

**THE EFFECT OF PORTFOLIO MANAGEMENT STRATEGIES ON THE
FINANCIAL PERFORMANCE OF THE UNIT TRUSTS LISTED AT THE
NAIROBI SECURITIES EXCHANGE**

BY

JOAN NYAMBURA NDUNGI

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF
SCIENCE IN FINANCE ,SCHOOL OF BUSINESS , UNIVERSITY OF NAIROBI**

DECEMBER 2021

DECLARATION

I, the undersigned , affirm that this is my original work and has not been presented to any university for examination .

Signed: . Date: 03/12/2021

NDUNGI JOAN NYAMBURA

D63/9774/2018

This research project has been presented for examination with my authorization as the University Supervisor .

Signed:  Date : 03/12/2021

Dr. HERICK ONDIGO

Lecturer,

School of Business , University of Nairobi

ACKNOWLEDGEMENT

I wish to thank my supervisor, Dr. Herick Ondigo, my family and those who are special to me for being patient and understanding with me during this time. These include my husband: Julius Nyakina, Son: Jabari Mogeni and my mum, dad, brother and sister who gave me the emotional support.

DEDICATION

To my lovely husband: Julius Nyakina, Son: Jabari Mogeni and my mum, dad, brother and sister for making me who I am today.

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT.....	xi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Portfolio Management Strategies	2
1.1.2 Financial Performance.....	3
1.1.3 Portfolio Management Strategies and Financial ¹ Performance ¹	4
1.1.4 Unit trust Listed on the NSE	5
1.2 Research Problem.....	6
1.3 Objective of the Study.....	8
1.4 Value of the Study.....	8
CHAPTER TWO: LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Theoretical Review	9
2.2.1 Modern Portfolio Theory	9
2.2.2 Capital Asset Pricing Model	10
2.2.3 Arbitrage Pricing Theory	11
2.3 Determinants of Firm Financial Performance.....	11
2.3.1 Portfolio Management Strategies	12

2.3.2 Firm Size	12
2.3.3 Leverage	13
2.3.4 Risk Management.....	13
2.3.5 Macro-Economic Factors	14
2.4 Empirical Review	14
2.4.1 International Studies.....	14
2.4.2 Local Studies	16
2.5 Conceptual Framework	18
Figure 2.1: Conceptual Framework.....	18
2.6 Summary of the Literature Review	19
CHAPTER THREE: RESEARCH METHODOLOGY.....	20
3.1 Introduction	20
3.2 Research Design.....	20
3.3 Target Population	20
3.4 Data Collection.....	21
3.5 Diagnostic Tests	21
3.6 Data Analysis	22
3.6.1 Analytical Model.....	23
3.6.2 Test Significance	24
CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION.....	25
4.2 Diagnostic Tests	25
Table 4.1 Shapiro-Wilk Test (Normality Test)	26
Figure 4.1 Heteroscedasticity	27
Table 4.2 Autocorrelation	28
Table 4.3: Multicollinearity	28

4.3 Descriptive Statistics	28
Table 4.4 Descriptive Statistics	29
4.4 Correlational Analysis	29
Table 4.5: Correlational Analysis.....	30
4.5 Regression Analysis	31
Table ¹ 4.6 Model Summary	31
Table 4.7 ANOVA	32
Table 4.8 Coefficients	32
4.6 Discussion of the Findings	33
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	35
5.1 Introduction	35
5.2 Summary of the Findings	35
5.3 Conclusion.....	36
5.4 Recommendations	37
5.5 Limitations of the Study	38
REFERENCES.....	40
APPENDIX I: LIST OF UNIT TRUSTS REGISTERED AT THE NSE.....	43

LIST OF TABLES

Table 4.1 Shapiro-Wilk Test (Normality Test)	26
Table 4.2 Autocorrelation	28
Table 4.3: Multicollinearity	280
Table 4.4 Descriptive Statistics	29
Table 4.5 Correlational Analysis	313
Table 4.6 Model Summary	311
Table 4.7 ANOVA	32
Table 4.8 Coefficients	322

LIST OF FIGURES

Figure 2.1 Conceptual Framework.....	18
Figure 4.1 Heteroscedasticity	27

LIST OF ABBREVIATIONS

APM	Active Portfolio Management
APT	Arbitrage Pricing Theory
CAPM	Capital Asset Pricing Model
CBs	Commercial Banks
FDI	Foreign Direct Investment
FP	Financial Performance
MIS	Management Information Systems
MPT	Modern Portfolio Theory
NSE	Nairobi Securities Exchange
ER	Expected Return
PD	Portfolio Diversification
PER	Portfolio Expected Return
PMS	Portfolio Management Strategies
PPM	Passive Portfolio Management
ROA	Return on Assets
ROE	Return on Equity
TA	Total Assets
VOM	Value of Money

ABSTRACT

The study sought to determine the effect of portfolio management strategies on the financial performance of the Unit Trusts listed on the NSE. To achieve this objective, the investigation used both correlational and descriptive research designs. The target population for this investigation were the 56 Unit trusts registered in the NSE. The financial information to analyze comprised of five years from the year of income 2015 to 2019. Inferential statistics was used to ascertain an underlying influence linking predictor variables to the output variable. Findings from the regression analysis showed that 4% of the variations in ROA was due to passive management portfolio, active management portfolio, firm size, leverage and inflation rate. This implied that 96% of the variation in ROA was due to other factors. Findings from the ANOVA showed that the model fitted with passive management portfolio, active management portfolio, firm size, leverage and inflation rate was a good fit and statistically significant to predict ROA. Further, results from the regression analysis pointed out that passive management portfolio, active management portfolio, firm size and leverage had positive impact on ROA as indicated by the correlation coefficient of 0.190. The study also concluded that portfolio management strategies had a negative impact on the ROA of the firm. The study recommends that the various unit trusts in NSE have or adopt portfolio management strategies to enhance firm performance. The study also recommends that for companies to enhance performance of portfolios, by having in place effective systems to match investment selection to an individual's risk objectives, and risk tolerance These systems utilize data to guide investment decisions and ensuring that sound investments would lead to an increase in portfolio. The study also recommends that the government through central Bank of Kenya come up with rigorous policies that will help curb inflation in the economy. With inflation in check investments of the companies would not be adverse affected by a struggling economy.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

A portfolio is a blend of securities which an investor or investment expert holds or manages. The assets contained within the portfolio may embroil bonds, stocks, options, futures contracts, gold certificates, warrants, real estate and production facilities, among other assets anticipated to retain their value. Holding a portfolio serves as an investment vehicle and as a strategy to limit risk also referred to as diversification. Managing a portfolio involves making decisions concerning investment policies and mix, asset allocation, matching investments to individual or institutional objectives and balancing the risks against performance (Chen, 2018). Effectively managing a portfolio embroils determining which assets to add to the portfolio, owing to the changing economic conditions and most importantly the aims of the portfolio owner (Campbell, 2002).

Portfolio management literature was supported by researchers who have substantially contributed to the sphere of portfolio management as well as how it affects an establishment's performance. Markowitz (1952) through the Modern Portfolio Concept suggest that effective portfolio management strategies capitalized on portfolio ER (PER) for a particular portfolio risk amount thus the fund managers should be careful when selecting the amounts of different assets. Some of the portfolio management strategies analysed by scholars include active, passive and semi active portfolio management strategies. There are three common portfolio management strategies namely active, passive and semi-active. Active portfolio management (APM) involves the investor making particular investment risks to beat an investment standard yardstick index. The strategy needs that the investor periodically changes the increment elements in the portfolio such

as industry, market as well as securities fluctuations outlooks (Levisauskait, 2010). APM strategy is the manager's attempt to surpass performance, based on a risk adjustment. Passive portfolio management (PPM) is the management of portfolio whose average features (comprising aspects like beta, dividend returns, industry weighting, and establishment's size) match the risk-return objectives of the market (Cremers, Ferreira, Matos & Starks, 2016). Lintner, Sharpe and Mossin through the Capital Asset Pricing Model (CAPM) argued that for an investor to consider an investment with a positive return, they must consider time value of money and risk. Ross (1976) through the Arbitrage Pricing Theory (APT) similarly posited that asset returns should not deviate so much from their expected values in a sound security market. The three theories were a guide the findings of the study on unit trust in Kenya.

