EVALUATION OF PERFORMANCE OF THE MUTUAL FUNDS AT THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

This Research Project Report is my original work and has not been submitted for a degree in this or any other university.

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To my father Andrew Mbithi Ngundo you always prayed for me and encouraged me to get nothing but the best and also provided financial support and my mother Rose Mbithi who taught me that in life you can achieve what you desire only if you are determined to do so.
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ABSTRACT

The study sought to determine the returns of mutual funds in relation to direct investment in the Nairobi securities market. This is in line with the role of mutual funds in the financial markets with studies carried out in other markets where mutual firms operate showing that the mutual firms perform below the market yet the mutual firms are expected to outperform the market given the ability to diversify funds from the pool into a variety of investments. The study made a comprehensive analysis of the returns of mutual funds including both money market and equity funds to establish the overall performance of mutual funds. As a result, CAPM was used to determine the expected returns and excess returns on mutual funds in relation to two proxies for direct investment the NSE, T-bills for money market funds and 20 share index for equity funds. It was therefore a longitudinal study which sought to determine behaviour of the mutual funds over the period from September 2007 to September 2012. Secondary data obtained from Nairobi Securities reports and Central Bank of Kenya reports was used and focused on registered mutual funds, 11 money market funds and 11 equity funds mainly due to the fact that this were the predominant category of funds representing the extreme ends of the investment spectrum. Based on the data collected, the mutual funds were evaluated to show their monthly returns and monthly standard deviation which was compared to the market. The data was analysed using quantitative techniques with various statistical measures being employed. The study found out that the mutual funds perform below the market portfolio as seen from the negative excess returns exhibited. The low performance is resulting from the inability of the managers of the mutual funds to accurately predict future prices in order to effectively diversify as well as their inability to effectively manage risks. Suggestions are thus made for managers of mutual funds to device means of accurately predicting future prices in order to effectively diversify as well as effectively monitor and manage risks.
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Mutual funds have come to play a dramatically increased role in financial markets in recent decades. Although the growth of the mutual fund industry started in the United States where the industry plays an extremely important role in financial markets, this trend has spread more recently to other countries around the world (Khorana, 2005). A mutual fund is simply defined as an investment vehicle which allows a group of many different investors to pool their money together with a clear financial objective, to make money (Lofthouse, 2001). It consists of an extensive collection of stocks and bonds, which is managed by a professional or group of professionals called an investment advisor (Investment Company Institute, 2009). The mutual fund was created for those investors who feel investing their money by themselves to be too risky or just not savvy enough, but who still want to take benefit of shared market.

Shares are purchased for the investor according to the rules of the fund and many restrictions on investment and redemptions apply. The shares are issued or redeemed by the investment advisor(s) typically in large blocks. These professionals issue and redeem shares throughout the day to keep the mutual fund making money. Mutual fund share prices are determined at the end of each business day by adding up the current value of the securities in the portfolio (after any expenses) and then by dividing the sum by the total number of shares outstanding. Mutual funds captured the public’s attention in the 1980s and '90s when mutual fund investment hit record highs and investors saw incredible returns (Baker and Wurgler, 2000). Although the idea of pooling assets for investment purposes has been around for a long time, Past studies are uncertain of the origins of investment funds; some cite the closed-end
investment companies launched in the Netherlands in 1822 by King William I as the pioneer mutual funds, while others point to a Dutch merchant named Adrian van Ketwich whose investment trust created in 1774 may have given the king the idea. Ketwich probably theorized that diversification would increase the appeal of investments to smaller investors with minimal capital. The next wave of near-mutual funds included an investment trust launched in Switzerland in 1849, followed by similar vehicles created in Scotland in the 1880s (Demirgüç and Levine, 1996).

The idea of pooling resources and spreading risk using mutual funds investments soon took root in Great Britain and France. The Boston Personal Property Trust, formed in 1893, was the first fund in the United States. The creation of the Alexander Fund in Philadelphia in 1907 was an important step in the evolution toward what we know as the modern mutual fund (Subrahmanyam and Titman, 1999).

1.1.1 Mutual Funds in Kenya

The Kenyan capital markets offer an array of investment products in the form of shares, bonds and mutual funds. The type of products chosen by the investor to commit his capital depends largely on his financial goals, time frame, and amount of capital available (Rock, 1986). Mutual funds have grown in acceptance and popularity in recent years. This is evidenced by the growth in the number of approved mutual funds from virtually zero in 2001 to 18 in 2011. Mutual funds are the small investor’s answer to achieving wide investment diversification without the need of prohibitive sums of money. As a market becomes sophisticated and more volatile, mutual funds become safe havens for less, sophisticated and less capitalized, conservative individuals in the market place (Welch, 1989). The fund management industry in Kenya is at its formative stages and is thus underdeveloped. There
are 18 fund managers licensed by both capital market authority and retirement benefit authority who play the role of managing the pension and mutual funds as well as other institutional and retail funds.

The registration of Africa alliance Kenya limited unit trust scheme in 2002 marked the beginning of mutual funds investment in Kenya. The launch of the mutual funds being pooled funds was expected to increase investment savings among Kenyans. The low level of per capita income of Ksh.35,045 was also suitable for this type of investment (CBK, 2006). Investing in shares has traditionally yielded unrivalled returns, offering investors the opportunity to build real wealth. Yet, the large amounts of money required to purchase these shares are often out of reach for smaller investors. The pooling of investors' funds makes mutual funds the ideal alternative, providing cost effective access to a wide variety of local and international shares/equities (companies listed on a stock exchange), bonds, and money market instruments such as fixed deposits, treasury bills and call accounts (Benveniste and Spindt, 1989). Pooling enables investors to reduce transactional costs involved in buying and selling of securities and gives investors the ability to negotiate for better returns than they would get if investing individually.

1.1.2 Direct Investment

Direct investment to the Securities Exchange involves buying of shares and bonds. A share of stock is literally a share in the ownership of a company. When an investor buys a share of stock, he is entitled to a small fraction of the assets and earnings of that company. Companies mainly have two ways of raising money to cover start-up costs or expand the business. They can either borrow money (a process known as debt financing) or sell stock (also known as equity financing). The disadvantage of borrowing money is that the company has to pay back
the loan with interest. By selling stock however, the company gets money with fewer strings attached. There is no interest to pay and no requirement to even pay the money back at all. Even better, equity financing distributes the risk of doing business among a large pool of investors (stockholders). If the company fails, the founders don't lose all of their money, they lose several thousand smaller chunks of other people's money (Kamanda, 2001).

