op Trust Investment Services LTD, COOP ✓
5. Genesis Kenya Investment Management LTD, GEN✓
6. ICEA Investment services LTD
7. Jubilee Financial services LTD, JUBI
8. Kenindia Asset Management Company LTD, KENI
9. Madison Asset Management Services LTD, MADI
10. Old Mutual Asset managers (Kenya) LTD, OM ✓
11. Stanbic Investment management Services (East Africa) LTD, SIMS ✓

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