

**DETERMINANTS OF FINANCIAL PERFORMANCE OF UNIT
TRUSTS IN KENYA**

BY

OMBONGI PRISCILLA NYANCHAMA

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DECLARATION

This research project is my own original work. I confirm that the contents of this project have never been presented in this or any other university for examination or any other purposes.

Signature..... Date.....

Ombongi Priscilla Nyanchama

D61/64402/2013

This research project report has been submitted for examination with my approval as the University Supervisor.

Signature..... Date.....

Dr. Josephat Lisiolo Lishenga

Department of Finance and Accounting

School of Business, University of Nairobi.

DEDICATION

I dedicate this research project to my dear parents Teresia and James Ombongi, my siblings, friends and classmates for their continued support and inspiration throughout this research project.

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I would like to sincerely express my utmost gratitude to the Almighty God. He has given me the strength, knowledge, wisdom and dedication needed to undertake this research project from the start to completion. I'm also extremely grateful to my Supervisor Dr. Lishenga Lisiolo for his continued guidance, mentorship and motivation throughout this research project. I highly value your concerted effort in utilizing your academic knowledge, time and experience to provide direction and inspiration to ensure the success completion of this final project. I also want to thank all our lecturers for their academic support. I appreciate my family, friends and classmates who have contributed to the success of this research project. May God bestow his blessings upon you all.

ABSTRACT

This study was aimed at identifying the determinants of financial performance of unit trusts in Kenya. A unit trust is an arrangement whereby property (shares, bonds and real estate) is held on trust for a large number of investors. This makes unit trust funds the ideal alternative, providing cost effective access to a wide variety of local and international shares or equities (companies listed on a stock exchange), bonds, and money market instruments such as fixed deposits, treasury bills and call accounts. This study utilized secondary data; which was from the annual reports of the unit trusts studied for the period between years 2008 to 2012. The NSE 20 share index was used in estimating the performance of unit trusts where by each unit trust performance was indicated in a percentage of the market Rate of Return. NSE provided rates of returns over the five year period to show performance distribution of the unit trusts. The study focused on registered unit trusts in Kenya from January 2008 to December 2012 with money markets, equity, fixed income, bond, growth, and balanced funds categories.

In the analysis of determinants of financial performance of unit trusts in Kenya; fund size, expense ratio, equity fund allocation ratio, fund type, diversification of funds and the minimum investment amount were taken into account. Both dependent and independent variables were analyzed using Jensen's Alpha model where by the alphas and betas computed from various rates of return; market rate of return, rates of return for funds taken into consideration and Risk Free Rate of Return for the various periods were used as constants. The findings of the study showed that size of fund is a critical determinant of performance of unit trusts. As funds grow in size, they tend to become more efficient in their operations. The study also found out that expense ratio and

equity fund allocation ratio have no influence on fund performance of unit trusts. Diversification of funds and minimum investment amount were found to be having an impact on overall fund performance of unit trusts in Kenya.

As per the study findings, the coefficient of determination value was 0.6534 significant. This indicates that 65.34% variation in determinants of financial performance of unit trusts in Kenya that is explained by variation of independent variables. Therefore, the other factors, which are not studied, contribute to the remaining 34.66%. The researcher therefore recommends more studies to be carried on unit trusts. Since the study was limited to internal factors, other studies should be done targeting economic factors such as general availability of credit, national disposable income, prosperity of people to spend, interest rates, inflation rates and trends in growth of Gross National product (GNP).

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ABBREVIATIONS AND ACRONYMS

BAAM:	British America Asset Managers
CAPM:	Capital Asset Pricing Model
CBA:	Commercial Bank of Africa
CIS:	Collective Investment Schemes
CMA:	Capital Market authority
ICEA:	Insurance Company of East Africa
MPT:	Modern Portfolio theory
NSE:	Nairobi Stock Exchange
OMAM:	Old Mutual Asset Managers
RBA:	Retirement Benefit Authority.
ROI:	Return On Investment
R/V:	Reward Volatility Ratio
SD:	Standard Deviation
UK:	United Kingdom
US:	United States

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Harman, (1987) defines unit trusts as an investment alternative that pools money from many individuals and channels it into various investments with the aim of achieving low risk through diversification and lower average cost per member. The funds are collectively invested in a portfolio of assets such as shares, bonds, money market instruments and authorized securities in order to meet the needs and objectives of the group of investors.

The Kenyan capital markets offer an array of investment products in the form of shares, bonds and unit trusts. Unit trusts have grown in acceptance and popularity in recent years. This is evidenced by the growth in the number of approved unit trust funds from virtually zero in 2001 to 11 in 2008. Unit trusts are the small investor's answer to achieving wide investment diversification without the need of prohibitive sums of money. 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.

1.1.1 Financial Performance of Unit Trusts

Kagunga (2010) defines performance as a measure of the level of achievement in terms of target goals of the unit trusts. Performance evaluation of unit trusts is important aspect of determining whether fund managers do add value to the fund pooled together by unit holders. Fund managers can either be passive or active. Passive fund managers do ensure investments are done in accordance with a pre-determined strategy that doesn't entail any forecasting .The idea is to minimize investing fees (Schoenfeld, 2004) and to avoid the adverse consequences of failing to correctly anticipate the future. Retail investors typically do this by buying one or more 'index funds', by tracking an index, an investment portfolio typically gets good diversification, low turn over and extremely low management fees. With low management fees, an investor in such a fund would have higher returns than a similar fund with similar investments with higher management fees and transaction costs.

1.1.2 Determinants of Financial Performance

To discuss the performance variable, there is need to analyze various determinants involved in running of unit trusts. Indro *et al.*, (1999) defined expense ratio as the proportion of assets paid for operating expenses and management fees, including administration fees and other costs, but excluding brokerage costs. According to Sharpe (1966) funds with lower expenses tend to have better performance. However, the extensive work of Friend *et al.*, (1970) published in a book, report no significant relation between performance and expense ratio and only a slight positive relation with turnover ratio.

Indro *et al.*, (1999) found out that fund size of unit trust funds do have impact of overall performance of unit trusts. First, growth in fund size provides cost advantages, as brokerage costs for larger transactions are lower while research expenses increase less than proportionately with fund size. However after reaching optimal fund size, too large funds can lead to deviation from original objectives by investing with some lower quality assets and increased administrative costs.

