

**ASSET ALLOCATION BY FUND MANAGERS AND THE FINANCIAL  
PERFORMANCE OF UNIT TRUSTS IN KENYA**

**BY**

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**A RESEARCH PROJECT PRESENTED TO THE UNIVERSITY OF NAIROBI  
SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR MASTERS OF BUSINESS ADMINISTRATION.**

## DECLARATION

I declare that this research project is my original work and it has never been presented anywhere as a fulfilment of any examination.

### STUDENT

SIGNED

DATE

.....

.....

**KAGUNDA TABBY**

This management research project has been submitted for examination with my approval as the university supervisor.

### SUPERVISOR

SIGNED

DATE

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.....

**MR. MIRIE MWANGI**

## **DEDICATION**

This project is dedicated to my parents Mr. & Mrs Peter Kagunda, my brothers and sisters who have continually supported me throughout and to my friends Jane Kithii and Patricia Kungu for their moral support and encouragement.

## **ACKNOWLEDGMENTS**

It has been an exciting and instructive study period in the University of Nairobi and I feel privileged to have had the opportunity to carry out this study as demonstration of knowledge gained during the period studying for my master's degree. With these acknowledgments, it would be impossible to remember those who in one way or another, directly or indirectly, have played a role in the realization of this research project. Let me, therefore, thank them all equally.

First, I am indebted to the all-powerful GOD for all the blessings he showered on me and for being with me throughout the study. I am deeply obliged to my supervisor for his exemplary guidance and support without whose help; this project would not have been a success.

Finally, yet importantly, I take this opportunity to express my deep gratitude to the lasting memory of my loving family, and friends who are a constant source of motivation and for their never ending support and encouragement during this project.

## **ABSTRACT**

Much of the previous research into the evaluation of asset allocation by fund managers and the financial performance of unit trusts mechanism has concentrated generally on developed countries. Not much known local study has focused on the evaluation of asset allocation by fund managers and the financial performance of unit trusts in Kenya. This study therefore sought to fill the existing research gap by carrying out a survey study on the evaluation of asset allocation by fund managers and the financial performance of unit trusts in Kenya. The main purpose of the study was to investigate into the evaluation of asset allocation by fund managers and the financial performance of unit trusts in Kenya.

This research was conducted through a survey study. The target population of this study was the unit trusts that consisted of equity-based funds and schemes that deal with stocks traded in Kenya. This restriction limited the number of funds available for evaluation, but provided a well-focused comparison of funds that were popular among investors. This paper utilized secondary data. Data on financial performance of unit trusts including net asset value and dividend paid by unit trusts was collected from offices of respective unit trusts schemes. Data on estimate of dividend received on the market portfolio, and the 20 share index was collected from the Nairobi Stock Exchange. Data on market interest rates, interbank allocation rates and free rates was collected from the Central Bank of Kenya. The NSE 20 share index was used in estimating the performance of unit trust. Data on asset allocation will be collected from the annual reports for the period 2005-2009.

From the findings, the study established that for unit trusts available to Kenyan investors, asset allocation can explain a significant amount of the difference in returns across time and hence a primary determinant of return performance for these trusts. The study also found out that asset allocation by fund managers and the financial performance of unit trusts in Kenya are better resolved for performance to be effective in a very great extent. The study further established that asset allocation by fund managers and the financial performance of unit trusts in Kenya is a comprehensive important measurement and mitigation method used for various organizations

hence much important if effectively implemented and utilized. This study therefore recommends that in order to avoid many impediments, the unit trust managers should make sure that its strategies are sufficient to enable administration and management of credit with management prudence and giving them advice promptly.

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## **ABBREVIATIONS**

CAPM: Capital Asset Pricing Model

CIS: Collective Investment Schemes

CMA: Capital market authority

GNP: Gross National Product

MCC: Maxwell Communication Corporation.

MPT: Modern Portfolio Theory

NSE: Nairobi stock exchange

PMPT: Post Modern Portfolio Theory

UK: United Kingdom

USA: United States of America

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

The role of financial system in any country is to aggregate capital from surplus source and allocates the resources to deficit units through formal and informal channels. Financial markets provide the mechanism that links surplus to finance deficits units with additional options. The financial system comprises of numerous commercial banks, non- bank financial institutions, a range of insurance companies, and a stock exchange Faure, (1987).

According to Wagacha (2001), capital markets are essential part of the financial sector of modern economies and more so for growing economies. They provide an avenue for alternative savings tools to savers and non- bank sources of financing for enterprises. Thus, capital markets promote economic growth through enhanced savings mobilization. He concluded that a well developed capital market promotes economic growth through increased savings mobilization, access to foreign savings, spreading of financial risks, help the government finance their deficits while reducing the fiscal pressures of debt redemption by the maturities of the securities, and a facilitating role in translating savings to investments.

A report from Nairobi Stock Exchange (NSE), 2002 indicates that in a bid to deepen the capital markets access to investors, the Capital Markets Authority (CMA) issued guidelines for the development of Collective Investment Schemes (CIS) in 2001. CIS are an intermediation that pools the savings of individual investors to enable them to benefit from professional fund management, economies of scale, and to achieve a greater level of diversification than would not otherwise be possible. CIS includes Unit Trusts, Mutual Funds (open and closed), and Special Interest Collective Investment Schemes. According to African Alliance Kenya Investment Bank, unit trusts are a means of participation in the equity, bond and the money market for investors (or unit holders) that in their individual capacity may not have the time, the money or expertise to successfully effect investments in these markets. They are an ideal investment vehicle for investors seeking exposure to the financial markets across the spectrum, from the individual to

pension funds, companies and government institutions. Unit trusts are a medium to long-term investment (ideally a minimum of three to five years) allowing market fluctuations time to smoothen out. The portfolios of Collective Investment Schemes include equities, bonds (corporate and government) and money market securities e.g. Treasury Bills.

Lofthouse (2001) looks at unit trusts as part of Collective Investment Schemes where investors with similar investment objectives pool their money together. The assets are placed under the control of trustees for the benefit of beneficiaries. The managers are responsible for the day-to-day investment management. Unit trusts are open ended in the sense that anyone can buy units from the managers who will create new units for them, or sell back their units for cancellation or liquidity by the managers.

### **1.1.1 Asset Allocation and Unit Trust in Kenya**

Reilly and Brown (1997), defines asset allocation as the process of deciding how to distribute an investor's wealth among different countries and asset classes for purposes of investment. This asset allocation is based on investor's policy statement and it contributes to the performance of an investment. A policy statement includes investor's goal/ objectives, constraints, and investment guidelines. They are developed to determine the overall investment strategy. It does not indicate specific securities to purchase and when they should be sold; they should provide guidelines as to the asset classes that should be included in the portfolio and the relative proportions of the investor's fund that should be invested in each class.

There are two types of asset allocation strategies namely: strategic and tactical asset allocation. Strategic asset allocation refers to how portfolio funds will be divided given the portfolio manager's long-term forecasts of expected returns, variance and covariance Sharpe (1996). According to Lofthouse (2001), strategic weights should be set based on: capitalization where all investors should hold the same risky portfolio the market portfolio and should vary their holding of a risk- free asset to obtain the risk-return trade-off that they desire; or following the median manager that is doing what others are doing; or use of mean-variance optimization where an efficient frontier is calculated and then an efficient portfolio is chosen; or even asset- liability

modelling in this the basic idea is to project the assets and liabilities of an institution to see how they might develop in relation to each other under a number of different conditions. Many fund managers are therefore in the position that they manage assets that are intended to meet specific liabilities.

Tactical asset allocation on the other hand refers to how the funds are to be divided at any particular moment given the investors short-term forecasts. The decision determines what deviations based on current market valuations should be made from the strategic asset allocation. It will take place within ranges around the strategic weights Lofthouse, (2001). VanHorne (1997) observes that the process of asset allocation allows for the formation of an efficient set and this allows the investment manager to invest in those securities that form the optimal portfolio. Reilly and Brown, (1997) also observe that asset allocation decisions determine to a great extent both the returns and the volatility of the portfolio. Diversifying by combining different asset classes in a portfolio reduces overall portfolio volatility.

The fund management industry in Kenya is at formative stages and is thus undeveloped. The number of units that back the portfolio of securities held in the fund is fixed. The number of shares outstanding can be altered only through a new formal issue of the funds securities just like shares of a company listed on the stock exchange. Prices of closed end funds shares reflect the relative supply of and demand for shares. There can be a substantial difference between the net asset value and the per share value at which the closed end funds should actually trade Jacob and Pettit, (1998). According to Jacob and Pettit, (1998) the funds continually issue and redeem shares at a price that reflect the net asset value of the portfolio held by the fund.

### **1.1.2 Investment Factors**

Since asset allocation is part of portfolio management process, it should be done after careful evaluation of investment factors. These factors range from economic, company, industry to general factors. Economic forecasts are important for both company and industry studies, and therefore share selection, and also for decisions about which type of asset to favour. The stock market is intimately linked to the economic changes in GNP, the nation's income impact firm's

sales and prices, which in turn affect revenues, costs and profits. This feeds through to dividends and retained earnings. Changes in GNP affect the general price level and interest rates. One has to forecast both the course of the economy and how much has been discounted by investors Lofthouse, (2001).