Modern stock exchanges make buying and selling easy. Investors don't have to actually travel to Securities Exchange, they can call a stock broker who does business with the NSE, or they can buy and sell stocks online for a small fee. If these exchanges didn't exist, buying or selling stock would be a lot harder. With an exchange in place, investors can buy and sell shares instantly. Once investors buy shares of a company they becomes a shareholders and if the corporation chooses to pay an annual dividend, then shareholders will receive a cut of the profits every year. Very few young companies issue dividends, however. They're more likely to issue growth stocks, in which all of the profits are reinvested. In this case, shareholders are banking on the fact that the right corporate management will help the company grow and generate even more profit. It's this potential for future success that will help determine the stock price on the open market. And if the shareholder holds onto a growth stock for long enough, he could eventually sell it for a significant gain (Brown, 2006).

1.1.3 Mutual Funds and Diversification

Portfolio Theory assumes that investors are risk averse, meaning that given two portfolios that offer the same expected return, investors will prefer the less risky one. Thus, an investor will take on increased risk only if compensated by higher expected returns. Conversely, an investor who wants higher expected returns must accept more risk. The exact trade-off will be the same for all investors, but different investors will evaluate the trade-off differently based
on individual risk aversion characteristics. The implication is that a rational investor will not invest in a portfolio if a second portfolio exists with a more favorable risk-expected return profile i.e. if for that level of risk an alternative portfolio exists which has better expected returns (Artikis, 2001).

An investor can reduce portfolio risk simply by holding combinations of instruments which are not perfectly positively correlated. In other words, investors can reduce their exposure to individual asset risk by holding a diversified portfolio of assets (Jensen, 1968). Diversification may allow for the same portfolio expected return with reduced risk. These ideals have been started with Markowitz and then reinforced by other economists and mathematicians such as Andrew Brennan who have expressed ideas in the limitation of variance through portfolio theory.

Mutual funds are not guaranteed or insured, even if an investor buy through a bank and the fund carries the bank's name, the investor can lose money investing in mutual funds. Past performance is not a reliable indicator of future performance. But past performance can help assess a fund's volatility over time. All mutual funds have costs that lower investment returns (Schindler, 2000). Investors purchase mutual fund shares from the fund itself instead of from other investors on a secondary market, such as the Nairobi Securities Exchange or New York Stock Exchange.

The price that investors pay for mutual fund shares is the fund's per share net asset value (NAV) plus any shareholder fees that the fund imposes at the time of purchase (such as sales loads). Every investment has advantages and disadvantages. But it's important to remember that features that matter to one investor may not be important to another investor. Whether any particular feature is an advantage for one investor will depend on the investors
unique circumstances. For some investors, mutual funds provide an attractive investment choice because they generally offer the following features: Professional Management - Professional money managers research, select, and monitor the performance of the securities the fund purchases. Diversification - Diversification is an investing strategy that can be neatly summed up as "Don't put all your eggs in one basket." Spreading investments across a wide range of companies and industry sectors can help lower risk if a company or sector fails. Some investors find it easier to achieve diversification through ownership of mutual funds rather than through ownership of individual stocks or bonds. Affordability - some mutual funds accommodate investors who don't have a lot of money to invest by setting relatively low amounts for initial purchases, subsequent monthly purchases, or both. Liquidity- Mutual fund investors can readily redeem their shares at the current Net Asset Value plus any fees and charges assessed on redemption at any time (Christensen, 2005).

But mutual funds also have features that some investors might view as disadvantages, such as: costs despite negative returns- Investors must pay sales charges, annual fees, and other expenses regardless of how the fund performs, and depending on the timing of their investment, investors may also have to pay taxes on any capital gains distribution they receive- even if the fund went on to perform poorly after they bought shares. Lack of control- Investors typically cannot ascertain the exact make-up of a fund's portfolio at any given time, nor can they directly influence which securities the fund manager buys and sells or the timing of those trades. Price uncertainty- with an individual stock, you can obtain real-time (or close to real-time) pricing information with relative ease by checking financial websites or by calling your broker. You can also monitor how a stock's price changes from hour to hour or even second to second. By contrast, with a mutual fund, the price at which you purchase or redeem shares will typically depend on the fund's NAV, which the fund
might not calculate until many hours after you've placed your order. In general, mutual funds must calculate their NAV at least once every business day, typically after the major exchanges close. Due to the fact that mutual funds are highly diversified in their investments, meaning they own a number of stocks so that if one or a few turn out to be bad decisions they won't dramatically affect the whole fund and because they employ professional managers to oversee the operations who typically have many years of experience in the business of selecting and evaluating investments for the fund, making the entire buy and sell decisions its generally expected they generate a higher return in comparison to direct investment (Titman, 1994).
1.1.4 Nairobi Securities Exchange

The Nairobi securities exchange was established in 1954. It operated as an association of stockbrokers with no trading floor until October 1991. The introduction of the trading floor has led to a substantial increase in trading volumes and upward movement in the various indexes. The NSE has been instrumental in enabling the public and private sectors in Kenya to raise large amounts of capital for expansion of new businesses (NSE, 2005). The role of NSE is to provide a platform for the individuals or the organizations for the trading and investing their savings through the purchase of shares. It makes the movement of money into the system. People invest to make profit and to beat the inflation. Increase in the market capitalization of the companies make them strong and help in the economic growth by providing employment and by production etc. If the circulation of money will stop then the money will be plunged in the hands of the people, the growth will be stopped, so the Securities exchange play an important role in any economy (Munga, 1974).

Stock market performance is measured by stock market index which is an indicator of the direction of share price movement. It is a quick measure for judging the overall direction of the market and it is considered to be accurate indicator of changes in the stock market. The market index comprises of a selection of listed companies which represent a significant portion of the market capitalization and trade actively. The main indices at the NSE are the NSE 20 share index, NSE all share index (NASI) and the American International Group (AIG) index (Kibuthu, 2005).
1.2 Research Problem

Benchmark comparison is an important performance measure as it indicates to what extent the fund managers are able to produce better performance of managed portfolio compared to market or index portfolios. Pooled funds above anything else are credited with being able to diversify risk to a big extent, the mutual funds are therefore expected to either outperform the market or to do as well as the market. Mutual funds assume higher risks compared to bonds or other government securities and hence, they are expected to produce returns not only higher than the returns offered by bonds or other government securities but also high enough to match the risk level of a given fund (Treynor, 1965).