Portfolio management is essentially a systematic method of managing one's investments efficiently. This concept has advanced significantly (Kevin, 2008) hence need to understand the portfolio management process that involves setting of investment objectives with an aim of achieving higher returns. Investors hold well-diversified portfolios instead of investing their entire wealth in a single or a few assets. When more and more securities are included in a portfolio, the risk of individual securities in the portfolio is reduced (Pandey, 2010) this requires portfolio management which is the professional management of various securities. This is very vital due to the chance that the return achieved on an investment will be different from that expected.

Schoenfeld and Steven (2004) state that active strategies are ones that are all about achieving returns that are superior to the financial markets. Active fund managers may use a variety of factors and strategies to construct their portfolio(s). Active investors seek out what they consider to be better than average opportunities in an attempt to maximize returns.

1.1.3 Unit Trusts in Kenya and their Financial Performance.

Risk aversion by Kenya's unit trusts managers has limited growth of this investment opportunity as most put the bulk of the funds in banks and the stock market CMA (2010). There has been an average growth of Sh1.9 billion annually to Sh17.6 billion in the past nine years, which is much slower than other financial sector investments such as pension funds that have more than doubled over the past five years from Sh176 billion in 2005 to Sh420 billion. Most Unit trust managers concentrate their investments in quoted equities and bank deposits, which are less risky and more liquid CMA (2010).

The value of assets under management by unit trust firms increased by 68 per cent in the year 2010 attributed by gains in share price at the stock market and increased purchase of treasury bonds, Maiyo (2001). Unit trust managers' total assets increased by Sh11 billion to Sh28 billion in 2010 from Sh16.8 billion in 2009 CMA (2011). Total revenue of the fund managers, which includes unrealized gains on securities, increased more than four times to Sh3.8 billion compared to the 2009 level of Sh868 million. The industry reported profits after tax of Sh3.3 billion from Sh446 million with British American Asset Managers (BAAM) being the market leader in the industry measured by assets under management.

1.2 Statement of the Problem

According to Sharpe, (1966) and Jensen, (1968), early studies in developed markets have shown that unit trusts do not outperform the market and managers do not have the capacity to consistently beat the market. However, studies in the 1980's have discovered that fund managers are able to outperform the market. This is in contrast to

the general findings of earlier studies. A research 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. Contrary to the studies in the US, findings on mutual funds study in Australia deduced no evidence of persistency in performance.

A number of local studies have been conducted regarding unit trusts in Kenya. Kagunda (2011) focused on net asset value and dividend paid by unit trusts for equity-based funds and schemes and found out that asset allocation by fund managers can be effective to a great extent. However the studies failed to examine factors like fund type, fund objective and portfolio turnover that might also have a hand on fund performance. Also the studies failed to take into account determinants that are considered by fund managers as generators of superior performance.

Further, Kasanga (2011) carried out a research on determinants of performance of unit trusts in Kenya; he concentrated only on equity and money market funds leaving out other funds such as balanced funds, income funds and managed funds. In his literature review he focused only on macro-economic factors like inflation and growth. He failed to point out that even internal factors like expense ratios, investment styles, diversification and fund size might have a hand in performance of those unit trusts. Njeri (2011) carried out a study on the challenges faced by unit trusts in Kenya when implementing growth strategies. Her main focus was on the concept of strategy but did not consider performance attribution. Shikuku (2012) also carried a study on unit trusts but his focus was on effects of behavioral factors on investment decision making by unit trusts. His study was narrowed to behavioral finance and behavioral aspects ranging from; overconfidence, representativeness, anchoring and herd behavior. This

shows that limited studies have been done of performance of unit trusts in Kenya. It's against this background that the study aimed to answer; what are determinants of financial performance of unit trust funds in Kenya?

1.3 Objective of the study

The overall objective of the study was to establish determinants of financial performance of unit trust funds in Kenya. The Specific objective was to determine the extent to which fund size, expense ratio, minimum investment amount, equity fund allocation ratio and diversification of funds affect financial performance of unit trusts.

1.4 Significance of the Study

The relevance of the information on determinants of performance of unit trusts in Kenya will be useful to various groups or persons. First, the information will assist fund managers to increase their skills on how to arrive at optimal decisions by considering determinants that have impact on performance. Secondly, to unit holders as they will be able to know whether fund managers add value to their invested capitals they will be able to identify the factors affecting performance of unit trusts they have invested in and will have an idea on what will make them perform better and what will not.

Thirdly, the study will benefit the government, through the CMA and the NSE. The relevant bodies will be in a position to give informed advices to the relevant authorities and investors hence help in the growth of the industry and efficiency in the market. This is because they will be able to understand the challenges facing unit trusts and how to address those challenges hence enabling better economy. Fourth, the

study will be useful to the general public as it will be a valuable source of information in relation to investment decisions they make. Finally, 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 performance of unit trusts will find this study useful as a basis of carrying out more studies in Kenyan context.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents both theoretical and empirical literature reviews on the order of fundamental aspects that define the study variables. Section 2.2 presents the theoretical literature, section 2.3 discusses the empirical literature, section 2.4 analyses the determinants of unit trust performance Section 2.5 reviews the performance of unit trust and other investment vehicle and section 2.6 is the conclusion.

2.2 Theoretical Review

This section reviewed three theories related to unit trusts performance. The theories reviewed are the Modern Portfolio Theory (MPT), the Capital Asset Pricing model (CAPM) and the Arbitrage Pricing Theory (APT).

2.2.1 Modern Portfolio Theory

Harry Markowitz with his paper “Portfolio Selection” in the 1952 Journal of Finance introduced modern Portfolio Theory (MPT). MPT is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalent minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. Although MPT is widely used in practice in the financial industry and several of its creators won a Nobel memorial prize for the theory, (Markowitz, 1991) in recent years the basic assumptions of MPT have been widely challenged by fields such as behavioral economics.

MPT 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. This is possible, 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 (Bhalla, 2010)

MPT was developed in the 1950s and early 1970s and was considered an important advance in the mathematical modeling of finance. Since then, many theoretical and practical criticisms have been leveled against it. These include the fact that financial returns do not follow a Gaussian distribution or indeed any symmetric distribution, and that, correlations between asset classes are not fixed but can vary depending on external events and crises. Therefore, MPT is a form of diversification. Under certain assumptions and for specific quantitative definitions of risk and return, MPT explains how to find the best possible diversification strategy. Direct test of the actual performance of professionals who often are compensated with strong incentives to outperform the market should represent the most competing evidence of market efficiency. However, MPT assumes that portfolio risk can be reduced if investors focus on the variability of expected returns. To achieve that, investors should pick assets that tend to have dissimilar price movements. In other words, MPT assumes that diversification reduces portfolio risk only when combined assets have prices that move inversely.