In Kenya, we have various unit trusts listed on the NSE. These unit trusts employ different portfolio management strategies such as leverage, yield-spread, interest rate expectation, individual security selection, yield curve active, passive, semi active (Micheni 2013). In this study, we shall focus on the main portfolio management strategies, which are active and passive and assess the effect of these strategies on these unit trusts financial performance.

1.1.1 Portfolio Management Strategies

Portfolio management strategies (PMS) refers of the methods adopted by portfolio managers to create the maximum possible returns at lowest possible risks (Chen, 2018). Portfolio management strategies (PMS) are defined as approaches, methodologies and techniques adopted by investment managers or investors to achieve a pre-defined

investment objective. These strategies enable fund managers to make the most conceivable yields at least conceivable risks. As discussed above, there are three common portfolio management strategies namely active, passive and semi-active.

PPM strategy involves the investor aligning himself/herself with the market thus his or her views are the views of the market. The portfolios of the investor thus move narrowly consistent with certain market or asset category. The goal of this strategy is to reduce investment cost to circumvent distresses related to errors attributable to taking particular security risks (Elton, Gruber & De Souza, 2019). Semi-active portfolio management (SAPM) strategy involves holding a percentage of portfolio in an index whereas the left-over percentage remains for active trading. This enabled the investor to gain from the general market change but similarly putting active risks with particular chosen securities (Levisauskait, 2010). PPM strategies was measured by daily yield of the mutual funds trading on the NSE while active portfolio strategies were measured by daily return of active unit trusts.

1.1.2 Financial Performance

It is the degree of how the establishment's financial goals are attained. It is also the financial healthiness of a firm (Frich, 2009). Firm's financial performance (FP) refers to certain ways of performing or doing a financial activity that involves a degree to which financial objectives are accomplished. It is also defined by Kogoyire and Shuka (2016) as the outcome of organizations' activities. FP can be improved through efficient utilization of organizational resources that are available which improve the firm's profitability. FP entails the adequacy with which a financial firm meets its shareholders' required rate of return at the same time complying with the government regulations. According to

Maghanga and Kalio (2012), FP is more than just a rise in stock markets and an increase in sales of a firm and gives more focus on things that impinge on the financial statement of the organization.

Establishment's FP is measured by indicators such as return on investment (ROI); given by the firm's net profit over the cost of investment, return on equity (ROE); given by firm's net revenue over owner's equity, and return on assets (ROA) given by net Revenue over total assets (TA). Others are firm revenues, profits (Liargovas & Skandalis, 2004). Most of the FP measures usually use historical information of the organization which is subject to managerial manipulation. The bearing of PMS on the FP of investment establishments registered in the NSE has been reviewed by Micheni (2013) who established that PMS enhanced the FP of firms. However, the study was done on Centum Investments and not every investment establishments registered in the NSE. This investigation ascertained the bearing of PMS on the FP of the investment establishments registered in the NSE.

1.1.3 Portfolio Management Strategies and Financial Performance

Kirumba (2012) examined the bearing that investment strategies had on the Kenyan joint investment schemes' FP. The researcher using a descriptive survey, ascertained that a positive and substantial association exists between investment strategy and profitability of the establishment. Micheni (2013) determined portfolio management strategies used by Centum Investments and their effect on the establishment's FP. Using a survey research method and secondary material obtained from the establishment's accounts, the investigation showed that a strong association exists between strategies of (yield spread,

leverage, individual security selection, yield curve, interest rate expectation) and FP of the establishment.

Cox (2017) compared between APM and PPM in the US and ascertained that in the US, funds that are actively managed significantly underperformed compared to their benchmarks which implies that there is no benefit to APM in the U.S. the researcher also found that fees and expenses bear a negative influence on the FP of an establishment. Makau and Ambrose (2017) empirically reviewed the bearing of portfolio diversification (PD) on FP of investment establishments registered in NSE, Kenya. The research design employed was explanatory, non-experimental and focused on investment establishments registered in the NSE. The investigation further ascertained that the bearing of PD on establishment's performance yields are varied, indecisive and inconsistent outcomes. The literature failed to focus attention on investment establishments registered in the NSE as per this investigation.

1.1.4 Unit trust Listed on the NSE

The Nairobi Securities Exchange (NSE) is a major African securities market operating in Kenya Instituted in 1954, it has years of legacy in equity as well as debt securities listings. NSE allowed private firms in their system first in 1988, this allowed several private businesses to secure their economies through NSE, therefore, the increment of investors, and intern increased the finances of the government (Makau & Ambrose, 2017).

In this regard, several unit trusts are listed on the NSE to boost their efforts of raising capital. To date, there are fifty six (56) unit trusts listed on the NSE (Appendix I). Unit trusts are categorized into money market fund, fixed income fund, balanced fund, and

equity fund. Unit trusts provide a wide range of securities. They ensure they make money through asset gains via trading on the NSE through various investment vehicles. The NSE has a wide range of investments such as security, shares, and properties provided by the investors. The performance of the investment companies is mainly hinged on the portfolio composition of those best performing securities reflecting the financial performance of the firms (Kimeu, 2015).

1.2 Research Problem

Investment is the main business activity among firms that engage in trading securities on behalf of clients. As such, investment firm's main source of revenue is the gains derived from the investment portfolios such as stocks, commodities, cash and bonds (Jasmin, 2010). Investment portfolios are source of great risk thus the need to manage investment portfolios to ensure firm's robustness. Efficient investment portfolio management safeguards the control of the risks associated with the portfolios.

Unit trusts that have had performance challenges have been associated with poor portfolio management. For instance, Cytonn was deeply sunk into negative territory, which is attributed to most of its investments doing badly (Kariuki, 2018) even after actively managing their portfolio. This has resulted to the company pulling out stake in various companies which brings into question their investment management strategies. For the year ended December 2017, the board members took the initiative to warn the investors and the potential investors to expect a more than 25 per cent lower earning as compared to the year ended December 2016. This brings to question the bearing of PMS on the establishment's performance. However, On the other hand, Centum has mainly employed mainly active

PMS in executing its portfolio. The company assists the portfolio companies in various aspects such as identifying strategic investors, business expansion strategies, enhancing partnerships with various companies such as Gen Africa, Kenya Wine Agencies Limited, Almasi Beverages Limited and NAS Servair. This is a key driver of their success evidenced by the high net profit after tax of 1.48 billion Kshs and total assets of 63.46 billion Kshs. In this study we are going to analyze the effect of the selected PMS on the various investment's firm financial performance.

Different investigations have been performed to ascertain the link between PMS and performance of unit trusts, for instance; Hilsted (2012) examined APM, portfolio structure, execution and investment strategy in Denmark. Hailu and Tassew (2018) evaluated the bearing of investment expansion on FP of CBs in Ethiopia for the period of 2013 to 2017. Cox (2017) compared between APM and PPM strategies in the US and established that APM significantly underperformed relative to PPM. Locally, Kirumba (2012) examined the bearing that investment strategies had on the FP of Kenyan joint investment schemes and ascertained that a positive and substantial association exists between investment strategy and firm profitability. Micheni (2013) determined portfolio management strategies used by Centum Investments and their bearing on establishment's FP and found that PMS enhanced the FP of Centum Investments.

The literature reviewed focused on investment strategies and not portfolio management strategies. The literature reviewed focused on other countries such as the US, Denmark and Ethiopian and not Kenya leaving a knowledge gap. Micheni (2013) focused attention to this subject but considered Centum Investments and not the investment services establishments recorded in the NSE which is the focus of this study. Therefore, this review

presents contextual gap. This a knowledge gap that this investigation filled through answering the question; what is the effect of PMS on the FP of the unit trusts recorded in the NSE?

1.3 Objective of the Study

To determine the effect of portfolio management strategies on the financial performance of the unit trusts listed at the NSE.

1.4 Value of the Study

Policy makers of portfolio managing entities for instance banks, insurance firms, fund management companies, trustees and unit trust would understand the potential advantages of applying portfolio management activities in managing their companies' portfolios. Further, the management/ executive of these companies would be able to discern key factors to use while managing their portfolios. Another advantage of the study is the benefit to an individual investor who sought to understand the utilization of portfolio management strategies to boost his/her individual net worth.