According to Gitman and Joehnk (2002), industry analysis involves a study of groups that looks at the competitive position of a particular industry in relation to others and identifies companies that show particular promise within an industry. The investor will want to keep an eye out of specific companies that appear well situated to take advantage of industry conditions. Specific market and economic environment impacts positively and negatively on a company's performance for a short period of time, however, a firm's own managerial capabilities will determine its performance over a long period of time.

### **1.1.3 Portfolio Performance**

One important issue which remains is the 'bottom line' of the investing process: evaluating the performance of a portfolio. Evaluating portfolio performance is important regardless of whether an individual manages his or her own funds or invests indirectly through investment companies. Investing is a two dimensional process based on returns and risk. These two factors are opposite sides of the same coin, and both must be evaluated if intelligent decisions are to be made. To evaluate portfolio performance properly, we must determine whether the returns are large enough given the risk involved.

Performance evaluation is concerned with two issues: (1) determining whether the money manager, added value by outperforming the established benchmark and (2) determining how the fund manager achieved the calculated return. Did the fund manager achieve the return by market timing, by buying undervalued stocks, by buying low capitalization stocks by overweighing specific industries e.t.c. Performance evaluation requires the determination of whether a fund manager achieved superior performance by skill or luck Bruno, S. (1999).

## **1.2 Statement of the Problem**

Early studies of unit trust funds/mutual funds in developed markets show that unit trusts do not outperform the market and managers do not have superior ability to consistently beat the market Sharpe, (1966), Jensen, (1968). Indirectly, the evidence indicates that the market is remarkably efficient.

Studies in the 80's however, have discovered that fund managers are able to outperform the market. This is in contrast to the general findings of earlier studies. The study by Ippolito (1989) on 143 mutual funds in the US over the period 1965-1984 showed that mutual funds with high turnover, fees and expenses are able to earn higher returns to offset the high charges. Recent studies by Grinblatt and Titman (1992), Hendericks et al (1993), Goetzmann and Ibbotson (1994), Malkiel (1995), Gruber (1996) show that fund managers are able to outperform the market and the 'hot-hand' phenomenon does exist in the US market. Contrary to the studies in the US, mutual funds studies in Australia generally find no evidence of persistency in performance. These studies include Robison (1986) and Hallahan (1999). The inconsistency in the findings between U.S.A. and Australia certainly begs further investigation.

Several researches have been carried out on institutional investors where Mwobobia (2004) carried out a survey of factors that investment management companies consider when making investment decisions, Mugo (1999) studied factors that institutional investors consider when making investment in shares quoted at NSE, Gitu (2003) studied factors affecting the equity allocation decisions made by trustees and fund managers of pension scheme portfolios in Kenya and Kamanda (2001) carried an empirical evaluation of equity portfolios held by insurance companies in Kenya. One of the common conclusions identified from all these researches is that before any investment decision factors identified in finance literature are considered. These factors range from economic, company, social to general factors. Mugo in her research observed that the relevance of the factors is however different as insurance company and fund management companies consider company factors more important while retirement benefit schemes consider industry factors more relevant.



However, according to Lofthouse (2001), institutional investors should not be thought as homogeneous groups. Different types of institutional investors face different tax regimes, different regulatory constraints (such as solvency ratios for insurance companies and minimum funding requirements for pension funds) and different horizons. VanHorne (1997) observes that different financial instruments have different levels of risk and in order for them to compete for funds these instruments must provide different yields. Securities have different characteristics in default risk, marketability, taxability and embedded options, which account for the different levels of risk and hence different expected return for the investors.

The investigation of asset allocation decision by fund managers and performance of unit trust using data on the Kenyan industry is an area of very limited research activity. Jerop, (2007) in her study focused only on performance of unit trusts in Kenya and observed that equity fund being the most aggressive of the funds have a high risk commensurate with high returns. They are popular among unit trusts investors as they comprise over 50% of the total unit funds held. The money market fund represents the less aggressive investment as they had low returns as well as low risk. In value terms individual investors in Kenya are not significant in the demand for securities due to generally low per capita income and the corresponding low savings rate, *World Bank (2002)*. The study therefore intended to assess asset allocation by fund managers and whether their decision influences the performance of these funds. This researcher thus is feeling that no study has been carried out on the asset allocation by fund managers and the financial performance of unit trusts in Kenya. Therefore a research gap exists that need to be filled by doing a thorough survey on the asset allocation by fund managers and the financial performance of unit trusts in Kenya. Traditionally stock holding, mutual funds managers hold stocks that beat the market portfolios by almost enough to cover their expenses and transaction costs. It's clear then that mutual fund holding of cash and bonds, is presumably to maintain liquidity in the face of uncertain investor inflows and redemptions.

### **1.3 Objective of the Study**

The overall objective of the study was an evaluation of the relationship between asset allocation by fund managers and the financial performance of unit trusts in Kenya. The specific objective of the study however, was to establish whether unit fund managers in Kenya outperform the market.

### **1.4 Significance of the Study**

#### **The Unit Trust Investors**

The study will be useful to the investors as they will know whether fund managers add value to their invested capital. They will establish whether unit trusts are riskier than the market index. Do unit trusts exhibit superior performance compared to market index as contended by fund managers or are returns on securities unpredictable and that shares are priced in a competitive market.

#### **The Management**

The study will be of importance to fund managers since they can tell the relationship between risk-adjusted returns and other risk factors. This would probably help them know whether they should possibly spend more time on defining objectives as regards risk and return, explicitly stating these objectives to the public and formulating portfolios to match these objectives.

#### **The Capital Market Authorities**

The study will particularly interest the Capital Market Authority and the Nairobi Stock Exchange. They will be in a position to allocation informed advices to the relevant authorities and investors.

#### **Scholars and Researchers**

The study will form a basis for further research to the academicians and other interested bodies. The scholars and researchers who would like to debate or carry out more studies on unit trusts will find this study useful as a basis of carrying out more studies in Kenya

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter defines unit trust as a form of investment, compares unit trusts with mutual funds, discusses the mechanics under which unit trusts operate and reviews the theories guiding this study. The chapter also reviews some of the empirical studies that have been carried out both locally and in other countries.

#### **2.2 Unit Investment Trusts**

Basically a unit trust is an arrangement whereby property (shares, bonds, real estate) is held on trust for a large number of investors. It is constituted by a deed or indenture regulating the rights, powers, and duties of the parties to the arrangement Harman, (1987). While the unit trusts, like mutual funds, issues redeemable securities, it is none-the less different from a mutual fund in that the entity sponsoring the unit trust nearly always creates a secondary market in the Units sold by the trust, both the sponsor and the trust benefit from the creation of secondary market. The sponsor receives a sales charge on each unit resold in the secondary market, often at a higher rate than that received on units sold in the primary market. Unit holders enjoy a trust that does not have to deplete itself of its assets to meet redemptions.

Unit trusts are attractive investments because they offer liquidity and diversity at affordable prices. They allow investors of even moderate means to own an interest in a pool of diversified securities and, because they issue redeemable securities, they allow investors to liquidate their investments quickly and avoid many of the market's vagaries, Harman (1987). Unit trusts provide diversity and liquidity at an affordable cost compared to mutual funds since it has no investment advisor to whom it must pay an annual management fee. Moreover, because the unit trusts fund has a relatively fixed portfolio, the brokerage commissions it incurs are small in comparison to those of mutual funds, the portfolio that often changes. Finally because of its relatively fixed portfolio the unit trusts fund offers a "Known" return. Conversely, a mutual

fund's investments return may rise or fall as it trades its portfolio or invests additional proceeds from new shareholders Harman, (1987).

Unit trusts are open-ended; the fund is equitably divided in to units which vary in price in direct proportion to the variation in value of the fund's net asset value. Each time money is invested, new units are created to match the prevailing unit buying price, each time units are redeemed the assets sold match the prevailing unit selling price. This ensures there is no supply or demand is created for units and prices of units remain a direct reflection of the underlying assets. The trust manager makes profit through the bid-offer spread. This is the difference between the purchase price of the units or the offer price and the sale value of the units or the bid price. The trust deed often gives the manager the right to vary the bid-offer spread to reflect market conditions. This enables the manager to control liquidity Harman, (1987).

With the passage of Capital Markets Authority Amendments Act (2000), which recognizes Specific Investment Vehicles, and especially mutual funds, and unit trusts , more opportunities for diversification by both institutional and retail investors should emerge Wagacha, (2001).Ondigo (2001) observes that the main problem facing the securities markets in Kenya is that there are insufficient products to satisfy the demand for securities and the main concern should be in developing products that satisfy the demand that exist . The establishment of collective investment vehicles will be essential in order to enable as many individual Kenyan investors as possible to participate in this evolution Zimele Asset Management,( 2000).