2.2.2 Capital Asset Pricing Model

The Capital Asset Pricing model (CAPM) extends from the portfolio theory that is used to determine the required rate of return for a risky asset. CAPM was developed by Sharpe (1964), Lintner (1965) and Mossin (1966). It takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk), as well as the expected return of the market and the expected return of a theoretical risk free asset. Using beta as the measure of risk, the CAPM then redefines the expected return in terms of risk-free rate and the expected risk premium. In deriving the relationship between the risk and return of a portfolio, that is Risk return trade off, the risk and return relationship of specific portfolios are analyzed and the results generalized based on the findings.

2.2.2.1 The Risk-Free Asset and Capital Allocation Line

The risk- free asset is the (hypothetical) asset that pays a risk-free rate. In practice, short-term government securities e.g. treasury bills are used as a risk-free asset, because they pay fixed rate of interest and have exceptionally low default risk. The risk-free asset has zero variance in returns (hence is risk-free); it is also uncorrelated with any other asset (by definition, since its variance is zero). As a result, when it is combined with any other asset or portfolio of assets, the change in return is linearly related to the change in risk as the proportion in the combination vary (Charles 2001).

Further, Short (1979) concluded specific risk is the risk associated with individual assets within a portfolio and can be reduced through diversification. Systematic risk or portfolio risk or market risk refers to the risk common to all securities- except for selling short as noted below, 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. 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 (wood, 2003).

2.2.3 Arbitrage Pricing Theory

An arbitrage opportunity is an investment that has some probability of yielding positive return yet it doesn't require net outflow of cash and carries no chance of losing money for example when two assets offer same returns, but trade at different prices. Formulated by Ross (1976), the Arbitrage Pricing Theory (APT) offers a testable alternative to the capital market pricing model (CAPM). The main difference between CAPM and APT is that CAPM assumes that security rates of returns will be linearly related to a single common factor- the rate of return on the market portfolio. The APT is based on similar intuition but is much more general. Arbitrageurs use APT to identify and profit from mispriced securities (Levy and Post, 2005).

Levy and Post, (2005) found out APT assumption that, in equilibrium, the return on an arbitrage portfolio (i.e. one with zero investment, and zero systematic risk) is zero. If this return is positive, then it would be eliminated immediately through the process of arbitrage trading to improve the expected returns.

2.3 Determinants of Performance of Unit Trusts

A number of factors determine the performance of unit trusts. This study reviewed three variables that might determine the unit trusts' performance: expense ratio, growth in fund size and portfolio management.

2.3.1 Expense Ratio

Passively managed funds incurred lower costs and outperformed actively managed funds, Indoro et al. (1999). Actively managed funds incur various costs, including operating and research expenses, which are measured by the expense ratio. Indro et al. (1999) defined expense ratio as the proportion of assets paid for operating expenses and management fees, including administration fees and other costs, but excluding brokerage costs. Even though various costs are included in the ratio, most of the expenses can be associated with financial market research, as Indro et al. (1999) considered explicit cost of research to be reflected by the ratio, which is the price paid by uninformed investors for them to be informed.

Early study by Sharpe (1966) finds that funds with lower expenses tend to have better performance. However, the extensive work of Friend et al. (1970) published in a book, report no significant relation between performance and expense ratio and only a slight positive relation with turnover ratio. Ippolito (1989) finds that the risk-adjusted returns, net of fees and expenses of active portfolios are comparable to those of index funds and that fund performance is not related to portfolio turnover and management fees. Grinblatt and Titman (1989, 1992) also report that mutual funds are able to generate sufficient returns to offset the expenses that they incurred. The findings of these studies are inconsistent with the so-called original version of efficient market

theory (EMT) which implies that expenditures of money on research and trading are wasted in a market in which securities prices already incorporate all available information. This version of EMT predicts that active management of fund will result in alphas equal to the negative of the expenses incurred in acquiring the information

Ippolito (1989), found that fund performance is not related to turnover, management fee and expense ratio are consistent with the notion that mutual funds size. It appears that funds with higher portfolio turnover, fees, and expenses do earn sufficient risk-adjusted returns to offset the higher charges involved. In other words, mutual funds are sufficiently successful in acquiring and implementing new information to offset their expenses. Fortin and Michelson (2005) in their study of international mutual funds also found no relationship between performance and expense ratio but showed a positive relationship between performance and turnover.

2.3.2 Fund Size

Net assets under management can affect performance, as funds need to attain a minimum size to achieve returns net of research expenses and other costs. However, large funds do incur excessive costs results in diminishing or even negative marginal returns. Initially, growth in fund size provides cost advantages, as brokerage costs for larger transactions are lower while research expenses increase less than proportionately with fund size. After exceeding an optimal size, too large a fund can lead to deviation from original objectives by investing with some lower quality assets, as well as increased administrative costs for additional coordination among staff to manage sub-funds (Indro et al. 1999).

It is commonly assumed that small unit trusts perform better than large ones, and

based on a market liquidity theory which states that a large unit trust has difficulty in realizing its shareholdings without affecting the share price when it wants to change the balance of its portfolio. Many researchers have suggested that there is an optimum fund size. Indro *et al.* (1999) conclude that funds must attain a minimum size in order to achieve adequate returns. They also note that marginal returns become negative after a fund exceeds its optimal size. In a study on the mutual fund's size and its performance, Perold and Salomon (1991) believe that a large asset base of a mutual fund eroded fund performance because of trading costs that were associated with liquidity or price impact, whereas a small fund can easily put all of its money in its best ideas.

Most fund managers may maximize fund size in order to increase their performance fees. Sawicki (2001) suggested young funds that were small abandoned unsuccessful strategies for more successful ones to convince investors not to withdraw. In a later study, Sawicki and Finn (2000) found small funds were represented disproportionately among top performers but underrepresented among worst performers, indicating fund size may influence performance.

2.3.3 Portfolio Management

Portfolio management is considered to be a complex process consisting of various avenues namely; Setting of investment policy, portfolio selection and diversification (Chandra, 2006).

2.3.3.1 Investment Style

Chandra (2006) found out that investment policy is one of the factors that might have a positive or negative impact to one's investment. An investor cannot define his investment policy unless he defines his investment style and objectives to his disposal. Objectives have to be defined in terms of risk and return. The investment style should have the specific objectives regarding the investment return requirements and risk of tolerance of the investor. Identifying investor's tolerance for risk is the most important objective, because it is obvious that every investor would like to earn the highest return possible. But because there is a positive relationship between risk and return, it is not appropriate for an investor to set his investment objectives as just "to make a lot of money". Investment objectives should be stated in terms of both risk and return (Aburine 2008b).

