PORTFOLIO COMPOSITION AND FINANCIAL PERFORMANCE OF INVESTMENT COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA.

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A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF BUSINESS, ECONOMICS, AND TOURISM IN PARTIAL FULFILMENT FOR THE AWARD OF DEGREE IN MASTERS OF SCIENCE IN FINANCE OF KENYATTA UNIVERSITY.

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DECLARATION

This thesis was completely original to me and was not previously submitted for the award of degree or any other academic award in any university.

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DEDICATION

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

BLM	Black-Litterman Model
CAPM	Capital Asset Pricing Model
CIS	Collective Investment Scheme
CPI	Consumer Price Index
CMA	Capital Markets Authority
ESG	Environmental Social Governance
GDP	Gross Domestic Product
IOSCO	International Organization of Securities Commission
ICI	Investment Company Institute
IMF	International Monetary Fund
MPT	Modern Portfolio Theory
MREIT	Mortgage Real Estate Investment Trust
NSE	Nairobi Securities Exchange
NAV	Net Asset Value
OLS	Ordinary Least Squares
PWC	Price Waterhouse Coopers
PER	Portfolio Expected Return
ROA	Return on Assets
ROI	Return On Investment
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

Bonds Investment	This is fixed income investments within the securities exchange in both treasury bonds and corporate bonds. This was measured by the proportion of the value of the bond investments.
Capital Markets	A sector of the financial system that exclusively deals with raising capital via instruments such as stocks, bonds, treasury bills and other investment assets.
Equity Investment	This is amount of money invested in common stocks. This was measured by the proportion of the value of the equity investments
Financial Performance	A measure of an organizations capacity to use resources to generate revenue or a representation of an organization’s policies and actions in financial terms. This was proxied by return on investment.
Investment Company	A company that invests its shareholders' funds in several asset classes, including bonds, equities, and real estate, is known as an investment company.
Mutual Funds	A general term for reserves permit pooling of cash with that of different financial backers and oversaw by a group of venture experts. It was estimated utilizing the proportion of cash put resources into common assets.

Portfolio Composition	This is active investment which consists of a variety of assets and investments to build a portfolio. The volume of investments in stocks, bonds, mutual funds, and real estate was used to gauge this.
Real Estate	It is a sort of real property that is used for personal, commercial, or modern reasons and typically refers to any natural resources found on the ground, such as water or minerals. It was calculated using a proportion of the money invested in land.
Inflation Rate	It is the pace of expansion in costs over a given time-frame. It was measured using consumer price index.

ABSTRACT

Stakeholder choices are greatly swayed by potential gains from investment. They generally lean towards opportunities that promise heftier rewards rather than those that offer lower returns. The downward trajectory in performance observed in investment firms enlisted on the Nairobi Securities Exchange shoulders much of the blame for this. By scrutinizing the interplay between the financial performance of publicly traded investment ventures in Kenya and the makeup of investment portfolios, this inquiry sought to furnish a response to this query. The focal point of this inquiry was to assess the influence of portfolio composition on the profit margins of investment firms featured on the Nairobi Securities Exchange. Five investment firms listed on the Nairobi Securities Exchange were the subjects under investigation. To ensure a holistic grasp of the topic at hand, the research melded principles from other theories, including the Modern Portfolio Theory, Quantity Theory of Inflation, Capital Asset Pricing Model, Theory of Active Portfolio Management and the Black-Litterman Theory, to appraise a company's holdings. The scrutiny adopted a theoretical model to assess a company's holdings. The examination grounded itself on positivist philosophical tenets and a causal research approach. The five investment firms listed on the Nairobi Securities Exchange constituted the intended recipients of this inquiry, which was executed using secondary data procured from the exchange and the websites of the relevant investment firm. The research study commenced in 2015 and concluded after an eight-year span, terminating in 2022. To ensure the research was conducted within the bounds of legality and ethics, Kenyatta University and the National Commission for Science, Technology, and Innovation both provided their sanction for the study to gather data. In the data analysis phase, both descriptive and inferential statistics were brought into play. Descriptive statistics, including standard deviation, mean, and median, were presented in tables and charts. In terms of inferential statistics, panel regression analysis and correlation were applied. Prior to executing the panel regression analysis, diagnostic tests were administered to affirm the assumptions of the panel model. The outcomes gleaned from the panel data exhibited that venturing into equity funds exhibited a favorable connection with financial performance. Bond investments and financial performance displayed a feeble correlation. A slight and statistically insignificant affirmative correlation surfaced between real estate investments and return on investment. Mutual fund investments had a constructive and noteworthy influence on the financial performance of investment firms. The interplay between the financial performance of Kenyan listed investment entities and the composition of their portfolio was significantly shaped by inflation. The study indicated that the financial performance of investment firms registered on the Nairobi Securities Exchange was markedly influenced by the composition of their portfolio. The inquiry unearthed a substantial correlation between returns on investment and equity fund investments. Financial performance and investments in mutual funds exhibited a modest but constructive correlation. Bond and real estate investments were found to have no appreciable effect on the return on investment for listed investment enterprises. To enhance their financial performance and more effectively mitigate their firm's investment risk, the study recommended that investment company management uphold a well-balanced portfolio of investments. In an endeavor to refine their financial performance, investment firms should give heed to equity investments. This necessitated investing in dependable counters with superior dividend payout and appreciation potential.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

It is common to see portfolio structure as a challenging field with no easy ways to optimize a portfolio (Aliu, Pavelkova, & Dehning, 2017). Adding more assets to a portfolio can reduce its risk, and an investor's choice of portfolio is influenced by both potential profits and risk tolerance (Bhattacharjee, 2017). Furthermore, risk and return are the most crucial factors to take into account while making investing decisions, especially when it comes to portfolio management, according to Sethilnathan (2016). A well-structured portfolio tailored to an investor's needs should be built. Lowering investment risk while maintaining the expected return on investment is the goal of the well-known investing strategy known as portfolio optimization (Lekovic, 2018).

Security theories, shared resource theories, esteem adventures, and land theories are just a few of the many areas that adventure groups can help with (Norsim, Yakob, and McGowan, 2019; Myskova and Hajek, 2017). The company in charge of these assets has had tremendous growth, is developing quickly, and ought to keep doing so, according to Englishman Haldane (2018). Even a cursory review of the pertinent data reveals that Haldane has a strong case. A total of $37.3 trillion in assets were managed in 2004. But in 2016, it rose to $85 trillion, according to a Price Waterhouse Coopers research published in 2019. According to Price Waterhouse Cooper's projections, the total value of assets under managed globally would almost quadruple to a startling $145 trillion by 2025 (PWC 2019). Geographically next to the Bound together Domain, the United States is a significant

asset to the board firm and contributes significantly to the organization's revenue generation. AUM increased from around half of GDP to 240% of GDP between 1946 and 2014, expanding at a rate that was approximately five times higher than GDP (Haldane, 2018). The United Kingdom offers comparable examples.

According to Garca, Ortiz, Población, and Sarto (2013) in Spain, fund managers do not keep a fixed portfolio for their theory system; instead, the amount of their resources varies all the time due to monetary sponsor purchases and recoveries. Asset managers have found that cash flows and the range of asset betas have a negative correlation, with the former showing stronger reactions when money leaves an asset than when it arrives. Furthermore, the non-risk-adjusted average annual returns of five global portfolios beat the returns of US mutual funds by over 10%. The portfolio consisting of all Worldwide Common Resources (IMF) performed much better than the USMF on a risk-adjusted basis. Despite having higher risk profiles, new international funds did better than US mutual funds in absolute terms.

Over the coming years, Asia is expected to see the biggest expansion in funding sources (Price Waterhouse Cooper, 2019). As much of that business as possible will be retained by current fund managers based in the United States. As investment enterprises continue to grow at an expected rate, worries about their impact on financial stability have arisen. Numerous institutions have expressed worry about these issues, including the Financial Stability Board in 2017, the Office of Financial Research in 2015, as well as the International Monetary Fund (IMF). Lack of liquidity, linkages and concentration issues, as well as increased cyclicality, are the main problems. Although these issues affect the whole financial sector, they have a disproportionately large and progressive impact on the

US financial asset management business. The Global Financial Crisis (GFC) of 2007–2008 showed how some financial events have the potential to lead to dangerous financial instability.

According to Laes and Silva (2014), luck rather than competence is more likely to have contributed to the success of Brazil's best fund managers. On the other hand, research indicates that inadequate management, as opposed to pure luck, may be the reason for the low performance of the funds that rank lowest. Larger funds outperform smaller and mid-sized ones in terms of performance. According to Jensen's Alpha, fund managers in Africa lacked both specialized knowledge and the ability to foresee the market (Tan, 2015; also Mohamed, 2014). In contrast to the local market index, funds are thought to yield subpar results. Kenya did not show portfolio optimization, but the risk of individual funds was frequently lower than the risk of the market. According to Oduwole (2015), Nigerian mutual fund managers are unable to correctly forecast stock prices in order to outperform buy-and-hold and buy-the-market strategies.

Nigeria's shared fund market has been steadily expanding. In 2017, there were a total of 202,059 unit holders, and the Net Asset Value (NAV) reached an impressive $104,851,000,000. By June 2018, the nation boasted 38 fund overseers; nevertheless, only six of them commanded 75% of the assets. As per NSE records from December 2019, funds traded on the Nigerian Stock Exchange (NSE) had a market capitalization of $263.82 billion naira ($1.055 billion) and a net asset value of $259 million ($1.039 billion naira). In 2013, the World Bank and the International Organization of Securities Commissions (IOSCO) worked together on a research to understand the development of mutual funds in Nigeria. Oduwole (2019) did drew attention to further issues with the company, such as

the lack of data centers to help investors evaluate the performance and worth of readily accessible mutual funds. Due to their lack of industry expertise and experience, Nigerian retail investors struggle to evaluate the performance of existing mutual funds.

Any sort of unit trust plan enabled the certified asset manager to pool modest sums of money, which are then used to acquire shares and money market instruments on behalf of the investors (Price Waterhouse Coopers, 2019). Unit trust schemes exist in two varieties: open-ended and closed-ended. Investment trusts, unconstrained investment companies, real estate investment plots, and specialty funds are examples of open-end investment strategies used in Kenya. Investment enterprises are required to register under the Capital Markets Act of 2001, and after doing so, they are each issued a license that allows them to operate in compliance with the license's conditions. Only five investment firms were approved and listed with Kenya's Capital Markets Authority (CMA) and Nairobi Securities Exchange (NSE) as of January 31, 2021. These companies were Kurwitu Ventures Limited, Home Afrika Limited, Trans-century Limited, Olympia Capital Property Limited, and Centum Investment Company Limited.

Investment firms that are listed in Kenya often possess a diverse portfolio of assets. To invest in a variety of assets that most individuals would find challenging to do themselves and to provide returns for its stakeholders and investors, they hire professional asset managers. For the sake of investors, these asset managers are in charge of managing assets worth billions of shillings (Nairobi Securities Exchange, 2020). Investment businesses maintain a diverse portfolio of bonds, equities, and real estate to protect their clients' money from losing all of its value in the event that one particular investment collapses. The portfolio may include bonds, shares, options, futures contracts, gold funds, warrants, real

estate, and production facilities, among other assets, in order to retain value. Having a varied portfolio of investments can improve your quality of sleep at night. Managing a portfolio include allocating cash, assessing possible gains and losses, and coordinating short- and long-term goals (Chen, 2018). The effect of portfolio composition on financial performance remains a contentious issue, given the disparities in research findings, particularly in the global context. Many factors affect the returns of investment enterprises, but portfolio diversity is especially crucial when it comes to the best-performing stocks, which are usually impacted by automated financial technologies.

1.1.1 Financial Performance

Financial performance is a measure of an organizations capacity to use resources to generate revenue or a representation of an organization’s policies and actions in financial terms. This was proxied by return on investment. When determining if a corporation is financially successful, both the trading company's and its clients' perspectives are taken into consideration. The rates of return offered to clients based on their original investment, as perceived from their perspective, are what are highlighted. The majority of firms listed on the stock exchange, according to Mbogo, Aduda, and Mwangi (2017), draw investors because of their attractiveness to both corporate and individual investors. Although employees and depreciation are considered when making changes, the firm's main priority is the profits provided to clients. The net profit after taxes is calculated after making the required changes to elements like taxes and interest payments. A range of profit indicators can be used to examine long-term financial reports, and performance monitoring is essential for keeping companies accountable.

Managers must take into account the requirements of all stakeholders in order to increase performance. One of the most significant performance indicators is profit on investments, which is calculated by dividing net profit by total assets. Return on assets, or ROA, is the most effective statistic for measuring success.

A strong case was made by Willie and Hopkins (1997) against using branch numbers, asset size, or technological prowess as the primary indicators of an organization's performance. Rather, they suggested that Return on Equity (ROE), or Profit from Equity for its Shareholders, be used as the main indicator. Return on equity (ROE) is cited as the standard for evaluating financial success. Return on Equity (ROE) and Return on Investment (ROI) were used as performance metrics in the study.

For ROI, use the formula "100% * Net Profit/Cost of Investment." Just add the net profit and the entire investment cost to determine ROI. Because ROI concentrated on investments in equities, mutual funds, securities, and real estate, it was selected for their study.

1.1.2 Portfolio Composition

A portfolio is a collection of several investments that people can buy or have professionally handled. According to Markowitz (1959), a solid portfolio is more than just a selection of top-notch equities and bonds. This carefully considered combination provides both safety and strong returns across a range of chances. According to Markowitz, investors should put together a diversified portfolio that meets their needs.

One popular investing tactic to reduce risk and yet anticipate respectable returns is portfolio diversification (Lekovic, 2018). Investment companies distribute their capital among various assets such as mutual funds, equities, bonds, and real estate.

Portfolio management is a complex discipline that does not offer straightforward solutions for portfolio optimization, claim Aliu, Pavelkova, and, Dehning (2017). According to research by Aliu, Pavelkova, and Dehning (2017), a portfolio's risk level decreases as the number of assets rises. They come to the conclusion that an investor's risk tolerance and prospective rewards both affect their portfolio. Similar to this, Sethilnathan (2016) claims that risk and return are the most important aspects to consider when making investment decisions, especially when managing a portfolio. Although investors are aware of the advantages of diversification, Kumar (2001) contends that they occasionally approach diversification naively, neglecting to take stock correlations into consideration. As they work toward economic development, nations focus on expanding their stock markets (Adebayo, 2016). Since domestic savings are invested in the economy through these markets and banks, the success of the stock market is a reliable predictor of the state of the country's economy (Ndwiga and Muriu, 2016). To stay in operation, modern organizations need to ensure that their financial structure facilitates both development and adaptation (Pandey, 2009). As such, it is imperative that these organizations consider the potential impact of stock investment decisions on their overall profitability.

According to Gathenya (2015), equity investments are the total amount of money invested in a business through the purchase of its shares. The stock market reflects the everyday trading of the stocks of these companies. The majority of firms listed on the stock exchange, according to Mbogo, Aduda, and Mwangi (2017), draw investors because of their attractiveness to both corporate and individual investors. Investors who do not intend to keep positions for a lengthy period of time find business shares more alluring since they are more liquid (Bessler, Opfer, and Wolff, 2017). The success of the equity markets is

assessed based on the worth of equity investments in the overall investment strategy. The performance of equity investments will be evaluated based on the amount of money invested in shares.

Conversely, bonds are a type of debt that operates similarly to a loan between the bondholder and the issuer, which is typically a government agency or business (Felicien, 2015). Bonds, according to Iqbal, Hameed, and Qadeer (2012), are "fixed-return investments from which the borrower is obligated to make periodic fixed interest payments to the bondholder." Generally speaking, bonds are less risky and yield less than stocks. One of the main issues with bonds is default risk, also referred to as credit risk. The two most popular types of bonds are corporate and government bonds. Compared to government bonds, commercial bonds offer higher returns but also greater risk (Bhattacharjee, 2017). We'll assess bond returns in relation to the entire amount invested.