### **2.3 Theoretical Evidence**

Modern Portfolio Theory (MPT) emphasizes how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward. According to the theory, it's possible to construct an "efficient frontier" of optimal portfolios offering the maximum possible expected return for a given level of risk. This theory was pioneered by Harry Markowitz in his paper "Portfolio Selection," published in 1952 by the *Journal of Finance*. There are four basic steps involved in portfolio construction: Security valuation, asset allocation portfolio optimization and performance measurement. The Black-Litterman model starts with a benchmark portfolio. These come from the equilibrium expected returns that would clear the market, assuming a given risk

model. The equilibrium expected returns (market-implied views) are the set of expected returns that would produce the market portfolio if fed into an optimiser with the specified risk model. In other words, these are the returns from reverse optimisation assuming the market portfolio is efficient Drobetz, (2001); Jones, Lim, and Zangari, (2007).

Next, these “market-implied” views are combined with the investor’s private views using Bayesian mixed-estimation techniques. The Black-Litterman model allows the incorporation of both absolute views (e.g. a fixed expected rate of return) and relative views (e.g. one stock or sector will outperform another). The relative weights placed on an investor’s view will reflect the confidence that he has in that view. The posterior distribution of expected asset returns given the recommendation changes are then used as the input for portfolio optimization.

The blended views will produce balanced portfolios that are tilted toward the investor's private views, with the degree of tilt (for a given level of risk) depending on the investor's relative confidence in his or her expectations. For details on the derivation of Black-Litterman, excellent references include Satchell and Scowcroft (2000), He and Litterman (2002), and Meucci (2005). Practical guides to the implementation of the model in general contexts are presented by Drobetz (2001) and Idzorek (2004). Extensions of the model to more general asset dynamics can be found in Martellini and Ziemann (2007).

Harry Markowitz laid the foundations of MPT, the greatest contribution of which is the establishment of a formal risk/return framework for investment decision-making. By defining investment risk in quantitative terms, Markowitz gave investors a mathematical approach to asset-selection and portfolio management. MPT is limited by measures of risk and return that do not always represent the realities of the investment markets. The assumption of an elliptical distribution is a major practical limitation, because it is symmetrical. Using the variance (or its square root, the standard deviation) implies that uncertainty about better-than-expected returns is just as disliked as uncertainty about returns that are worse than expected. Furthermore, using the elliptical distribution to model the pattern of investment returns makes investment results with more upside than downside returns appear more risky than arguably they really are, and the opposite for returns with a predominance of downside returns. The result is that using traditional

MPT techniques for measuring investment portfolio construction and evaluation frequently distorts investment reality, Sortino and Satchell (2001).

It has long been recognized that investors typically do not view as risky those returns above the minimum they must earn in order to achieve their investment objectives. They believe that risk has to do with the bad outcomes (i.e., returns below a required target), not the good outcomes (i.e., returns in excess of the target) and that loss weigh more heavily than gains. This view has been noted by researchers in finance, economics and psychology, including Sharpe (1964).

Markowitz suggests that a model based on the semi variance would be preferable. Recent advances in portfolio and financial theory, coupled with today's increased electronic computing power, have overcome these limitations. The resulting expanded risk/return paradigm is known as Post-Modern Portfolio Theory, or PMPT. Thus, MPT becomes nothing more than a special (symmetrical) case of PMPT, Sortino and Satchell (2001).

Barbell Theory is a very simple investment allocation where your assets are focused on the extreme ends on the risk spectrum, just like with a barbell, the weight is on the two ends. This would be much different from a standard (MPT) which has become the standard method of asset allocation in the past 20 years. In other words, if the two ends of the barbell represent opposite ends of the risk spectrum, then you would allocate all of your money between the very safe end and the very aggressive end. For example, you might allocate 80% of your money to inflation-protected treasury securities and 20% of your money to very aggressive small growth company stocks, Walnut Hill Advisors LLC.

The "Floor and Upside" Strategy means that, before investing in any kind of risky portfolio, it makes sense to build a "floor" of safe cash flow streams for the retirement years. First, define your baseline consumption, and then project what that will be during your retirement years. This gives us baseline income needed for retirement. Factor in any other guaranteed income sources you expect, such as social security and/or a pension. Determine how much additional money you will need above those guaranteed sources and use financial assets, to secure a level of income that meets those basic needs, Walnut Hill Advisor LLC.

### **2.3.1 Performance of Unit Trust**

Garret and Rex (2000) examined the performance of U.K equity unit trust that existed in the period 1978 and 1997. Two types of unit trust were considered, one that distributed dividends on a regular basis, an income unit and one that accumulates dividends inside the unit, an accumulation unit. The result shows that the U.K money managers are unable to outperform the market when exposure to market, value and size risk is taken into account. They also found out that only poor performance persists.

Maiyo, (2007) observed that equity funds being the most aggressive of the funds have a high risk commensurate with the high returns. These funds are also popular among the unit trust investors as they comprise over 50% of all the total unit trust funds held. The unit holders in Kenya are risk averse implying that as the return increases so does the risk. The money market fund representing the less aggressive investments had low return as well as low risk. In comparison against the benchmarks the study showed that equity funds under performed in the NSE-20 share index, while the money market fund on the other hand outperformed the 91-day Treasury bill rates. On a risk-adjusted basis the equity funds did not outperform the market (NSE-20 Share Index) demonstrating the diversification effects of a large portfolio.

### **2.4 Asset Allocation and Portfolio Performance.**

Reilly and Brown (1997), defines asset allocation as the process of deciding how to distribute an investor's wealth among different countries and asset classes for purposes of investment. This asset allocation is based on investor's policy statement and it contributes to the performance of an investment. A policy statement includes investor's goal/ objectives, constraints, and investment guidelines. They are developed to determine the overall investment strategy. It does not indicate specific securities to purchase and when they should be sold; they should provide guidelines as to the asset classes that should be included in the portfolio and the relative proportion of the investor's fund that should be invested in each class.

There are two types of asset allocation strategies namely: strategic and tactical asset allocation. Strategic asset allocation refers to how portfolio funds will be divided given the portfolio manager's long-term forecasts of expected returns, variance and covariance Sharpe (1996).

According to Lofthouse (2001), strategic weights should be set based on: capitalisation where all investors should hold the same risky portfolio, the market portfolio and should vary their holding of a risk free asset to obtain the risk-return trade-off that they desire; or following the median manager that is doing what others are doing; or use of mean-variance optimization where an efficient frontier is calculated and then an efficient portfolio is chosen; or even asset-liability modelling in this the basic idea is to project the assets and liabilities of an institution to see how they might develop in relation to each other under a number of different conditions. Many fund managers are therefore in the position that they manage assets that are intended to meet specific liabilities.

Tactical asset allocation on the other hand refers to how the funds are to be divided at any particular moment given the investors short-term forecasts. The decision determines what deviations based on current market valuations should be made from the strategic asset allocation projections, Lofthouse, (2001).

VanHorne, (1997) observes that the process of asset allocation allows for the formation of an efficient set and this allows the investment manager to invest in those securities that form the optimal portfolio. Reilly and Brown, (1997) also observes that asset allocation decisions determines to a great extent both the returns and the volatility of the portfolio. Diversifying by combining different asset classes in a portfolio reduces overall portfolio volatility.

Brinson, Singer, and Beebower (1991) showed that 91.5% of portfolio returns were attributable exclusively to strategic asset allocation. Elkin (1999) also stated that asset allocation, rather than stock picking or market timing, is by far the most important factor that determines the returns that a portfolio would generate over time. Surz, Stevens, and Wimer (1999) devised a simple model to estimate what percentage of investment policy is explained by performance pertaining to the magnitude of return, not the variability of return. In this model, the fraction of return explained by policy was devised. They found that asset allocation on average explains about 95% of investment results.

Dorbetz and Kohler (2002) used the same approach, with German and Swiss balanced mutual fund data to show that the correct answer depends on the specific question being asked. They find that more than 80 percent of the variability in returns of a typical fund over time is explained



by asset allocation policy, roughly 60 percent of the variation among funds is explained by policy, and more than 130 percent of the return level is explained, on average, by the policy return level.

## **2.5 Investment Management**

According to Sharpe (1996), investment management is the process by which money is managed. It may be active or passive management, use implicit or explicit procedures and, is relatively controlled or uncontrolled. Elton and Gruber (1997), observes that passive management involves holding securities for relatively long periods of time with small or infrequent changes. This implies a well-diversified portfolio with infrequent trading and market level risk and return expectations. The concentration therefore will be on less risky assets. Passive portfolio managers act as if the market is relatively efficient and for this reason the price of securities shows their intrinsic value, therefore there are no mis-priced securities. However, their decisions are consistent with the acceptance of consensus estimates of risk and return. The portfolio they hold may be a surrogate for the market portfolio known as index fund, or they may be portfolio tailored to suit clients with different preferences. The paper will try to understand the type of investment management practiced in Kenya and how this affects the financial performance of different funds.

According to Elton et al (1995), the simplest case of passive management is the index fund that is designed to replicate exactly a well-defined index of common stock, such as the 20-share index or S& P 500. The managers of the fund buy each share in the index in exactly the proportion it represents in the index. Although exact replication is the simplest technique for constructing an index fund, many index funds are not constructed this way. Managers of the fund must face a series of decisions in designing a fund. These decisions involve a trade-off between accuracy in duplicating the index (called tracking error) and transaction costs .The passive approach is usually identified with buy and hold strategy. A buy and hold strategy means purchasing and holding a security to maturity or redemption and then reinvesting cash proceeds in similar securities.