Sharpe (1981) evaluated the overall performance of mutual funds in the US and the results showed that only 32% of the funds outperformed the index. Jensen (1968) using a risk adjusted measure of portfolio performance estimated how much a managers forecasting ability contributes to the funds return. The results showed on average funds earned 1.1% less than they should have earned for their level of risk. He concluded that mutual funds could not beat the market by buy and hold policy or passive investment strategy. Despite the fact that mutual funds have been around for sometime, its adoption as a vehicle for investment has been very minimal and many investors opt for direct investment which at times produces high negative returns. There has been limited studies locally focusing on mutual funds performance and thus the need to research on this topic to aid the investors make an informed decision as to which channel to use while investing at the Nairobi Securities Exchange.

Maiyo (2007) aimed at evaluating the performance of unit trusts by specifically looking at which trust in the industry performed better. The results showed mixed findings with the unit trust performing depending on the composition of their portfolios. He however did not exhaustively compare how the unit trust performed in relation to the market benchmark.
Kamanda (2001) evaluated the equity portfolio held by Kenyan insurance companies over the period January 1998 to December 1999 and observed that majority of the insurance companies maintained poorly diversified portfolios and the market portfolio outperformed the insurance industry portfolio. He also observed that the market rate of return for the Nairobi Securities Exchange was less than the risk free rate during the study period and hence recommended for further research on how efficient it is to direct invest at the Nairobi Securities Exchange. Muriithi (2005) evaluated risk and return of equity mutual funds in Kenya. His conclusion was that neither the the Old Mutual Equity Fund nor the African Alliance Balanced fund registered average returns higher than the market as represented by the NSE share index. In his study however, he only focused on the equity mutual and hence a comprehensive study need to be done about the money market funds. This research sought to answer the question: Are mutual funds able to generate a higher return compared to the market at the Nairobi Securities Exchange?

1.3 Objective of the Study

To evaluate mutual funds performance at the Nairobi Securities Exchange in comparison to the market.

1.4 Value of the study

The study shall offer valuable contribution to theory and practise. The study will give good insight to scholars who want to do further research on the performance of mutual funds and factors influencing their performance. The study will also provide Capital Market Authority with information to be used to educate the general public to understand the performance of mutual funds. This will help them make better investments decisions. In addition the study will provide information to the Nairobi Securities Exchange management as to how the NSE
segment of mutual fund performs throughout the year. The information can be used to make policy proposals to the capital market authority.

The study will help the stock brokers and investment banks in advising their clients on investment strategies at the Nairobi Securities Exchange. Moreover it will give investors useful information regarding the returns of mutual funds. The study will bring out the risk and return relationship that investors can identify with. The Government of Kenya through its policies influences the investments in various types of products and industry and the study can assist in identifying out these areas that need incentives to attract more capital inflows.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter looked into the literature on the performance of mutual funds related to the study at hand and summarized the information from other researchers who have carried out their research on the same field by summarizing the theories, empirical review and general literature.

2.2 Theoretical Review

2.2.1 Portfolio Theory

Portfolio Theory is a theory of finance which attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets (Markowitz, 1952). Although Portfolio theory is widely used in practice in the financial industry, in recent years the basic assumptions of Portfolio Theory have been widely challenged by fields such as behavioral economics. Portfolio Theory is a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset (Rilly and Keith, 2000). This possibility can be seen intuitively because different types of assets often change in value in opposite ways. For example, to the extent prices in the stock market move differently from prices in the bond market, a collection of both types of assets can in theory face lower overall risk than either individually. But diversification lowers risk even if assets' returns are not negatively correlated, indeed even if they are positively correlated.
More technically, Portfolio theory model, an asset's return as a normally distributed function or more generally as an elliptically distributed random variable defines risk as the standard deviation of return, and models a portfolio as a weighted combination of assets, so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not perfectly positively correlated, Portfolio theory seeks to reduce the total variance (Grinblatt and Titman, 1994). Many theoretical and practical criticisms have been leveled against Portfolio Theory. These include the fact that financial returns do not follow any symmetric distribution, and that correlations between asset classes are not fixed but can vary depending on external events (especially in crises). Further, there is growing evidence that investors are not rational and markets are not efficient (Sorros, 2001).

2.2.2 Capital Asset Pricing Model

Capital Asset Pricing Model is a model that describes the relationship between risk and expected return and that is used in the pricing of risky securities. The Capital Asset Pricing Model is a centerpiece of modern financial economics. It gives a precise prediction of the relationship between the risk of an asset and its expected return. This helps provide a benchmark rate of return for the evaluation of possible investments for example to see whether the expected return that is forecasted for a stock is more or less than its 'fair' return given its risk. Also it helps make an educated guess as to the expected return on assets that have not been traded in the marketplace (Sharpe, 1964).

Markowitz (1952) often referred as the founder of modern portfolio management identified the efficient set of portfolios, or the efficient frontier of risky assets. Later on the capital asset pricing models (CAPM) was derived independently by Sharpe (1964), Lintner (1965) and Mossin (1966). The major factor that contributed portfolio theory to develop into capital
market theory is the concept of risk free asset. CAPM is one of the models that when applied can be used to measure the portfolio performance of risky investments.

The CAPM formula identified by Sharpe (1964) is shown below. The expected one period return \( E(R_i) \) given on any security (or portfolio), \( i \), is:

\[
E(R_i) = R_f + [E(R_M) - R_f] \beta_{iM}, \quad i=1,...,N.
\]

Where:

\( E(R_i) \) is the expected rate of return on security \( i \),

\( R_f \) is the risk-free rate of return

\( \beta_{iM} \) is the beta coefficient or systematic risk of security \( i \)

\( E(R_M) \) is the expected return in the market.

### 2.3.1 Systematic Risk and Specific Risk

Specific risk is the risk associated with individual assets. Within a portfolio these risks can be reduced through diversification (specific risks "cancel out"). Specific risk is also called diversifiable, unique, unsystematic, or idiosyncratic risk. Systematic risk or market risk refers to the risk common to all securities. Systematic risk cannot be diversified away (within one market). Within the market portfolio, asset specific risk will be diversified away to the extent possible. Systematic risk is therefore equated with the risk (standard deviation) of the market portfolio (Milonas, 1995).