The study would also benefit investment advisors or management consultants who seek to maximize the return of their client's portfolios and advise their investors. Moreover, the study would enable the government improve businesses awareness on how to align their investments in private-public partnerships in order attract more investors.

Finally, the investigation would augment the knowledge body in the Finance field. From this study, scholars would be able to increase their understanding on the portfolio management strategies used by the investment companies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This part described the collected works on the link between PMS and the FP of Unit trusts listed. The literature is reviewed to identify the knowledge gaps. Theoretical and empirical literature is assessed by reviewing a number of concepts, models as well as empirical investigations on this theme. Afterwards, there would be a literature review summary followed by the research gap.

2.2 Theoretical Review

The link between PMS and the FP of Unit trust listed has had contributions from various theories which include; Modern Portfolio Theory (MPT), the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT) .

2.2.1 Modern Portfolio Theory

This concept was advanced by Markowitz (1952) to addresses the investment policy variable. The theory insists on lessening the risk for a certain expected yield amount. The work of this concept is supported by scholars such as Chijoriga, (2007) who opines that the modern portfolio theory of management tries to determine most resourceful blends of assets to make the most of PER for a certain risk amount which enhance performance.

Markowitz (1952) validates that firms control their activities with regards to portfolio and that investors are similar and do not take risk, thus ought to be encouraged with a high rate of return that will eventually pay off their risk taking. Omisore et al (2012) further argued that diversification can be used to lower risk amount even if the ROA is not negatively or positively linked. The theory thus supports the literature of this study through arguing that

effective portfolio management strategies will make the most of PER for a certain portfolio risk level thus the fund managers should be careful when deciding on the proportion of different assets in a portfolio.

2.2.2 Capital Asset Pricing Model

CAPM was advanced in the 1960s from the work of three researchers Lintner, Sharpe and Mossin (1960) autonomously. CAPM is usually termed as Sharpe-Lintner-Mossin CAPM. William Sharpe (1964) argue that the PER equivalent is the amount on a risk-free security added to a risk premium and that if the expected return (ER) doesn't reach or surpass the needed yield, at that point the investment ought to be made. The theory was later updated by Fama & French (1992) who found that firm size, book-to-market, earnings-price and debt equity ratios augment the description of anticipated stock yields shown by market beta.

The models reflect asset sensitivity to non-diversifiable risk called systematic/market risk; typically signified using the beta (β) size in the financial sector, and the market ER as well as the ER of a hypothetical risk-free asset. CAPM "proposes that equity capital cost of an investor is established using beta. Hence, CAPM contends that investors should be rewarded using two methods: risk and time value of money (VOM). The risk constitutes compensation level needed by the investor in acceptance of extra risk. Conversely, the time VOM is indicated using the risk-free (r_f) rate and rewards the investors for putting funds in some investment at a particular time.

2.2.3 Arbitrage Pricing Theory

APT was established by Ross (1976). This model was advanced from the criticism of the CAPM model such as the model having unworkable postulations. APT also lengthens the CAPM model to a multifactor model from one factor. The model suggests that no arbitrage ought to be present in a robust security market though Ross argued that there exist numerous aspects that lead to systematic deviation of asset returns from their anticipated values (Ross, 1976). The model however fails to provide the extent or amount of the aspects themselves. Ross postulates that factors can lead to borrowers not to complete their payments which makes bank accumulate high levels of non-performing loans. The theory is of the opinion that when an investor adopts effective portfolio management strategies, it improves their profitability hence FP.

The theory has various assumptions such as the ROA being a macroeconomic aspect linear function of for instance exchange rate, inflation rate, GDP, FDI, interest rate, industrial production, government expenditure, money supply and variations in oil prices. APT assumes that there is financial market equilibrium and that, arbitrage prospects ought not to exist in efficient financial markets (Ross, 1976). That to stop arbitrage, the expected ROA ought to be its sensitivity's linear function to the number of general aspects. This theory is thus crucial to the findings of this study for its opinion that adopting effective portfolio management strategies improves the establishment's profitability hence FP.

2.3 Determinants of Firm Financial Performance

This part illustrated the FP aspects that include portfolio management strategies, firm size, leverage, risk management and macro-economic factors as discussed below.

2.3.1 Portfolio Management Strategies

Micheni (2013) argued that with more challenging economic conditions firms have smaller amount assets to utilize on different ventures or modify programs. As such, firms employ strategies that would enhance such investments since their survival depends on it. Micheni (2013) supports the work of Kamau (2010) who evaluated the link between PMS and the FP of Centum Investments and using a survey research method and secondary material obtained from the firm's books, the investigation ascertained that a strong link exists between yield spread strategies, leverage strategies, different security selection strategies, interest rate expectation and yield curve strategies on the firm's FP. The investigation then suggested that portfolio managers, division executives and customer service managers must employ an MIS which will help generate portfolio information reports.

2.3.2 Firm Size

There was no clear definition of establishment's size, however, many organizations use different measures to determine firm size, for instance TA, book value of revenue, number of employees and others. Firm size is highly correlated to the cash flow of the organization (Majumdar, 2009). The establishment's size may have a positive bearing on FP as larger establishments can exploit that advantage to obtain certain financial gains in corporate relations. Pervan (2012) through his study on how firm size influences the business success ascertained that establishment's profitability and size are positively connected however, the relationship is weak. Kioko (2013) evaluated the effect of establishment's size on performance and found a moderate link.

2.3.3 Leverage

Firm leverage is defined by Brigham and Eugene (2004) as the degree to which fixed-income securities (preferred stock and debts) are used in capital structure of an establishment. Leverage is also the ratio of debt and equity which states the relationship between loaned out funds and owners funds in the capital structure of an establishment (Chadha & Sharma, 2004). It is given by “(long term debt added to current percentage of long term debt) as a ratio of TA” (Khanna & Tice, 2005). A study by Mohammad (2014) on listed chemical companies of Pakistan established a positive and substantial link between leverage and establishment’s performance. Also, Weill (2003) found that among organizations in Germany and France leverage was ascertained to bear a significantly positive association with firm performance while among the Italian firm the relationship was negative and substantial. The investigation then concluded that the bearing of firm leverage on establishment’s performance is neither positive nor negative but depends on the firm or country of reference. As a result, this area of knowledge needs additional evaluation.

2.3.4 Risk Management

It involves evaluating and controlling the establishment’s exposure to a number of risks by using financial derivatives and insurance among others. Business risks negatively affect a firm’s cash flows as well as its general wellbeing (Tong, 2004). Thus, in the event that the firm successfully manages its foreign exchange risks the gain from such successful implementation will bear a lasting positive influence in value creation for the firms’ owners since it increases their value by way of improved company performance and reducing firm

costs of capital. Bhaduri (2002) concluded that the risk exposure level could result in its market value variations.

2.3.5 Macro-Economic Factors

These are measures used to determine a firm's performance. According to Chinzara (2011), they comprise of inflation, interest rate, exchange rates, treasury bills, GDP, foreign direct investment (FDI) and money supply. Inflation rate is the general price surge of commodities and services leading to the fall of money's buying power. It is suggested to adversely impinge on the FP of firms. Exchange rate is the value at which the currency of a country may be traded for the currency of another country. Literature associates exchange rates unpredictability with price instability and the poor performance of firms (Benita & Lauterbach, 2004). FDI include investments that an establishment makes or a person from one nation into commercial benefits in a different nation. Increase in FDI is suggested to improve the performance of firms in the country. Other macroeconomic aspects for instance output growth, exchange rate, inflation and interest rate are established to bear a unidirectional association with the performance of establishments (Modebe & Chijindu, 2016).

2.4 Empirical Review

This part consisted of international studies and local investigations on the link between portfolio management strategies and FP.

2.4.1 International Studies

Hilsted (2012) evaluated APM, portfolio construction, implementation and investment strategy in Denmark. The researcher sought to create an investment strategy for APM to

outdo the Morgan Stanley Capital International (MSCI) Denmark from the period 1992 to 2011. The study found that blending strategic and tactical asset apportionment comprises a suitable investment strategy for APM since it restricts the long-term portfolio investment prospects and enables for short-term portfolio shifting. The study then concluded that APM is not able to give greater returns compared to the MSCI Denmark, However, it has demonstrated to be of advantage to the investor, since the exposure of market risk explains both lower and greater portfolio return to the standard.