Active management on the other hand, according to Elton et al (1995), involves taking a position different from that which would be held in a passive portfolio, based on a forecast about the future and that the security markets are inefficient. There are two main approaches to active management: technical analysis and fundamental analysis. Loft house (2001), technical analysts look at past prices, believing that future trends can be deduced from the past, they also look at the behaviour of various types of market participants, company directors and other insiders, sentiments and contrary opinion, and liquidity levels. Technical analysts are contrasted with fundamental analysts, who try to calculate the true underlying value of a stock by analyzing dividends, growth, interest rates and other factors. Managers of the fund have to decide on the tools to use, to calculate the true underlying value of stock.

Some of the tools that the managers can use include charts where these can be done in a number of ways: Dow theory where the stock's price is thought to reflect everything that will be known by investors; moving average for markets, stocks, sectors, etc. for a variety of periods; support and resistance where managers argue that shares, markets etc. have psychological support and resistance levels. The idea is that the market will find it hard to, for example, rise through a resistance level but if it does, it can move ahead until a new resistance level is established; relative strength which is calculated for a stock to show how it has been performing relative to its sector or to the market as a whole, or for a sector relative to the market Lofthouse (2001).

Another tool is the smart money. If the fund managers cannot decide how to invest, then copying somebody who knows what they are doing seems a reasonable tactic. They can achieve this through insider trading where certain types of non-public information is used by company directors in connection with a share transaction. It's widely believed that insider trading is a useful guide to forecasting the market's level. The justification for this is a belief that insiders act partly in response to general economic factors that impact their firms. If they react to such general information before it's widely known, they might provide a good guide to the market's likely direction. Another tool is the contrarian investment strategy. This involves going against the crowd Lofthouse (2001). If the fund managers believe that the market is inefficient and they can exploit, then they should make active bets.

Elton et al (1995) say that active managers can be classified into three groups: market timers, sector selectors, and security selectors. Market timers change the beta on the portfolio according to forecasts of how the market will do. They change the beta on the overall portfolio either by changing the beta on the equity portfolio or by the amount invested in short-term bonds. Security selection involves search for undervalued securities and the methods of forming these securities into optimum portfolios. Sector/ industry selection is like security selection, except that the unit of interest is an industry. Managers practicing in this type of analysis will rotate their portfolios overweighing/ under weighting sectors over time as they change forecasts of what sector is undervalued or overvalued. According to Karanja, (2007) investment objective is one of the most important factors influencing portfolio choice amongst investment companies. The fund managers of unit trusts should therefore understand the objectives of their investors as this will help in determining how to invest to ensure efficient diversification.

## **2.6 Factors Considered by Investors**

Key issues revolve around risk and return of the investment. However, there are other issues and factors that have a direct or indirect impact on the risk and return of an investment. Fund managers must undertake analysis of macro and micro factors to select assets that are valuable currently and in the future.

### **2.6.1 Economic Factors**

According to Gitman and Joehnk (2002), investment vehicles are heavily influenced by the state of the economy and economic events. The overall performance of the economy has a significant bearing on the performance and profitability of the company. A study of the economy should not only give an investor a grasp of the underlying nature of the economic environment but also enable them to assess the current state of the economy and formulate expectations about its future course. Taxation and government expenditure as well as monetary policies of the government provide the present and future investors with information of the investment environment. When the economy is growing, corporate earnings and in turn returns and capital gains increase Bhalla (1997). Elton et al (1995) say government fiscal policy for example taxes tend to be expansive when it encourages spending, when the government reduces tax and or increases the size of the budget. Similarly, monetary policy (money supply and interest rates) is said to be expansive when money is readily available and interest rates are relatively low. The

fund managers have to understand the government monetary and fiscal policies as the impact of these major forces filters through the system and affect several key dimensions of the economy. This will help them know which investment vehicle to buy and at what time.

Lofthouse (2001) observes that inflation expectations are formed on the basis of economic conditions and monetary policy. For example, a change of government may change the policy trade-off between growth and inflation. The anticipation or actual changes in the exchange rate also lead to inflation. Investment vehicles are influenced differently by inflation. Investment vehicles whose values move with general price levels (stocks) have low purchasing power risk and are most profitable during periods of rising prices. Those that provide fixed returns have high purchasing power risk and they are most profitable during periods of low inflation. Purchasing power risk is the chance that changing price levels (inflation or deflation) will adversely affect investment return. The managers of different funds need to understand inflationary periods for them to know when to shift their kind of investment. Mwobobia (2004) observed that investment in stock is influenced by economic factors such as inflation and tax rates, corporate bonds are influenced by the interest rates and inflation while tax rate is unimportant. Government bonds are influenced by interest and inflation rates. While the economic factors influencing investment in real assets were interest rates and inflation this is because investments in real assets are mostly financed through debt capital.

### **2.6.2 Industry Factors**

Investors will want to keep an eye out for specific companies that appear well situated to take advantage of industry conditions. Growing industries provide an avenue for ideal investments because demand of the firm's output is anticipated to grow and profitability will be maintained in the event of increased competition with other industries. The stage of industry growth, the stability of the growth, the stability of the sales in the industry and the rate at which the industry is growing are important Elton et al (1995). Wakaguyu (1999) observed that retirement benefit schemes and fund management companies consider factors at play in the industry than in the company or in economic environment. They consider quality of management, change in investment trends, and safety of the principal capital, net profit margin and company growth in sales. Specific industry factors enhance a company performance. In understanding the industry

the managers will actually know whether to change sectors or securities in order to increase the real worth of their companies.

### **2.6.3 Company Factors**

Specific market and economic environment impacts positively and negatively on a company's performance for a short period of time, however, a firm's own managerial capabilities will determine its performance over a long period of time. Ratio analysis highlights the direction the company is taking and its financial position. The nature of the company involves factors such as marketing influences, future company earnings in terms of quantity and quality, market share, growth in sales and stability of sales, Gitman and Joehnk (2002). This therefore calls for careful scrutiny of the company's reports of account in order to get any information about the nature of any company that might help in making a viable decision. Gitman and Joehnk (2002), argue that the firm's operating characteristics influence operating efficiency and earnings of the company. Quality Management is important to investment success, in maintaining a competitive position of the company and to successfully run its affairs to produce profits. There is a need for fund managers to analyze the companies that they wish to invest in and in particular the quality of management, this will ensure that customers' funds are not committed to projects or even companies that will not do well. Wakaguyu (1999) observed that, insurance companies consider company factors more important than any other factors. They consider changes in share prices, safety of the principal capital, amount of capital, return in equity, amount of debt, changes in investment trends and operating efficiency

### **2.6.4. General Factors**

Investment should be evaluated from a risk- return perspective. Markowitz (1959) observed that creation of an optimum investment portfolio is not simply a matter of combining a lot of unique individual securities that have desirable risk-return characteristics. The goal is to diversify or to invest in various assets to avoid failure. Diversification helps to spread the portfolio and reduce risk. Markowitz set out a way of diversifying so that for any degree of risk, the investor got the best return possible or alternatively, for any return bore the lowest risk. Reducing total risk will increase expected cash flow thereby increasing the value of the firm. There is a need therefore to understand how securities are combined in order to minimize the risk of the unit holders and increase their value.

Total risk can be divided into systematic and unsystematic components. Systematic risk is the variability of return on stocks or portfolios associated with changes in return on the market as a whole. It's due to risk factors that affect the overall market, such as changes in the nation's economy or, tax reforms. They affect securities overall and consequently, cannot be diversified away. On the other hand, unsystematic risk is the variability of return on stocks or portfolios not explained by general market movements. It is unique to a particular company or industry. It is independent of economic, political and other factors that affect all securities in a systematic manner. By diversification this kind of risk can be reduced or even eliminated if diversification is efficient Van Horne (1997). In understanding factors that influence the different securities the fund managers will know how to diversify their portfolios.

Return on the other hand is a key variable in the investment. It allows us to compare the actual or expected gains of various investments with the levels of return we need. The level of return achieved or expected from an investment depends on a variety of factors. The key factors are internal characteristics and external forces. Internal characteristics include characteristics such as the type of investment vehicle, the quality of management, and how the investment is financed and the customer base of the issuer. External factors include wars, political and international events. Components of return come from periodic payments, such as dividends or interest and appreciation in value, the gain from selling an investment vehicle for more than its original purchase price. These two sources are called current income and capital gains or losses Gitman and Joehnk, (2002). Omony, (2003) observed that risk and return are the key considerations in investment practices of pension fund managers in Kenya. According to Gitman and Joehnk, (2002) the level of return achieved depends on investment factors, the managers therefore need to understand these factors for them to make forecasts on expected returns of different companies and investment vehicles.