Mutual funds, which combine the capital of numerous participants to buy equities, are managed by professionals. Both small and large businesses are able to make these investments. Mutual funds remunerate purchasers and sellers with a portion of the assets under management (AUM) as well as a sales charge known as a load.

Real estate investing is the process of purchasing, holding, managing, leasing, and selling real estate with the goal of turning a profit. The development of real estate properties as a component of an investment strategy is known as real estate development, which is a subset of real estate financing. In contrast to other assets that may be easily sold for cash, real estate requires a substantial initial investment that can be borrowed against, time, and a consistent revenue stream to be successful. Real estate investing is a risky endeavor that calls for awareness of these hazards. The performance of mutual fund investments will be

monitored in a special investment journal. We'll maintain an investment journal just for tracking our real estate holdings.

1.1.3 Inflation Rate

Governments are powerless to influence uncontrolled external factors like macroeconomic pressures. The success of a corporation and its ability to make forecasts for the future can be impacted by macroeconomic conditions, either directly or indirectly (Nurlaily et al., 2013). These include things like GDP growth, loan interest rates, and the rate of expansion. The entire monetary production of the economy, represented as a percentage, is a nation's GDP. Unfavorable economic circumstances destroy a money portfolio's inherent value. Higher profits for individuals who take a chance are the result of increases in GDP and wagering willingness (Suheyli, 2015).

What is meant by "expansion" is the constant, gradual increase in average prices within an economy. Even a minor growth rate can have a significant impact on a nation's economic sector (Muthama, Mbaluka, & Kalunda, 2013). Expansion, which is evident in speculating enterprises, can have a negative effect on expenses and specialized arrangements, for example. Businesses' investments lose value when they plan for expansion, which has an adverse effect on output quality and technical performance (Suheyli, 2015). Simiyu and Ngile (2015) state that a Consumer Price Index (CPI) is used to track the worth of a market basket of items purchased by families and customers. The studies done by Odidi, M. V. & Jagong’o, A. (2020)., on moderating effect of inflation on the relationship between foreign direct investment, financial market development and economic growth, justified the Inflation rate as the moderating variable in the study.

1.1.4 Portfolio composition and Financial Performance of Investment Companies Listed in Kenya

The Kenyan Capital Markets Authority (CMA) issues licenses to adventure businesses that operate there. The Capital Markets Act of 2001 is the law that regulates these businesses, which are known as Collective Investment Schemes (CIS). The guidelines specified in the license that each investment firm is awarded must be rigorously followed. Just five trading organizations had CMA registrations and were listed on Kenya's Nairobi Securities Exchange (NSE) as of January 31, 2022.

Kenyan investment firms often diversify their money by owning a range of assets. They use certified asset managers to invest in a variety of assets that most consumers wouldn't have access to on their own. For the sake of their clients and stakeholders, these investment businesses are in charge of managing assets worth billions of shillings (Nairobi Securities Exchange, 2020). To diversify their holdings and lower risk, investment firms hold a variety of assets, including stocks, bonds, and real estate. This indicates that a small number of companies are not essential to their success. The performance of these investment companies is significantly influenced by the growth of the portfolio, particularly when the highest-performing assets perform well. Risk-based analysis is used to assess the performance of these NSE-listed companies. To precisely evaluate their effectiveness and performance, they employ a variety of methods and resources.

Table 1.1 Financial Performance of Investment Companies

Investment Companies	Years	2015	2016	2017	2018	2019	2020	2021
Transcentury		-0.11	-0.05	-0.05	-0.02	-0.5	-0.21	0
Centum	R	0.12	0.04	0.03	0.02	0.01	-0.06	-0.01
Home Afrika	O I	-0.16	-0.16	-0.11	-0.36	-0.43	-0.54	-0.23
Olympia		-0.06	0.11	0.02	1	0.57	1.2	0.8
Kurwitu		0	0	-0.9	-0.7	-0.04	-0.01	0

Source: Researcher (2023)

- For the years 2015 to 2021, the financial results of Transcentury Limited, Centum Limited, Home Africa Limited, Olympia Limited, and Kurwitu Limited showed a negative return on investment. The years 2015 and 2021 show that the negative ROI has decreased steadily over time. From 2016 through 2021, only Olympia Limited was able to maintain a positive return on investment of 0.11, 0.02, 1, 1.2, and 0.8.It was clearly indicated that ROI was on the decline for the majority of investment firms.

1.2 Statement of the Problem

Because financial backers are extra concerned in ventures that possess the potential for higher yields than the companies that offer lesser rewards, the presence of a hypothesis influences whether they will persist in providing resources. The financial presentation, for example, of Transcentury Limited, Centum limited, Home Africa limited, Olympia limited, and Kurwitu Ltd showed a negative return on investment for the duration from 2015 to 2021. The unfavorable ROI has consistently dwindled over the years as demonstrated in

the years 2015 and 2021. Solely Olympia limited had succeeded in maintaining a positive return on investment of 0.11, 0.02, 1, 1.2, and 0.8 for the years 2016 to 2021. The ROI fell by an average of 50% for the period 2015 to 2022 from -0.0425 to -0.0850 for the four investment firms, namely Transcentury Limited, Centum limited, Home Africa limited, and Kurwitu Limited. This downward trend in financial performance thus compels the researcher to investigate why there was a continual decline in financial performance of Investment Companies despite the extensive portfolio diversification by the firms.

Nonetheless, due to a diminishing pattern of execution in listed investment firms recorded in Nairobi Securities Exchange, the obligation of additional substantial returns has been completely unreliable. Listed firms management promote risk-taking by considering the opportunity for substantial earnings with minimal risk.

The firms listed in Nairobi Securities Exchange's encountered losses from 2016 to 2018, according to the NSE Report (2018). For example, Home Afrika lost KSh 888.8 million in 2019 and KSh 346.2 million overall in 2018. The company's diminishing investment portfolios were held responsible for the unsatisfactory performance. As a result of subpar outcomes in 2018, Centum, another investment company, reported a 66% drop in post-tax profits (Centum Yearly Report, 2019).

Kurwitu Company Limited was listed in the Nairobi Securities Exchange in 2014. Since then, the company has undergone numerous periods of inactivity and multiple alterations to its investment strategy, leading to an overall deficit of Kshs 10.8 million in 2017 (Kurwitu Yearly Report, 2018), in addition to a loss of Kshs 5.4 million in 2018. Trans Century also wanted to leave the Nairobi Securities Exchange in 2020 after suffering large

losses. To summarize, the data demonstrates that all individual investment enterprises observed a diminishing pattern over the research duration.

Numerous scholars have delved into this subject. Though the growth rate was not taken into consideration, Hitt, Hoskinson, and Kim (2017) identified a correlation between portfolio composition and firm financial success. Researchers Iqbal, Hameed, and Qadeer found that all businesses performed similarly regardless of the degree of diversity in their portfolios in a 2012 study they conducted to examine the effect of portfolio composition on the financial performance of investment organizations.

Charles (2015) delved into how portfolio composition approaches influenced the financial performance of Centum Ventures and found that portfolio organization wielded a significant impact on success. Kimeu (2015) looked at how portfolio management affected the financial performance of investment businesses listed on the NSE between 2012 and 2014. However, the study found a research gap and concluded that the period from 2012 to 2014 was inadequate.

Musembi and Jagongo (2018) conducted an exhaustive analysis of portfolio development and financial performance, unveiling a fluctuation in the utilization of macroeconomic factors like GDP. While the present study will employ Return on Investment since the focus will be on security investments, mutual funds, equity investments, and real estate ventures, Obiero (2018) utilized Return on Assets (ROA) as a metric to explore the effects of portfolio composition on the financial performance of NSE-listed investment corporations.

The effect of portfolio composition on financial performance remains a contentious issue, given the disparities in research findings, particularly in the global context. Less attention

has been devoted to developing nations like Kenya, with a greater emphasis on research conducted in affluent ones. Consequently, there exists a void in the body of knowledge concerning developing economies like Kenya. Through examining the performance of Kenyan investment firms and providing more pertinent data on the effect of portfolio composition on their success in the country, this research aims to bridge that knowledge gap.

1.3 Objectives of the Study

The study was guided by following general and specific objectives

1.3.1 General Objectives

The general objectives of the study was to examine how portfolio composition affects the financial performance of investment firms listed on Kenya's Nairobi Securities Exchange.

1.3.2 Specific Objectives

The study's objectives were as follows:

- **i.** To investigate how equity investments influence the financial performance of investment firms listed on Kenya's Nairobi Securities Exchange.
- **ii.** To evaluate the effects of bond investments on the financial performance of investment firms listed on Kenya's Nairobi Securities Exchange.
- **iii.** To examine how real estate investments affects the financial performance of investment firms listed on Kenya's Nairobi Securities Exchange.
- **iv.** To assess the effects of mutual fund investing on the financial performance of investment firms listed on Kenya's Nairobi Securities Exchange.

v. To assess the moderating effects of inflation rates on portfolio composition and financial performance of Kenyan investment firms listed in Nairobi Securities Exchange.

1.4 Research Hypotheses

The investigation was directed by the following hypothesis:

H_{01} Equity capital has no significant effect on the financial performance of Kenyan investment companies registered on the Nairobi Securities Exchange.

H_{02} The financial performance of Kenyan investment businesses registered on the Nairobi Securities Exchange is not significantly affected by bond investments.

H_{03} Real estate investment has no significant effect on the financial performance of Kenyan investment companies registered on the Nairobi Securities Exchange.

H_{04} The financial performance of investment businesses registered on Kenya's Nairobi Securities Exchange are not significantly affected by investments in mutual funds.

H_{05} Inflation rates has no significant moderating effects of on portfolio composition and financial performance of Kenyan investment firms listed in Nairobi Securities Exchange..

1.5 Significance of The Study

Policymakers received a quick overview of the research's potential for bridling portfolio composition by strategy developers to achieve the Millenium Development Goals and Kenya's main development and monetary blueprint, Vision 2030. Financial resource investors are worried about how well risk profiles and portfolio synthesis are being executed. When building their portfolios, reserve managers have the option to employ

growth-oriented or value-oriented techniques. The information helped reserve managers make better portfolio decisions and consider factors that have a bigger influence on the development of speculation. Store managers may be able to help clients make better business decisions by maximizing the value of their capital expenditures by identifying key development factors.

The goal of the study was to support advisors and executives who try to counsel investors, financial backers, and state-run administrations on how to effectively use portfolio composition to minimize risks. The study's concept states that fundamental data will be useful for planning and recommends alignment with both financial and monetary objectives. By comprehending fundamental development components, investors can also ascertain whether financial managers make wiser speculating judgments on their contributed capitals.

Through the CMA and the NSE, the public authority was obtained to formulate strategies and policies that promote the growth of trading enterprises. The evaluation functioned as a basis for upcoming scholarly investigations. For academics and professionals interested in leading or conducting further research on portfolio composition and financial performance in the Kenyan setting, the study offers observational material thus providing empirical literature.

1.6 Scope of the Study

Home Afrika Limited, Trans-century Limited, Olympia Capital Property Limited, Kurwitu Ventures Limited, and Centum Limited were the subjects of the investigation. The goal is to assess how portfolio management affects investment businesses that are listed on the Nairobi Securities Exchange in terms of their financial performance. The portfolio

structure comprised value-related interests, shares, real estate, and shared asset interests, among others. The context was chosen with consideration for the investment companies' diminishing financial performance as well as the identified empirical gaps. The analysis was carried out between 2015 and 2022, a period when most investment businesses saw a decline in their returns on investments. The chosen time frame was in line with a precipitous drop in the ROI of the businesses.

1.7 Organization of Study

The research is divided into five components. The underlying information on the portfolio piece and financial performance is included in the Chapter 1 presentation. It presents the issue and focuses on the goals, importance, scope, and challenges of the review. The hypothetical writing survey, precise writing audit, writing survey framework, and appropriate format are all presented in Section 2 of this study. The third section covers the configuration of the exploration strategy, the target population, the inspection plan, the tools and technique for gathering information, the information inquiry, and the demonstrative testing. Chapter 4 presents the results of the data analysis, and Chapter 5 presents the findings, conclusions, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

An overview of the experimental and speculative literature for the subject is given in this chapter. The theoretical literature presents the concepts that underpin the research variables. The empirical section contains studies related to the study variables. The study's conclusion presents the interrelationships between the variables in a conceptual framework.

2.2 Theoretical Literature Review

This section focuses on the relevant theories that give context for the study's contributing components. A solid foundation of relevance to the topic is provided by the idea.

2.2.1 Modern Portfolio Theory

In 1952, Markowitz proposed the Modern Portfolio Theory (MPT), which contends that risk-averse investors may build portfolios to maximize or increase expected returns while taking into consideration a particular degree of market risk. It highlights the fact that higher benefits come with a certain level of risk. MPT lays a big focus on diversification among a variety of companies rather than relying on the average return of a single asset. An investor can profit from diversification by lowering overall portfolio risk by investing in a variety of stocks. The idea's primary flaw is that investors want to minimize return variance and maximize constrained anticipated benefits.

The yield of the asset determines the expected returns, whereas return variation is regarded as a gauge of risk. Portfolio selection is influenced by the trade-off between average return and return variance. MPT states that it is possible to create effective Investing portfolios that deliver the highest predicted return at a given degree of risk. The resources in these effective portfolios have the best expected returns, outperforming alternative combinations while maintaining the same degree of risk. The premise that investors are logical individuals who want to maximize their utility or happiness is the first—and possibly most important—assumption of modern portfolio theory. This suggests that the main objective of investors is to expand their wealth and that they base their judgments on a rigorous examination of the information that is available. The portfolios that offer the highest projected return for a specific level of risk is chosen by rational investors after weighing the risks and projected returns of various investment possibilities.

The idea of Homo economics idealized economic actor who continuously makes rational decisions is the foundation of this presumption. MPT is predicated on the idea that, generally speaking, investors make logical judgments when making investments, even though real-world investors might not always act exactly logically because of behavioral biases and emotions. The second fundamental tenet of MPT is that, given an equal expected return, investors are risk-averse and would rather take on less risk than more. This assumption is backed up by actual data and is consistent with the common sense understanding that, given the same circumstances, most individuals would rather have a more predictable outcome and are uncomfortable with uncertainty. The standard deviation of an investment's returns, which gauges the degree of variability or volatility, is commonly used in MPT to quantify risk. Building The objective of rational investors is to create

portfolios that offer the highest projected return for a particular level of risk. This inspires the concept of the efficient frontier, a set of portfolios that show the ideal equilibrium between return and risk. A portfolio along the efficient frontier that corresponds to an investor's risk tolerance will be selected.

A key idea in modern portfolio theory is diversification, which is based on the idea that distributing investments throughout a range of assets can lower a portfolio's overall risk. This premise is supported by the fact that different assets have unique risk-return profiles and that there is imperfect correlation between their prices. The movements of one asset may cancel out the movements of another when there is imperfect correlation between them, lowering the risk of the portfolio as a whole. The idea of the correlation coefficient, which quantifies how much the returns of two assets move in tandem, serves as an illustration of this premise. When two assets move in perfect sync and have a correlation coefficient of +1, diversification is not beneficial. Nonetheless, diversification can assist in lowering the risk of the portfolio without compromising expected return if the correlation is less than +1 (and ideally negative or zero). MPT makes the assumption that investors have access to trustworthy data regarding the risks and expected returns of various investments or assets. Investors are able to build their portfolios with knowledge thanks to this information. It is predicated on the idea that historical risks and returns may be used to reasonably predict future risks and returns.