Since a security will be purchased only if it improves the risk-expected return characteristics of the market portfolio, the relevant measure of the risk of a security is the risk it adds to the
market portfolio, and not its risk in isolation. In this context, the volatility of the asset, and its correlation with the market portfolio, are historically observed and are therefore given. There are several approaches to asset pricing that attempt to price assets by modeling the stochastic properties of the moments of assets' returns these are broadly referred to as conditional asset pricing models (Gruber, 1996). Systematic risks within one market can be managed through a strategy of using both long and short positions within one portfolio, creating a "market neutral" portfolio.

2.3.2 **Stock Picking and Market Timing**

Stock picking involves finding out whether a fund manager has an ability to choose a portfolio of shares that generate excess returns. Sharpe (1975) calls it the selection of securities within a given class by an investment manager who hopes to outperform his competitors. Stock selection according to Kon (1983) is based on forecast on company specific events and hence the prices of individual securities.

Market timing involves shifting funds between a market index portfolio and a safe asset, such as Treasury Bills or a money market fund, depending on whether the market as a whole is expected to outperform the safe asset (Bodie, 2008). If an investment manager believes he can make better than average forecast of market portfolio returns, he will adjust his portfolio risk level in anticipation of market movements. If successful, he will earn abnormal returns relative to an appropriate benchmark.

Treynor (1966) suggested that in order to study whether or not a mutual fund manager actually has market timing abilities one has to look for evidence that the volatility of the fund was higher in years when the market did well than in the years when the market did badly oscillating between two characteristic lines, the one with high volatility (buying high beta
shares before the market moves up) and the one with low volatility (buying low beta shares and treasury bills before the market moves down). A handful of studies evaluating the performance of mutual funds are largely confined to the US and their conclusion are that active funds do not outperform passive benchmarks. Gallagher and Jancenic (2002) in their study of actively managed Australian bond fund over a ten year period to 1999 established that at a total portfolio level the majority of the funds do not exhibit superior risk adjusted performance. Their results strongly indicate that the fund managers significantly underperform as a result of security selection.

2.3.3 Risk Adjusted Portfolio Performance Measure

Treynor (1965) developed the first composite measure of portfolio performance that included risk by postulating two components of risk, risk produced by general market fluctuation and risk resulting from unique fluctuation in the portfolio securities. Treynor index denoted as

\[ T_i = \frac{(R_i - R_f)}{\beta_i} \] Where \( R_i \) is the average rate of return for portfolio \( i \) during specified period of time, \( \beta_i \) systematic risk for the portfolio and \( R_f \) the average return on a nil free investment during the same time.

2.4 Empirical Review

Treynor (1965) talks about his measure which enables one to rank mutual funds according to relative performance. He uses the characteristic line of each fund because the line contains both the expected rate of return and a measure of risk. However in order to obtain a rate of return of the fund, the rate of return of the market has to be assumed. The slope of the line measures the rate at which the individual investor increases the expected rate of return of his portfolio as his burden of portfolio risk increases. A comparison of slopes among mutual funds provides a means of rating funds which is adequate because variations in individual risk
appetite has been adjusted. The ranking remain the same even though the slopes vary just as
the market rate of return varies.

Stotz (2005) utilizes two different investment methods, based on earnings forecasts estimated
by financial analysts, to determine if active stock selection strategies outperform the index.
The author also investigates how a possible bias in analysts' earnings expectations influences
the expected returns. The result of the paper indicates that both investment methods
outperformed the index. Fletcher (1995) examined whether UK Unit Trusts managers have
stock picking and market timing abilities. He performed tests derived by Hendriksson and
Merton (1981) and Chen and Stockum (1986). These two procedures only require return data
of the managed funds which was easily available to Fletcher. His conclusion was that the
managers may have stock picking abilities but they don't have market timing abilities.
Hendriksson and Merton (1981) approach was derived from Merton (1981) which predicts
when stocks will outperform riskless assets and when the riskless assets will outperform
stocks but it does not predict the magnitude of superior performance. Kon (1983) performed
an empirical study using a sample of mutual funds to test market timing abilities of mutual
funds. He found that at the individual fund level there is evidence of superior market timing
ability and performance. He however found that even though the multivariate test developed
positive results, they were inconsistent with the efficient market hypothesis i.e. fund
managers as a group don't have special information regarding expectations on the returns of
the market portfolio.

Sharpe (1975) explored the potential gains from market timing and how they related to the
manager's ability to make correct predictions. He said that a manager who times the market
cannot expect to make an incremental return greater than four percent each year and that
market efficiency implied that is should be as difficult to predict market returns as to identify
specific securities that will perform abnormally well or poorly. On the average, stocks outperform short-term money market instruments. Without superior predictive ability, one is likely to forego return by shifting from stocks to cash equivalents. He concluded that counter to widely held beliefs, market timing gains are likely to be modest at best, and that only a manager with truly superior predictive ability should even attempt to time the market.

Blake & Timmermann (1998) used a large sample of 2,300 UK open ended mutual funds over a 23 year period to measure fund performance. His conclusions were that UK investors in mutual funds may be less well-informed than their US investors. There was also evidence of underperformance on a risk-adjusted basis by the average fund manager and persistence of performance. There was similar evidence in the US equity mutual funds. Blake (1998) identified some new patterns in performance related to the funds’ distance from their inception and termination dates i.e. they found that a fund underperformed more as the termination date was approaching, while, in contrast, there was some evidence that funds outperform during their first years of existence (but this wasn’t very significant).

Chevalier & Ellison (1999) studied whether age, the undergraduate institution the manager went to and having an MBA or lacking an MBA contributes to performance. They concluded after adjusting for risk characteristics and expenses that old managers are lower performers than younger managers; also mutual fund managers who attended more selective undergraduate schools perform better.

2.5 Critical Review

Malkiel (1995) analysed mutual fund returns from 1971 to 1991 and found that mutual funds have tended to underperform the market, not only after management expenses have been deducted, but also gross of all reported expenses except load fees. Also persistency of funds
was found to be due to survivorship bias and if not then they were found to be not robust because strong persistence that characterized the 1970s failed to exist during the 1980s. Grinhlatt and Titman (1992) investigated whether the past performance of mutual funds related to future performance (persistence in mutual fund performance). Their conclusion was that there is positive persistence in mutual fund performance. This persistency could not be explained by the problems in the benchmark that are related to firm size, dividend yield, past returns, skewness, interest rate sensitivity, or CAPM beta. The findings could be explained by the persistent differences in fees and transaction costs across funds, although they concluded that it could not be the only explanation.