Cox (2017) compared between active and APM in the US. The investigation used a sample of 10 U.S. based firms chosen randomly. The study considered firms such as large-cap mutual funds, mixed allocation and matched them to their standard funds. The researchers found that in the US, actively managed funds significantly underperformed compared to their benchmarks which implies that there is no benefit to APM in the U.S. the researcher also found that fees and expenses bear an adverse influence on the firm's FP.

Hailu and Tassew (2018) evaluated the bearing of PD on FP of Ethiopian commercial banks (CBs) between the years 2013 to 2017. The researchers employed a quantitative research approach and used panel random effect regression model to analyze data. The investigation also ascertained that financial assets investment, insurance, government security, credit portfolio and investment size have positive substantial bearing on FP of Ethiopian Banks. The researcher verified that investment diversification strategy positively impinges on the FP of Ethiopian CBs. The investigation recommended that Ethiopian banks should emphasize on upholding the assurance in PD and establish marketing strategies that promote diversification.

2.4.2 Local Studies

Kirumba (2012) examined the bearing that investment strategies had on the FP of in Kenyan joint investment schemes. The investigation utilized a descriptive survey. The researchers utilized both primary and secondary material. The investigation ascertained that these schemes had employed two kinds of strategies. The study then concluded that firm investment strategy is positively and considerably linked to profitability and return on assets.

Micheni (2013) determined portfolio management strategies used by Centum Investments and their bearing on the establishment's FP. The researcher employed a survey research method. The investigation also employed secondary data sourced from the firm's reports. The investigation ascertained a strong link exists between strategies (yield spread, leverage, individual security selection, interest expectation and yield curve) on the firm's FP. The investigation then suggested that portfolio managers, division executives and customer service managers ought to employ a MIS that will help generate portfolio information reports.

Kimeu (2015) conducted a research which focused on assessing the bearing of PMS and structure on the FP of investment establishments in Kenya. The investigation aimed at verifying the determining factors of FP of investment establishments registered at NSE owing to portfolio composition and strategies. The investigation utilized a descriptive research design, whereby, the secondary material collection method was applied. The sources used included the data of five companies listed in NSE between the year 2012 to 2015, which was available in books of account of NSE and Capital market authority Kenya.

In analyzing data multi-regression analysis was used for relating the variables and Ordinary Least Squares was used for the estimation of variables. The findings indicated that portfolio composition and strategies have a positive bearing on the FP of investment establishments registered at NSE, and the bearing is to a great extent. The investigation recommends that the management and investment companies should formulate policies for ensuring a strong portfolio composition of unit trust hence performance.

Osano (2013) determined the bearing of investment strategies on FP of Kenyan investment funds. The researcher focused on all the nineteen investment thus employed a census approach. The investigation utilized descriptive analysis design. The investigation employed both secondary and primary data which was obtained using interviews with ten investment executives. The researchers found that investment assets in Kenya is mainly active investment which is integrated into their operations. The study also found that investment strategy aspects for instance leverage, liquidity, age and size enhance the FP of a firm through improving firm ROA. The study thus concluded that investment strategies enhance firm FP.

Masinde, Ndambiri and Oluoch (2018) evaluated the bearing of financial policy on FP of CBs quoted at the NSE. The investigation targeted eleven CBs registered in the NSE as at 31st December 2017. The investigation utilized secondary data. The study employed a descriptive research design. Asset management policy, cash management policy and dividend policy were ascertained to bear a positive and substantial link on the FP of a firm. The researchers then concluded that a positive and substantial link exists between an investment policy and the FP of registered CBs in Kenya.

Osewe (2020) conducted a descriptive research design to establish the effect of portfolio diversification on financial performance of unit trust listed at the Nairobi Securities Exchange, Kenya. A census study was done on all the five unit trust that are listed at the NSE. Secondary information collected for the period of 2011 to 2019. This data was later analyzed via a regression model and descriptive statistics. The analysis outcome revealed that investment portfolio diversification was positively related to performance.

2.5 Conceptual Framework

A diagrammatic link between the predictor variable and the output variable is illustrated by figure 2.1. The output variable is shown by financial performance while the predictor variable is represented by PPM, APM, and moderated by firm size and leverage.

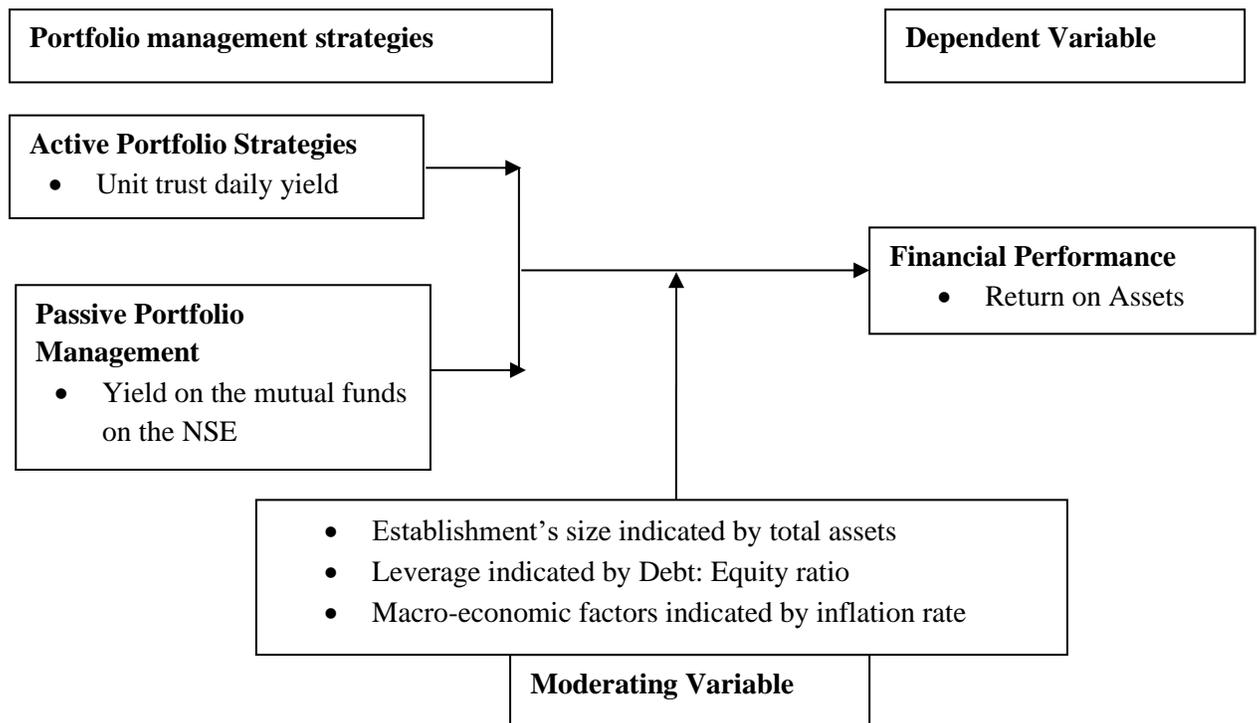


Figure 2.1: Conceptual Framework

2.6 Summary of the Literature Review

This part reviewed the collected works on the bearing of PMS on the FP of unit trusts. The theory reviewed three concepts that seek to elucidate the association between PMS and the FP of unit trusts. These comprise MPT, CAPM and APT. The theories support the idea of adopting effective portfolio management strategies to enhance firm performance.

The literature on the determining factors of the FP of unit trusts was also reviewed. Although there are many different determining factors of the FP of unit trusts, this study however focused on five factors which include; PMS, firm size, leverage, risk management and macro-economic factors. Most of the literature reviewed established that adopting effective PMS improves the FP of Unit trusts in other countries such as US, Denmark and Ethiopia. However, the literature does not focus on the perspective of this investigation which is the unit trust in Kenya resulting in a knowledge gap.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This part summarized the approach that was utilized during collection, analysis and presentation of findings with regards to the effect of PMS on the FP of the unit trusts registered in the NSE. The sections discussed include research design, target population, data collection and data analysis.