It can be difficult to forecast future returns and risks in practice, and these estimates are frequently rife with ambiguity and inaccuracy. Nonetheless, MPT is predicated on the idea that investors can approximate projected returns and risks fairly by using statistical techniques and historical data. MPT recognizes that investors' varying investing time

horizons impact their choices regarding risk tolerance and asset allocation. In order to potentially achieve larger long-term profits, an investor with a longer time horizon, for instance, would be more willing to tolerate higher short-term volatility. On the other hand, a shorter-term investor can put less emphasis on risky investments and instead prioritize capital preservation. This presumption acknowledges that every investor has different financial objectives and limits, and that each investor's investment strategy should be customized to take these things into account. It emphasizes how crucial it is to take one's investment horizon into account when building a portfolio.

MPT functions in a fictitious environment without taking transaction fees or taxes into account. In actuality, transaction fees and taxes can have a big influence on portfolio efficiency and investment returns. Capital gain returns may be eroded by taxes, and the advantages of trading may be diminished by transaction costs like brokerage fees. Although the mathematical modeling is made simpler by MPT's assumption of no taxes and transaction costs, real-world investors still need to give these aspects significant thought when making decisions. Although this assumption represents a constraint on MPT, it can be overcome by employing a number of methods and plans intended to reduce these expenses. According to MPT, it is impossible to regularly generate above-average returns through superior analysis or information, and markets are assumed to be efficient, which means that asset prices accurately reflect all available information. Every investor has access to the same information in an efficient market, and prices react quickly to fresh information.

According to the Efficient Market Hypothesis (EMH), it is difficult to consistently beat the market by selecting specific stocks or predicting market movements, is strongly tied to this

premise. Rather, MPT promotes a passive strategy in which investors use broad diversification to try and mirror the performance of the market as a whole. MPT makes the assumption that diversity has a positive, win-win effect on the portfolio. It does this by making sure that there is little connection between the assets in the portfolio. One drawback of MPT is that it can be challenging to accurately analyze the relationship coefficient between two assets, especially when dealing with multiple assets. This requires specialist tools and isn't always feasible.

In order to deduce the validity of the correlations between risk, return, and diversity, modern portfolio theory makes certain assumptions. The normal distribution of asset returns, prudent investing behavior that shies away from needless risk, the goal of maximizing profits in all circumstances, and equal access to information for all investors are some of these presumptions. A single investor's incapacity to significantly impact market prices, the availability of infinite money at the absence of trade expenses and taxes, the risk-free rate of return, and the homogeneity of investor return expectations are among the other presumptions. While some contend that specific analysis yields more accurate information, others think that the buy-and-hold approach recommended by MPT is inefficient for diversification. Rather, they contend that the best outcomes can be obtained through active portfolio management.

Therefore, the theory is the main theory of this study as it anchors the dependent variable financial performance as supported by Markowitz who proposed the Modern Portfolio Theory (MPT), which contends that risk-averse investors may build portfolios to maximize or increase expected returns while taking into consideration a particular degree of market risk.

2.2.2 Capital Asset Pricing Model

William Sharpe, an economist, created the Capital Asset Pricing Model (CAPM), which won the 1970 Nobel Prize in Economics. He said that investing involves two different categories of risk: systematic risk, often known as market risk, which cannot be avoided, and includes factors like interest rates, economic downturns, and geopolitical events; and unsystematic risk, which is specific to individual stocks and can be reduced by diversification when adding more stocks to a portfolio. It is, to put it another way, the portion of a stock's performance that has no connection to broad economic market movement. Even in the most diversified portfolio, systematic risk can still exist and be controlled, even while diversity helps to control unsystematic risk.

A technique is provided by the Capital Asset Pricing Model (CAPM) of assessing systemic risk and a fair return on investment. According to Sharpe, the expected return on a stock or portfolio should be equal to its cost of capital. The "equity market premium," which is added to the cost of capital, is intended to compensate investors for taking on more risk. The market's anticipated return less the risk-free rate of return results in this premium. Then it is multiplied by "beta," a term that gauges a stock's price volatility in relation to the market. A beta above one indicates more sensitivity to both volatility and market movements, whereas a beta below one indicates less volatility and sensitivity to both.

The foundation of CAPM is the Efficient Market Hypothesis (EMH), which asserts that financial markets are effective (Fama, 1970). Asset prices in an efficient market reflect all available information, and it is not feasible to regularly generate above-average returns by using privileged information or past price data analysis. This belief, which derives from Eugene F. Fama's writings, contends that competence should not be the basis for

outperforming the market; rather, luck should play a larger role. Market efficiency was divided into three categories by Fama's research: weak, semi-strong, and strong. While strong efficiency incorporates all information, including insider information, semi-strong efficiency adds the incorporation of all publicly available information. Weak efficiency suggests that historical price and volume Prices at the moment already take information into account. The moderately powerful efficiency is the main foundation upon which CAPM is based, presuming that investors have access to and utilize all information related to asset price that is made publicly available.

The fundamental tenet of the CAPM, which states that an asset's expected return should correspond to its degree of systematic risk (beta), is supported by the EMH assumption. The core tenets of CAPM would be undermined if markets were not efficient because investors might regularly generate excess returns by taking advantage of securities that were mispriced. The Capital Asset Pricing Model (CAPM) and Harry Markowitz's Modern Portfolio Theory (MPT) both start with the premise that investors are logical and risk-averse (Markowitz, 1952). Investors that are reasonably look for the highest return possible given the level of risk, seek to maximize their utility or satisfaction. When presented with an equal projected return, risk aversion suggests that investors would rather take on less risk than more. This presumption, which recognizes that investors typically shun uncertainty and seek more predictable results, is based on economic theory and psychology. It gives a useful framework for comprehending investor decision-making in the context of asset pricing, even though it oversimplifies the complexity of human behavior.

According to CAPM, investors assess and choose their investments based on the projected returns and risks of an asset over a specific time period. This implies that investors have a one-period investment horizon. This supposition aligns with the MPT framework and streamlines the model (Markowitz, 1952). As a matter of fact, investors' investing horizons can differ and their inclination toward risk can evolve over time. On the other hand, the one-period investment horizon assumption makes it possible to create the CAPM formula mathematically, giving an essential framework for comprehending asset price correlations. A risk-free rate exists, represented by the yield on a government bond, is another fundamental tenet of the CAPM. An asset that has zero standard deviation of returns, or no risk, is known as the risk-free rate. In reality, risk-free investments are frequently represented by government bonds issued by stable governments.

Investors can evaluate the relative risk and return of other assets using the risk-free rate as a benchmark. The risk premium, or the excess return anticipated from investing in a risky asset relative to the risk-free rate, is computed using this information as a base. The risk-free rate assumption makes CAPM computations easier to understand and permits the division of an asset's projected return into a beta-based risk premium and a risk-free component (Fama & French, 2020). According to the CAPM, all investors have similar expectations for the risks, returns, and asset correlations in the future. This suggests that all investors have the same understanding of the risk and expected returns of each asset, as well as how each asset relates to the market as a whole. Although this assumption makes the model simpler, it may not accurately represent the variety of viewpoints and data that exist in actual marketplaces. In reality, there can be differences in investors' opinions and projections, which could affect asset pricing. However, the homogeneous expectations

assumption makes it easier to create a methodical framework for evaluating expected returns and asset values.

Since it is assumed that investors have unlimited access to credit, The Capital Asset Pricing Model (CAPM) implies that there are no constraints on leverage at the risk-free rate. By enabling investors to build portfolios with any mix of hazardous assets and the risk-free asset, this assumption simplifies the model. (Black, Jensen, & Scholes, 2019). The ability of an investor to use leverage in their holdings may be limited by transaction costs, margin requirements, and borrowing limits, which are typically linked to lending and borrowing. But the assumption of infinite borrowing and lending is a basic concept in CAPM that enables the Capital Market Line (CML) must be established as well as the Security Market Line (SML), which must be derived. By concentrating on one-time investment decisions, the CAPM model simplifies asset returns by assuming that they follow a single-period distribution. According to this assumption, asset returns do not show serial correlation, which means that a period's return is independent of its prior period's return (Lintner, 2015). Autocorrelation, or the idea that previous returns affect future returns, is actually a common feature of asset returns. Nonetheless, the mathematical foundation of the CAPM was developed with the use of a simplifying assumption known as the single-period asset returns assumption.

As a result, the framework of the Capital Asset Pricing Model (CAPM) is built on a number of fundamental assumptions; the presence of a risk-free rate, limitless borrowing and lending at the risk-free rate, rational investor behavior, homogenous expectations, a one-period investment horizon, the efficient market hypothesis, and single-period asset returns are some of these presumptions. Although these suppositions make the model simpler, they

offer a methodical and scientific framework for comprehending asset price and the evaluation of risky securities.

Notwithstanding its benefits, the CAPM has drawbacks in that it ignores a number of real-world occurrences, which leads investors to make bad financial decisions. An investor may be able to obtain additional, more precise valuation procedures with a little more work and calculation. Since the US government, which is frequently cited as the risk-free benchmark, cannot be lent to or borrowed from at the same rate as individual investors, the assumption for instance, achieving a "risk-free" rate of return is impossible. Moreover, the CAPM predicts future volatility based on historical data, but market securities may deviate significantly from past trends. Moreover, even though the Capital Asset Pricing Model (CAPM) suggests that portfolio diversity removes most risks, diversification cannot completely eliminate all threats. Additionally, this model's application and testability are limited because it is predicated on a number of assumptions about investor behavior and markets that may not always hold true in real-world situations. Despite its flaws, the Capital Asset Pricing Model is nevertheless frequently employed in finance today. to assess risky securities and anticipate asset returns based on risk tolerance and capital costs. This theory is important for analyzing financial performance and investment choices in a range of contexts, including the financial market in Kenya, where market development has a major role in defining prospects and results for investments. It also has practical applications.

2.2.3 The Black-Litterman Theory

The Black Litterman Hypothesis (BL) was put forth by Black and Litterman in 1990. It was thought that speculating would overcome the deformities of present portfolio speculation (MPT) that monetary supporters had to deal with. The model developed by

Black and Litterman includes both Markowitz's CAPM portfolio speculation and the mean-variance improvement theory. Surprisingly, the use of bonds, financial structures, and overall CAPM concordance values can undermine an abstract acting strategy asset assignment models, claim Black and Litterman (1992).

The Bayesian technique is used by the BL model to explain the probability dispersion of asset returns. This makes it feasible to provide the finest potential portfolio loading for certain assets by fusing the perspectives of a financial backer with the typical overflow returns. Despite a weighted evaluation of portfolios reflecting the opinions of the financial benefactor, the ideal portfolio for an unlimited financial patron is compared to the market balance portfolio (Black and Litterman, 1990). When supply and demand are equal, equilibrium, according to Litterman, ensues. This situation doesn't seem to occur in any financial-related business fields. Anyhow, the presence of certain players in the financial structure, like arbitrageurs, removes divergences from congruity; hence, equilibrium is viewed as a gravitational convergence point rather than a fixed position,taking into account the congruity question and beginning the model with an asset assignment. This assumption indicates that the asset acted as it had in the past and will continue to do so. This section is then modified in light of the financial sponsor's viewpoint of the assets' future presentation. First, the semi-efficiency of financial markets is the basis upon which the model runs. This suggests that while there may occasionally be pockets of inefficiency where prices deviate from underlying values, asset prices generally represent the information that is currently accessible. Although markets are not fully efficient, the model makes the assumption that investors cannot consistently take advantage of these inefficiencies to generate returns that are higher than average. Underlying the model's use of market prices as inputs for predicted

returns, this assumption is crucial since it assumes that market prices provide adequate estimates of genuine asset values. Second, the Black-Litterman framework makes the logical assumption that investors make informed decisions. In this sense, rationality refers to the systematic assessment of the risk and return aspects of investment choices in order to maximize utility or satisfaction. The basis for comprehending how investors formulate opinions about risk and expected returns is this supposition. It is anticipated of rational investors to offer well-founded opinions, which are crucial inputs for the Black-Litterman model.

Thirdly, the model makes the assumption that all investors have uniform expectations for how assets will perform in the future. It makes the assumption that investors agree on expectations for returns, correlations between different assets, and volatilities. This assumption treats the market as a single entity with a collective set of expectations, which simplifies the model, but it does not adequately account for the diversity of viewpoints in actual markets. The Black-Litterman model's primary novelty is that it treats investor opinions as consensual modifications to the state of the market. The approach implies that investor views are not fundamentally different from market expectations, but rather represent modifications or revisions to current expectations. This presumption is consistent with the idea that investors who have opinions that diverge from market pricing aren't always undermining the market's overall efficiency.

In addition, the model makes the assumption that returns have a normal distribution, which makes it easier to calculate expected returns and risk. This assumption contributes to the mathematical tractability of the model, even if it might not adequately capture the non-

normal characteristics frequently seen in financial returns. When necessary, sophisticated iterations of the model can handle non-normal return distributions.

The lack of transaction costs or market frictions is another essential premise. The model imagines a perfect society in which investors can freely exchange assets, modify the allocations in their portfolios, and put their opinions into action. This simplification helps the model to concentrate on the fundamental ideas of integrating viewpoints into the asset allocation process, even though it is far from reality. In reality, market frictions like taxation, illiquidity, and trading fees can have a big influence on investment choices. Additionally, the model makes the assumption that investor opinions are in line with current market values. In other words, opinions should support rather than challenge current market assessments. This presumption is based on the notion that investors evaluate the facts and circumstances around the market, developing opinions that enhance rather than contradict the consensus of the market.

Lastly, the Black-Litterman model makes the assumption that investors have a uniform risk aversion. By ignoring the requirement to take into consideration different risk tolerance levels, it simplifies the model by treating all investors as having equal risk preferences. Although this supposition simplifies the model, it might not adequately represent the range of risk attitudes among actual investors, some of whom might have greater risk tolerance than others. Everyone agrees that by including beliefs about expected outcomes, the BL model weakens and spreads the MPT. But because these projections are essentially sentiments or the output of dynamic assessment models, the BL model has the potential to evoke certain proclivities. A view of a class of assets that is overly certain can therefore result in a portfolio that is more concentrated in that class of assets than the MPT would

recommend. This could result in very terrible disasters. Sponsors that use this tactic financially should consider this. The Black-Litterman hypothesis is pertinent to the topic because it allows financial investors to include a range of assets (such as security, value, land, and pooled savings) into theoretical plans, resulting in typical, extended portfolios that are managed by financial execution.

2.2.4 The Theory of Active Portfolio Management

It was developed by Grinold (1989). The conjecture regards the portfolio as the board structure where the leader still has a chance to break a record-breaking endeavor. Unattainable organization is the term for financial clients or shared savings that don't attempt to generate returns above a benchmark document but routinely deposit assets into a record store that eagerly repeats the hypothesis weighting and returns of that rundown. Since the leader of a disconnected business does not want to outmaneuver the benchmark record, a lively organization is the opposite of an unattainable organization. The ideal unique CEO takes advantage of market disappointments by either buying undervalued securities (stocks, etc.) or selling overvalued securities short. These two techniques can be used separately or in combination. Dynamic organizations may also produce less instability (or possibility) than the benchmark record contingent on the goals of the specific exertion portfolio, various assumptions, or common resource.