The investment style should be also state other important constraints which could influence the investment management. Constraints can include liquidity needs for the investor, projected investment horizon, as well as other unique needs and preferences of the investor (Jaime, 2002). The investment horizon is the period of time for investments. Setting of investment style for individual investors is based on the assessment of their current and future objectives. The required rate of return for investment depends on what sum today can be invested and how much investors need to have at the end of the investment horizon. Wishing to earn higher income on his investment investors must assess the level of risk he should take and to decide if it is relevant for him or not (Nofsinger, 2008)

2.3.3.2 Portfolio Selection and Diversification

Based on one's objectives and constraints one has to specify one's asset allocation, that is, one has to decide how much of one's portfolio has to be invested in each of the asset categories: cash, bonds, stock, real estate, precious metals and others (derivatives) (Santamore, 1997). The conventional wisdom on the asset mix is embodied in two propositions; other things being equal, an investor with greater tolerance for risk should tilt the portfolio in favour of stocks, whereas an investor with lesser tolerance for risk should tilt the portfolio in favor of bonds (Chandra, 2006). As James H. Lorie summed up the long view when he stated: the most enduring relation in all finance perhaps is the relationship between returns on equities (or stocks) and returns on bonds in all periods of American history, British history, French history and German history, equities (stocks) have provided higher return on bonds. Other things being equal, an investor with a longer investment horizon should tilt his portfolio in favor of bonds.

When comparing investments, it's crucial that one take into account the impact of taxes. For instance, there are both taxable and tax-free bonds. The taxable bonds usually pay higher interest than tax-free bonds, but one has to pay taxes on any income you receive. Depending on your tax bracket, one's net returns from a taxable investment may not be greater, and may even be less, than lower-yielding tax-free investments (Gitman, 2007).

Diversification is a strategy that can be neatly summed up by the timeless adage "Don't put all your eggs in one basket." The strategy involves spreading your money among various investments in the hope that if one investment loses money, the other

investments will more than make up for those losses (Pandey, 2010). Investors hold well-diversified portfolios instead of investing their entire wealth in a single or a few assets. When more and more securities are included in a portfolio, the risk of individual securities in the portfolio is reduced (Pandey, 2010) this requires portfolio management which is the professional management of various securities. This is very vital due to the chance that the actual return is greater than the expected return.

An example of an undiversified is to hold only one stock. This is risky; it is not unusual for single stock to go down 50% in one year. It is much less common for a portfolio of 20 stocks to go down that much, even if they are selected at random. If the stocks are selected from variety of industries, company sizes and types (such as some growth and some value stocks it is still less likely (Charles, 2001)

Because achieving diversification can be so challenging, some investors may find it easier to diversify within each asset category through the ownership of mutual funds rather than through individual from each asset category. Mutual funds make it easy for investors to own a small portion of many investments (Mishkin, 2007) A total stock market index fund, for example, own stock in thousands of companies. That's a lot of diversification for one investment.

2.4 Review of Empirical Studies

This section will review various empirical studies on unit trusts and the theories under review. Studies on MPT, CAPM and APT will be reviewed in that order.

2.4.1 Empirical studies on MPT

Maina (2003), in his research on the risk and return of investments held by insurance companies in Kenya, sought to establish the relationship between the risk and return of investment channels available to insurance companies in Kenya. The study was carried out on 10 insurance companies based on the investments data for the period 1st January 1997 to 31st December 2001. The objectives of the study were to establish if there are differences in return across companies for investment in similar assets and whether there existed a correlation between the risk and return on investments undertaken by insurance companies in Kenya. Both primary and secondary data source were used, including company's annual financial reports, annual returns to the commissioner of insurance, and a questionnaire filled by the companies' management giving information on the breakdown of the investment income per category-including sales or purchases of investments in the course of the year. The study established that there was no relationship between mean rate of return and risk on investment. From the findings, there appears to be very little correlation between the return and risk of investments held by insurance companies. According to this research findings, Markowitz's (1952) findings that return and risk have a relationship does not hold for investments held by insurance companies in Kenya.

Kirkegaard (2006) analyzed the application of MPT with an objective of investigating if an investor can apply MPT to achieve higher returns than investing in an index portfolio. Combining a strong portfolio that beats the market in the long run would be the ultimate goal for most investors. He used historical data based on the Stockholm Stock Exchange (OMX) 30 index share. The index reflected the market as a whole and the portfolio was reweighted at a preplanned schedule, each to constantly obtain an

optimal risky portfolio. The results indicated that the actively managed portfolio outperforms the passive benchmark during the selected time frame.

Said (2012) carried out a survey to determine whether the application of the MPT theory in the Nairobi Securities Exchange (NSE) can allow an investor to achieve a higher risk-adjusted return than the market portfolio (i. e. the NSE 20 share index). The study was carried out on all firms listed in the NSE 20 share index between 1st January 2007 and 31st December 2011. The study used secondary data to construct a portfolio consisting of 8 high performing securities with optimal portfolio. The portfolio was compared to the NSE 20 share index as the benchmark. The data collected to measure performance included share prices at the beginning of every month (P_0), the share prices at the end of every month (P_1), and the amount of dividend issued (D_1). The return on the portfolio was computed and the standard deviation was used as the risk measure. The result was that the optimal portfolio was seen to outperform the market portfolio.

2.4.2 Empirical studies on CAPM

Choudhary & Choudhary (2010) tested the validity of the CAPM for the Indian stock market by analyzing the monthly stock returns from 278 companies of Bombay Stock Exchange (BSE) 500 index listed on the BSE from January 1996 to December 2009. The findings of the study were not supportive of the theory's basic hypothesis that higher risk associated with a higher level of return. The results obtained provide credence to the linear structure of the CAPM equation being a good explanation of security returns. The CAPM's prediction for the intercept is that it should be equal to zero and the slope should equal the excess returns on the market portfolio.

The findings of the study contradict the above hypothesis and indicate evidence against the CAPM. The inclusion of the square of the beta coefficient to test for nonlinearity in the relationship between returns and betas indicates that the findings are according to the hypothesis and the expected return beta relationship is linear. Additionally, the tests conducted to investigate whether the CAPM adequately captures all aspects of reality by including the residual variance of stocks indicates that the residual risk has no effect on the expected return on portfolios. However, it was argued that the results of the tests conducted on sample data for the period of January 1996 to December 2009 did not appear to clearly reject the CAPM. In the light of above findings, the conclusion was that beta is not sufficient to determine the expected returns on securities/portfolios.