According to Lofthouse (2001), this is the ability of assets to be converted into cash immediately at full market value in any quantities without making any price concessions. Some assets are more liquid than others. This can be assessed by the size of the issue. For example, the smaller the issue in the case of bonds the greater the redemption yields. Fund managers must put the

issue of liquidity into consideration, as their investors might want to redeem their issues. According to the analysts, what you would expect from the performance of a unit trust relative to the market is that they should outperform the market through diversification, if they have competent fund managers. This means that in times of high performance, the unit trust funds will slightly lag behind in comparison to the market (all the relevant benchmarks). Equally, in times of market downturn as being experienced today, they will not come down as significantly as the market does (Daily Nation Pg 8 dd 26, 2009 Investment).

This normally tends to cushion an investor from drastic market downturns relative to the markets and possible high performance in times of good returns. When you average out over a relatively long-term perspective, you can post some decent gains in their investments. The market declined between January and December 2008 by about 32 percent, as a result investments in the unit trust declined by between 18 percent and 30 percent. If anything, during times of indiscriminate and systematic market falls like now, it is difficult, if not impossible, for any manager to deliver positive returns on an equity fund as all shares across all counters fall at the same time. It is quite difficult to completely insulate them from the overall performance of the markets, since they are also subject to their cyclical movements (Daily Nation Pg 8 dd 26, 2009 Investment). This paper therefore seeks to establish how the fund managers performed over a period of five years between 2005 and 2009.

## **2.7 Empirical Review**

Financial times (2000) present comparative data for 60 large pool schemes in Kenya, Europe and USA. The data revealed 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 in Kenya 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 5.5% of the Kenyan fund compared to 26.5% and 11.1% of the European and USA funds respectively. The fund managers have a good reason for making such investment decision. The different proportions in the different countries could be due to the different factors in these countries. This study will therefore try to look at performance of equity based portfolios.

Moon and Bates (June 1992) found that Maxwell Communication Corporation (MCC) will be reasonably profitable though heavily indebted after undertaking straightforward financial analysis. This will be after media speculation about fraudulent transactions and accounting deficiencies. The implication being that, unsuspecting shareholders were losing through no fault of their own, as it would not have been possible for them to predict any potential business failure from the given published accounting information. They concluded that all the information about the financial stability of MCC will be in the audited accounts, if the investors had bothered to analyze the accounts. Most times, financial statements do not disguise the true financial position of a company. Fundamental analysis involves in depth analysis of the firm's financial statements, which form the basis of investment decisions and there is a need therefore to know whether financial position of a firm can be clearly deduced from the financial statements.

Fowler, Ross et al, (Oct 2007) found that for unit trusts available to New Zealand investors, asset allocation can explain a significant amount of the differences in return across time and between trusts. Across time, asset allocation accounts for about 80% of the variation in actual return. Between trusts, asset allocation explains about 60% of the variation in returns. From either perspective the choice of asset allocation is an important factor in explaining returns. Investors expect active managers to provide returns that exceed passive returns, after fees and expenses. Their results suggest that New Zealand investors might be better off with passive trusts as active managers contribute little after deducting their fees and transaction costs. This paper will determine whether asset allocation by the fund managers in Kenya determine the performance of these funds.

Mugo (1999) observed that factors identified in finance literature are considered in investment decision by institutional investors at the NSE. However, the relevance of the factors is different as insurance companies and fund management companies consider company factors more important while Retirement Benefits Schemes consider industry factors more relevant. However institutional investors should not be looked at as homogeneous and therefore these findings cannot be generalized for Collective Investment Schemes.



Mwobobia (2004) concluded that factors that investment management companies consider across the board of investment instruments from the most important to the least are risk, return, and growth of capital, diversification, income stability and liquidity. The factors range from economic, company, social and geographical. Similarly, the factors influence investment instruments differently, for example, factors like inflation influence investment in government bonds more than it does in corporate bonds and stocks. However, investment management companies differ from unit trusts in the sense that they are closed-ended where the money invested is not changed for long periods.

Unit trusts on the other hand are open-ended as anyone can buy units for cancellation or liquidation by the managers. The study therefore seeks to identify these factors that fund managers consider in asset allocation decisions particularly the unit trusts, as the two cannot be generalized. Omony, (2003) observed that risk and return are the key considerations in investment practices of Pension Fund Managers in Kenya. Current income is not their fund objective; however, the most predominant objective will be capital preservation. Pension schemes also differ from collective investment schemes as they have a minimum funding requirement and they are established to invest funds to meet pension liabilities. That is they are invested with the expectation that they will be sufficient to pay pension entitlements when these are due.

## **2.8 Conclusion**

Most surveyed results indicates that on average managers of unit trusts have not been able to forecast share prices accurately enough to outperform a simple buy and hold policy. Additionally, there was, however, evidence of statistically significant inferior performance. These results hold even when management expenses are added back. The major finding as regards to the beta values was that none of the unit trusts examined provided volatility greater than that of the market. This is most likely because unit trusts invariably tend to invest in a wide spread of shares, and because they keep much of their funds in cash especially when the stock market is depressed.

For instance a study by Daniel (1997) which looked at characteristics based benchmark that is designed to measure whether mutual funds pick stocks that outperform simple mechanical strategy. The evidence presented in this paper suggests that the average mutual fund does, in fact, succeed, along this allocation dimension. However the amount by which it beats the mechanical strategy is fairly small and is approximately equal to the average management fee. Aggressive growth strategy funds which exhibit the highest performance, probably also generate the largest costs.

The is that no study therefore that has been carried out on the asset allocation by fund managers and the performance of unit trusts in Kenya. Therefore a research gap exists that need to be filled by doing a thorough survey on the asset allocation by fund managers and the performance of unit trusts in Kenya. Traditionally stock holding, mutual funds managers hold stocks that beat the market portfolios by almost enough to cover their expenses and transaction costs. It's clear then that mutual fund holding of cash and bonds, is presumably to maintain liquidity in the face of uncertain investor inflows and redemptions.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter presents the methodology that will be used to carry out this research. Research methodology is defined as an operational framework within which the facts are placed so that their meaning is seen more clearly. The methodology of this research includes the research design, population to be studied and the sampling strategy, the data collection process, the instrument to be used for gathering data, and how data will be analyzed. Data to be collected was for the period 2005 to 2009.

#### **3.2 Research Design**

The study used the descriptive survey research design owing to its capability to address the objective of the study. Travers (1969) states that surveys are conducted to establish the nature of the existing situation or condition. According to Robson (2002), the research design portrays an accurate profile of persons, events, or situations. This method will enable the researcher to collect a large amount of data. The survey design was chosen because it provided a means to contextually interpret and understand performance of unit trusts in Kenya compared to asset allocation and unit trust performance.

#### **3.3 Population and Sampling**

There are twenty six approved collective investment schemes in Kenya, (Kenya Gazette dd April, 2009). Given the objective as explained earlier, the unit trusts selected for this study consisted of equity-based funds that deal with stocks traded in Kenya. This restriction limited the number of funds available for evaluation, but provided a well-focused comparison of funds that are popular among investors. There are seven in number that deal with equity fund and random sampling was used. A simple random sample is obtained by choosing elementary units in search a way that each unit in the population has an equal chance of being selected. A simple random sample is free from sampling bias, Salant and Dillman, (1994).

### 3.4 Data Collection

The researcher utilized secondary data. Data on performance of unit trusts including net asset value and dividend paid by unit trusts was collected from offices of respective unit trusts schemes. Data on estimate of dividend received on the market portfolio, and the 20 share index was collected from the Nairobi Stock Exchange. Data on market interest rates, interbank allocation rates and free rates was collected from the Central Bank of Kenya. The NSE 20 share index was used in estimating the performance of a unit trust performance. The index is calculated using equities of 20 companies; this clearly indicates the need to restrict the study to unit trust that invests only in shares. Data on asset allocation was collected from the annual reports for the period 2005-2009.

### 3.5 Data Analysis

In this study, the researcher was used Jensen's standard performance measure since the main aim of the study was to get an absolute measure of performance. The formula to compute the performance of unit trust, market index and risk free returns was as follows:

$$R_{j,t} = \log_e \frac{NAV_{j,t} + D_{j,t}}{NAV_{j,t-1}} \quad (1)$$

$$R_{m,t} = \log_e \frac{I_t}{I_{t-1}} \quad (2)$$

$$R_{fm,t} = \log_e \left( \frac{1 + R_{f,t}}{12} \right) \quad (3)$$

Where:

- $R_{j,t}$  = monthly continuously compounded rate of return of the  $j$ th unit trust during month  $t$ ;
- $NAV_{j,t}$  = net asset value for unit trust  $j$  at the end of month  $t$ ;
- $D_{j,t}$  = dividend per unit paid by unit trust  $j$  during month  $t$ ;
- $R_{m,t}$  = estimated monthly continuously compounded rate of return on market portfolio  $m$  for month  $t$ ;
- $I_t$  = level of the Market interest rate index at the end of month  $t$ ;
- $R_{f,t}$  = inter bank allocation rate for one month (quoted in yearly rate); and

•  $R_{fm,t}$  = Inter Bank allocation Rate for one month (quoted in monthly rate).

Jensen (1968) shows that the capital asset pricing model (CAPM) holds for any arbitrary length of time as long as the returns are expressed in terms of the proper compounding length of interval. Jensen asserts that the natural logarithm form of return provides a very good approximate for calculating returns.