One of the major concerns with dynamic portfolio conjecture is that the savvy investor who is funding the venture will steer clear of any useless wagers. Financial supporters exerted a great deal of effort to extend benefits in all of the extraordinary conditions encouraged. The goal of having a hypothesis return more substantial than the benchmark may be the diminishing of chance rather than, or in any case, the opposite. The hypothesis uses the

fundamental guideline introduced by Grinold (1989) and subsequently developed by Clarke, de Silva, and Thorley (2002) to summarize the rules of a dynamic portfolio piece. Dynamic organization speculation regulates how a financial sponsor ought to construct a portfolio given a typical advantage or aptitude for projecting returns. Therefore, dynamic organization depends on the knowledge that financial business fields lack complete competence. The appropriate perspective is risk and return similar to a benchmark portfolio when asset the chiefs is given to capable financial sponsor in institutional settings (for example, benefits savings). This is true even though financial patrons may eventually routinely consider total bet and return. The openness of idly directed portfolios necessitates an accentuation on regard further in excess of the choosing of an insignificant cost record hold notwithstanding the head expert issue in allocated asset the leaders.

Firstly, at its core, the Theory of Active Portfolio Management operates under the assumption that financial markets are at least semi-efficient (Fama, 1970). This implies that asset prices predominantly reflect all publicly available information, and achieving consistent above-average returns is a challenging endeavor due to the difficulty of identifying mispriced securities or exploiting market inefficiencies. The theory acknowledges that while some market inefficiencies may exist, they are likely limited. Secondly, the theory assumes rational investor behavior (Markowitz, 1952). Rationality in this context refers to the notion that investors aim to maximize their utility or satisfaction by systematically evaluating the risk and return characteristics of investment options. This assumption provides a foundational understanding of investor behavior within the active portfolio management framework, positing that investors make decisions aligning with their long-term financial goals and do not engage in systematically suboptimal behavior.

A significant assumption of the Theory of Active Portfolio Management is that all investors have access to the same information and process it in a similar manner (Fama, 1965). This assumption of homogeneous information implies that there are no significant disparities in knowledge or interpretation of financial data among investors. Consequently, active portfolio managers must recognize that they are not privy to unique insights or data that can consistently provide an edge in the market, emphasizing the complexity of outperforming other market participants.

Within this framework, it is also assumed that investors have a well-defined investment horizon (Lintner, 1965). This assumption suggests that investors evaluate and make decisions based on expected returns and risks within a specific time frame. While investment horizons can vary among investors, this assumption streamlines the model by considering a single, predefined horizon for all investors.

Moreover, the Theory of Active Portfolio Management is grounded in the fundamental principle of the risk-return trade-off (Sharpe, 1964). This principle posits that investors are willing to take on higher levels of risk only when they expect higher returns as compensation. Conversely, lower returns are required when taking on less risk. This trade-off is central to many aspects of active portfolio management, influencing the selection of assets and the construction of portfolios. Active portfolio management also acknowledges the presence of market frictions and transaction costs (Black, 1986). This assumption recognizes the practical constraints faced by investors, including trading costs, taxes, and liquidity considerations. Such frictions can impact returns and influence the feasibility of specific active strategies.

While the theory is rooted in the idea of rational investor behavior, it also acknowledges the influence of behavioral factors on decision-making (Kahneman & Tversky, 1979). This assumption recognizes that investors may not always act rationally and can be influenced by psychological biases and emotions, which can impact investment decisions. In addition, the theory assumes that some portfolio managers possess skill or expertise that enables them to generate excess returns through active management. This assumption acknowledges that not all active managers are created equal and that there may be individuals or teams with the ability to identify mispriced securities or exploit market inefficiencies. However, it also recognizes that skill in active management is not easily discernible and that past performance alone may not reliably predict future success.

The Theory of Active Portfolio Management is built upon a set of key assumptions that shape its principles and practices. These assumptions encompass the semi-efficiency of financial markets, rational investor behavior, homogeneous information, well-defined investment horizons, the risk-return trade-off, market frictions, the influence of behavioral factors, and the existence of manager skill. Understanding these assumptions is essential for active portfolio managers as they navigate the complexities of deciding on investments with the intention of getting better returns. While the theory provides a framework for active management, it also underscores the challenges and uncertainties inherent in the active portfolio management process. Dynamic portfolio managers could build their portfolio(s) using a variety of approaches and elements. These include purchasing shares from faltering firms or selling at a discount to its real worth. They also contain area theories that aim to forecast long-term macroeconomic examples (for example, a focus on oil or housing stocks). A few extremely focused holds pursue similar ideas, such as combination

trading, short selling, decision making, and asset segmentation. This hypothesis was used to support the financial sponsor's preference for an even portfolio association, which limits risks and increases the associations' ability to finance hypothesis associations.

2.2.5 Quantity Theory of Inflation

Copernicus (1517) forged the Quantity Doctrine of Inflation. This hypothesis essentially traces back to the midst of the sixteenth century, when the French social thinker Jean Bodin initially proposed that the surplus of financial ores brought from the mines of the Spanish colonies in South America was responsible for the cost expansion then agitating Western Europe. The quantity assumption was assimilated into the convention of conventional financial practice after undergoing substantial refinement, growth, modification, and augmentation by David Hume, Richard Cantillon, and John Locke in the late 17th and early 18th century. The quantity hypothesis furnished both the preeminent calculated system for the comprehension of financial occurrences in that exceedingly protracted period and the central scholarly foundations of customary arrangement remedies designed to safeguard the highest quality level, constituting the focal point of nineteenth-century classical financial analysis (Snowdon et al. 1994). Today, the quantity hypothesis persists and thrives on the convictions of the so-called monetarist school, which are backed by organizations like the College of Chicago and the Central Bank of St. Louis,Milton Friedman, Karl Brunner, Allen Meltzer, Philip Cagan, and other financial gurus are at the forefront. Modern monetarists continue to elucidate forefathers' historical quantity hypothesis contentions.

The amount idea hasn't, however, been completely accepted. Despite how ambiguous it may seem, the quantity hypothesis has perhaps generated more debate than any other single

issue in the field of finance theory. The quantity hypothesis has been a central topic of discussion in some of the most important financial discussions of the last two centuries, including the Bullionist and Money School-Banking School debates in the 1800s and the disagreement between Keynes and the neoclassical business analysts in the 1930s. There are also few signs that the dialogue is coming to an end. Many of the same types of concerns that have come up in past debates are still being debated between the monetarist and post-Keynesian schools of thought (Mishkin, 1992).

The Bullionists, led by Ricardo (1932), posited that there was currency devaluation and inflation, that the Bank of Britain issued an excess of monetary certificates, and that the most reliable evidence for bullion was the disparity between the market and former mint price of gold compared to paper money. The Bullionists utilized the gold premium then instead of cost indices, much as we do now to ascertain the degree of expansion. The Bullionists arrive at their conclusions by following the associated path: the volume of currency dictates domestic prices; domestic prices influence the exchange rate; additionally, the rate employed to convert irredeemable paper for the highest quality level currencies determines the premium on gold. Consequently, the devaluation Both the presence of the premium on bullion and the exchange rate being below the level of gold parity, or below the percentage of each nation's original old mint gold prices, provided evidence that prices in England were higher and the amount of currency was greater than it would have been had the nation genuinely adhered to the highest quality standard.

Similar strains of hypothesis thinking were at the core of the Bullionists' scheme to reinstate convertibility. Bullionists believed that curtailing the note supply was the sole requisite for reestablishing specie payments at the former mint price. The notion behind this was that a

reduction in the currency supply would depress internal expenses, rectify the import/export disparity, restore trade to normalcy, and eliminate the preferential treatment of bullion. With a sufficient reduction in the note issuance, convertibility might be reinstated without apprehension that a foreign source of gold would once again deplete the nation's gold reserve. An Index of Reactions There has been a body of beliefs that contravene the quantity hypothesis for a substantial period of time (Lucas, 1980). All of the corroborating analyses have ultimately been counterbalanced against the hypothesis.

The quantity hypothesis, according to contemporary Keynesians, is erroneous because it presupposes a predetermined inclination to complete transactions. If there is resource unemployment and an excess capacity, a financial expansion, if desirable, could lead to an augmentation in output rather than an upswing in costs. Currency may serve a broader purpose, especially in most instances. In spite of the nonpartisan nature of the quantity theory, financial alterations may invariably exert an influence on output, lending rates, and other tangible considerations. Furthermore, post-Keynesian financial analysts contend that the quantity hypothesis misjudges the potency of velocity and its companion, the interest rate on currency. The reality is that velocity is an unstable, capricious factor that is impacted by assumptions, susceptibility, and fluctuations in the volume of currency substitutes. Due to velocity's erratic behavior, it is difficult to forecast how a specific alteration in the value of a certain currency will affect expenses. Alterations in velocity may offset (disprove) or accentuate the cost-level consequence of a shift in currency. In opposition to the quantity hypothesis, proponents of the alleged genuine bills regulation in the nineteenth century argued that the currency supply is an endogenous factor that reacts covertly to variations in the interest rates on it (McCandless and Weber, 1995). One

repercussion is that alterations in finances cannot influence costs. The quantity of currency supplied cannot surpass or fall short of the quantity demanded, even though this remains uncertain. Furthermore, no state of ample supply or overt reiteration of currency can ever arise to stimulate spending and boost costs because the quantity of currency offered perpetually equals the quantity demanded. To put it simply, there is no transmission mechanism linking currency to costs. In actuality, the effect is reversed for certain sincere bill proponents. Rather than the reverse, causality flows from costs and income to currency. Income and costs determine the currency interest, which determines the currency supply. Additionally, since shifts in wages, costs, and expenditure result from these shifts in the currency supply rather than their origins, it follows that financial fluctuations cannot be the instigator of growth, flattening, or other monetary vexations.

This notion is pertinent to this sphere of study because it corroborates the notion that the rate of expansion, equilibrium of payment disequilibrium, and economic cycles all bear upon how venture enterprises manage their finances.

2.3 Empirical Literature Review

In this section, studies with actual data on study variables are presented.

2.3.1 Equity and Financial Performance

Kioko and Ochieng (2020) investigated the impact of broadening investment portfolios for adventure enterprises listed on the Nairobi Securities Exchange (NSE) using an engaging research approach. The research honed in on five NSE-listed venture businesses and selected the target audience through a random sampling approach. From 2014 to 2019, information was obtained from the NSE and the relevant companies' official websites.

Diagnostic assessments and multiple linear regression models, along with statistical metrics like median, mean, and standard deviation, were employed in inferential examinations. The study unveiled a notable and constructive correlation between portfolio variety and returns on investment for Nairobi Securities Exchange enterprises. The research emphasized portfolio expansion and utilized a range of regression methodologies, including panel data regression.

Musembi and Jagongo (2018) examined how portfolio diversification affected the financial outcomes of businesses engaged in adventure that are listed on Kenya's Nairobi Securities Exchange and the findings indicated that most of businesses engaged in adventure diversify their portfolio on other investments to reduce the level of risks exposure. However the study never considered the moderating effects of inflation which the current study incorporates. Despite the fact that there have been several studies on the subject, experts can't agree on how diversity and corporate success are related. Furthermore, there hasn't been much focus on the impact of diversity on business performance in Kenya. This study's objective was to evaluate how portfolio diversity affected the financial success of investment firms listed on Kenya's NSE. The study used a descriptive non-exploratory research design and focused on NSE adventure enterprises. According to the outcomes, diversified investment affected the financial prosperity of Kenyan trading businesses listed on the NSE. The earlier study applied a descriptive research layout, while the proposed study would embrace a causal research methodology.

Bhattacharjee (2018) delved into the effect of equity provision on portfolio performance in India as a medium-term investment. Between 2014 and 2017, the scholar collected random data from the common fund India website. The data was processed using SPSS, and the

independent model t-test was employed. According to the data, average returns from stock funds were higher than those from bond funds but lower than those from well-balanced funds. The study inferred that investing in stocks exerted a substantial impact on portfolio performance. The research was carried out in India, and due to a logical contrast, the proposed study will focus on adventure enterprises listed on the NSE.

Hailu (2018) analyzed how equity stakes affected Ethiopia's budgetary performance insurance enterprises, both private and state-owned. From 2006 to 2016, the research examined the financial records of nine out of seventeen insurance firms. E-views software was used to scrutinize the data, which was then correlated using the random-effects regression technique. Descriptive data such as standard deviation, mean, maximum, and minimum were also employed for analysis. The dependent variable employed to scrutinize the performance of insurance firms was return on assets. According to the findings, equity stake had a slight and adverse effect on asset return. The research focused on the insurance industry's financial performance. The proposed study would use panel data regression analysis and focus on adventure businesses.

2.3.2 Bonds and Financial Performance

The study by Shukrani, Ifire, Yeya, and Banafa (2022) examined how venture businesses listed on the Nairobi Securities Exchange was impacted by investment portfolio decisions. The effective market speculation hypothesis, The evaluation was guided by the theories of behavioral finance, liquidity preference theory, and financial intermediation hypothesis. Optional data were employed for this investigation. To evaluate the outcomes of the researched parameters, an expressive exploration configuration was employed. Before employing the multiple linear regression models utilized in summarizing the study's

findings, several demonstrations and linking tests were conducted. The outcomes of these relationships revealed regions of financial performance and relationship strength for bonds, equities, and real estate interest. A strong effect on bond and real estate interest was shown by hypothesis testing at a 5% significance level, which resulted in H02 being verified and H01 and H03 being disproved. Bond interest rates were anticipated to have an influence on the overall financial performance of investment enterprises listed on the Nairobi Securities Exchange. The goal was to create a speculative investment portfolio. Since the heuristic test was insufficient, a second regression analysis was carried out. The study will focus on the portfolio element, and the heuristics of the model will be evaluated using a board regression.

Nzau, Kung'u, and Onyuma conducted a study in 2019 on the impact of security issuance on the financial performance of enterprises listed on the Nairobi Securities Exchange. The information was supplied by each of the six corporations that issued additional bonds or tranched bonds between 2008 and 2017. If the issuance of bonds had a substantial impact on the financial performance of NSE-listed firms, it was determined using regression analysis. According to the data, the price, size, coupon rate, and maturity of the securities may be responsible for around 75.4% of the variation in financial performance. Financial performance was discovered to be influenced by the amount of securities and the increase in their value. Bond issuance does affect the financial performance of Kenyan registered enterprises, as indicated by the research. To enhance their financial performance, the listed companies were advised to assess the various components of bond issuance. The focus of the investigation centered on security issuance, with key indicators of security issuance encompassing security cost, securities coupon rate, security size, and security value

appreciation. The current evaluation will employ a log of capital invested in bonds as a measure of speculative bond activity.

Pina, Badia, and Torres' (2019) study is focused on the economic performance of government security portfolios within the framework of environmental, social, and governance (ESG) models. They used a sample of 24 industrialized nations, with information available from 2006 to 2017. Government bonds were categorized using RobecoSAM data according to their ESG performance, and the financial differences between government bonds with high and low rankings were evaluated. The analysis showed that, despite the lack of a discernible difference, government bonds with high ratings beat those with low ratings in terms of a variety of economic performance metrics. The subject matter chosen was a portfolio of government bonds and its financial performance. The anticipated investigation will concentrate on licensed investment companies taking part in securities-related speculative activity.

The effect of bond portfolio composition on Canadian investment presentations was investigated by Barnes and Burnie (2018). They primarily procured six-year samples from listed firms that were appraised to have significantly enhanced performance on the Canadian Stock Exchange between 2008 and 2013. The yield curves utilized in the study were prevalent during the period of profitability. In order to evaluate the actual portfolio performance, a regression model was employed. Due to the varying trends observed in different stocks, the investigation determined that the assumptions derived from time-series returns calculated from security yield curves had no bearing on the display. The assessment was conducted in Canada for purposes of relevant comparability, and the suggested research would concentrate on trading businesses listed on the NSE.