Were (2012) used the CAPM model to test weekly returns at the NSE. The objective was to test the validity of the capital asset pricing model on the NSE. Historical data of average weekly return, of the 20 companies that constitute the NSE, for the period January 2005 to June 2012 was used. The companies were grouped into 4 portfolios of 5 each and their returns analyzed using descriptive analysis. The result was that the portfolio with the highest beta also had the highest return and the portfolio with the lowest beta had the lowest return as well as higher risks are associated with higher returns. The conclusion from the test was that investors and market regulators should take into account risk-return trade off while making investment decisions.

2.4.3 Empirical studies on APT

Tests on APT are less controversial than those of CAPM because the theory requires no assumptions about returns distribution, investor preferences and market portfolio.

APT is also able to predict relative pricing of any subset of securities. Roll and Ross (1980) embarked on empirical investigation on APT by looking at the daily returns on NYSE and American Stock Exchange (AMEX) stocks between 1962 and 1972. They found that the total variance of returns does not add explanatory power of the model. They however concluded that the model should not be rejected.

Cauchie, Hoesli and Isakov (2003) investigated the determinants of stock returns in a small open economy in an APT framework. The analysis was conducted with monthly data from the Swiss stock market over the period 1986 to 2000. They used data on industrial sector indices, as well as macro-economic data. They found that Swiss equity returns are influenced by both global and local economic conditions. The results also show that the statistically determined factors may yield a better representation of the determinants of stock returns than the macro-economic variables.

2.4.4 Empirical Studies on Factors Affecting Financial Performance of Unit Trusts

Studies have been carried out mainly in US, Great Britain, Australia and Japan. Very few studies outside these countries due to the fact that mutual funds and unit trust are relatively new investment in many parts of the world. In Kenya, unit trusts have been in operation since 2001. Sharpe (1966) carried out a study using returns from 34 mutual funds for the period 1954 to 1963, calculated the correlation between each fund's Reward Volatility (R/V) ratio and its net asset value. The R/V ratio was computed as the difference between a fund's average annual return and the pure interest rate divided by the standard deviation of the annual rate of return. He found that larger fund. Sharpe (1966) discusses the impact of size on fund performance

where funds with substantial assets could obtain a given level of security analysis by spending a smaller percentage of its income than a smaller fund can. Detzel (2006) finds that investors should monitor their fund size regularly, as there is evidence that fund size tends to drift over the years.

The fund manager must act in the best interest of the shareholders or the fund owners. As such, a fund manager must act with discretion often recognizing that they are held and charged with a higher standard of care and a higher degree of knowledge than the average person (Omonyo, 2003). He further observed that risk and return are the key considerations in investment practices of Pension Fund Managers in Kenya.

Wood (2003) concluded that diversification of investment is a strategy adopted by most investors. Essentially, it means spreading your investments across more than one investment Avenue, so that if one of your investments falters, another will balance it out. Diversification of investments can be choosing multiple asset classes and/or diversification within the same asset class. Hence, diversification of investment is a must to mitigate risk. However, more often than not we have a dilemma of how much to diversify. Either too much or too less diversification may not provide the desired results. One should have a right balance in your diversification strategy. The returns from different asset classes have different returns at different points of time that is if a return from one asset class have depressed we gain by extra return from another asset class (Kunt, 1999)

Abd-Karim (2010) in his study on the characteristics and performance of Islamic funds in Malaysia concluded that Islamic funds' performance is significantly influenced by fund managers' special investment skills as it enables the fund managers to outperform in any given market condition.

Kagunda, (2011) on a study entitled “asset allocation by fund managers and the financial performance of unit trusts in Kenya established that for unit trusts available to Kenyan investors, asset allocation could 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 performances 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.

Kasanga (2011) investigated the determinants of performance of unit trust in Kenya from January 2008 to December 2010. He found out that forecasting ability and market timing ability techniques employed by fund managers in managing both equity and money market portfolios were important determinants of performance. Maina (2011) assessed the relationship between Unit Trusts performance and the asset allocation in Kenya for a selected sample of the Companies licensed by the Capital Markets Authority under the Collective Investment Schemes. The study further looked at the operations of Unit Trusts in Kenya and analyzed the performance of those Unit Trusts that trades on Equity funds. The performance was regressed against the asset allocation and empirically analyzed. The analysis revealed that there was a positive correlation between the reported Equity Unit Trust performance and the asset selection that Fund Managers have identified or preferred to invest in the Nairobi Stock Exchange

The study done by Buster, (2012) on the relationship between asset allocation and financial performance in Kenya, found out that there was a difference between the performance of unit trusts and the market. This is illustrated especially in the year

2011, where the stock market slumped in its performance while that of the unit trusts improved in its return by 18% as compared to the previous years. However, in the year 2010 and 2011 both returns from the stock market and the unit trust recorded an upward trend while in 2010, both were affected by external factors namely the post-election violence to record a downward trend in performance. Given the desire of investors to seek out diversification in their asset portfolios and considering the performance of the stock market, many investors have sought to diversify their holdings further by investing in unit trusts. The findings show that unit trusts have performed well over the period of study.

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.

In Kenya, in his article, Ogilo, (2013) on the impact of credit risk management on financial performances of commercial banks it was found that there is a strong impact between the components on the financial performances of commercial banks. The study also established that capital adequacy, asset quality, management efficiency and liquidity had weak relationship with financial performance (ROE) whereas earnings had a strong relationship with financial performance. This study concludes that a model can be used as a proxy for credit risk management.

In conclusion, from the above review of literature it's evident that determinants of performance of unit trusts might include: expense ratio, fund size, investment style and portfolio diversification. It is also evident that there are limited empirical studies on determinants of performance of unit trusts in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presents the research design and methodology that were applied during the study. Key areas that were covered included the Research Design, Target population, Sample size, Data collection methods, Data Analysis Techniques and ethical standards in research study.

3.1 Research Design

The descriptive research design was used for this study that enabled in depth search of information on how various determinants might affect performance of unit trust. According to Kothari (1985) descriptive research is carried out with specific objectives and hence it results in definite conclusions. It tries to describe the characteristics of the respondent in relationship to a particular product or practice or culture of importance. The major purpose of descriptive research is description of the state of affairs, as it exists at present.

3.2 The Population and Sample

According to Mugenda and Mugenda (1999) population refers to an entire group of individuals, events or objects having common observable characteristics. The population of the study was 16 unit trusts registered under the Capital Markets Authority Cap. 485A. The 16 approved unit trusts will also form the study sample hence a survey will be conducted in this study.