3.2 Research Design

The investigation used both correlational and descriptive research designs. Descriptive design was defined by Kothari (1990) as the method of collecting data before the research and analyzing it by clearly through the in-depth description. The researcher employed descriptive design to describe the extent to which the unit trusts use various portfolio management strategies. Descriptive design is apt as it enables use of representative sample and ensures that the outcomes are statistically reliable even in multiple variables' analysis.

Correlation design was employed to ascertain the link between PMS and the FP of the unit trusts in the NSE. Correlation design is a type of design used by the researcher in accessing the type of relations that exist between variables for solving the research problem (Mugenda & Mugenda, 1999). Hence, it is justified to employ both descriptive and correlation research design to describe and ascertain how portfolio management strategies influences the FP of unit trusts registered in the NSE.

3.3 Target Population

Kothari (2004) states target population as the total amount of research participants in the researcher's situation of attention. The target population for this investigation were the 56 unit trusts registered in the NSE (Appendix I).

3.4 Data Collection

The financial information to analyze comprised of five years from the year of income 2015 to 2019. Secondary material was obtained from the reports of the investment establishments as well as books to amass material on the establishment's annual earnings. Data on TA, debt and equity was sourced from each of the Unit trust's statement of financial position. Data on the return (after tax profit) was sourced from the statement of income. In addition, information on the annual inflation rate was sourced from CBK website while the daily prices (which was annualized) of the unit trusts and the exchange traded fund was sourced from Nairobi Securities Exchange repository.

3.5 Diagnostic Tests

Diagnostic tests was done to establish the normality, Heteroscedasticity, multicollinearity and autocorrelation. Normality tests aid in ascertaining whether a set data is properly demonstrated using a normal distribution as well as to calculate how expected it is for a random variable in the set of data to have a normal distribution. Shapiro-wilk test is ideal for normality test using power one is able to depict the link between data and equivalent normal scores. Data is considered normal when the Shapiro –test is greater than 0.05 otherwise when is below 0.05, it's not normal (Panagiotidis, 2002).

Heteroskedasticity is the situation whereby the changeability of a variable is uneven among the variety of values of the other variable that foretells it. It tests whether the change of the errors from a regression is subject to the values of the predictor variables (Salisu & Olofin, 2009). heteroscedasticity will be tested via Scatter plot. Scatter plot will be used to the data values of the variables. Normal distribution of the variable shows con shaped scatter plot,

otherwise, data is concentrated on one side of the plot. Dataset distributed on the extreme left or extreme of the scatter plot shows heteroscedasticity.

Autocorrelation ascertained the existence of the association between the variable values that are based on linked characteristics. The autocorrelation function helped in obtaining patterns in the data. Precisely, it indicates whether the association between points detached by numerous time lags (Panagiotidis, 2002). Autocorrelation was checked via Durbin Watson. The thumb rule applied is that if the Durbin-Watson statistic is above 4 then there is negative autocorrelation while if the Dublin Watson is less than 4 then there was no autocorrelation and when the values lie between $4 <$ and >4 then the test is considered inconclusive.

3.6 Data Analysis

For sourced information to be apprehended without difficulty, analysis has to be undertaken. The researcher used quantitative and qualitative approaches for data analysis. Afterwards, the data was edited, categorized, coded and presented for quantitative data analysis by way of statistical package for social science (SPSS). Charts and tables were utilized for more illustration for ease in interpretation as well as analysis. Sourced data was carefully scrutinized for comprehensiveness and unambiguousness.

Subsequently, data was condensed, coded and presented. Inferential statistics was employed to measure the association between portfolio management procedures and Unit trust's FP, evaluated using their profitability with regards to ROA. The inferential statistics was used to ascertain an underlying influence linking predictor variables to the output variable.

3.6.1 Analytical Model

Multiple regression analysis was utilized to verify the link between PMS and the FP of Unit Trust registered in the NSE. The analytical model utilized is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

Y – FP was evaluated by the annual ROA of the Unit Trusts

X₁: Passive management portfolio was measured by the annual yield of unit trusts (Elton, Gruber & De Souza, 2019)

X₂: Active management portfolio was measured by the annual return rate of mutual funds (Cremers, Ferreira, Matos & Starks, 2016).

X₃: Firm Size (measured by natural log of TA)

X₄: Leverage (debt to equity ratio)

X₅: Macro-Economic Factors (measured by annual inflation rate)

are X₁ to X₂ are portfolio management strategies.

β_0 - is the constant of the model

$\beta_0, \beta_1 - \beta_5$ - are the regression coefficients

ε - Stochastic estimate of error term

3.6.2 Test Significance

A multiple linear regression model was utilized to measure the link between the predictor variables on the output variable. F-test was employed to ascertain the overall importance at 95% confidence interval. The p-value for the F-statistic was utilized to ascertain the model's strength. The deduction was subject to whether p-value is below 0.05 then it would be determined that the model is substantial and has good conjecturers of the output variable and that the outcomes are not dependent on casual. If the p-value is above 0.05 then the model was unsubstantial and was not be employed in describing the changes in the output variable.

CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

This study was conducted with the aim of examining effect of portfolio management strategies on the financial performance of the unit trust listed on the NSE. The study in detail looked into passive management portfolio, active management portfolio, firm size, leverage and inflation rate and the effect they had on the return¹ on assets on the firms listed in Nairobi securities exchange (NSE). This chapter presents findings of data analysis and interpretations.

4.2 Diagnostic Tests

The study carried out various diagnostic tests to examine the nature of the distributions from which data utilized from the study was sourced. The various diagnostic tests that were carried out include normality, heteroscedasticity, Multicollinearity and autocorrelation. Normality tests are carried out to access if the sample data is normally distributed. The study carried out the Shapiro-wilk test as a measure of normality. The Shapiro-wilk test is a numerical way of accessing normality. If the level of significance of the test is greater than 0.05 then the data is said to be normally distributed otherwise when is below 0.05, it's not normally distributed.

Heteroscedasticity looks at the size of the error across values of the independent variable. To examine heteroscedasticity, a scatterplot is used in which of the residuals against the predicted values of the dependent variable are assessed. Presence of classic cone-shaped pattern in the scatter plot with most of the data concentrated along the line of best fit is an indication of normality otherwise; the data is not normally distributed.

Autocorrelation is used to assess if there exists correlation between the values of the same variables across different observations in the data. Thus, it is useful in pointing out association that could exist in variables. Durbin Watson statistic to check autocorrelation of the variables. Durbin-Watson statistic value of above 4 is used to indicate that there is negative autocorrelation while if the Durbin Watson is less than 4 implies that there is no autocorrelation and when the values lie between $4 <$ and >4 then the test is considered inconclusive. Findings from the various diagnostic tests are as presented in the tables and figures below.

Multicollinearity arises where independent variables are highly correlated and was tested via Variance inflation factor (VIF). Variance Information Factor (VIF) estimates the extent to which one variable is explained by another variable. When $VIF=1$ shows the variable are not correlated, $1 < VIF < 5$ shows the predictors are fairly correlated, $VIF > 5$ to 10 shows highly correlated (Garson, 2012). The rule of thumb is that $VIF > 4.0$ when multicollinearity is a problem.

Table 4.1 Shapiro-Wilk Test (Normality Test)

	Kolmogorov-Smirnov ^f			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Return_on_Assets	.385	5	0.200	0.969	5	.872

Source: (Secondary Data, 2020)

The null hypothesis for the normality test is that data are normally distributed. If the P-value < 0.05 . From the findings, Shapiro-Wilk has a significance of 0.872. Since p-value is greater than chosen alpha level (0.05), then we accept the null hypothesis hence there is evidence that data tested are normally distributed.