2.3.3 Real Estate and Financial Performance

The exploration of Bhuyan et al. (2019) honed in on how the US Mortgage Real Estate Investment Trust impacts growth in portfolios. Specialists gathered information from various sectors within the US financial industry between 2002 and 2012 to scrutinize the value and benefits of the Mortgage Real Estate Investment Trust (MREIT). Post-event costs and earnings were computed for 82 enterprises, encompassing 26 REITs, 16 MREITs, and 42 standard equities listed on multiple stock exchanges. As per the assessment, financial backers will not reap gains from MREIT expansion. According to the analysis, MREITs stand as the feeblest asset category to employ for portfolio growth. According to the research, small-scale investors should steer clear of using MREITs for expansion. Due to context-driven divergence, the evaluation was conducted in the United States, and the proposed study will zero in on trading businesses listed on the NSE.

Obiero (2019) executed a study of the speculative enterprises' financial performance and portfolio extension on the NSE. The theoretical framework was instructed using the portfolio theory, the Black and Litterman theory, and the capital resource estimation model. The review utilized a distinct examination design approach. The five registered venture firms on the NSE acted as the subject population for the review, and the five registered venture companies on the NSE were chosen employing a statistical technique. Additional data from the NSE and the websites of the various registered venture groups were integrated into the review. From 2014 to 2019, a wide array of data was accumulated. The investigation unearthed that the financial performance of speculative organizations listed on the NSE was influenced by bond, equity, and land interests blended together. For the

examination setup, a thorough exploration strategy was embraced. The ongoing study will adopt the causal exploration strategy.

Ametefe (2018) delved into "portfolio construction," "implementation of defined benefit commitment funds," and "real estate investment" in the united domain. For asset yield, public indices were consistently utilized as an intermediary. Between 1991 and 2015, the majority of information was gathered from data streams and Bloomberg, as well as other sources like Cambridge Partners and other benefit reserves. Property and securities were envisioned to function as deterrents to fluctuations in growth or financing costs. Equities and other speculative ventures frequently constituted a substantial element of portfolios devised to surpass benchmarks in terms of risk-adjusted yields. The focal point of the study was the presentation of branded annuity reserves in the United Kingdom. The current context for the assessment will be the financial performance of speculative organizations in Kenya.

Defau and De Field (2018) probed into the influence of plan and support credits on asset allocation and monetary enhancement in Belgian benefits reserves. Between 2001 and 2015, 182 Belgian annuity reserves underwent examination. They ascertained that factoring in an individual's age when computing benefits reserves proved instrumental. Age is typically esteemed in investment decisions grounded on information pertaining to the median age of active individuals rather than the average age of despondent and lethargic individuals. The reliant variable in this study was the member's age, while the current investigation zeroed in on land investments. The research was predicated on Belgian benefit reserves, and the notion was focused on the age of the allocation. The ongoing

examination focused in on the portfolio composition and financial management practices of speculative firms.

2.3.4 Mutual Funds and Financial Performance

Bhuyan et al. (2019) delved into the significance of reliance within the context of American housing loan land partnerships and their influence on the enhancement of portfolios. Over the course of a decade, from 2002 to 2012, researchers accumulated data from various sectors of the U.S. financial industry to assess the worth and benefits of the Mortgage Real Estate Investment Trust (MREIT). Ex-Post expenditures and earnings were calculated for 82 entities, comprising 26 REITs, 16 MREITs, and 42 ordinary stocks traded on various stock markets. As per the analysis, investors will not reap rewards from MREIT expansion. The report suggests that MREITs represent the feeblest asset category for fostering portfolio growth. The report advises small investors to steer clear of adopting MREITs for growth. This research was conducted within the United States to account for context-driven distinctions, and the recommended investigation would concentrate on trading enterprises listed on the NSE. Krishnamoorthi and Murigesan (2018) scrutinized the risk and value associated with several mutual fund programs based in India. This research proposed that it is worthwhile to explore the customary returns and risks tied to investments in mutual funds. Irrespective of the level of risk associated with each firm's engagement, the BETA value was computed for the six companies as a whole. The utility of Sharpe, Treynor, and Jensen alpha risk-adjusted methodologies for evaluating the performance of profit-agnostic equity plans within the mutual fund sector is still uncertain. An annual returns appraisal of mutual fund equity assets was conducted, unequivocally demonstrating that all sample funds generated favorable returns exceeding the risk-free rate. While pooled investments

had not yet reached their predictions, the assessment concluded that equities should be the preferred speculative avenue for modest financial support. The evaluation was formulated utilizing India's typical financial schemes. The primary focus will remain on speculative enterprises listed on the NSE.

The effect of mutual funds on the financial performance of Ethiopian commercial banks was investigated by Hailu and Tassew (2018). They presented statistics relevant to seventeen (17) active commercial banks in Ethiopia throughout a five-year period, from 2013 to 2017. A panel random-effects regression model and a quantitative exploratory technique were both used by the experts to analyze the data. The study found that banks that invested in mutual funds generated better returns. The study found that increased speculative behavior had a big impact on how Ethiopian commercial banks handled their money. The experts suggested that Ethiopian commercial banks give trust-building a higher priority than portfolio expansion. The financial results of freshly created commercial banks in Ethiopia provided the context for this study. The upcoming evaluation will concentrate on the financial performance of investment firms in Kenya.

The 2018 research by Andelinovic, Samodol, and Pavkovic focused on the profit and asset allocation of Croatia's Pre-Dissolvability II insurers. The researchers collected information from the records of insurance companies between 2008 and 2015. To evaluate the gathered data, they used cluster analysis and panel data analysis methodologies. Based on their investing approaches, insurers were categorized using cluster analysis. The results were then applied to forecast changes in asset allocation brought on by financial advice. The investigation showed that Croatian insurers' financial interests had a significant impact on how well they performed. The study focused on Croatian strategies for allocating assets.

The primary area of attention will continue to be on speculative businesses with NSE listings.

Krishnamoorthi and Murigesan examined the risk and return connected to several Indian mutual fund systems in their 2018 research. This study pushed for an assessment of the typical risks and rewards associated with mutual fund investing. The BETA value was determined for all six firms, regardless of the level of risk involved in each company's involvement. It is still unclear whether Sharpe, Treynor, and Jensen alpha risk-adjusted methodologies are appropriate for assessing the success of profit-neutral stock programs in the mutual fund sector. After doing a yearly return study on the equity assets of mutual funds, it became abundantly evident that every sample fund produced profitable returns that were higher than the risk-free rate. While pooled investments had not yet met their projections, the assessment concluded that equities should serve as the preferred speculative avenue for modest financial assistance. The structure was based on standard fund schemes, incorporating a notion of risk and return. A bivariate analysis was employed in the examination to determine whether the hypotheses had detrimental effects. The upcoming examination will encompass four unrestrictive components that will be assessed using a panel model.

2.4 Literature Review and Research Gaps Summary

Table 2.1 presents empirical research gap identified in the reviewed study and how the current study aims to fill them.

Table 2.1 Literature Review and Research Gaps Summary

Author and year	Title	Findings	Identified Gaps	Gaps to be filled
Shukrani, Ifire, Yeya, and Banafa (2022)	Concentrated on the impact of venture portfolio decision on the monetary execution of speculation organizations recorded at the Nairobi Security Exchange.	The connection results demonstrated areas of strength for a connection between interest in securities, values and land with monetary execution.	The concept was on investment portfolio choice. Heuristic test was not done and multiple regression analysis was used.	The study concept was on portfolio composition and panel regression was used were test on the model using heuristic tests was carried out.
Kioko and Ochieng (2020)	Concentrated on the impact of portfolio enhancement on the monetary execution of venture companies recorded	There was a positive and critical connection between Value speculations and profit from ventures for the	Multiple regression model was used and hence panel data.	The proposed study used a panel regression analysis.

	in the Nairobi Securities exchange	ventures firms at Nairobi Securities Exchange		
Nzau, Kung'u and Onyuma (2019)	The focus was on the influence of security issuance on the monetary execution of enterprises listed on the Nairobi Securities Exchange.	The results show that security issuance may explain about 75.4 percent of the variance in monetary execution as characterised by security cost, securities coupon rate, bond percentage, and bond yield to maturity.	The study was on bond issuance and focused on bond issuance as characterized by bond price, bonds coupon rate, bond proportion, and bond yield to maturity as indicators.	The current study used log of the amount invested in bonds as the indicator of bond investment.
Bhuyan *et al* (2019)	Concentrated on the impact of Mortgage Real Estate Investment Trust on portfolio broadening in the US	The exploration uncovered that MREITs end up being the most awful resource class	The study was based in US and due to contextual difference	The proposed study focused on investment firms listed in NSE.

		to be utilized in portfolio broadening		
Badia, Pina, and Torres (2019)	Concentrated on the monetary execution of government security portfolios in light of Ecological, Social and Administration rules (ESG).	The discoveries recommended that high-evaluated government bonds, as indicated by ecological, social, and administration (ESG) aspects, outflanked low-positioned bonds under any cut-off	The context was on financial performance of government bonds portfolio.	The proposed study focused bond investment of listed investment companies.
Obiero (2019)	Directed an examination with respect to portfolio enhancement and monetary	The specialist found that interests in bonds, interest in values and interest in land essentially impacted the FP	The research design used was descriptive research design.	The current study used causal research design.

	execution of venture organizations at the NSE.	of venture organizations recorded at the NSE.		
Musembi and Jagongo (2018)	The influence of portfolio diversification on monetary execution of trading enterprises reported in Nairobi Securities Exchange, Kenya was studied..	The review found interest in value affects monetary execution of trading companies recorded in the NSE in Kenya.	The study made use of an explanatory research design..	The proposed study used causal research design.
Bhattacharjee (2018)	Concentrated on resource distribution on portfolio execution as medium-term interests in India.	The scientist figured that interest in value decidedly affected portfolio execution.	The study was based in India and due to contextual difference.	The proposed study focused on investment firms listed in NSE.
Hailu (2018)	The implication of interest in value on the monetary	The review presumed that interest in value had a horrible and immaterial	The econometric tool E-views software was used to examine the	The context was on insurance company's financial performance. The

	execution of insurance agency in Ethiopia was investigated.	outcome on return on resources.	data using the random effect regression approach and correlation.	current study focused on investment companies and panel regression analysis was used
Barnes and Burnie (2018)	Explored the impacts of bond portfolio piece on the execution of ventures in Canada.	The discoveries of the examination uncovered that the assumptions created by time-series returns got from the yield bends of securities didn't decidedly impact the presentation since the singular securities had various developments	The study was based in Canada and due to contextual difference.	The proposed study focused on investment firms listed in NSE.

Krishnamoorthi and Murigesan (2018)	Examined the gamble and return of chosen shared reserves plans in India.	The review uncovered that while the assets should be the best venture vehicle for little financial backers, common assets had not arrived at their assumptions.	The study context was on mutual funds schemes in India.	The proposed study context was on investment companies listed in NSE.
Hailu and Tassew (2018)	Evaluated the impact of mutual funds on the economic performance of Ethiopian commercial banks	The review laid out that speculation enhancement decidedly affected the monetary execution of business banks in Ethiopia.	The evaluated research focused on the economic performance of commercial banks in Ethiopia..	The context of the current study was on financial performance of investment companies in Kenya.
Andelinovic, Samodol and Pavkovic (2018)	Concentrated on resource allotment and productivity of safety net providers in the pre-	The review uncovered those interests in genuine resources essentially affected the productivity of	The study context was on asset allocation schemes in Croatia.	The proposed study context was on investment companies listed in NSE.

	dissolvability II period in Croatia.	Croatian safety net providers.		
Krishnamoorthi and Murigesan (2018)	Examined the gamble and return of chosen shared reserves plans in India.	The review uncovered that while the assets should be the best venture vehicle for little financial backers, common assets had not arrived at their assumptions.	The study concept was on risk and return and the context was on mutual funds schemes. The study used a Bivariate analysis and tested whether the investment were risky or not.	The current study used a panel model and four independent variables was tested.

Source: Researcher (2023)

2.5 Conceptual Framework

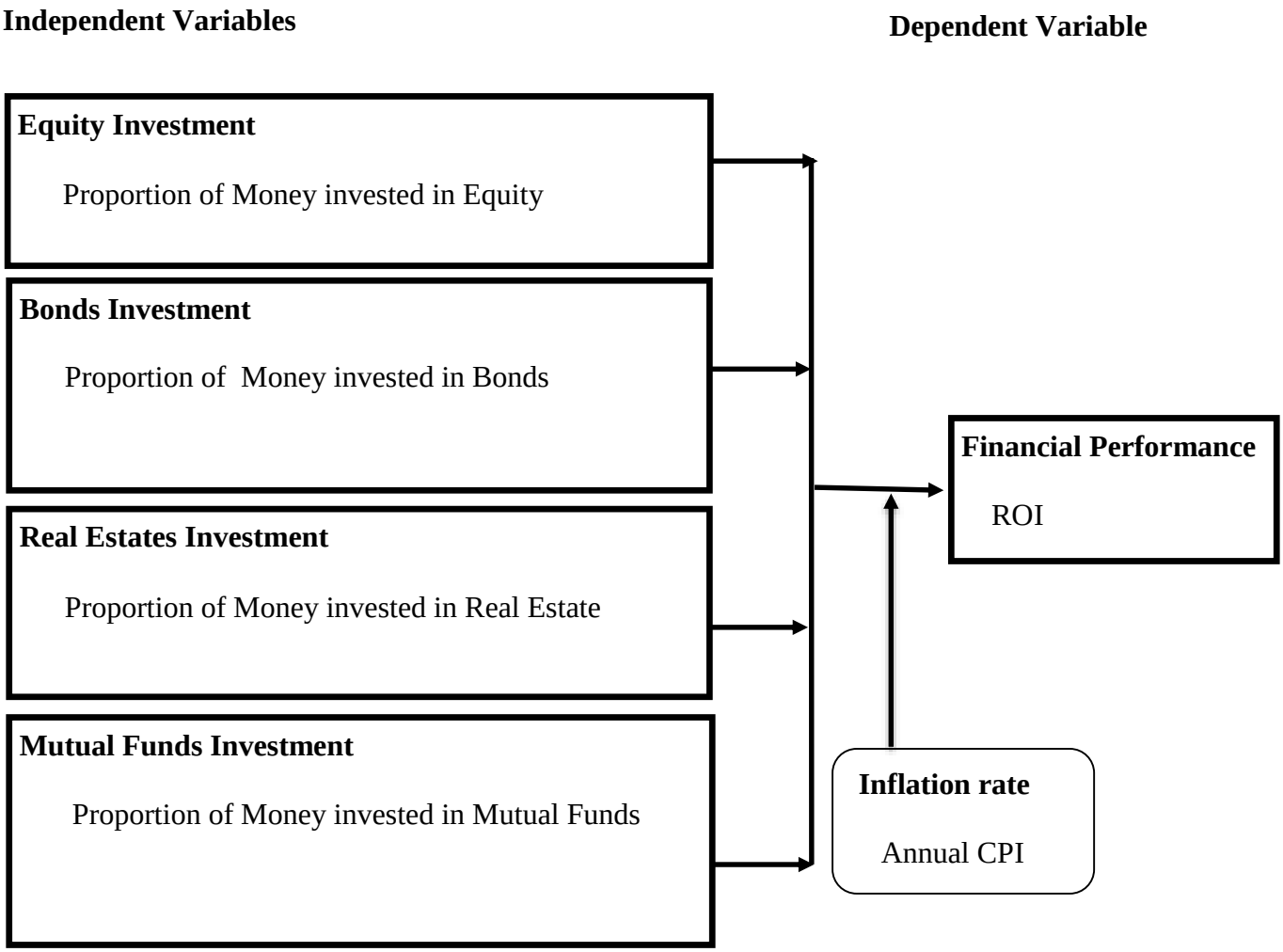

Figure 2.1 Conceptual Framework

Source: Researcher (2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter covers various aspects of the study, including the research methodology, the specific group being studied, how the sample was chosen, the tools and process used to gather data, the methods applied for data scrutiny and exhibition, and the ethical deliberations considered in this research.