Fama and French (1994) explained that CAPM had failed empirical research. The way of producing an estimate of the cost of equity is to estimate a stock's market beta and combine it with the risk-free interest rate and the average market risk premium. Unfortunately CAPM was found to give an overestimation of the cost of equity if the beta was high and also gave an under estimation of the cost of equity in low beta stock. Fama and French (1994) also challenged CAPM as a good measure of performance of mutual funds. Jensen (1968) used the CAPM time-series regression for a portfolio and took the intercept (Jensen's alpha) as a measure abnormal performance. The problem was that, because of the empirical failings of the CAPM, even passively managed stock portfolios produced abnormal returns (Elton, Gruber, and Hlavka, 1993). For example, funds that concentrate on low beta stocks, small stocks or value stocks tended to produce positive abnormal returns even though the fund managers didn’t have stock picking abilities.
2.6 Summary of Literature Review

The concept of portfolio performance can be divided into two parts, prediction of future security prices and the ability to minimize the unique risk through efficient diversification. The prediction of future security prices emphasizes the portfolio managers’ ability to predict future security prices and thereby earn returns that exceed those expected of a portfolio with a given level of risk. The other issue is the portfolio managers’ ability to change the risk level of the portfolio by switching securities. A manager is capable of changing the risk level of a portfolio depending on the expected state of the market. Jensen’s alpha is often used to predict the future development of a stock market by estimating an alpha that indicates if a stock is wrongly priced. The model is based on the CAPM, which shows that any security or portfolio is expected to earn returns that are relative to the level of risk accepted. A manager will earn abnormal returns, or rather returns that exceed those expected of a portfolio with a given level of risk, if future security prices are successfully predicted.

In mutual funds, investors receive a diversified portfolio. The theory of diversification explains how a risk-averse investor can optimize a portfolio by maximizing the return with the lowest level of risk. Generally, an investor must be willing to accept some risk to receive the highest possible return. Most of the unique risk can be eliminated by diversification while market risk cannot be avoided. Active fund managers try to “beat the market” by finding stocks that generate abnormal returns. The performance of an active fund heavily depends on the manager’s ability to evaluate and control the portfolio risk as quickly as possible.

Studies evaluating the performance of mutual funds are largely confined to the US and their conclusion are that active funds do not outperform market index. In addition other studies established that at a total portfolio level, the majority of the funds do not exhibit superior risk
adjusted performance. Their results strongly indicate that the fund managers significantly underperform as a result of security selection. In addition actively managed mutual funds considerably performed much better than the passive funds. Investigations on whether past performance of mutual funds related to future performance (persistency in mutual fund performance) concluded that there is positive persistence in mutual fund performance. In Kenya many studies have been conducted on the stock market touching on various aspects, however to date there has not been any study on mutual fund performance and this study strived to analyze mutual funds return at the NSE giving informed choices to investors who want to venture in the securities market.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The approach adopted was to determine whether mutual funds give a better return in comparison to the market at the NSE. This chapter outlines how the research was conducted. It contains the research design, population, data collection method and data analysis method used.

3.2 Research Design

The research adopted longitudinal design. This is because it involved collection of historical data over a period of time. The study sought to compare the performance of mutual funds schemes with the performance of the NSE index. The performance of mutual funds in Kenya for the period September 2007 up to September 2012 was adopted in this study. The study examined the performance per category of funds and concentrated mainly on the money market and equity funds which represent both extremes of the investment spectrum.

3.3 Population

The population comprised of 44 registered mutual funds operating in Kenya as at the end of September 2012. These are funds registered with the capital market regulator, The Capital Market Authority. Census method was employed in this study as the population is not very big. The study focused on funds categorised as equity or money market and therefore excluding the balanced and income funds as they have no acceptable benchmarking in the market making comparison between these funds quite difficult. The funds chosen from the sample comprise a big proportion of the total portfolio held by the mutual funds. As at September 30th 2006 the equity and money market funds accounted for 53% and 40% of the
total mutual funds portfolio respectively. In total therefore these funds accounted for 93% of the total value of the funds.

3.5 Data Collection

Secondary data was the main source of data used for the study. The fund prices at the end of every month were obtained from the values of published or quoted in the daily newspapers. Yearly return is more appropriate because even small mutual funds would be reluctant to make changes in their portfolio compositions necessary to change fund volatility more often than once a year. The data on the NSE 20 share index was obtained from the Nairobi Securities Exchange as at the end of the month. The 20 share index was used as the market portfolio or proxy and benchmark for the funds. The average 91 day T-bill rate at the end of every month provided by the CBK was used as the proxy market and benchmark for the money market.

3.6 Data Analysis

Based on the data collected, the mutual funds were evaluated to show their monthly returns and monthly standard deviation which was compared to the market. The data was analysed using quantitative techniques with various statistical measures being employed.

The return of the funds was calculated on monthly basis using the following model

\[ R_{it} = \alpha + \beta R_{mt} + \epsilon_{it} \]

Where,

\( R_{it} \) = return for fund \( i \) on day \( t \)

\( R_{mt} \) = return on the portfolio (20 share index or T bills)

\( \beta \) = the slope

\( \alpha \) = Constant (Y intercept)
\( e_t = \text{error term} \)

By the law of iterated expectations, \( e_t = 0 \)

The monthly return was calculated as the change in NSE 20 index during the month expressed as a ratio of the beginning NSE 20 share index. This is expressed as follows.

\[
R_M = \frac{M_t - M_{t-1}}{M_{t-1}} \times 100
\]

Where

\( R_m \) Return of the market for period \( t \)
\( M_t \) NSE 20 share index at period \( t \)
\( M_{t-1} \) NSE 20 share index at period \( t-1 \)

The fund was individually compared to the market return for the study period.

This was done by establishing standardized excess returns for the firms followed by cumulative returns. The return performance of the market and the mutual funds were ranked in order of performance and a comparative analysis of the market return and the fund's returns was used to assess the performance of mutual funds and the market index. Qualitative data was analysed using the SPSS and excel. This was presented in tabular and graphical form for easier comparative analysis.
CHAPTER FOUR: DATA ANALYSIS

4.0 Introduction

This chapter gives a presentation of the findings made during the analysis. The aim is to establish the differences in performance of mutual funds in comparisons to the various market rates for direct investment. The data collected was analyzed separately for the two types of mutual funds focused on in the study, the money market funds and equity funds for each of the five years of study followed by an average for the five years.

The firms are then ranked by performance and comparison made between money market funds and equity funds.