The figure 4.1 below shows the analysis on heteroscedasticity

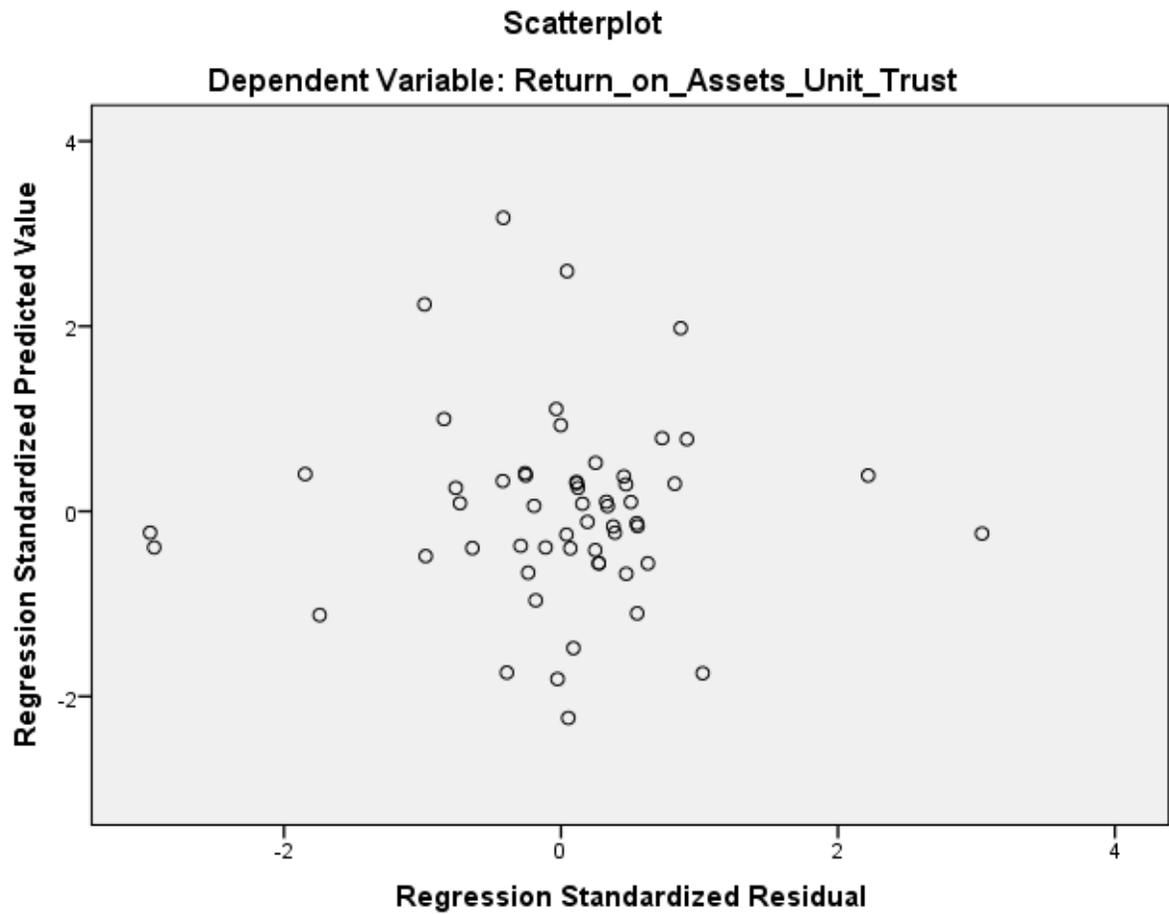


Figure 4.1 Heteroscedasticity

Source: (Secondary Data, 2020)

From the figure above, it is clear that the data is heteroscedastic since the data distribution is funnel shaped. This is a situation where the variability of a variable is unequal across the range of values of a second variable that predicts.

Table 4.2 Autocorrelation

Model	R	R Square	Durbin-Watson
1	0.190 ^a	0.036	1.844

Source: (Secondary Data, 2020)

Findings in the autocorrelation table show that the Durbin-Watson statistic is 1.844. This was an indication that autocorrelation was absent in the data.

Table 4.3: Multicollinearity

	Tolerance	VIF
(Constant)		
1 Passive management portfolio	.935	1.070
Active management portfolio	.976	1.024
Log_of_Total Assets	.758	1.320
Debt_to_equity_ratio	.991	1.009
Inflation_rate	.750	1.333

Where Multicollinearity arises falls between $1 < VIF < 5$ then the predictors that the data is are fairly correlated.

4.3 Descriptive Statistics

Descriptive statistics are summaries of a data set. These statistics are essential as they help describe the basic characteristics and features of a data set. They are also important as they form a basis for further quantitative analysis. The minimum statistic looked into the lowest value within the data whereas maximum statistic looked over the highest value in the data set. The mean was used to indicate the average value of the data set. Standard deviation was utilized to show the spread of the data: that is, it checked how far each individual data value is far from the mean. Table 4.4 presents the values of descriptive statistics.

Table 4.4 Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Return on Assets Unit Trust	56	-10.00	24.00	7.0375	5.49851
Passive management portfolio	56	1.00	13.00	8.1964	2.53993
Active management portfolio	56	-5.00	30.00	8.1107	4.63264
Log of Total Assets	56	-6.00	13.79	7.9526	3.60844
Debt to equity ratio	56	-18.00	4004.00	114.7643	537.21394
Inflation rate	56	-7.00	12.00	6.8411	2.82012
Valid N (listwise)	56				

Source: (Secondary Data, 2020)

Findings from the descriptive statistics revealed that the mean of Return on Assets (ROA) was 7.038 with a standard deviation (SD) of 5.498. Passive management portfolio had a mean of 8.196 with a SD of 2.539. Active management portfolio had a mean of 8.1107 and a SD of 4.533. Firm size (Log of Total assets) had a mean of 7.953 and SD of 3.608. Leverage (debt_to_equity_ratio) had a mean of 114.76 and SD of 532.2. Inflation rate had a mean of 6.841 and SD of 2.82.

4.4 Correlational Analysis

The study used correlation coefficient to establish the association between the dependent variable and dependent variables. Values was expected to range between -1 to +1. The outcome of the correlation analysis was as indicated in Table 4.5.

Table 4.5: Correlational Analysis

	Return on Assets Unit Trust	Passive managemen t portfolio	Active manage ment portfolio	Log_of_ Total Assets	Debt_to_ equity ratio	Inflation _rate
Return_on_Assets	1.000					
Passive_management_portfolio	-.046	1.000				
Active_management_portfolio	.097	.105	1.000			
Log_of_Total_Assets	-.067	.081	.108	1.000		
Debt_to_equity_ratio	.028	-.051	.034	.069	1.000	
Inflation_rate	-.133	-.151	.068	.461	.039	1.00

Source: (Secondary Data, 2020)

Passive management portfolio had a weak and negative association with return to assets as shown by ($r=-0.046$). Active management portfolio had a weak and a positive link with return on assets ($r=0.97$) and a weak positive association with passive management portfolio ($r=0.105$). Log of total assets had a weak negative correlation with ROA ($r= -0.067$) and active management portfolio ($r=0.108$). Log of total assets had a weak positive correlation with passive management portfolio ($r= 0.081$). Debt to equity ratio was negatively related to Return to equity ($r = 0.028$), passive management portfolio ($r = -0.051$), Log of total assets ($r=-0.034$) and positively related to active management portfolio ($r =0.069$). Inflation rate had a negative correlation with return on assets ($r = -0.133$), passive management portfolio ($r=-0.151$), and a positive correlation with active management portfolio ($r =0.068$), log of total assets ($r =0.461$), and debt to equity ratio ($r= 0.039$).

4.5 Regression Analysis

Regression analysis to estimate the relationship between passive management portfolio, active management portfolio, firm size, leverage, inflation rate and ROA. The results of the regression table are usually presented in the model summary, ANOVA and coefficients table. The ANOVA table scrutinizes if the overall model fit for the data is good fit for prediction. The coefficient table quantifies how much of the dependent variable changes as a result of change in the independent variables. Values from the coefficient table are used to model the future relationship between the variables. Results of the study are as shown in the tables presented below.

Table 4.6 Model Summary

Model	R	R ² Square	Adjusted R ²	Std. Error of the Estimate
1	.190 ^a	.036	-.060	5.66133

a. Predictors: (Constant), Inflation_rate, Active_management_portfolio, Log_of_Total_Assets, Debt_to_equity_ratio, Passive_management_portfolio

Source: (Secondary Data, 2020)

The model summary revealed that the R-Square is 0.036. This means that 4% of the proportion of variance in ROA can be explained by the model that was fitted with passive management portfolio, active management portfolio, firm size, leverage and inflation rate as independent variables. While, 96% of ROA is explained by other variables not included in the regression model.