3.3 Data Collection

Data was mainly Secondary data; it was gathered through relevant annual financial publications and reports of the unit trusts in Kenya. Data on performance of unit trusts included net asset value, average yield and total fund, equity fund allocations, initial investment amount by unit trusts will be collected from the respective unit trusts firms for the annual period from year 2008 to year 2012. Data on estimate of dividend received on the market portfolio and the NSE 20 share index was collected from the Nairobi Securities exchange (NSE). The NSE 20 share index was used, as it was more representative of the data used.

3.4 Data Analysis

The researcher used Statistical Package for Social Sciences (SPSS) to do the data analysis. Regression analysis was used to show the relationship between the determinants and finance performance of unit trusts. The study employed the most widely used Jensen's model to calculate the risk-adjusted returns with the following regression specification:

$$R_{it}-R_{ft} = \alpha_i + \beta_i (R_{mt}- R_{ft}) + \varepsilon_{it} \dots \dots \dots 1$$

Where:

R_{it} = Rate of return of the fund i at time t (dependent variable)

R_{mt} = Rate of return for the market at time t (independent variable)

R_{ft} = Rate of return of risk free asset

β_i = Coefficient of systematic risk of fund i /Portfolio beta

α_j = (Jensen's alpha) reflects the risk-adjusted performance of fund i

ε_{it} = Random error term

The alphas generated from the Equation (I) were regressed in the following regression equation.

$$\alpha_j = b_0 + b_1 ER + b_2 FS + b_3 IS + b_4 MIA + b_5 D + \varepsilon_i, \dots, II$$

Where:

ER = Expense Ratio

FS = Fund Size

IS = Investment Style

D = Diversification

IIA = Minimum Investment Amount.

To determine to what extent fund performance is related to; expense ratio, which was total amount of funds paid for various costs, incurred, fund size that was arrived by multiplying the number of units by the price per a unit. Investment style involved: minimum investment amount, ration between equity fund allocation ratio and the total amount of funds. Diversification was measured by introducing a ratio of zero to one (0-5) and then allocation five to the unit trust with largest number of fund size and zero to unit trusts with lowest number of fund types was done.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents data analysis, findings of the study, and presentation of the output, summary and interpretation of findings. Section 4.2 presents the summary statistics, section 4.3 presents the results of the regression analysis and section 4.4 presents discussions of the findings.

4.2 Summary Statistics

The financial information analyzed comprised of 5 years from the year 2008 to 2012. This information was collected from ten unit trusts as well as the Nairobi 20 share index. Data analyzed consisted of returns of the funds and how this varies with fund characteristics such as, expense ratio, investment style, equity allocation and initial investment amount, diversification of funds and fund size. Data analyzed included a total of 11 funds which were in operation in year 2008 to 2012 and whose data was available.

4.2.1 Fund Characteristics and Distribution by Company

Table 4.1 Fund Characteristics and Year of Inception

Unit Trust	Fund Type/Year of inception								
	E	MM	FI	M	BA	EA	BO	MR	G
African Alliance	2007	2003	2003	2007					
Old mutual	2003	2003			2005	2008	2008		
British American	2003	2003	2003		2003			2003	

CBA	2006	2006							
Amana		2010			2010				2010
CIC	2011	2011	2011						
Standard Investment	2009		2009		2009				
Suntra	2008	2008			2008				
Madison	2010	2010			2010		2010		
Zimele		2008			2008				
ICEA	2008	2008					2008		2008

Source: Researcher, 2014

From table 4.1 and 4.2, Equity (E) Money Market (MM), Fixed Income (FI), Managed (M), Managed Retirement (MR), Balance (BA), Bond (BO) and Growth (G) funds were considered. D stands for Deviation, and V is for Variance. Table 4.1 above gives a summary of various unit trusts, fund type they offer and year of inception. It is evident that British American Unit Trust scheme and Old Mutual Unit Trust Scheme are the oldest in the industry since they launched their equity and money market funds in the year 2003 as common funds between the two and money market fund by African Alliance unit trust. Other funds launched in year 2003 are fixed income by both British American and African Alliance, balanced fund and managed retirement fund by British American. This explains why Old Mutual and British American Unit Trust Schemes have been dominant in the industry.

Table 4.2 Fund Characteristics and Minimum Investment Amount

Unit Trust	Fund Type/Minimum Investment Amount Kshs '000'									Mean	D	V
	E	MM	FI	S	BA	EA	BO	M.R	G			
African Alliance	100	100	100	100						100	-28	784
Old mutual	50	50			50	50	50			50	-78	6084
British American	250	250	250		250			250		250	122	14884
CBA	100	100								100	-28	784
Amana				10	10				10	10	-	13924
CIC	10	10	10		10					10	-	13924
Standard Investment	5		20		20					15	-	12769
Suntra	100	100			100					100	-28	784
Madison	50	50			50		50			50	-78	6084
Zimele		10			10					10	-	13924
ICEA	10	10					10		10	10	-	13924
Total										705	V	1265.8

Maximum										250	S.D	35.58
Minimum										10		
Average										127.7		

Source: Researcher, 2014

Table 4.2 gives a summary of Minimum Investment Amounts (MIA) for various fund types offered by various unit trusts. Standard Investment Trust Fund emerges as the one with lowest initial investment amount of Kshs 5,000 for equity fund, followed by CIC asset management, Amana, ICEA and Zimele Unit Trusts at Kshs10,000. Old Mutual third with Kshs50,000 Suntra, CBA and African Alliance Unit Trusts schemes falls fourth with Kshs. 100,000. British-American Unit Trust Scheme registers highest amount of initial investment amount of Kshs250,000. Overall average minimum investment amount is approximately Kshs 128,000 with total variance of Kshs 1.266 million and standard deviation at approximately Kshs 36,000.

4.2.2 Financial Performance of Unit Trusts.

Table 4.3 Unit Trust Fund Performance

Year	Maximum (%)	Minimum (%)	Average (%)	Variance	S.D (%)
2008	15	6.22	6.92	34.47	5.872
2009	14.39	6.2	7.03	26.34	5.132
2010	14.97	6.4	7.31	27.54	5.248
2011	19	7.26	10.83	31.37	5.601
2012	20.24	7	13.26	23.42	4.839

Source: NSE

Table 4.3 provides the return of unit trusts over the five-year period starting 2008 to year 2012. The percentages were arrived at considering returns of various unit trusts over the total returns by all the unit trusts annually. The average values shows how unit trusts increased their returns from 6.92 percent in year 2008 to 7.03 percent in 2009, to 7.31 percent in 2010 and 10.83 percent in 2011 and further increased to 13.26 percent in 2012. It is evident that unit trusts have been increasing their performances since 2008, which was accompanied, by a huge percentage increase in 2011. Year 2008 has the largest variance of 34.47 hence denoting greater variability of 5.872% with year 2012 recording lowest variance of 23.42 denoting less variability of the scores in the performance of unit trusts distribution.