4.1 Cumulative Standardized Excess Returns

Cumulative standardized excess returns measures the disparity between the performance of the mutual fund firm and the performance of the proxy which was NSE 20 share index for equity fund firms and T-Bills for money fund firms. A negative value thus shows performance below the market rate while a positive one shows performance above market rate. The magnitude of the value thus shows how far above or below the market rate the firm is performing.
### 4.1.1 Money Market Funds

#### Table 1: Cumulative standardized excess returns for money market funds

<table>
<thead>
<tr>
<th>Firms</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Mutual Money Market Fund</td>
<td>-44.4996</td>
<td>-326.165</td>
<td>-757.301</td>
<td></td>
<td></td>
<td></td>
<td>-210.644</td>
</tr>
<tr>
<td>CBA Market Fund</td>
<td>-95.3613</td>
<td>-636.477</td>
<td>-6.65221</td>
<td>-166.36</td>
<td>-71.728</td>
<td>-25.776</td>
<td>-167.058</td>
</tr>
<tr>
<td>Suntra Money Market Fund</td>
<td>-40.4037</td>
<td>-301.176</td>
<td>-62.2875</td>
<td>-62.977</td>
<td>-40.303</td>
<td>-22.159</td>
<td>-88.2176</td>
</tr>
<tr>
<td>Zimele Money Market Fund</td>
<td>-38.3345</td>
<td>-65.7311</td>
<td>-220.496</td>
<td>-310.25</td>
<td>-0.0769</td>
<td>0.0699</td>
<td>-105.803</td>
</tr>
<tr>
<td>Madison Asset Money Market Fund</td>
<td>-3.1702</td>
<td>-4.7167</td>
<td>-3.94347</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data

The table above shows the excess returns for the funds for each of the year under study then gives the average performance for the entire study period. This used to see the performance of each of the years and establish the trend of the performance as well as compare the performance of each of the firms.

The table shows that there was a general negative excess returns in all the money market funds for all the years under study with the only exception being the performance of CIC
money market fund in the year 2009 which becomes an exception rather than the rule. It is thus still viable to infer that money market funds perform below the market rate.

The money market funds show significant negative standardized excess returns with all firms showing negative returns in all the years under study to show that the firms perform below the market rate, which in this case was the T-Bills.

The closest firm to the market is Madison asset money fund which performed below the market by 3.94347.
### 4.1.2 Equity Funds

**Table 2: Cumulative standardized abnormal returns for equity funds**

<table>
<thead>
<tr>
<th>Firms</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIE Fund</td>
<td>24.04</td>
<td>8.387307</td>
<td>52.8151</td>
<td>6.494832</td>
<td>-5.35674</td>
<td>-5.79358</td>
<td>-4.17338</td>
</tr>
<tr>
<td>African Alliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya Equity Fund</td>
<td>0.189515</td>
<td>64.7692</td>
<td>-12.09</td>
<td>-12.664</td>
<td>-23.1058</td>
<td>-22.4879</td>
<td></td>
</tr>
<tr>
<td>ICEA Equity Fund</td>
<td>16.31</td>
<td>6.521979</td>
<td>51.7895</td>
<td>4.964897</td>
<td>0.158974</td>
<td>0.793962</td>
<td>-3.84011</td>
</tr>
<tr>
<td>British-American</td>
<td>0.32</td>
<td>-10.5773</td>
<td>78.3829</td>
<td>-50.3527</td>
<td>-19.4247</td>
<td>-35.0302</td>
<td>-32.2412</td>
</tr>
<tr>
<td>Equity Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBA Equity Fund</td>
<td>10.11</td>
<td>0.321672</td>
<td>64.8741</td>
<td>-12.7299</td>
<td>-11.4186</td>
<td>-21.2363</td>
<td>-16.638</td>
</tr>
<tr>
<td>CIC Equity Fund</td>
<td>20.65</td>
<td>0.664244</td>
<td>-8.6862</td>
<td>0.59277</td>
<td>-3.1911</td>
<td>12.7133</td>
<td>3.790283</td>
</tr>
<tr>
<td>Dyer and Blair</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Fund</td>
<td>1.08</td>
<td>-10.3574</td>
<td>-40.097</td>
<td>-20.9603</td>
<td>-16.4909</td>
<td>-29.7923</td>
<td>-19.797</td>
</tr>
<tr>
<td>Old Mutual Equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suntra Equity</td>
<td>17.42</td>
<td>4.434822</td>
<td>51.5795</td>
<td>1.738349</td>
<td>-8.32141</td>
<td>-14.1125</td>
<td>-8.40413</td>
</tr>
<tr>
<td>Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madison Asset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.43753</td>
<td>3.462407</td>
<td>1.012441</td>
</tr>
</tbody>
</table>

*Source: Research data*

The table above shows the excess returns for the equity funds in order to assess the performance of the funds for each of the years and determining their impact on the overall performance. It is evident that they year 2007 had positive excess returns with only Dyer and Blair equity fund and Old Mutual equity Fund registering negative returns. The year 2008 had mixed returns with three firms showing negative returns while others showing positive returns. The trend shows that from 2009 to 2012, there are more negative returns.
This shows that equity funds show mixed performance at times above and at time below but show more negative returns than positive returns. It is thus prudent to infer that equity funds perform below the portfolio. The above findings thus show that the equity funds perform below the 20 share index with nearly all the firms had negative comparative returns apart from C.I.C Equity fund. However, in 2007, the funds showed performance above the market rate as the year only used September to December thus only four months.

4.2 Order of Performance of Firms

Based on the findings above, the firms were ranked in order of their performance in comparison to the market rate. It is however noted that the performance is overally below market rate with very few exceptions.
### 4.2.1 Money Funds

**Table 3: Order of performance of money market funds**

<table>
<thead>
<tr>
<th>Fund</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Asset Money Market Fund</td>
<td>-3.94347</td>
</tr>
<tr>
<td>CIC Money Market Fund</td>
<td>-32.7436</td>
</tr>
<tr>
<td>Stanbic Money Market Fund</td>
<td>-55.8585</td>
</tr>
<tr>
<td>ICEA Money Market Fund</td>
<td>-59.2708</td>
</tr>
<tr>
<td>Suntra Money Market Fund</td>
<td>-88.2176</td>
</tr>
<tr>
<td>British-American Money Market Fund</td>
<td>-93.1104</td>
</tr>
<tr>
<td>Zimele Money Market Fund</td>
<td>-105.803</td>
</tr>
<tr>
<td>Amana Money Market Fund</td>
<td>-106.34</td>
</tr>
<tr>
<td>African Alliance Kenya Shilling Fund</td>
<td>-124.181</td>
</tr>
<tr>
<td>CBA Market Fund</td>
<td>-167.058</td>
</tr>
<tr>
<td>Old Mutual Money Market Fund</td>
<td>-210.644</td>
</tr>
</tbody>
</table>

Source: Research data

The table takes a closer look at each of the firms by ranking them according to their performance then comparing the firms by their performance before establishing the common market trends. The money funds show a consistent close performance with very few firms on the extremes with majority of the firms having fairly low performance.