Table 4.7 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.195	5	12.039	.376	.0386 ^b
	Residual	1602.657	50	32.053		
	Total	1662.851	55			

a. Dependent Variable: Return_on_Assets_Unit_Trust

Source: (Primary Data, 2020)

From the ANOVA table it was shown that F-Statistic was 0.376 at 0.038 level of significance. This level of significance was less than 0.05. Thus, this implied that the model fit was statistically significant to predict ROA based on passive management portfolio, active management portfolio, firm size, leverage and inflation rate.

Table 4.8 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.382	3.563		2.633	.011
Passive management portfolio	-.171	.311	-.079	-.550	.585
Active management portfolio	.137	.167	.116	.823	.414
Log of Total Assets	-.008	.243	-.005	-.031	.975
Debt to equity ratio	.010	.001	.026	.188	.852
Inflation rate	-.296	.312	-.152	-.948	.348

From the coefficients table it can be shown that the model fit for predicting ROE is;

$$Y = 9.38 + -0.171X_1 + .137X_2 - 0.008X_3 + 0.010X_4 - 0.296X_5$$

Y: Annual ROA

X₁: Passive management portfolio

X₂: Active management portfolio

X₃: Firm Size (Log of total assets)

X₄: Leverage (Debt to equity ratio)

X₅: Annual Inflation Rate

The regression coefficient table shows that all the variables had an insignificant relationship with return to equity. The association is considered insignificant when the P value > is greater than 0.05. In this case, passive management portfolio ($\alpha=0.585$), active management portfolio ($\alpha=0.414$), firm size (log of total assets) ($\alpha=0.975$), and annual inflation rate ($\alpha=0.348$). Leverage (Debt to equity ratio) ($\alpha=0.852$), was found to have a significant association with return on Assets.

4.6 Discussion of the Findings

From the model summary it was established that 4% of the variation in ROA was due to passive management portfolio, active management portfolio, firm size, leverage and inflation rate. The ANOVA table showed that the model fit was statistically significant to be used for the prediction of ROA. From the coefficient table it was shown that the constant value was 9.38. This was an indication that ROA would have a value of 9.38 if all other factors were held constant. Active management portfolio had a beta value of 0.137. This implied that a unit increase in active management portfolio would lead to a decrease in ROA by a value of 0.137. Passive management portfolio had a beta value of -0.171. This indicated that an increase in passive management portfolio led to a decrease in ROA by a value of 0.171. Firm size had a beta value of -0.008. This meant that a unit increase in the firm size would lead to a decrease in the ROA of the firms by a value of 0.008. Leverage had a beta value of 0.010. This implied that a unit increase in leverage in the firms led to a

0.010 increase in ROA. Inflation rate had a beta value of -0.296. This meant that a unit increase in inflation lead to a decrease in the ROA of the firms by a value of 0.296.

Findings of the study are in line with those of Charles (2011) who investigated the effects of portfolio management strategies on financial performance of unit trusts in Kenya: a case study of centum investments. From his study he concluded that leverage had a positive impact on the ROA of centum investments.

The results of this study are also in agreement with those of Kimeu (2014) who investigated the effect of portfolio composition on the financial performance of unit trusts listed in NSE. Findings of this study found out that portfolio management strategies and firm size had a direct effect on the firms listed in NSE.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presented the summary of the findings, conclusions and recommendations guided by the objective of the study which was to assess the effect of portfolio management strategies on the financial performance of the unit trust listed on the Nairobi securities exchange. This chapter further presented study limitations and suggestions for further studies.

5.2 Summary of the Findings

From the normality, heteroscedasticity, multicollinearity and autocorrelation diagnostic tests that were carried out it was discovered that the data used for the study was normally distributed, had a linear pattern and lack autocorrelation.

Findings from the descriptive statistics revealed that the mean of ROA was -7.04 with a SD of 5.499. Passive management portfolio had a mean of 8.196 with a SD of 2.539. Active management portfolio had a mean of 8.11 and a SD of 4.632. Firm size (Log of Total assets) had a mean of 7.95 and SD of 3.608. Leverage (debt to equity ratio) had a mean of 114.76 and SD of 537.21. Inflation rate had a mean of 6.84 and SD of 2.82.

The regression analysis reflected that 4% of the variations in ROA was due to passive management portfolio, active management portfolio, firm size, leverage and inflation rate. This implied that 96% of the variation in ROA was due to other factors. These factors could comprise of Board diversity (Erich, 2019); size and age of the firm (Majumdar, 2019).

Portfolio diversification (Makau & Ambrose, 2017) and financial policy (Masindet, Ndambiri & Oluoch, 2018).

Findings from the ANOVA showed that the model fitted with passive management portfolio, active management portfolio, firm size, leverage and inflation rate was a good fit and statistically significant to predict ROA. Further results from the regression analysis pointed out that passive management portfolio, active management portfolio, firm size and leverage had positive impact on ROA as indicated by the correlation coefficient(R) of 0.19.

5.3 Conclusion

The study concluded that portfolio management had a direct (positive) impact on the ROE of the firms listed in NSE. The ANOVA table also revealed that the model fit was statistically significant to predict ROA based on passive management portfolio, active management portfolio, firm size, leverage and inflation rate. However, the individual significance (t-test) reveals that only debt to equity ratio had a significance relationship in the regression model.

The study also concluded that leverage had a positive impact on the ROA of the firm. This means that the companies increase debt to equity ratio that is used to finance their assets led to their increased financial performance. This is in agreement with Rehman (2013) who established a positive(direct) association of debt equity ratio with ROA and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on asset.

The study also concluded that firm size had a negative impact on the ROE of the companies. This indicated that an expansion in the size of the companies would be

accompanied by a decrease in the financial performance of the companies. The study further concluded that an increase in inflation had a negative impact on ROE. This meant that of inflation went high the financial performance of the companies went down.

Finally, the study concludes that APM strategies dictate indexed portfolios about the sum of funds that the investment management sector controls. Also, the indexed segment of the industry is developing rather fast, a tendency due to the lesser management charges for PPM. Lastly, even though the sum of funds controlled in active equity and fixed-income strategies is approximately equivalent, equity indexing is far more common compared to fixed-income indexing.

5.4 Recommendations

The study recommends that the various firms listed in NSE have an effective portfolio management system. An effective system will have investments of the company leading to an increase in portfolio as well as financial performance of the companies.

The study also recommends that the companies have in place effective capital structure management systems. These systems utilize data to guide financing decisions and ensuring that sound investments would lead to an increase in portfolio.

The study also recommends that the government through central Bank of Kenya come up with rigorous policies that will help curb inflation in the economy. With inflation in check investments of the companies would not be adverse affected by a struggling economy.

5.5 Limitations of the Study

The study was limited to companies listed to only five companies listed in the NSE. This implies that the results of the study can only be inferred to the companies that were investigated. Inferring these results to other companies might not give an accurate result of the other companies.

The study was also limited in terms of accuracy for the data. The data utilized for the study was secondary and was sourced from the NSE and the firms under investigation websites. Thus, the researchers cannot verify the accuracy of the data and used it in the study as presented.

The study was also limited to a five-year period between 2015 to 2019. This meant that the results accurately reflect the performance of the firms in these years. Inferring them to other years might not give precise result for the other years.

5.6 Suggestions for Further Studies

From the findings of this study, it was determined that 4% of the variation in ROE was due to passive management portfolio, active management portfolio, firm size, leverage and inflation rate. Thus, it is important for other studies to examine what other factors account for the remaining 96% variation in ROE.

The study also explored a single macro-economic factor for the research which was inflation. It is important for other studies to look into other macro as well as micro economic factors and see how the various factors influence the financial performance of the firms.

The study was limited to a five-year period and fifty six listed in the NSE. Thus, it is important for other studies to look into different years other than the ones that were investigated and look into different firms as well. This would help the industry come up with conclusive knowledge of how portfolio management strategies have an impact on the firms.