3.2 Research Philosophy

The exploration's philosophical underpinning is positivist doctrine. Positivism assumes that knowledge is factual and does not account for subjective factors, and that reality is uninterrupted and can be delineated and explicated objectively without impacting the occurrences under examination. Saunders, Lewis, and Thornhill (2013) contend that a positivist outlook endorses a quantitative exploration approach grounded on the supposition that objective reality can be quantified in numerical format with prognostic and elucidative import. The inquiry utilized objective information gathering and scrutiny to handle primary information with the aim of supplying conclusions that can be employed to evaluate and react to research suppositions, which is why this doctrine was opted for (Oketch, Kilika & Kinyua, 2020).

3.3 Research Design

Additionally, Cooper and Schindler (2014) depict and classify research designs as being cross-sectional, logical, exploratory, and rational. The investigation used a causal and

expressive investigative strategy. Kothari's studies from 2004 establish a study plan as the scientists' blueprint, defining the method of data collection, the scope of the measurement, and the strategy for examination. It condenses the steps taken by the researcher, from developing the hypothesis through doing a thorough analysis of the data.

The who, when, by whom, how, and where questions were answered with help from the illustrated research design. Identifying the causative effects of portfolio composition on the financial performance of investment businesses listed on the Nairobi Securities Exchange was the goal of this inquiry.

3.4 Empirical Model

The study used a panel regression model using STATA software. The panel regression analytical model look like this;

$$Y_{it} = \beta_O + \beta_1 X_1 it + \beta_2 X_2 it + \beta_3 X_3 it + \beta_4 X_4 it + \varepsilon it$$

Where;

Y= Financial performance, β0=Constant term

β1,β2,β3,β4=Beta coefficients of the independent variables

X1= Bond investments

X2=Mutual Fund Investments

X3=Equity Investments

X4=Real Estate Investments

ε =Error term

i=Investment firm.

i=1...5 t = the time period index. t = 1…6

3.5 Test for Moderator Effect

The Aiken and West (1991) equation was used to perform the moderation test. The equation tested the fifth hypothesis (H05): Inflation had little effect on the relationship between portfolio composition and financial performance. Using the model, the independent variable interacted with the dependent variable; $Y= \beta_0 + \beta_1 X_i + \beta_2 IR + \beta_3 X_i IR + \varepsilon it$

Where;

Y= Dependent Variable (Financial Performance)

β_0 = Constant

β_1 = Coefficient of composite index of portfolio composition

β_2 = Coefficient of inflation

β_3 = Coefficient of the interaction of the composite index of portfolio composition and the moderator (inflation)

IR= Inflation Rate

The coefficient 3 was used to analyze the influence of inflation, the moderating variable, on the correlation between portfolio composition and financial performance. The P value of 3 was compared to a significance threshold of 0.05 to decide whether to accept or reject the null hypothesis (H05), which claims that inflation has no meaningful influence on the link between portfolio composition and financial performance.

3.6 Operationalization and Measurement of Variables

This study looked at the relationship between portfolio composition and financial performance. For the purpose of determining the strength of the association between the studied variables, quantitative data was used in the study.

Table 3.1 Operationalization and measurement of Variables

Variable	**Type**	**Operationalization**	**Measurement**	**Measurement Scale**	**Hypothesized direction**
Financial Performance	Dependent	Ability of the Investment firm to generate financial returns.This is measured using a profitability.	Profitability (Return on investments)	Ratio	Positive/negative
Equity Investments	Independent	The amount of money in equity investment held by the investment firm.	Log of money invested in Equity	Ratio	Positive/negative
Mutual Funds Investments	Independent	The amount of money in mutual	Log of money	Ratio	Positive/Negative

		funds held by the investment firm.	invested in Mutual funds		
Bond Investments	Independent	The amount of money in bond investment held by the Investment firm.	Log of money invested in Bonds	Ratio	Positive/negative
Investments in real Estates	Independent	The amount of money in real estate investment held by the investment firm.	Log of Money invested in Real Estates	Ratio	Positive/negative
Inflation Rate	Moderator	The changes in price level of investment companies operations held by investments firms.	Annual Consumer Price Index Annual(CPI)	Ratio	Positive/negative

Source: Researcher (2023)

3.7 Target Population

Cooper and Schindler (2009) assert that the intended populace is an assembly of entities or elements from which researchers can draw conclusions. Its focus group comprised the five

firms identified as such in Appendix I of the Nairobi Securities Exchange's investment firms. Due to the accessibility of secondary data and the companies' published financial account reports, they were specifically chosen.

3.8 Sample Design

The study used a census approach since the population is small and manageable. Kothari (2011) supported that the use of census in the study would reduce errors in type I and type II.

3.9 Data Collection Instruments

The examination solely relied on secondary information. Information was gathered employing a supplementary data compilation timetable (Appendix I). The inquiry made use of information from supplementary origins, and hence information from the 5 firms listed under the investment enterprises was amassed from scrutinized, published financial statements.

3.10 Data Collection Procedure

The researcher obtained the necessary authority from Kenyatta University and NACOSTI permit before proceeding to collect data.

3.11 Data Analysis and Presentation

The data underwent evaluation to draw conclusions and inferences. Data was collected over an extended period from 2015 to 2022. Following the accumulation of research data, it was scrutinized through a quantitative analysis technique. The annual panel data was dissected using the panel regression method. Descriptive analysis encompassed

explanations of dedicated focus factors. Parameters such as percentages, averages, minimums, maximums, and standard deviations were included in the reports. The data was presented in tables and figures.

Sample data for population inferences honed in on inferential statistics. The null hypothesis of the study was tested using inferential analysis. Furthermore, a significance level of 5% was employed to assess the hypothesis. Values below 5% indicate the significant impact of an independent variable on the predicted variable.

3.12 Diagnostic Tests

Before moving ahead, an initial evaluation of measurable suppositions was carried out. These suppositions include customary practices, linearity, autonomy of error terms, uniform variance, and collinearity. The objective of this evaluation was to recognize and tackle any potential elements within the data that could impact the ultimate outcomes. Each of these suppositions were thoroughly scrutinized, and the discoveries were methodically arranged for subsequent reference.

3.12.1 Multi-Collinearity Test

Ruhiu, Nugi, and Waititu (2014) uncovered a substantial connection between autonomous variables, suggesting multicollinearity. This issue results in significant deviations for coefficients linked to the affected elements. When multiple independent variables are considerably interrelated, multicollinearity might arise in multiple regression models. The independent variables in an optimal regression model that accurately portrays the data should possess noteworthy correlations with the dependent variable, yet feeble correlations with one another.

One method for dealing with multicollinearity is to take out one of the highly correlated independent variables before re-evaluating the regression equation. The Variance Inflation Factor (VIF) may be used to identify multicollinearity by measuring its size. A VIF of 5 or higher with a tolerance value lower than 0.2 typically point to a problem (Makori and Jagongo, 2013). The researchers used VIF calculations to examine the data for possible autocorrelation and multicollinearity (Ruhiu et al., 2014).

3.12.2 Test of normality

Various philosophical approaches like correlation, regression, t-tests, and variance analysis hinge on the presupposition that the data adheres to a normal distribution, also referred to as a Gaussian distribution.Tabachnick, Fidell, and Ullman (2007) suggest specific criteria for interpreting normality tests, emphasizing that skewness values should remain below 2 and Kurtosis values should be less than 10 to consider the data as following a normal distribution The fundamental anticipation is that the individuals from whom the data was gathered were evenly spread out. These statistical tests prove useful when visually examining the regularity of the data.

3.12.3 Homoscedasticity Test

The Kaiser-Meyer-Olkin (KMO) test determines if data are appropriate for factor analysis. It evaluates the appropriateness of sampling for each variable in isolation as well as for the entire model as a whole. According to Hadi, Abdullah, and Sentosa (2015), this statistical indicator indicates the extent to which the variability across variables may be plausibly attributed to common sources. A lower KMO score indicates that factor analysis might be appropriate for the data. The range of KMO values is 0 to 1. Hadi, Abdullah, and Sentosa

(2015) determined that a KMO indicator below 0.4 is deemed unacceptable, between 0.4 and 0.6 is viewed as below average but acceptable, between 0.6 and 0.8 is categorized as respectable, and anything beyond 0.9 is seen as extraordinary.

3.12.4 Autocorrelation Test

The investigation also examined autocorrelation suppositions, which stipulate that error terms remain consistent over time. This implies that errors linked to one observation do not significantly impact errors associated with other observations. According to Gujarati (2004), the Reed Watson test stands out as the most precise method for appraising the presence of autocorrelation. Should the computed figure in the test closely approach 2, autocorrelation is not a concern.

3.12.5 Stationarity Test

The fundamental attributes of a stationary time series, such as its average, variability, and stability, stay consistent over time (Van, 2003). In this examination, we are addressing a scenario involving time series where the values retain their predictability throughout. To ascertain stationarity, the Levin-Lin Chu unit-root test was utilized, which is apt for scrutinizing time series data in this assessment.

3.12.6 Hausman Test

The researcher used either fixed effects or random effects in each of the two panel data regressions that he performed. To provide the most appropriate regression for the data, the Hausman test was used. The following assumptions were assessed by the test:

The findings support the adoption of the Random Effect, which is the null hypothesis (Ho).

Alternative Hypothesis (Ha): Fixed Effect is supported by the evidence.

3.13 Ethical Consideration

Research ethics refers to the standards and principles that the researcher should adhere to before, during, and after a survey (Mugenda and Mugenda, 2011). Authors whose works were linked with this report were appropriately acknowledged. This recommendation was also guided by the ethical standards and regulations governing work at the Kenyatta School. The researcher received a NACOSTI research award and obtained a data collection approval letter before embarking on the data compilation process.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents documents and interprets the findings of the study. Subsequently, these results are discussed in connection with existing literature from previous researchers.

4. 2 Descriptive Statistics

From the study findings, five of the firms listed under the investment sector which represents(95%) researcher used secondary data sources comprising of audited financial accounts, which are available to the public, as the major source of this information. A summary of the descriptive statistics produced from the gathered data is represented in Table 4.1.

Table 4.1 Summary of the Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Investment in Equity (M)	40	53.27	173.01	113.14	31.41639
Investment in Bonds (M)	40	58.0	188.19	123.095	34.70721
Investments in Real Estate (M)	40	51.50	150.44	100.97	26.06772
Investments in Mutual Funds (M)	40	60.11	191.0	125.555	35.07369
ROI (M)	40	0.16	0.83	0.6084	0.15403
Inflation	40	4.69	7.98	6.1800	1.11469
Valid N (listwise)	40				

N-Number of Observations

Source: Researcher Data (2023*)*

According to Table 4.1, the median stock investment is 113.14 million, with a minimum investment of 53.27 million and a maximum investment of 173.01 million. The modest amount of dispersion in stock investments across these businesses is shown by the standard deviation, which is around 31.42 million. In general the study findings showed a positive link between stock fund investment and financial performance. This shows that equity investment and returns on investment (ROI) have a positive connection. The findings are supported by Kioko and Ochieng (2020) study which investigated the impact of broadening investment portfolios for adventure enterprises listed on the Nairobi Securities Exchange

(NSE) using an engaging research approach. The study unveiled a notable and constructive correlation between portfolio variety and returns on investment for Nairobi Securities Exchange enterprises.

These companies invest, on average, around 123.10 million in bonds, ranging from 58.0 million to 188.19 million. The standard deviation, which is around 34.71 million, shows that bond investment varies. In general results revealed a small and negative relationship between bond investment financial performance, with a coefficient of -.032038, $p>0.05$. This shows that the link between returns on investment (ROI) and investments in bonds. The findings are in line with the study of Nzau, Kung'u, and Onyuma conducted a study in 2019 on the impact of security issuance on the financial performance of enterprises listed on the Nairobi Securities Exchange. The information was supplied by each of the six corporations that issued additional bonds between 2008 and 2017 indicated that issuance of bonds had a substantial impact on the financial performance of NSE-listed.

Mutual funds investments firms typically range from 60.11 Million to 191.0 million, with a mean investment of about 125.56 million,35.07 million is the standard deviation. The findings are supported by Hailu and Tassew (2018), study on effect of mutual funds on the financial performance of Ethiopian commercial banks. They presented statistics relevant to seventeen (17) active commercial banks in Ethiopia throughout a five-year period, from 2013 to 2017 and found that banks that invested in mutual funds generated better returns.

In addition, the average real estate investment is around 100.97 million, with a standard deviation of roughly 26.07 million, ranging from 51.50 million to 150.44 million. The study resulted in a coefficient of.0115484, demonstrating a slight but non-significant

positive relationship between real estate investments and ROI ($p>0.05$). The findings are supported by Bhuyan et al. (2019) investigated on how the US Mortgage Real Estate Investment Trust impacts growth in portfolios.. According to the analysis, MREITs stand as the feeblest asset category to employ for portfolio growth.

The average return on investment (ROI) is about 0.6084 with a standard deviation of 0.15403. This metric signifies the financial performance of the companies. The ROI value indicates that, on average, these companies have generated a positive return on their investments. The range of ROI spans from 0.83, indicating diversity in investment performance among the companies. The mean inflation rate is approximately 6.18 with a standard deviation of 1.11469. Inflation stands as a pivotal economic factor that can influence investment returns. A higher inflation rate may erode actual returns. The range of inflation from the results spans from 4.69 to 7.98. which is high and has significant effects on financial performance of listed investment firms. The study findings are supported by a study of Muthama, Mbaluka and Kalunda,(2013) who concluded that even a minor growth rate in inflation can have a significant impact on a nation's economic sector. Businesses' investments lose value with rise in inflation, which has an adverse effect on output quality and technical performance (Suheyli, 2015).

4.3 Diagnostic Tests

To make sure that the panel data adhered to the key assumptions for linear regression, the research performed diagnostic tests.

4.3.1 Multicollinearity Test

Multicollinearity examinations were conducted to assess the degree of linear connection among independent factors within the regression model, as described by Baltagi in 2005. The results for multicollinearity are presented in Table 4.2.

Table 4.2: Multicollinearity Results

Variable	Tolerance	VIF
Investment in Bonds	0.316742	3.157139
Investment in Real Estates	0.525939	1.901362
Investment in Mutual Funds	0.586618	1.704686
Investment in Equity Funds	0.350643	2.851907
Inflation	0.911883	1.096632

Source: Researcher Data (2023*)*

The findings in table 4.2 indicate that investment in bonds had a tolerance of 0.316742 and VIF of 3.157139, investment in real estates had a tolerance of 0.525939 and VIF of 1.901362, investment in mutual funds tolerance was 0.586618 and VIF of 1.704686, investment in equity funds tolerance was 0.350643 and VIF 2.851907 and inflation tolerance of 0.911883 and VIF 1.096632. Lack of multicollinearity is indicated by tolerance and VIF not exceeding 4. Since VIF was less than 4 for all the variables, there was no multicollinearity.

4.3.2 Normality Test

Normality tests are commonly used to determine if a given sample comes from a population with a normal distribution (Kothari & Garg, 2014). The study employed both kurtosis and skewness as approaches for determining the dataset's normalcy.

Table 4.3 Normality Results

	Statistic	Skewness	Kurtosis
Investment in Bonds	40	0.608	-0.719
Investment in Real Estates	40	0.289	1.531
Investment in Mutual Funds	40	0.833	1.437
Investment in Equity Funds	40	0.133	0.113
ROI (M)	40	-1.314	1.032
Inflation	40	0.415	-1.151
Valid N (listwise)	40		

Source: Researcher Data (2023)

Tabachnick, Fidell, and Ullman (2007) suggest specific criteria for interpreting normality tests, emphasizing that skewness values should remain below 2 and Kurtosis values should be less than 10 to consider the data as following a normal distribution. As depicted in table 4.3, the skewness values for the study variables were all below +2, and the Kurtosis values were found to be less than 10, which indicates that the data exhibited characteristics of normality according to these criteria.