There is seen a wide disparity between the highest performing firm and the and the next best and the same disparity is seen between the last three firms to show the two extremes while the firms in the middle of the pack have very close differences in their performance to show it is the general performance of the firms.
4.2.2 Equity Funds

Table 4: **Order of performance of equity funds**

<table>
<thead>
<tr>
<th>Fund</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIC Equity Fund</td>
<td>3.790283</td>
</tr>
<tr>
<td>Madison Asset Equity Fund</td>
<td>1.012441</td>
</tr>
<tr>
<td>ICEA Equity Fund</td>
<td>-3.84011</td>
</tr>
<tr>
<td>Standard Investment Equity Fund</td>
<td>-4.17338</td>
</tr>
<tr>
<td>Suntra Equity Fund</td>
<td>-8.40413</td>
</tr>
<tr>
<td>Stanbic Equity Fund</td>
<td>-9.44947</td>
</tr>
<tr>
<td>CBA Equity Fund</td>
<td>-16.638</td>
</tr>
<tr>
<td>Dyer and Blair Equity Fund</td>
<td>-19.797</td>
</tr>
<tr>
<td>African Alliance Kenya Equity Fund</td>
<td>-22.4879</td>
</tr>
<tr>
<td>Old Mutual Equity Fund</td>
<td>-24.4044</td>
</tr>
<tr>
<td>British-American Equity Fund</td>
<td>-32.2412</td>
</tr>
</tbody>
</table>

Source: Research data

Equity firms on the other hand have show very close low performance with all values ranging between 3 and – 32. There are also few two firms that performed above the market rate but this is an exception rather than the rule as all the other firms performed below the market rate. The information is best explained in the two figures below.
Figure 1: Performance of money market funds

- Madison Asset Money Market Fund
- CIC Money Market Fund
- Stanbic Money Market Fund
- ICEA Money Market Fund
- Suntra Money Market Fund
- British-American Money Market Fund
- Zimele Money Market Fund
- African Alliance Kenya Shilling Fund
- CBA Market Fund
- Old Mutual Money Market Fund
- Amana Money
Figure 2: Performance of equity funds

Source: Research data
4.3 Comparative Performances of the Firms

The comparative performance of the two types of firms was determined by calculating the average cumulative returns for each of the type of fund then comparing against the market rate and each other to establish the trends in performance and drawing of conclusion for the study.

The findings were as follows

Table 5: Average cumulative returns

<table>
<thead>
<tr>
<th>Fund</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-969.934</td>
</tr>
<tr>
<td>funds</td>
<td>229.828</td>
<td>265.245</td>
<td>205.576</td>
<td>3995.56</td>
<td>1105.95</td>
<td>17.4369</td>
<td></td>
</tr>
<tr>
<td>Equity funds</td>
<td>11.40</td>
<td>0.94</td>
<td>49.41</td>
<td>9.07</td>
<td>10.64</td>
<td>17.52</td>
<td>-12.6966</td>
</tr>
<tr>
<td>Average</td>
<td>109.214</td>
<td>133.093</td>
<td>127.493</td>
<td>2002.32</td>
<td>558.295</td>
<td>17.4785</td>
<td>-491.315</td>
</tr>
</tbody>
</table>

Source: Research data

The table explains the overall performance of money market funds and equity funds across the years as well as their comparative average performances so as to make a general analysis of the performance of the types of funds and mutual funds in general. The findings reveal that there was a positive return for equity fund in 2007 but negative returns for all the other years while money market funds showed overall negative returns for all the years. This shows that equity funds generally perform below the market portfolio. The same is true for money market funds. It is also to be noted that equity funds perform better than money market funds though both perform below the respective market rates. It is thus imperative to conclude that mutual funds perform below the market rate.
4.4 Regression Analysis

Based on the established returns for the mutual funds, a regression analysis was conducted to show the response of the mutual funds in relation to the market.

**Table 6: Regression of performance of mutual funds against the performance of the market**

<table>
<thead>
<tr>
<th>Fund</th>
<th>Beta</th>
<th>Intercept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market funds</td>
<td>1.934691</td>
<td>0.108341</td>
</tr>
<tr>
<td>Equity funds</td>
<td>9.325092</td>
<td>3090.592</td>
</tr>
<tr>
<td>Average</td>
<td>5.629892</td>
<td>1545.35</td>
</tr>
</tbody>
</table>

Source: Research data

Thus

\[ R_{MM} = 1.935 \times R_T + 0.108 \]

Where \( R_{MM} \) is the returns of Money market firms

\( R_T \) is the returns of the tea bills

This shows a steady movement of the return of the Money Market thus very slight changes in returns of the money markets to show that the money market changes slower than the market portfolio, in this case T-Bills resulting into a 1.935 beta. This is also seen in the wide negative excess returns
$R_E = 9.325 \times R_P + 3090$

Where

$R_E$ is returns of equity funds

$R_P$ is the return of the 20 share index

This shows that the returns of Equity funds vary widely as the market changes with a beta of 9.325 showing very drastic changes in the returns of equity funds with any change in the market portfolio thus the equity funds are more flexible and more responsive to changes in the 20 Share index.

$R_M = 5.623 \times R_{MP} + 1545$

Where

$R_M$ is returns of mutual funds

$R_{MP}$ is returns of market portfolio

This shows an even mix of steady and wide variations of returns in response to the changes in returns of the market portfolio. However, the steady trend shows a more prominence leading to an overall slow response to change among the mutual funds.

The table thus shows that equity funds are more responsive to the changes in the market than the money market funds. This explains why equity firms comparatively perform better than money market firms though they are still below the market rate thus are not responsive enough to the changes in the market. Since mutual funds work on diversification by accurately predicting future prices, these funds should be very responsive to changes in prices in the market to be able to perform above market portfolio.
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The chapter deals with the summary of the findings of the research as well as discussions on the findings. This is followed by recommendations and conclusion.