Consequently, in an effort to avoid huge fluctuations in prices that might distort our data, we employed the compounded rate of return. Equations (1) to (3) were used to calculate the rates of return based on a continuous compounding method that was adopted by Jensen (1968). Jensen further suggests that loading charges could be excluded from the calculation of the funds' rates of return when conducting an evaluation of the forecasting ability of fund managers. In addition, we omitted the dividend yield of the market portfolio from our analysis, since, as mentioned earlier, Sharpe and Cooper (1972) suggest that the value of betas would not change significantly. The compounded rate of return on the market portfolio,  $R_{m,t}$  was then be compared with the NSE 20 share index for that month.

## CHAPTER FOUR

### DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This chapter presents analysis and findings of the research. The findings are represented in tables. The financial information analysed comprised of 5 years from the year 2005 to 2009. This information was collected from seven unit trusts schemes (see appendix 1) as well as the NSE.

#### 4.2 Unit Trust Returns.

This section provides an analysis of returns given by unit trusts under study. The data reflects data gathered over period of five years for seven unit trusts. The findings are summarized in table 1

**Table 1: Unit Trust Return (%)**

	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>S.D</b>
2005	3.12	138.45	57.097	198.5314
2006	6.88	183.84	78.049	257.1934
2007	3.75	141.91	81.688	200.1628
2008	2.58	122.83	64.342	180.234
2009	3.12	153.23	75.627	200.091

*Source: NSE*

Table 1 provides the return of unit trusts over the five year period. Looking at the average values, we can be able to see that unit trust increased in returns from 57.097% in year 2005 to 78.049% in the year 2006. The returns increased further to 81.688% in 2007 before the returns reduced to 64.342% in the year 2008. However, the growth rate resumed in the year 2009, where the returns increased to 75.627%.

### 4.3 Unit Trust Returns in Comparison with Market Returns

This part compares the returns of unit trusts under study with that of the Nairobi Stock Exchange 20 share index. The results are tabulated in table 2.

**Table 2: Comparison with the Market**

Unit trust return						Market Return				
	Min	Max	Mean	S.D	Growth rate	Min	Max	Mean	S.D	Growth rate
2005	3.12	138.45	57.10	198.53		3094.38	3982	3648.20	8066.02	
2006	6.88	183.84	78.05	257.19	37%	4025.21	5645.65	4597.57	11043.69	26%
2007	3.75	141.91	81.69	200.17	5%	4971.04	5774.27	5259.63	12021.53	14%
2008	2.58	122.83	64.34	180.23	-21%	3341.47	5336.03	4522.71	10381.16	-14%
2009	3.12	153.23	75.63	200.09	18%	2474.75	3294.56	3027.31	6416.83	-33%

*Source: NSE*

The table above shows unit trust performance against the market portfolio. The mean value for unit trust ranges from a low of 57.097% in the year 2005 to a high of 81.688% in the year 2009.

Statistically there is a huge variance between the minimum and maximum return of unit trusts given their rate of return and this is confirmed by the large values of standard deviation.

For the market return measured by the Nairobi Stock Exchange 20 share index can be seen to oscillate between a low of 3027.31 points in the year 2009 to a high of 5259.629 at the end year

2007. The minimum and maximum return for the stock market was highest in the year 2007 illustrated by the standard deviation.

The returns of unit trusts was 37% in the year 2006 then slowed down to a growth rate of 5% before slumping to a negative growth rate of 21%. However, in 2009 unit trust return to a growth pattern of 18%. For the stock market, the returns were on an upward growth rate in the year 2006 and 2007. However, the stock market return slumped in the year 2008 and even further in the year 2009 by up to 33%. These can be attributed to the reduced confidence in the bourse by investors following post election violence in 2007/2008. This clearly indicates that the unit trust returns outperformed the market.

#### **4.4 Unit Trusts Returns in Comparison with Asset Allocation**

To answer this total return for each trust and the benchmark were computed. The trust returns (dependent variable) were regressed against their benchmark returns (explanatory variables) and the results are illustrated in table 3.

**Table 3: Comparison with Asset Allocation**

<b>Name Of Unit Fund</b>	<b>R<sup>2</sup> (Calculated)</b>
Old Mutual Equity Fund	0.308
British American Equity Fund	0.327
Commercial Bank Of Africa Equity Fund	0.19
Suntra Equity Fund	0.0083
ICEA Equity Fund	0.055
Standard Equity Growth Fund	0.0079
Dyer And Blair Equity Fund	0.0098

**Source: NSE**



The research found that for Equity Based Fund unit trusts available to Kenyan investors, asset allocation can explain a significant amount of the difference in returns across time and hence a primary determinant of return performance for these trusts. British American Equity Fund had the highest return of 32.7% followed by Old Mutual Equity Fund with 30.8%. Dyer & Blair, Suntra and Standard Equity Growth Fund took the last three positions with less than one per cent each.

#### 4.5 T Test Statistics

This section provides a statistical view of the findings, where the t-test statistic is used to give significance to the results. This is illustrated in table 4

**Table 4: T Test Statistics**

	<b>Unit trusts</b>	<b>Stock market</b>
Mean	4211.084	71.3606
Variance	766020.3	105.5758
Observations	5	5
Pearson Correlation	0.394888	
Hypothesized Mean Difference	0	
df	4	
t Stat	10.62499	
P(T<=t) one-tail	0.000222	
P(T<=t) two-tail	0.000444	

*Source: NSE*

The Two-Sample t-Test analysis test for equality of the population means underlying each sample. The three tools employ different assumptions: that the population variances are equal,

that the population variances are not equal, and that the two samples represent before treatment and after treatment observations on the same subjects. In addition the Pearson correlation provides a basis to show that there is a significant relation between stock market returns and that of unit trusts. The t statistic was used to determine whether the returns of the market differed statistically with that of unit trusts. We can see that for either one tail test, the significance is 0.000222 and for two tail test, the significance is 0.000444, which is low than our threshold of 0.05 hence we agree with our null hypothesis that the returns of the market do not differ statistically with that of unit trusts.

#### 4.6 Regression Statistic

Regression tests carried out are illustrated in the table 5

**Table 5: Regression Statistic**

Multiple R	0.394887628				
R Square	0.155936239				
Adjusted R Square	-0.125418348				
Standard Error	928.4898021				
Observations	5				
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	477801.3	477801.3	0.554234	0.510605
Residual	3	2586280	862093.3		
Total	4	3064081			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	1810.758892	3250.84	0.557013	0.616376	-8534.86

Unit trust return	33.63655726	45.18195	0.744469	0.510605	-110.153
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*Source: NSE*

From the regression statistic, the coefficient of determination (R square) measures the proportion of variability in a data set that is accounted for by a statistical model. In this case it can be seen that there is strong relationship between the returns of unit trusts and that of the market. In this case we can see that 15.6% of the market returns is determined by that of unit trusts.

From the sum of squares, we can see that regression model (477801.3) is lower than the residual value of (2586280) which implies that there are other factors that determine the returns of the market other than regressing the return of unit trusts and that of the market. The coefficients provide numerical figures that could be used to estimate the returns of the market.

#### **4.7 Jensen Index**

The main index used in this study to carry out tests on unit trusts returns is illustrated in table 6 below.

**Table 6: Jensen Index on Unit Trust Return**

Year	Beta	Jensen alpha	Adjusted Jensen alpha
2005	0.48	0.00339	0.00145
2006	0.63	0.00087	0.00065
2007	0.67	0.0067	0.00082
2008	0.53	-0.0236	0.00981
2009	0.69	-0.0053	0.0101
Overall	0.662	0.00432	0.00327
Market returns	1	0	0
% of funds >market		34.35%	36.54%

*Source: NSE*

Beta represents the level of portfolio risk, while adjusted Jensen alpha is simply a ratio of Jensen alpha over systematic risk. Jensen alpha was defined in the methodology chapter.

The beta value for unit trust ranges from a low of 0.48 during the year 2005 to a high of 0.69 during the year 2009. The complete data sample shows a beta value of 0.662. We can see that the Jensen generally indicates positive returns to investors in unit trusts with the exception of two years that is 2008 and 2009.

For the overall data, it can be seen that 34.35% of the funds perform better than the market in terms of Jensen's alpha and 36.54% in terms of the adjusted Jensen alpha. This confirms that more than one third of unit trusts performed better than the market.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

From the analysis and data collected the foregoing discussions, conclusions and recommendations were made. The response was based on the objectives of the study.

#### 5.2 Summary of Findings

The objective of the study was to evaluate the asset allocation by fund managers and the financial performance of unit trusts in Kenya.

The study found out that there was a difference between the performance of unit trusts and the market. This is illustrated especially in the year 2009, where the stock market slumped in its performance while that of the unit trusts improved in its returns by 18% as compared to the previous years. However, in the year 2006 and 2007 both returns from the stock market and the unit trust recorded an upward trend while in 2008, both were affected by external factors namely the post-election violence to record a downward trend in performance. The research also found that for equity based unit trusts available to Kenyan investors, asset allocation can explain a significant amount of the difference in returns across time and hence a primary determinant of return performance for these trusts.