From the findings, the Skewness was 0.415 and the Kurtosis value was -1.151,indicating that inflation rate had a significance influence on the relationship between portfolio composition and financial performance of investment companies listed in Nairobi Security Exchange.

4.3.3 Heteroscedasticity Test

Heteroscedasticity is defined as irregular fluctuations in the residuals of a regression model across different panel data points (Garson, 2012). The research investigation used a Breusch- Pagan/ Cook- Weisberg test to detect heteroscedasticity in the residuals of the regression model, as shown in table 4.4.

Table 4.4 Heteroscedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity
Ho: Constant variance
Variables: fitted values of ROI
chi2(1) = 0.001
Prob > chi2 = 0.000

ROI = Return on Investment

Source: Researcher Data (2023)

The results in table 4.4 indicate that there is insufficient evidence to reject the null hypothesis (Ho) of constant variance in the fitted values of ROI. The chi-squared statistic (chi2(1)) is 0.001, and the probability (Prob> chi2) is 0.000, showing that there is no substantial heteroscedasticity in the data.

4.3.4 Test for Autocorrelation

The study also put autocorrelation assumptions to the test, which state that error terms should not fluctuate over time. This implies that errors linked to one observation have no discernible impact on errors related to other observations. Gujarati (2004) says that the Reed Watson test is the most reliable method for determining whether or not an

autocorrelation problem exists. If the test result is close to 2, autocorrelation is not an issue. Table 4.5 summarizes the findings.

Table 4.5 Test for Autocorrelation

Dependent Variable	F	Durbin-Watson
Return on Investment	9.374	1.493

Source: Researcher Data (2023)

The results in table 4.5 Durbin Watson was 1.493. Durbin Watson statistics of 1.5 to 2.5 indicates that serial correlation is not present. The data was therefore appropriate for analysis.

4.3.6 Model Specification Tests

Before panel data analysis, analysis of the type of time series effect was assessed using Hausman Test. The findings are shown in table 4.6.

Table 4.6 Test for Autocorrelation

Hausman Test

	---- Coefficients ----			
	(b) Random	(B) .	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Bonds	-.0317218	-.032038	.0003162	.0107218
Real Estate	.0195348	.0115484	.0079863	.0102518
Mutual Funds	.0606243	.0591424	.0014819	.0083225

Equity_Funds | .248201 .2310029 .0171981 .0110782

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)

= 6.50

Prob>chi2 = 0.1646

Source: Researcher Data (2023)

The study tested the null hypothesis that there existed nonsystematic effects in the model. The study obtained Prob>chi2 = 0.1646 the null hypothesis could not be rejected implying existence of fixed effect in the model. Fixed model was therefore appropriate for the study.

4.4 Correlation Matrix

Correlation tests were used in the study to determine the nature and robustness of the relationship between the independent variable and the dependent study variables. These correlation analyses were performed using a 95% confidence level. Table 4.7 summarizes the findings.

Table 4.7 Correlation Matrix

		ROI (M)	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	Inflation
ROI (M)	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	40					
Investment in Bonds	Pearson Correlation	0.157	1				
	Sig. (2-tailed)	0.335					
	N	40	40				
Investment in Real Estates	Pearson Correlation	0.093	.547**	1	.		
	Sig. (2-tailed)	0.566	0.000				
	N	40	40	40			
Investment in Mutual Funds	Pearson Correlation	.477**	0.169	.408**	1		
	Sig. (2-tailed)	0.002	0.296	0.009			
	N	40	40	40	40		
Investment in Equity Funds	Pearson Correlation	.611**	.715**	.368*	.447**	1	
	Sig. (2-tailed)	0.000	0.000	0.020	0.004		
	N	40	40	40	40	40	
Inflation	Pearson Correlation	-0.025	0.142	-0.078	0.116	0.196	1
	Sig. (2-tailed)	0.880	0.382	0.631	0.477	0.225	
	N	40	40	40	40	40	40

Source: Researcher Data (2023)

Table 4.5 displays that the connection between ROI (M) and bonds investment is affirmative (0.157), but it does not bear statistical significance (p-value> 0.05). This implies a feeble positive association between returns on investment (ROI) and bond

investments, but it lacks the strength to yield significant insights. The study findings are supported by Pina, Badia, and Torres' (2019) study which focused on the economic performance of government security bonds within the framework of environmental, social, and governance (ESG) models. The analysis showed that, despite the lack of a discernible difference, government bonds with high ratings beat those with low ratings in terms of a variety of economic performance metrics

The correlation between ROI (M) and real estate investment is affirmative (0.093), but it does not possess statistical significance (p-value> 0.05). This denotes a feeble and non-significant positive link between ROI and real estate investments. The findings are supported by Bhuyan et al. (2019) investigated on how the US Mortgage Real Estate Investment Trust impacts growth in portfolios.. According to the analysis, MREITs stand as the feeblest asset category to employ for portfolio growth.

There exists a reasonably robust affirmative correlation (0.477) between ROI (M) and mutual funds investment, and this correlation is statistically substantial (p-value< 0.05). This implies a meaningful positive bond between ROI and mutual funds investments. The findings are supported by Krishnamoorthi and Murigesan who examined the risk and return connected to several Indian mutual fund systems in their 2018 research. After doing a yearly return study on the equity assets of mutual funds, it became abundantly evident that every sample fund produced profitable returns that were higher than the risk-free rate.

There is a pronounced affirmative correlation (0.611) between ROI (M) and equity funds investment, and this correlation is exceedingly statistically significant (p-value< 0.001). This points to a significant affirmative association between ROI and investments in equity funds .The findings are in line with Musembi and Jagongo (2018) examined how portfolio

diversification affected the financial outcomes of businesses engaged in adventure that are listed on Kenya's Nairobi Securities Exchange and the findings indicated that most of businesses engaged in adventure diversify their portfolio on other investments to reduce the level of risks exposure

There exists a very faint negative correlation (-0.025) between ROI (M) and inflation, but it does not hold statistical significance (p-value> 0.05). This suggests that, essentially, there is no substantial relationship between ROI and inflation. It is therefore worth noting that the model preserved relevance in the absence of the moderator (inflation rate). However, when the moderator was included, the connection lost its significance, demonstrating that inflation has a sizable moderating effects on the association between portfolio composition and financial performance of companies, listed on the Nairobi Securities Exchange. The study findings are supported by a study of Muthama, Mbaluka and Kalunda,(2013) who concluded that even a minor growth rate in inflation can have a significant impact on a nation's economic sector. Businesses' investments lose value with rise in inflation, which has an adverse effect on output quality and technical performance (Suheyli, 2015).

4.5 Panel Regression Analysis

The researchers used Hausman to choose between using fixed effects or random effects models, specification tests are used. According to the study, the random effects model was superior fit for this investigation.

4.5.1 Fixed Panel Data Analysis

Table 4.8 lists the findings from the panel data analysis.

Table 4.8 Fixed Panel Data Analysis Results

ROI |	Coef.	Std. Err.	z	P>|z|
Bonds |	-.032038	.0308432	-1.04	0.299
Real Estate |	.0115484	.0244182	0.47	0.636
Mutual Funds	.0591424	.0239341	2.47	0.013
Equity Funds |	.2310029	.0228341	10.12	0.000
_cons |	-.0284404	.1491268	-0.19	0.849

R-sq: within = 0.8383 Obs. per group: min = 8

between = 0.8789 avg = 8.0

overall = 0.8333 max = 8

Wald chi2(4) = 175.00

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

Bonds = investment in bonds, Real_Estate = property investments, Mutual Funds= mutual fund investments, Equity_Funds= equity investments

Source: Researcher Data (2023)

Table 4.8 provides useful insights into the relationship between various portfolio compositions and investment firm financial performance. The cumulative R-squared value of 0.8333 indicates that the model accurately predicts a significant percentage of the variation in the dependent variable, Return on Investment (ROI). This means that the independent variables chosen have a significant impact on the financial success of these organizations.

Among the specific coefficients, the Equity funds variable stands out with a p-value of 0.000 and a statistically significant coefficient of 0.2310029. This shows a strong positive

connection between ROI and equity fund investment, with a coefficient of 0.0591424 and a statistically significant p-value of 0.013. Bonds and real estate, on the other hand, have negative coefficients that are not statistically significant, indicating that ROI may not be significantly impacted by these assets.

The Wald chi-squared statistic of 175.00 with a p-value of 0.000 suggests that at least one of the independent variables has a substantial role in explaining the variance in ROI. Furthermore, the random-effects GLS regression model implies no connection between the error term (u_i) and the independent variables (X), which is a critical requirement for model validity. Overall, our findings provide useful insights for investors and policymakers in understanding the portfolio composition elements that determine the financial performance of Nairobi Securities Exchange investment businesses.

The study model was developed as below:

$$Y_{it} = -.0284404 + -.032038X_{1it} + .0591424X_{2it} + .2310029\,X_{3it} + .0115484X_{4it} + \varepsilon_{it} \ldots\ldots \quad \text{Eq. 4.1}$$

Removing the insignificant coefficients, the model obtained is:

$$Y_{it} = 0.0591424X_{2it} + .2310029\,X_{3it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad \text{Eq. 4.2}$$

Where;

Y= Financial performance, β0=Constant term

β1,β2,β3,β4=Beta coefficients of the independent variables

X1= Bond investments

X2=Mutual Fund Investments

X3=Equity Investments

X4=Real Estate Investments

ε =Error term

i=Investment firm.

i=1...5 t = the time period index. t = 1…6

The above empirical model are in line with the studies done by Musembi and Jagongo (2018).

4.5.2 Test for Moderation

Two tests were carried out; one with a moderator and the other without a moderator.

4.5.3.1 Results without Moderator

The regression analysis for panel data without a moderator is presented in table 4.9.

Table 4.9 Fixed Panel Data Analysis Results

ROI |	Coef.	Std. Err.	z	P>|z|
Bonds	-.032038	.0308432	-1.04	0.299
Real_Estate	.0115484	.0244182	0.47	0.636
Mutual Funds	.0591424	.0239341	2.47	0.013
Equity_Funds	.2310029	.0228341	10.12	0.000
_cons	-.0284404	.1491268	-0.19	0.849

R-sq: within = 0.8383 Obs. per group: min = 8

between = 0.8789 avg = 8.0

overall = 0.8333 max = 8

Wald chi2(4) = 175.00

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

Bonds = investment in bonds, Real_Estate = property investments, Mutual Funds= mutual fund investments, Equity_Funds= equity investments

Source: Researcher Data (2023)

The coefficient for bonds is in the negative (-0.032038), indicating an inverse relationship between the allotment of funds to bonds and ROI. Nonetheless, this connection is not statistically substantial as the p-value (0.299) surpasses the conventional significance level of 0.05. Consequently, the allotment to bonds does not yield a notable impact on ROI in this analysis .The coefficient for real estate stands as a positive figure (0.0115484); nevertheless, this correlation lacks statistical significance with a p-value of 0.636. This signifies that the influence of real estate investments on ROI doesn't carry statistical weight in the study. The coefficient for mutual funds exhibits a positive sign (0.0591424), indicating a favorable relationship between investments in mutual funds and ROI. In this instance, the p-value stands at 0.013, which is below 0.05, signifying that the allocation to mutual funds holds a statistically meaningful positive influence on ROI. The coefficient for Equity funds is significantly positive (0.2310029), implying a robust positive association between investments in Equity funds and ROI. Moreover, the exceedingly low p-value (0.0000) signifies that this connection is highly statistically significant, suggesting that investment in real-life funds wields a substantial positive impact on ROI. The constant term embodies the baseline ROI when all other variables registered at zero. In this scenario, the coefficient takes a negative value (-0.0284404), yet the p-value is markedly high

(0.849), indicating that the constant term lacks statistical significance and doesn't make a substantial contribution to elucidating the variation in ROI.

4.5.3.2 Test With Moderator

The regression analysis for panel data with a moderator is presented in table 4.10.

Table 4.10 Results with Moderator

ROI	Coef.	Std. Err.	t	P>|t|
Bonds_infl	-.0056066	.0097352	-0.58	0.568
Equity_~e_infl |	.003565	.0077072	0.46	0.647
Mutual_infl |	-.0047904	.0075545	-0.63	0.530
Real Estate_~s_infl |	.0065542	.0072073	0.91	0.369
_cons |	1.073023	.3605542	2.98	0.005
F(4, 35) = 0.23		Prob > F = 0.9191	R-squared = 0.0257	
Adj R-squared = -0.0856		Root MSE = .24888		

Bonds = investment in bonds, Real_Estate = property investments, Mutual Funds= mutual fund investments, Equity_Funds= equity investments, infl = Inflation

Source: Researcher Data (2023)

The findings from Table 4.8 reveal that Bonds exhibits a coefficient of roughly -0.0056066, with a standard error of 0.0097352. The t-statistics records -0.58, and the p-value stands at 0.568. This implies a feeble negative correlation between the proportion of bonds in the investment portfolio and ROI. However, this connection lacks statistical significance at conventional levels (p> 0.05). Real Estate displays a coefficient of about 0.003565, alongside a standard error of 0.0077072. The t-statistic is 0.46, and the p-value reads 0.647. This signifies a faint positive correlation between the proportion of real estate investments

in the portfolio and ROI. Yet, akin to the prior variable, this correlation is not statistically significant.

Mutual Funds showcases a coefficient of roughly -0.0047904, coupled with a standard error of 0.0075545. The t-statistic shows -0.63, and the p-value is 0.530. This suggests a weak adverse relationship between the proportion of mutual fund investments in the portfolio and ROI, albeit without statistical significance.

Real Estate Stocks boast a coefficient of approximately 0.0065542, and a standard error of 0.0072073. The t-statistic registers 0.91, and the p-value stands at 0.369. This points to a subtle positive association between the proportion of real estate stocks in the portfolio and ROI, yet again, the correlation lacks statistical significance.

The constant term bears a coefficient of about 1.073023, alongside a standard error of 0.3605542. The t-statistic records 2.98, and the p-value is 0.005. The statistically meaningful p-value indicates that the constant term exerts a notable impact on ROI.

It is worth noting that the model preserved relevance in the absence of the moderator (inflation rate). However, when the moderator was included, the connection lost its significance, demonstrating that inflation has a sizable moderating impact on the association between portfolio composition investment and the financial success of companies listed on the Nairobi Securities Exchange.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

A summary of the key findings and a description of the particular goals are provided in this section. Furthermore, it draws implications from these findings and makes recommendations for further study.

5.2 Summary of Findings

5.2.1 Effect of Equity on Financial Performance

Finding out how equity investments affected the financial performance of investment businesses listed on Kenya's Nairobi Securities Exchange was the study's main goal. The correlation matrix's results showed a strong link between ROI (M) and equity investment (.611). With a p-value of 0.05, the association was statistically significant. With a coefficient of.2310029, p0.05, panel data findings showed a positive link between stock fund investment and financial performance. This shows that equity investment and returns on investment (ROI) have a positive connection.

5.2.2 Effect of Bonds on Financial Performance

The research's second goal was to ascertain how bond investments affected the financial results of investment companies that were listed on Kenya's Nairobi Securities Exchange. According to descriptive data, the average bond investment is around $3.6928, with a standard deviation of 0.89719. This demonstrates that, while the amounts invested vary, the firms in the research had a high allocation to bonds on average. In contrast, the

correlation matrix data indicated a positive (0.157) but non-significant (p-value > 0.05) relationship between ROI (M) and bond investment. Panel data results revealed a small and negative relationship between bond investment financial performance, with a coefficient of -.032038, p>0.05. This shows that the link between returns on investment (ROI) and investments in bonds.