5.1 Summary of the Findings

5.1.1 Performance of Money Markets

The money market funds register lower response to the changes in the market to show low accuracy in prediction of future prices for diversification and low efficiency in risk management thus generally perform below the performance of the T-Bills. This is seen in the negative excess returns registered for all the years resulting into an average negative return as seen in table one. Table six also shows a low rate of change of the Money market funds in response to the change in the performance of the T-bills. This leads to the general tendency of negative returns which results into negative overall returns as reflected in table two. Table two also shows that the returns of the firms range from negative 3 to a high negative 210.

Figure 1 also shows that all the money market funds performed below the market rate as all the bars lie below the height of the market rate bar with some funds such as Old Mutual money market fund registering a negligible comparative performance.

5.1.2 Performance of equity funds

The research found out that equity funds registered a wider variation in performance in relation to the changes in the performance of the 20 share index which was used as the market portfolio. Table 2 shows that the equity funds register mixed returns with some funds
showing positive returns in some years such as 2007 while showing negative returns in other years. It is however noted that the negative returns are predominant giving the funds average negative excess returns. This affirms wider changes in the performance of the equity funds in response to eth changes in the market which is seen in table six by the beta of 9.325. it can thus be deduced that equity funds makes attempts to diversify and manage risks though not very efficiently thus they still perform slightly below the market portfolio.

A look at table 4 which ranks the funds by performance, shows the highest performing equity fund registering a positive three excess returns to show it performed slightly above the market rate. The second fund also performs above the market rate but all other funds perform below market rate with the lowest performing fund registering a negative 32 return.

When the performances of the various firms are generalized to the overall performance of mutual funds as seen in table five, it is evident that the money mutual funds registers very high negative returns to show the money markets perform way below the market rate with a return of -491.315. It is however noted that this is more a resultant of the very low performance of the money market funds as compared to the equity funds which register an averagely low performance.

5.1.3 Responsiveness to the Market Changes

Table 6 shows that the equity funds are relatively more responsive to the changes in the market as seen from a Beta of 9. It is thus imperative that equity funds move fairly closely with the market trends. This explains why the performance of equity funds is fairly close to eth market though low. On the other hand money market funds register a very slow response to the market changes as seen in a Beta of 1. This explains the wide difference between the performance of the market and the performance of the money market funds.
The relationship between response to the market and performance rise from the fact that mutual funds rely on diversification and risk management to outperform the market which is only possible if they respond very quickly to the changes in the market prices.

The study makes an overall finding that mutual funds perform below their respective market rates. The study thus proves the hypothesis as well as being concurrent with previous studies that mutual funds perform lower than direct market investment at the NSE. The findings also show consistency in the performance by the mutual funds as predicted by the literature review.

This thus pegs the underperformance to the managers of the mutual funds. The managers are either unable to accurately predict future prices and invest in securities that earn abnormal prices as well as the managers’ inability to identify and control risks very fast. Following the poor diversification and poor response to risks, mutual funds thus perform lower than the respective market rates.

5.2 Conclusion

The study thus determined that the mutual funds perform lower than the performance of the market. This shows that the managers of mutual funds do not outperform the market to indicate they either do not accurately predict future prices so as to effectively diversify risks or do not effectively manage risks. This is seen as the funds are not effectively responsive to the market changes which would show their accurate prediction of the changes and risk management techniques.

Measures should thus be taken to ensure mutual funds able to perform above market rate by accurately predicting future prices to effectively diversify risks and effectively managing risks. Thus the study pointed out the importance of fund managers to improve on their
respective portfolio management techniques to ensure improved performance and even as a basis for future remuneration. Although mutual funds are instruments of diversified investments, a prudent choice between the many available mutual funds schemes will go a long way in generating wealth for investors.

5.3 Recommendations

Based on the findings of the research, measures should be taken to manage and mitigate the poor performance of mutual funds. One such measures is to determine why the mutual funds perform lowly with an aim of formulating ways to improve the performance of the mutual funds.

The investors are also encouraged to invest directly into the Nairobi securities market rather than through the mutual funds given that direct investment give higher returns on their investment than mutual funds who charge high commissions for their services yet they do not beat the market. There is a need for industry players and regulators to come up with objective relevant and universally acceptable benchmark so that fund performance is measured against uniform measure. Due to lack of uniform benchmark various fund managers have developed their own benchmark that guides them in the investment management which has led to inappropriate and incomparable results. Benchmark such as Lehman brothers and Index should be developed for the Kenyan market to act as a benchmark for the money market and bond instruments.

Also given that the performance of mutual funds in low based on the prediction of future prices for purposes of diversification as well as identification and control of risks, the study recommends for formulation of ways of accurately predicting future prices and effectively identifying and managing risks speedily.
5.4 Limitation of the study

The study concentrated on the equity and money market funds because there was readily available information on market benchmarks and proxies which were commonly adopted in the industry. However, mutual firms in Kenya do manage other funds such as balanced fund, fixed income fund, bond plus equity funds which were omitted for lack of universally acceptable benchmarks.

The period covered under the study was limited to five years due to availability of data in which a total of twenty two funds were studied, however many more funds are being registered on annual basis and hence a longer period would need to be considered in future.

Summarised information for individual mutual firms is not available at the Capital Market Authority registry and this proved a big challenge in collecting of the data.

5.5 Suggestions for further study

Similar study should be undertaken to establish the performance of privately owned firms in relation to the performance of the market portfolio.

A study can also be carried out to assess the methods used by managers of mutual funds to predict future prices as well as identify and control risks.

Another study can also be carried out to determine the extent to which mutual funds impact on the Nairobi securities Market.

The study covered a period of sixty months with twenty two funds being the focus. However, longer historical performance data and choice of more funds in the future may lead to more a more conclusive results.
REFERENCES


APPENDIX 1 LIST OF MUTUAL FUNDS

African Alliance Kenya Shilling Fund.
Old mutual money market fund
British American money market fund
Stanbic money market fund
CBA market fund
CIC money market fund
Amana money market fund
Suntra money market fund
Zimele money market fund
ICEA money market fund
Madison asset money market fund
African alliance fixed income fund
CIC fixed income fund
Stanbic fixed income fund b1
Stanbic fixed income fund A
Standard investment equity growth fund
Standard investment income fund
African alliance Kenya equity fund
ICEA equity fund
British American equity fund
CBA equity fund
CIC equity fund
Dyer and Blair equity fund
Old mutual equity fund
Stanbic equity fund
Suntra equity fund
Madison asset equity fund
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### APPENDIX 2 YEARLY EXCESS RETURNS

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