Carrying out t-test statistic our null hypothesis was accepted since even though, unit trust recorded a better performance than the stock market we could be able to see that the results were not statistically significant given the low levels of significance for both one tailed and two tailed tests. By carrying out regression tests, it was possible to confirm the relationship between unit trust return and that of the market where it was found out that the two have a strong relationship. However, the regression analysis could not be used exclusively since it was found out to be much lower than the residual figures hence confirming that stock market returns were affected to a large extent by other factors other than unit trusts.

Jensen index was carried out to confirm the returns of the stock market by removing fluctuations that might distort the data used. Both the Jensen alpha and adjusted alpha confirmed the positive

returns from unit trust in the four out of five years under study. It was also possible to get the percentage by which unit trust returns were higher than that of the market namely by 34.35%.

### **5.3 Conclusion**

Given the desire of investors to seek out diversification in their asset portfolios and considering the performance of the stock markets, many investors have sought to diversify their holdings further by investing in unit trusts. Unit trusts are attractive mainly because of the minimum risk involved as well mutual funds are professionally managed. These funds are invested in shares, bonds and real estates. Fund managers are paid for active management and they have claimed to offer better returns than that offered by a market portfolio.

This study employed several ways of comparing unit trusts return with that of the stock market. The measures included: raw return, market adjusted return, Jensen's alpha, adjusted Jensen's alpha, regression tests and t-test statistic. This was analyzed from the year 2005 to year 2009. It should also be noted that this period consists of various sub periods with different economic conditions. In the beginning it was a period of high growth and very bullish stock market (2005-2007). Then the country experiences a severe financial crisis in the year 2008 following the post election violence. This is then followed by recovery years of 2009 and onwards. Because of the different short-term characteristics of the economic situation, our results may have been strongly influenced by the severe financial crisis. Hence extreme caution needs to be exercised in interpreting the results.

The findings show that unit trusts have performed well over the period of study. In most of the instances, the market trail behind the performance of unit trusts. The fact that unit trust outperform the market can be attributed to the fact that fund managers could be in a position to predict stock prices based on several fundamental variables such as initial dividend yields, market capitalization, price earnings ratios, and price to book value ratios.

This implies that fund managers may have access to enough private information to offset their expenses. These results are consistent with the notion that mutual funds are efficient in their trading and information gathering activities.

#### **5.4 Limitations of the Study**

Care must be taken to generalize the results of this study as there were some limitations. The use of regression analysis assumes that there is an assumption of linearity with the various models, the observations are independent of each other, homogeneity of variances exist which may not be the case.

It is also within the period of study (2005-2009) that elections were held and this may have an impact on the performance particularly that of shares. The post election violence that locked many parts of the country (2007/2008) caused a decline in the performance of the market. The findings may therefore be compromised.

Most of the unit trusts firms have not been in operations for long and this limit the period of the study. Some have just been in operation for two years while the oldest unit trust is ten years.

#### **5.5 Recommendation for Further Study**

The current research focused on the unit trust in Kenya. This excludes other industries, and future studies should consider returns in other industries such as returns in the insurance sector, pension funds and other institutional investors. Future study can be done including variable such as diversification level, number of holdings, education level etc. Do these variables influence the performance of unit trust funds or these other industries?

The research also investigated the performance of the unit trusts that invest in shares, excluding those that invest in bonds and real estates. A research should be done for those that invest in bonds and real estate and a comparison done to offer better information to the stakeholders in the Capital Market Authority and NSE.

One may also be interested to know the kind of strategies used by fund managers in asset allocation decisions that will make them experience superior performance though not very significant. It is worthy to note that the expenses incurred by fund managers reduce the dividends paid to unit trusts holders.

## REFERENCES

- Barber, B., R. Lehavy, M. McNicholas, and B. Trueman, (2001), Can Investors Profit from the Prophets? Security Analyst Recommendations and Stock Returns. *Journal of Finance*, 56, 531-563.
- Bhalla S. G., and Wahal, S. (1997): "Momentum Trading by Institutions", *The Journal of finance*, Vol.57, No. 6, pp2449-2478. Blackwell publishing.
- Boni, L., and K.L. Womack, 2006, Analysts, Industries and price Momentum. *Journal of Financial and Quantitative Analysis*, 41, 85-109.
- Brinson, G., Singer, B., and Beebower, G. (1991). Determinants of Portfolio Performance II: An Update, *Financial Analyst Journal* (May/June), 40-48.
- Brown, S.J., Goetzann, W. N., Hiraki, T. Otsuki, T. and Shirashi, N. (2001): "The Japanese Open-End Fund Puzzle", *Journal of Business* Vol.74. pp 59-77. The University of Chicago.
- Bruno, S. (1999), International Investments. Addison Wesley Publishing Company.
- Busse, J.A (1999) "Volatility Timing in Mutual Funds: Evidence from Daily Returns", *The Review of Financial Studies*, Vol. 12. No.5. pp 1009-1041. Oxford University Press.
- Carhart, M.M., Kaniel, R., Musto, D.K., and Reed, A. V., (2002): "Leaning for the Tape; Evidence of Gaming Behavior in Equity Mutual Funds", *The Journal of Finance*, Vol 57, No.2, pp661-693. Blackwell Publishing.
- Chalmers, J. M. R., Edelen, R.m., and Kaldec, G. B. (2001):"On the Perils of Financial Intermediaries Setting Security prices: The Mutual Fund Wild Card Option", *The Journal of Finance*, Vol. 56, No. 6, pp 2209-2236. Blackwell Publishing.



- Chen, J., Hong, H., Huang, M., and Kubik, J. D. (2004): ``Does Fund Size Erode Mutual Fund Performance? : The Role of Liquidity and Organization'', *The American Economic Review*, Vol. 94, No. 5, pp 1276-1302. American Economic Association.
- Clemen, R., (1989),Combining Forecasts: A Review and annotated Bibliography. *International Journal of Forecasting*, 5, 559-583.
- Conrad, J and Kaul, G. (1998). ``An Anatomy of Trading Strategies'', *The Review of Financial Studies*, Vol.11. No. 3. pp 489-519. Oxford University Press.
- Daniel (1997), How to Avoid The Pitfalls in Portfolio Optimization? Putting the Black-Litterman Approach at Work. *Financial Markets and Portfolio Management* 15, 59-75.
- Daily Nation Pg 8 dd 26, 2009 Investment.
- Drobetz, W., (2001), How to Avoid The Pitfalls in Portfolio Optimization? Putting the Black-Litterman Approach at Work. *Financial Markets and Portfolio Management* 15, 59-75.
- Drobetz, W. and Kohler, E. (2002). The Contribution Of Asset Allocation Policy To Portfolio Performance, *Swiss Society For Financial Market Research*, pp 219-233).
- Elkin, L. M., (1999). How important is asset allocation, [www.frontiercm.com](http://www.frontiercm.com)
- Elton, J. E and M.J. Gruber, (1995), *Modern Portfolio Theory and Investment Analysis*, 5<sup>th</sup> edition, John Wiley & Sons, Inc.
- Elton, J.E, M.J. Gruber, S. Das and M. Hlvaka, (1997), Modern Portfolio Theory, 1950 to date. *Journal of Finance*, 21, 1743-1759.
- Gruber, M.(1996), `` Another Puzzle: The Growth in Actively Managed Mutual Funds'', *Journal of Finance*, Vol 51(3), pp. 783-810).
- Emory, p. J., and Strickland, D. (1985): ``Who Blinks in Volatile Markets, Individuals or Institutions?'', *The Journal of Finance*, Vol. 57, No. 5, pp 1923-1949.Blackwell Publishing.

- Fama, E. F., and French, K. R. (2004): "The Capital Asset Pricing Model: Theory and Evidence", *The Journal of Economic Perspectives*, Vol.18, No.3, pp. 25-46.American Economic Association.
- Faure, D., Hvidkjaer, S., and O'Hara, M. (1987):"Is Information Risk a Determinant of Asset Returns?" *The Journal of Finance*, Vol. 57, No. 5, pp 2185-2221.Blackwell publishing.
- Fowler, R, G. Robin and J.C. Singleton, (Oct 2007), *New Zealand Unit Trust: Asset Allocation, Style Analysis and Return Attribution*. Rollius MBA Crummer Graduate School of Business.
- Garret, Q and R.A Singuefield, (2000), Performance of U.K Equity Unit Trust. *Journal of Asset Management*, 1, 72-92.
- Gitu, M. I., (2003): "Factors Affecting the Equity Allocation Decisions made by Trustees and Fund Managers of Pension Scheme Portfolios in Kenya". Unpublished MBA Project. University of Nairobi.
- Gitman, U., Joehnk , Kapteyn, A., and Potters, J. (2002):"Evaluating Periods and Assets Prices in a Market Experiment", *The Journal of Finance*, Vo. 58, No. 2, pp 821-837.Blackwell Publishing.
- Goetzmann, W. N., and Massa, M. (2002): "Daily Momentum and Contrarian Behavior of Index Fund Investors", *The Journal of Financial and Quantitative Analysis*, Vol.37, No.3, pp 375-389. University of Washington School of Business Administration.
- Goetzmann, W.N., and R. Ibbotson (1994), Do Winners Repeat? *Journal of Portfolio Management*, Vol 20 (winter), pp. 9-18.
- Green, T.C., 2006, The Value of Client Access to Analyst Recommendations. *Journal of Financial and Quantitative Analysis*, 41, 1-24.