5.2.4 Effect of Real Estate on Financial Performance

Assessing the impact of real estate investments on the financial results of Kenyan companies listed on the Nairobi Securities Exchange was the third goal of the study. The descriptive statistics show that the average mutual fund investment was 3.2459, with a standard deviation of 0.72474. As a result, on average, with some variance, these companies allocated a sizable portion of their portfolios to mutual funds. Despite a positive (0.093) relationship between ROI (M) and real estate investment, the correlation is not statistically significant (p-value > 0.05). The panel data resulted in a coefficient of.0115484, demonstrating a slight but non-significant positive relationship between real estate investments and ROI (p>0.05).

5.2.5 Effect of Mutual Fund on Financial Performance

The fourth goal looked into how investing in mutual funds affected Kenyan investment companies listed on the Nairobi Securities Exchange. The mean investment in mutual funds is around 3.2459, while the standard deviation is 0.72474. This proves that, generally speaking with some variance, these companies donate a significant portion of their portfolios to mutual funds. Mutual fund investments are offered in the 1.90 to 4.98 range. The relationship between ROI (M) and mutual fund investment is statistically significant

(p-value 0.05) and relatively strong positive (r = 0.477). The panel data findings indicated a coefficient of.0591424, p0.05. It was concluded that investing in mutual funds had a positive and significant influence on investment results.

5.2.5 Moderating Effect of Inflation on the Relationship between Portfolio Composition and Financial performance

The study's fifth objective was to examine the impact of inflation on the relationship between companies listed on the Nairobi Securities Exchange and their portfolio composition, as well as how it affected their financial performance. Annualized inflation in Kenya ranged from 4.69 to 7.98 percent, with a mean of 6.18 percent. When inflation was present, the panel data model's R-square was 0.0257, P>0.05, and when it was not, it was 0.8383. This showed that the correlation between the portfolio composition and financial performance of Kenya's listed investment enterprises was significantly impacted by inflation.

5.2.6 Effect of NSE's Portfolio composition on Financial Performance

The study's main goal was to investigate the financial performance of investment companies listed on the Nairobi Securities Exchange in relation to growing Kenyan inflation rates. The standard deviation of the mean return on investment (ROI), which was about 0.6084, was 0.15403. The ROI figure demonstrates that these businesses, on average, had a favorable return on their investments. The ROI ranged from 0.83, demonstrating the variation in each company's performance with investments. The financial success of investment companies registered on the Nairobi Securities Exchange is significantly

influenced by portfolio composition, as shown by the study's R-square of 0.8383 and p0.05 results.

5.3 Conclusions

Examining the effect of portfolio composition on the financial performance of investment businesses that are listed on the Nairobi Securities Exchange was the main goal of the study. The study's conclusion was that there was a strong and positive link between the financial performance of these exchange-listed investment companies' portfolio composition.

The study's primary goal was to determine how equity investments affected the financial success of investment businesses listed on Kenya's Nairobi Securities Exchange. The research showed a relationship between equity investment and returns on investment that was favorable. The correlation matrix's findings, which showed a strong and positive association between ROI and equity investment, supported this claim. Results from panel data further supported a favorable relationship between equity fund investments and financial success.

The second goal was to evaluate how bond investments affected the financial success of investment companies registered with Kenya's Nairobi Securities Exchange. Despite lacking the strength to draw firm conclusions, the analysis suggested a weakly positive association between returns on investment (ROI) and bond investments. As a result, these investments could not have a big impact on ROI.

Assessing the effect of real estate investments on the financial standing of Kenyan companies listed on the Nairobi Securities Exchange was the third objective. Although

there was a positive correlation between ROI (M) and real estate investments, the connection remained shaky and unimportant since statistical significance was not attained. The evaluation of the effects of mutual fund investments on the operational outcomes of Kenyan investment businesses that are listed on the Nairobi Securities Exchange was the main objective of the fourth set of objectives. The study found a statistically significant (p-value 0.05) and substantial positive connection between ROI (M) and mutual fund investments.

The fifth goal was to look at how investment businesses listed on the Nairobi Securities Exchange's portfolio composition affects their financial performance when Kenya's inflation rates rise. The study found because inflation considerably reduces the relationship between investment portfolios and the financial success of investing firms in Kenya.

5.4 Recommendations of the study

It has been shown that the financial performance of investment companies registered on the Nairobi Securities Exchange is impacted by portfolio management. In order to enhance their financial performance and more effectively reduce their firm's investment risk, the analysis consequently indicates that the leadership of investment businesses should make sure they maintain an ideal assortment of assets.

The Nairobi Securities Exchange-listed investment businesses' financial performance was shown to be most significantly influenced by equity stakes. Therefore, in order to improve their financial performance, investment businesses are advised to pay attention to equity investments. This called for investing in strong counters with greater potential for gain and dividend payouts. Regarding investments in bonds, the study proposes that even though there exists a weak affirmative correlation between returns on Investments (ROI) and

investments in bonds, this connection may not be substantial enough to markedly affect ROI. As a result, investment firms ought to be circumspect in allocating their resources to bonds and contemplate broadening their portfolios into other classes of assets to potentially enhance their comprehensive financial performance. Investment firms may need to reassess the extent to which they channel their resources into real estate ventures. The investigation suggests that these firms meticulously evaluate the risk and return profile of their real estate holdings and contemplate alternative avenues for investment. Conversely, the study proposes that investment firms should investigate opportunities to augment their exposure to mutual funds. Lastly, the research advocates that investment firms should thoughtfully weigh the option of enlarging their allotments to Real Estate Funds as a safeguard against inflation.

5.5 Contribution to Knowledge

By showcasing a favorable correlation between portfolio composition and financial performance, the study imparts valuable insights for both investors and investment supervisors, underscoring the importance of thoughtfully formulating and overseeing portfolios to improve financial performance. It urges investment enterprises to closely scrutinize their portfolio arrangement tactics and contemplate refining them to amplify returns and overall financial well-being.

Moreover, the study delves into precise facets of portfolio configuration, encompassing investments in equities, bonds, real estate, and mutual funds. These assessments furnish nuanced perspectives on how distinct asset categories influence financial performance. The study discloses that investments in equities exhibit a constructive and noteworthy association with returns on investment (ROI). This revelation signifies that investment

corporations should ponder dedicating a substantial segment of their portfolios to equity investments to potentially enhance their performance.

The study also underscores the importance of mutual fund investments in elevating financial performance, as a statistically significant affirmative correlation was detected. In sum, these particular deductions proffer pragmatic counsel to investment corporations engaged in the NSE, aiding them in rendering enlightened determinations regarding their portfolio arrangement and optimizing their financial results

5.6 Limitations of the Study

The data for the research was obtained exclusively from publicly listed investment enterprises in Kenya. It's important to emphasize that the findings of this investigation might not apply to every investment firm in the country. The research aimed to zero in on five distinct investment corporations over an eight-year span, resulting in a total of 40 observations. The investigation wasn't confined to just an eight-year window. In certain years, there might have been gaps in the data. The research employed longitudinal examination with a chronological sequence of data to initiate trends and growth patterns; however, a cross-sectional survey approach is necessary. Information was gathered over an eight-year duration to more effectively illustrate the interconnections between variables.

5.7 Suggestions for Further Research

To deepen our comprehension, forthcoming studies might delve into the precise varieties of bonds that investment enterprises in Kenya are venturing into and how these diverse bond instruments influence financial performance. Additionally, additional research could zero in on the geographical location and categories of properties invested in by these

companies. Investigating whether property investments in particular regions or property types (e.g., commercial versus residential) yield differing impacts on financial performance could be an area of exploration.

Thirdly, upcoming research could probe the elements contributing to the connection between ROI and investment in Mutual Funds, such as the effectiveness of mutual funds, the proficiency of the fund manager, and the asset allocation tactics applied within these funds. Finally, additional research could concentrate on comprehending the mechanisms by which real estate funds serve as a safeguard against inflation for investment firms.

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APPENDICES

Appendix I: Data Collection Schedule

Firm	Year	Variable 1 **Investment in Bonds**	Variable 2 **Investment in Real Estates**	Variable 3 **Investment in Mutual Funds**	Variable 4 **Investment in real estate Funds**	ROI	Inflation
Kurwitu Ventures limited							
Kurwitu Ventures limited							
Kurwitu Ventures limited							
Kurwitu Ventures limited							
Kurwitu Ventures limited							
Kurwitu Ventures limited							
Kurwitu Ventures limited							

Kurwitu Ventures limited							
Olympia Capital Holdings Limited							
Olympia Capital Holdings Limited							
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Olympia Capital Holdings Limited							
Olympia Capital Holdings Limited							
Olympia Capital Holdings Limited							
Olympia Capital Holdings Limited							
Olympia Capital Holdings Limited							
Trans-century Limited							
Trans-century Limited							
Trans-century Limited							
Trans-century Limited							
Trans-century Limited							

Trans-century Limited							
Trans-century Limited							
Trans-century Limited							
Centum Investment Company limited							
Centum Investment Company limited							
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Centum Investment Company limited							
Centum Investment Company limited							
Centum Investment Company limited							
Home Afrika Limited							
Home Afrika Limited							
Home Afrika Limited							
Home Afrika Limited							

Home Afrika Limited							
Home Afrika Limited							
Home Afrika Limited							
Home Afrika Limited							

Appendix II: Secondary Data

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
1	Kurwitu Ventures limited	2022	5.08159	4.194246	2.222384	2.885828	0.56505222	7.66
1	Kurwitu Ventures limited	2021	5.069135	4.938627	1.450381	2.87255	0.56477267	5.62
1	Kurwitu Ventures limited	2020	4.081625	4.455819	1.473483	2.638161	0.4560342	5.41
1	Kurwitu Ventures limited	2019	4.568475	2.432156	2.974261	2.626395	0.596076	5.2
1	Kurwitu Ventures limited	2018	5.072612	3.198954	2.243777	5.136668	1.16355612	4.69

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
1	Kurwitu Ventures limited	2017	5.072803	1.206536	1.980191	5.134726	1.1631876 2	7.98
1	Kurwitu Ventures limited	2016	5.08459	4.711212	4.988731	5.144388	1.1628806	6.3
1	Kurwitu Ventures limited	2015	5.083376	3.940536	4.203831	5.13246	1.1624502 9	6.58
2	Olympia Capital Holdings Limited	2022	4.31526	4.205731	4.21525	4.376806	1.2261038 7	7.66
2	Olympia Capital Holdings Limited	2021	4.336848	4.201921	4.97138	4.39015	1.1807684 7	5.62
2	Olympia Capital Holdings Limited	2020	4.335187	4.196379	4.21856	4.387568	1.1874238	5.41

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
2	Olympia Capital Holdings Limited	2019	2.82707	4.195506	4.219888	4.382769	1.16082135	5.2
2	Olympia Capital Holdings Limited	2018	3.57123	4.193094	4.217506	4.378324	1.16033615	4.69
2	Olympia Capital Holdings Limited	2017	3.571253	4.186931	4.212365	4.376085	1.15988558	7.98
2	Olympia Capital Holdings Limited	2016	3.56765	4.184577	4.210183	4.373018	1.15962012	6.3
2	Olympia Capital Holdings Limited	2015	2.571302	2.686057	4.210723	4.1256	0.84078664	6.58

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
3	Trans-century Limited	2022	2.07431	1.199788	4.213415	4.38049	1.15879687	7.66
3	Trans-century Limited	2021	4.325477	4.206818	4.222826	4.384596	1.15838903	5.62
3	Trans-century Limited	2020	4.328578	4.207811	4.230142	4.388258	1.15793643	5.41
3	Trans-century Limited	2019	4.312247	4.165772	4.184889	4.361146	1.15748336	5.2
3	Trans-century Limited	2018	4.301634	4.175658	4.172482	4.353863	1.15738574	4.69

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
3	Trans-century Limited	2017	4.308341	4.201163	4.186759	4.365888	1.15698535	7.98
3	Trans-century Limited	2016	4.313704	4.202502	4.18492	4.369023	1.15646889	6.3
3	Trans-century Limited	2015	5.070115	4.959173	4.937811	5.124854	1.15599639	6.58
4	Centum Investment Company limited	2022	4.06933	3.94976	3.932233	4.121395	1.05560382	7.66
4	Centum Investment Company limited	2021	4.078696	3.963251	3.942696	4.131814	1.20434074	5.62

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
4	Centum Investment Company limited	2020	4.071376	3.943177	3.945801	4.123862	1.19207145	5.41
4	Centum Investment Company limited	2019	4.075093	3.931496	3.938774	4.122772	1.20240116	5.2
4	Centum Investment Company limited	2018	4.08864	3.919731	3.950577	4.13204	1.22196051	4.69
4	Centum Investment Company limited	2017	4.083237	3.907122	3.948641	4.126312	1.0383525	7.98
4	Centum Investment Company limited	2016	4.08925	3.93073	3.961611	4.136191	1.25303141	6.3

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
4	Centum Investment Company limited	2015	4.024205	3.916129	3.986406	4.103489	0.944586	6.58
5	Home Afrika Limited	2022	4.011552	3.897803	3.959322	1.835107	0.51545043	7.66
5	Home Afrika Limited	2021	4.026739	3.91434	3.935982	3.339869	0.96355137	5.62
5	Home Afrika Limited	2020	4.018621	3.885845	3.934227	1.829629	0.57609277	5.41
5	Home Afrika Limited	2019	4.041048	3.907495	3.960572	4.102968	1.19941461	5.2
5	Home Afrika Limited	2018	4.04205	3.91038	3.99719	4.11505	1.18558	4.69

	Firm	Year	Investment in Bonds	Investment in Real Estates	Investment in Mutual Funds	Investment in Equity Funds	ROI (M)	Inflation
5	Home Afrika Limited	2017	5.03973	4.91977	4.98241	5.11062	1.32726	7.98
5	Home Afrika Limited	2016	4.80084	4.16938	4.49998	5.10949	1.29545	6.3
5	Home Afrika Limited	2015	5.05188	4.89869	2.69469	5.10402	1.29109	6.58

Appendix III: Graduate School Approval

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 57530

Internal Memo

FROM: Dean, Graduate School

DATE: 15th September, 2023

TO: Cheruiyot K. Solomon
C/o Accounting & Finance Department.
Kenyatta University

REF: D58/CTY/21827/2021

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

This is to inform you that Graduate School Board, at its meeting of 13th September, 2023, approved your M.Sc Research Proposal Entitled, "Portfolio Composition and Financial Performance of Investment Companies Listed at the Nairobi Securities Exchange, Kenya".

You may now proceed with data collection, subject to clearance with the Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking forms per semester. The form has been developed to replace the progress report forms. The supervision Tracking Forms are available at the University's website under Graduate School webpage downloads.

Thank you.

15 SEP 2023

JULIA GITU
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Department of Accounting and Finance

Supervisors:

1. Dr. Moses Aluoch
C/o Department of Accounting and Finance
Kenyatta University

2. Dr. Peter Ng'ang'a
Department of Accounting and Finance
Kenyatta University

Appendix IV: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **126641**

Date of Issue: **02/October/2023**

RESEARCH LICENSE

This is to Certify that Mr.. Cheruiyot Kipkurui Solomon of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Portifolio composition and financial performance of Investments companies listed at Nairobi Securities Exchange in Kenya for the period ending : 02/October/2024.

License No: **NACOSTI/P/23/29997**

126641

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix V: List of the Investment Companies

1. Kurwitu Ventures limited
2. Olympia Capital Holdings Limited
3. Trans-century Limited
4. Centum Investment Company limited
5. Home Afrika Limited

Source: Nairobi Securities Exchange