4.2.3 Determinants of Financial Performance of Unit Trusts

Table 4.4 Determinants of Financial Performance of Unit Trusts

Variable	Max	Min	Average	Variance	S.D
Alpha	3.412	0.4256	1.218	1.141	1.068
Beta	1.109	0.07	0.338	0.767	0.876
Fund size (Kshs Millions)	32.47	13.78	20.54	46.43	6.814
Expense ratio	0.051	0.02	0.027	0.000138	0.0117
Initial Investment Amount (Kshs '000s')	5	250	73.1	58.97	7.68
Equity fund allocation Ratio	0.56	0.39	0.48	0.0031	0.055
Diversification of funds	5	2	3.62	1.142	1.069

Source: Researcher, 2014

Table 4.4 shows the analysis on determinants of financial performance of unit trust funds. Fund size has an average of Kshs million 20.54, a minimum fund size of Kshs 13.78 million and a maximum fund size of Kshs 32.47 million. Its standard deviation of 6.814 places it second in terms of variability greatness. The average value for expense ratio is at 0.027 with a minimum value of 0.051 and a maximum value of 0.02. Minimum investment amount has a mean value of Kshs 73.1 thousand, minimum investment amount of Kshs 5, 000 and a maximum value of 250 thousand. The highest Standard deviation exhibited by Minimum investment implies a greater variability in individual amounts. Equity ratio has a mean value of 0.48, minimum value of 0.39 and a maximum value of 0.56. This implies that almost half of unit trust funds are directed to equity fund investment. Finally, Diversification of funds has a mean value of 3.62, minimum value of 2 and a maximum value of 5.

From the above table, it is evident that expense ratio has the lowest variance denoting less variability in amount incurred as costs by the various unit trusts. Fund size has the greatest variance thus denoting that fund size by the unit trusts in question have a greater variability.

4.3 Regression Analysis

From regression model as provided in chapter Three; $R_{it}-R_{ft} = \alpha_i + \beta_i (R_{mt} - R_{ft}) + \epsilon_{it}$. Beta and Alpha Values were arrived at by considering various Rates of Returns for various funds and the provided market rate of return from 2008 to 2012. Beta indicates change in performance of unit trusts given unit change of various funds.

Table 4.5 Model Summary

Fund Type	Alpha	Beta
Equity	3.126	0.962
Money Market	0.4623	0.982
Balanced	4.872	0.802
Fixed Income	0.452	0.633
Bond Fund	0.394	0.576
Managed retirement	0.251	0.23
Growth Fund	0.249	0.214

Source: Researcher, 2014

Table 4.4 show positive betas for different funds analyzed with money market fund and equity fund registering the highest betas; hence all betas are significant.

Table 4.6 Coefficient Table

Model	Coefficients		t-Statistic
	A	Std. Error	
Alpha	1.36	-0.142	0.0605
Beta	0.338	-0.011	0.0431
Fund size	20.54	-1	0.0467
Expense ratio	0.027	0.0025	0.9951
Minimum Investment Amount	73.1	-1.46	0.0395
Equity Fund allocation ratio	0.48	0.07	0.6656
Diversification of funds	3.62	0.08	0.0423

T>0.6534 Significant

Where:

A: Is the regression coefficient.

Std. Error: Deviation of estimate.

4.4 Discussion

From the regression analysis conducted, regression coefficients were arrived at to show changes induced in financial performance of unit trusts by each determinant. The standard error of estimate was computed to show a measure of dispersion of scatter of the data around the regression line. For every value of Beta, a t-value was generated for the various variables with various levels of significance. $T > 0.6534$ refers to amount of variation explained by the determinants of fund performance.

Table 4.6 gives a summary of regressed results of risk-adjusted returns on various fund determinant and characteristics variables. From the t statistics, fund size is positively related to fund performance of unit trusts with t statistic value of 0.0467 was obtained as indicated in the coefficient table, Fund size t statistic value implies that funds increases in size they become more efficient hence contributing positively to unit trusts' fund performance.

The coefficient of Beta is positively and significantly related to fund performance. This result implies that riskier funds like equity funds are able to generate greater returns that compensate high levels of risk associated with the funds. This study also finds that fund's risk adjusted returns are significantly related to fund diversification and minimum investment amount charged. This suggests that fund performance is positively related to minimum investment amount, which determines the size of the fund. When more funds are included in a unit trust investment, the risk of individual

fund types in the portfolio is reduced (Pandey, 2010). The positive significance relationship as Markowitz (1991) suggests in Modern Portfolio Theory (MPT) that attempts to maximize portfolio expected return for a given amount of portfolio risk. This implies that unit trust fund performance can be achieved by choosing the proportion of funds and initial investment amounts by employing critical and technical procedures to ensure the best is arrived at. This further explains why Diversification of fund types has highest t statistic value.

Expense ratio with highest t-statistic value but it is significantly related to fund performance. This might imply that despite the positive relation between expense ratio and fund performance of unit trusts, expenses are of no significance since the higher the fund size leads to high costs associated with their operation but the high returns tend to offset costs incurred. As Ippolito (1993) explains; if mutual fund resources are managed efficiently higher returns are generated which will be used to offset expenses incurred.

Equity fund allocation ratio has the second largest t statistic value, but as expense ratio it is also insignificant. This implies that; of all the variables which might be involved in determining fund performance equity fund allocation ratio could be of less significance since amount of risks involved in various fund types is offset with higher amount of returns achieved by committing funds to various types of funds. These findings showed that there was a strong significant relationship between determinants of fund performance of unit trusts in Kenya. This could further explain why unit trust industry in Kenya has been experiencing tremendous growth in the last three years.

In conclusion, the regressed values resulted to coefficient of determination that showed the dependent variable value to changes in the independent variable values.