- Grinblatt and Titman, S. (1989); "Mutual Fund Performance: An Analysis of Quarterly Portfolio Holdings". *The Journal of Business* Vol.62. No. 3. pp.393-416. The University of Chicago Press.
- Grinblatt, M and Titman, S. (1992), "The Persistence of Mutual Fund Performance" *Journal of Finance*, Vol 47(5), pp. 1977-1984.
- Hallahan T. (1999), "The information content of portfolio performance history and persistence in fund performance: An examination of rollover funds", *Accounting and Finance*, Vol. 39(3), pp.255-275.
- Hallahan, T. and Faff, R.W. (1999), "An Examination of Australian Equity Trusts for Selectivity and Market Timing Performance", *Journal of Multinational Financial Management*, Vol 9, pp.387-402.
- Hallahan, T. and Faff, R.W. (2001), "Induced Persistence or Reversals in Fund Performance? The Effect of Survivorship Bias", *Applied Financial Economics*, Vol. 11(2), pp. 119-126.
- Harman, T. S. (1987): "Emerging Alternatives to Mutual Fund: Unit Investment Trusts and Other Fixed Portfolio Investment Vehicles", *Duke Law Journal*, Vol. 1987, No. 6, pp. 1045-1094.
- He, G., and Litterman, (2002), *The Intuition Behind Black-Litterman Model Portfolios*, *Goldman Sachs Investment Management Research*.
- Hendricks, D., Patel, J., and Zeckhauser, R.(1993). Hot hands in mutual funds: Short-run persistence of relative performance, 1974-88. *The Journal of Finance*, 48, 93-130.
- Idzorek, T., (2004), *A Step-By-Step Guide to the Black-Litterman Model: Incorporating User Specified Confidence levels*, *Working Paper, Zephyr Associates Publications*.
- Ippolito, R.A., (1993), On studies of mutual fund performance, 1962-1991. *Financial Analysts Journal*, 49, 42-50.

- Ippolito, R.A., (1989), Efficiency with Costly Information: A Study of Mutual Fund Performance 1965-1984. *The Quarterly Journal of Economics*, Vol 104, pp. 1-24.
- Jacob N.L and R.R Pettit, (1998), Investments.
- Jegadeesh, N., and Titman, S. (1995); ``Overreaction, Delayed Reaction, and Contrarian Profits'', *The Review of Financial Studies*, Vol. 8, No. 4, pp973-993.Oxford University Press.
- Jensen, M.C., (1968), The Performance of Mutual Funds in the Period of 1945-1965, *Journal of Finance*, Vol 23, p 389-416.
- Jones, R. C., T. Lim, and P.J. Zangari, (2007), The Black –Litterman Model for Structured Equity Portfolios, *Journal of Portfolio Management*, 33, 24-33.
- Kamanda , W. T. (2001): ``Predictable Investment Horizons and Wealth Transfers among Mutual Fund Shareholders'', *The Journal of Finance*, Vol. 59, No. 5, pp 1979-2012. Blackwell Publishing for the Knyan Association.
- Kenya Gazette dd April, 2009.
- Kothari, S.P. and Warner, J. B. (2001):`` Evaluating Mutual Fund Performance'', *The Journal of Finance*, Vol. 56. No. 5. pp 1985-2010. Blackwell Publishing.
- Loft house, J. (2001): ``Returns- Chasing Behavior , Mutual Funds, and Beta's Death'', *The Journal of Financial and Quantitative Analysis*, Vol. 37, No.4, pp 559-594.University of Washington School of Business Administration.
- Maiyo, E.J.,(2007), The Performance of Unit Trusts in Kenya, Unpublished MBA project, University of Nairobi.
- Malkiel, B. G. (2003); ``The Efficient Market Hypothesis and Its Critics'', *The Journal of Economic Perspective*, Vol. 17, No. 1, pp.59-82. American Economic Association.Malkiel, B.G. (1995). Returns from investing in equity mutual funds 1971-1991. *Journal of Finance*, 549-572.

- Markowitz, H., (1959), "Portfolio Selection": *Efficient Diversification of Investments*, John Wiley & Sons, New York.
- Martellini, L., and V. Ziemann, (2007), Extending the Black- Litterman Model beyond the Mean Variance Framework, *Journal of portfolio Management*, 33, 33-44.
- Meucci, A., (2005), *Risk and Asset Allocation*. Springer, Berlin.
- Moon, P. and Bates, K., June (1992), "Are Financial Statements Good Communicators?" *Management Accounting Journal*.
- Mugenda, O.M and Mugenda, A. (1999), *Research Methods: Qualitative and Quantitative Approaches*, Nairobi, Acts Press.
- Mugo, W.E (1999) A Study of factors that institutional investors consider in making decision on investments in shares traded at the N.S.E, Unpublished MBA project, University of Nairobi.
- Mwobobia K., (2004), A Survey of the Factors that Investment Management Companies Consider When Making Investment Decisions, Unpublished MBA project, University of Nairobi.
- Nanda, V., Wang, Z. J., and Zheng, L. (2004): "Family Values and the Star phenomenon: Strategies of Mutual Fund Families", *The Review of Financial Studies*, Vol 17, No. 3, pp. 667-698. Oxford University Press.
- Omonyo, A. B.,( 2003), A Survey of Investment Practices of Pension Fund Managers in Kenya, Unpublished MBA Project, University of Nairobi.
- Ondigo, H.O., (2001) "The information content of Annual Reports and Accounts: The case of companies quoted in the Nairobi Stock Exchange", Unplished MBA Project, University of Nairobi.

Reilly, F, K. and Brown, C. K. (1997): "An Examination of the Performance of the Trades and Stock Holdings of Fund Managers", *The Journal of Financial and Quantitative Analysis*, Vol. 38, No. 4, pp. 811-828. University of Washington School of Business Administration.

Reilly, F, K. and Brown, C. K. (1997). *Investment Analysis and Portfolio Management*. Sixth Edition. Fort Worth: The Dryden Press.

Robson, G., (1986), "The Investment Performance of Unit Trusts and Mutual Funds in Australia for the Period 1969 to 1978", *Accounting and Finance*, Vol 26, pp.55-79.

Robson, C. (2002) *Real world research: A resource for social scientists and practitioner researchers* (2nd Ed). Oxford: Blackwell.

Saita, F. (1999): "Allocation of Risk Capital in Financial Institutions", *Financial Management*, Vol. 28, No.3, pp. 99-111. Blackwell Publishing.

Salant, P. and D. A. Dillman (1994). *How to conduct your own survey*. John Wiley & Sons, Inc.

Satchel, S. and A. Scowcroft,( 2000), A Demystification of the Black-Litterman model: Managing Quantitative and Traditional Portfolio Construction, *Journal of Asset Management*, 1, 138-150.

Saunders, M.N.K., Lewis, P. & Thornhill, A. (2003), *Research methods for business students* (3rd Ed). Harlow: FT Prentice Hall.

Sharpe, W.F. and G.M. Cooper, 1972. Risk-return classes of New York Stock Exchange common stocks, 1931-1967. *Financial Analysts Journal* (March-April), 46-54, 81.

Sharpe, T., and Tiwari, A. (1996): "Does Stock Return Momentum Explain the 'Smart Money' Effect?" *The Journal of Finance* , Vol. 59, No. 6, pp. 2605-2622.Blackwell publishing.

Sharpe, W. F., (1996), Mutual Fund Performance, *Journal of Business*, Vol 39, pp. 119-138.

Sharpe, W.F., (1964) “Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk”, *Journal of Finance*, 19 pp 425-442.

Sortino and Satchell, (2002), Managing Downside Risk in Financial Markets, Butterworth Heinemann.

Surz, R., Stevens, D. and Wimer M. (1999). The Importance of investment Policy, *Journal of Investing*, Vol8, no4 (Winter), 80-85.

Van Horne, C. J., (1997), *Financial Management and Policy*, prentice Hall, India.

Wagacha, A. B., (2001); “A Survey of Investment Practices of Pension Fund Managers in Kenya”, Unpublished MBA Project University of Nairobi.

Walnut Hill Advisors,LLC., Income Planning is not Just Investment Management.

Wambui (2003): “The Future of Collective Investment Schemes in Kenya” Unpublished MBA Project. University of Nairobi.

Wermers, R.,(1999):“Mutual Fund Herding and the Impact on Stock Prices”, *Journal of Finance*, Vol. 54. No. 2. pp. 581-622. Blackwell Publishing.

Zimele Asset Management, 2000

## **APPENDIX 1**

### **EQUITY BASED FUNDS AND SCHEMES**

- ✓ OLD MUTUAL EQUITY FUND
- ✓ BRITISH AMERICAN EQUITY FUND
- ✓ COMMERCIAL BANK OF AFRICA EQUITY FUND
- ✓ SUNTRA EQUITY FUND
- ✓ ICEA EQUITY FUND
- ✓ STANDARD EQUITY GROWTH FUND
- ✓ DYER AND BLAIR EQUITY FUND