REFERENCES

- Bhaduri, S. (2002). Determinants of corporate borrowing: some evidence from the Indian corporate structure. *Journal of Economic and Finance*, 26(1), 200 - 215.
- Campbell, J., & Vicera, M. (2002). Strategic asset allocation: portfolio choice for long term investors. *Clarendon Lectures in Economics*.3(2),45-64
- Chijoriga, M. M. (1997). Application of credit scoring and financial distress prediction models to commercial banks' lending: The case of Tanzania. *Ph.D Dissertation, Wirts Chaftsnnversitat Wien (WU), Vienna*.
- Cox, C. C. (2017). A comparison of active and passive portfolio management. *University of Tennessee Honors Thesis Projects*.
- Cremers, M., Ferreira, M. A., Matos, P., & Starks, L. (2016). Indexing and active fund management: International evidence. *Journal of Financial Economics*, 120(3), 539-560.
- Das, K. (2016). A Brief review of tests for Normality. *research gate journal* , 2(1),122-130.
- Elton, E. J., Gruber, M. J., & de Souza, A. (2019). Passive mutual funds and ETFs: Performance and comparison. *Journal of Banking & Finance*, 10(6), 265-275.
- Fama, E., & French, K. (1992). The Cross-section of expected Stock returns. *Journal of Finance*, 2(3), 427- 465.
- Frich, C. B. (2009). Board diversity and firm financial performance. *Corporate governance: An international Journal*, 11(3), 98-111.
- Hailu, A. A., & Tassew, A.W. (2018).The impact of investment diversification on FP of commercial banks in Ethiopia. *Journal of Financial Studies*, 3(1), 84-92.
- Hilsted, J.C. (2012). Active portfolio management and portfolio construction - implementing an investment strategy. *Master Thesis, Applied Economics and Finance Copenhagen Business School*.
- Jasmin, H. (2010). The modern portfolio theory as an investment decision tool. *Journal of Accounting and Taxation*, 3(2), 17-27.
- Kimeu, F. M. (2015). The effects of portfolio composition on the financial performance of invetment companise listed in Nairobi securities exchange. *Nairobi: Uon Repository*.
- Kimeu, F.M. (2015). The effect of portfolio composition on the financial performance of investment companies listed in Nairobi Securities Exchange. *An unpublished master's thesis of the University of Nairobi*.
- Kirumba, W.F. (2012). The effect of investment strategies on the FP of collective investment schemes in Kenya. *An unpublished master's thesis of the University of Nairobi*.

- Kogoyire, W., & Shuka, F. (2016) Non-financial performance and financial performance. *International Journal of Financial Studies*, 9(3), 204-240.
- Kothari, C.R. (1990) *Research methodology: Methods and Techniques*. Wishwa Prakashan, New Delhi.
- Levisauskait, K. (2010). Investment analysis and portfolio management. *Vytautas Magnus University Kaunas, Lithuania*.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics*, 47 (1), 13-37.
- Maghanga M., & Kalio, C. (2012). Financial and non-financial performance measures: How do they affect job satisfaction? *The Accounting Review*, 37(4), 389-413.
- Majumdar, S. (2009). The impact of size and age on firm-level performance: Some Evidence from India. *Review of Industrial Organization*, 12(2), 231-241.
- Makau, M.M., & Ambrose, J. (2017). The impact of portfolio diversification on financial performance of unit trust listed in Nairobi Securities Exchange, Kenya: Empirical Review. *International Journal of Management and Commerce Innovations*, 5 (2), 177-187.
- Markowitz, H. (1952). The utility of wealth. *The Journal of Political Economy*, 5(2), 151–158.
- Masindet, J. I., Ndambiri, A. N., & Oluoch, J. O. (2018). Influence of financial policy on financial performance of commercial banks listed in Nairobi Securities Exchange. *The Strategic Journal of Business & Change Management*, 5, (2), 1592 – 1614.
- Mehrling, P. (2005). *Fischer Black and the revolutionary idea of finance*. Hoboken: John Wiley & Sons, Inc.
- Micheni, B.C.J. (2013). The effects of portfolio management strategies on financial performance of investments companies in Kenya: a case study of Centum Investments. *An unpublished master's thesis of the University of Nairobi*.
- Mills, E., & Zeng, K. (2021). Portfolio management strategies of cryptocurrencies. *International Journal of Applied Decision Sciences*, 14(1), 43-54.
- Mossin, J. (1966). *Equilibrium in a Capital Asset Market*, *Econometrica*, 34(4), 768–783.
- Mugenda, O.M. and Mugenda, A.G. (1999) *Research Methods: Quantitative and Qualitative Approaches*. Acts Press, Nairobi.
- Muthoki M., (2018). *Transcentury earnings hit by lower infrastructure spend, credit crunch*. Retrieved from <https://www.businessdailyafrica.com/corporate/companies/TransCentury-issues-profit-warning/4003102-4328992-nusapgz/index.html>
- N. S. E (2018). *Annual Report 2017*. Nairobi: NSE.

- Omisore, I., Munirat, Y., & Nwifo, C. (2012). The modern portfolio theory as an investment decision tool. *Journal of Accounting and Taxation*, 4(2), 19-28.
- Osano, B.O. (2013). The effect of investment strategies on FP of investment funds in Kenya. *An unpublished master's thesis of the University of Nairobi*.
- Osewe, L. A. (2020). *Effect of portfolio diversification on financial performance of unit trust listed at the Nairobi Securities Exchange, Kenya* (Doctoral dissertation, University of Nairobi).
- Panagiotidis, T. (2002). Testing the assumption of Linearity. *Research Gate Journal* , 4(4), 78-90.
- Rehman, S. S. U. (2013). Relationship between financial leverage and financial performance: Empirical evidence of listed sugar companies of Pakistan. *Global Journal of Management and Business Research*, 5 (3), 45-49.
- Ross, S. A. (1976). The Capital Asset Pricing Model (CAPM), short-sale restrictions and related issues, *Journal of Finance*, 32 (1), 69-77.
- Salisu, A., & Olofin, O. (2009). Testing for heteroscedasticity and serial correlation in a two-way error component model. *Research gate journal*, 9 (4), 125-141
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk, *Journal of Finance*, 19 (3), 425-442.
- Tong, S. (2004). Does capital structure affect institutional investor choices? *Journal of Investing*, 2(8), 53-66.
- Zabiulla, S. (2014). Portfolio strategies of fund managers in the Indian capital market. *IIMB Management Review*, 26 (1), 28-58.

APPENDIX I: LIST OF UNIT TRUSTS REGISTERED AT THE NSE

	Unit Trusts
1	Afri-Allian-Fixed Income Fund
2	Afri-Allian-Kenya Equity Fund
3	Africa-Alliance-Kenya Managed Fund
4	Africa Alliance Kenya Shilling Fund
5	AlphaAfrica Kasha MMF
6	Alphafrika Hifadhi Fixed Income Fund
7	Amana Balanced Fund
8	Amana Growth Fund
9	Amana Shilling Fund
10	Apollo Balanced Fund
11	Apollo Equity Fund
12	Apollo MMF
13	Britam Balanced Fund
14	Britam Bond Plus Fund
15	Britam Equity Fund
16	Britam Money Market Fund
17	CIC Balanced Fund
18	CIC Equity Fund
19	CIC Fixed Income Fund
20	CIC Money Market Fund
21	CIC Wealth Fund
22	Co-op Money Market Fund
23	Cytonn High Yeild Market Fund
24	Cytonn Balanced Fund
25	Cytonn Equity Fund
26	Dry Associates Balanced Fund
27	Dry Associates MMF
28	Equity Balanced Fund
29	Equity MMF
30	GenCap Hela Imara Fund
31	ICEA Lion Bond Fund
32	ICEA Lion Bond Fund A
33	ICEA Lion Capital Growth Fund
34	ICEA Lion Equity Fund
35	ICEA Lion Growth Fund
36	ICEA Lion Hybrid Fund
37	ICEA Lion Income Fund B
38	ICEA Lion MMF

39	ICEA Lion Savings
40	Madison Balanced Fund
41	Madison Equity Fund
42	Madison MMF
43	Nabo Africa Balance Fund
44	Nabo Africa Fixed Income Fund
45	Nabo Africa MMF
46	NCBA Equity Fund
47	NCBA MMF
48	Old Mutual Balanced Fund/Toboa
49	Old Mutual Bond Fund
50	Old Mutual Equity Fund
51	Old Mutual Money Market Fund
52	Sanlam Chama Fund
53	Sanlam Balanced Fund
54	Sanlam Pesa MMF
55	Zimele Balanced Fund
56	Zimele MMF