The coefficient of determination value was 0.6534 significant. This indicates that 65.34% variation in determinants of financial performance of unit trusts in Kenya that is explained by variation of independent variables; fund size, expense ratio, equity fund allocation ratio, diversification of funds and minimum investment amount. Therefore the $t > 0.6534$ significant depicts that the independent variables carried out in this study contributes to 65.34% of financial performance of unit trusts and the other factors which are not studied contributes to the remaining 34.66%.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary and conclusions that were made. Section 5.1 summary of findings. Section 5.2 presents the summary of the study, section 5.3 the conclusion, section 5.4 the limitations of the study and section 5.5 the recommendations for further research.

5.2 Summary of the Study

The study aimed at establishing determinants of financial performance of unit trust funds in Kenya. The study concentrated on Equity, Money Market, Balanced, fixed income, managed and growth funds offered by various unit trusts.

Unit price data from the eleven unit trust funds as provided by various Fund Managers was to compute the fund returns and betas, the NSE 20-share index as provided by the NSE served as benchmark for equity and balanced funds and the 91 Treasury Bill rates as provided by CBK served as proxy market for money market funds, the values of expenses were collected from the financial reports, age of fund was provided by CMA which was from inception to December 2012, size of fund which was measured by the assets under management was collected from the annual financial statements for various annual periods. The Jensen's Model was used to calculate alphas which were then regressed to determine the extent of relationship between performance and expense ratio, size of fund, diversification of fund type, equity fund ratio and initial investment amount and growth in size.

The study found that fund size has a positive impact on performance. That is, as unit trust funds size increases over the years, they become more efficient in their operations that were supported by the t-statistics hence increased returns. This implies that high growth rate tends to present fund managers with better returns despite risks involved.

The study also revealed that expense ratio has no significant impact on performance. Therefore aggressive fund managers are able to ensure efficiency in fund operations which enables generation of enough resources to offset the expenses incurred to enable better fund performance by unit trusts in Kenya.

The study also revealed a high significant relationship between fund performance of unit trusts and diversification of funds. There was also a significance positive relationship between fund performance and minimum investment amount of the funds. When more funds are included in a unit trust investment, the risk of individual fund types in the portfolio is reduced (Pandey, 2010). The positive significance relationship as Markowitz (1991) suggests in Modern Portfolio Theory (MPT) that attempts to maximize portfolio expected return for a given amount of portfolio risk. The study found significant relationship between fund size and the initial investment amount, diversification of fund. However there was no significance relation between fund performance and; expense ratio and equity fund allocation ratio. These results suggest that, when selecting unit trust funds, unit trusts should set clear objectives on the investment to be done and set the objectives in line with risk and return. .

5.3 Conclusion

The study revealed that fund size is a very important determinant of financial

performance of unit trust funds, thus investors should look at the size the fund before investing. CMA needs to have policy measures to control the size of unit trust funds order to safeguard the interests of Investors. The initial fees and management fees paid to fund managers may increase the expenses incurred by the fund but this may be offset by the abilities of the fund managers outperform the market benchmark. This may be explained by positive relationship but an insignificant one between fund performance and expense ratio.

The study also found that the minimum investment amounts are very high for British American Unit Trust Scheme which is registering Kshs.250,000 as the minimum investment amount for each of the fund they manage; equity, money market, balanced, income and managed retirement fund. This amount should be reduced in order to accommodate more investors. Also, an average amount needs to be set to enable uniformity in minimum investment amounts for various unit trusts in Kenya. From the findings in table 4.2, the amount can be adjusted to an average of Kshs 127,700. Therefore, there is need for CMA to regulate the size of funds in order to safeguard the interest of investors. By this fund managers will be able to find worthwhile investment opportunities in the industry so as to achieve better returns hence better fund performance.

5.4 Limitations of the Study

The study was limited to 11 unit trusts funds due to availability of information on market benchmarks and proxies, which were commonly adopted in the industry. The other unit trusts that were not considered in this study were due to lack of information concerning their fund performances.

The study was limited to a period of five years due to availability of data in the 11 funds studied. However, a longer period should be considered as more trusts are being registered by CMA each new year.

Another limitation is that some unit trusts firms have not published their financial statements publicly. When contacted, the firms claimed some information could only be made available to clients only; the question is what about those investors who intend to become clients? How will they be informed?

5.5 Recommendations for Further Research

This study covered most fund types namely; money markets, equity, balanced funds east African fund, bond, fixed income, growth, managed and retirement fund. Study need to be carried on managed prudential, diversified and Al Amana funds. Factors such as growth of the fund, fund objective and portfolio turnover which were not examined in this study. It's important for investors to look at these factors and examine how they would affect their returns. Since the study was limited to internal factors, other studies should be done targeting economic factors such as general availability of credit, national disposable income, prosperity of people to spend, interest rates, inflation rates and trends in growth of Gross National product (GNP).

The current research focused only on unit trusts in Kenya. This excluded other industries; therefore, 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 independent variables such as; demographic and economic factors Do these variables influence the financial performance of unit trust funds or these other industries?

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APPENDICES

Appendix 1: Approved Unit Trusts

1. African Alliance Kenya Unit Trust
2. Old Mutual Unit Trust
3. British-American Unit Trust
4. Stanbic Unit Trust
5. Commercial Bank of Africa Unit
6. Zimele Unit Trust Scheme
7. Suntra Unit Trust Scheme
8. Madison Asset Unit Trust Funds
9. Standard Investment Trust Funds
10. CIC Unit Trust Scheme
11. ICEA Unit Trust Funds
12. Dyer and Blair Unit Trust Scheme
13. Amana Unit Trust Funds Scheme
14. CFC Unit Trust Fund
15. Diaspora Unit Trust Scheme
16. First Ethical Opportunities Fund

Appendix 2: Research Budget

ITEM	AMOUNT PER ITEM (KSH)	QUANTITY	AMOUNT (KSH)
STATIONERY			
Biro pens	25	4	100
Pencils	25	4	100
Rubber	20	1	20
Ruled paper	350	2 Reams	700
Stapler and pins		1	500
PROPOSAL WORK			
Binding	60	10 Copies	600
Typing and photocopying	100	10 Copies	1,000
Internet services	-	3 GB	2,000
RESEARCH PROJECT WORK			
Data Collection			2,000
Data Analysis			2,000
Typing	20	50	1,000
Printing and binding	700	6	4,200
TOTAL			14, 220

Appendix 3: Data Collection Authorization Letter


UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE...09/07/2014

TO WHOM IT MAY CONCERN

The bearer of this letter...PRISCILLA NYANCHAMA OMBONGI.
Registration No...061/64402/2013

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.







The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.



✓ 
PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

Appendix 4: Time Plan- Year 2014

Activity	May	June	July	August
Proposal development				
Approval				
Data collection				
Data analysis/ Project write up				
Project submission				