

**FUND CHARACTERISTICS AND FINANCIAL PERFORMANCE OF
COLLECTIVE INVESTMENT SCHEMES IN KENYA**

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DECLARATION

I declare that this project is my original work and it has not been presented to any institution for any award.

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DEDICATION

The successful completion of this research project was due to the support accorded by my mother Rachel Mwaniki to whom the research project is dedicated. Her immense love in my world of academics is immeasurable.

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OPERATIONAL DEFINITION OF TERMS

Asset Allocation	This is the process through which an investor divides his or her wealth among different classes of assets like bonds, stock and cash options in which to invest in.
Collective Investment Schemes	This is investment vehicle where investors pool financial resources together under a third-party firm for purposes of investments.
Financial Performance	This is how well an organization uses its class of assets to generate revenue as measured by its ROA, ROI, ROE and Profit margins.
Fund Characteristics	These are the specific factors in an investment firm that influence the performance of such entity e.g. Fund size.
Fund Size	This refers to the largeness or the smallness of a fund in terms of the total amount of money invested.
Manager of Funds	This refers to persons that manage investment portfolios as assigned by investors for most mutual funds under the watch of the Capital Markets Authority.
Money Market Fund	This is a market where the investment done in a mutual fund at a lower risk than other mutual funds and in shorter investment durations that are less than five years.
Mutual Fund	This is a fund that pools money from different investors for purpose of investment and is managed by a professional firm.
Unit Trust	This type of collective investment scheme which is managed by a third party who makes investments and accumulates money for investment from the interested parties.

ABBREVIATIONS

ACD	Authorized Corporate Director
AuM	Assets under Management
CAPM	Capital Asset Pricing Model
CBK	Central Bank of Kenya
CDs	Certificates of Deposit
CFA	Chartered Financial Analyst
CIF	Collective Investment Fund
CIS	Collective Investment Schemes
CMA	Capital Markets Authority
CNAV	Constant Net Asset Value
CP	Commercial Paper
ETF	Exchange-Traded Fund
FP	Financial Performance
FSB	Financial Stability Board
GDPs	Gross Domestic Products
IBTC	Investment Banking & Trust Company
ICEA	Insurance Company of East Africa Limited
IFC	International Finance Corporation
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
I-REITs	Income Real Estate Investment Trusts
IS - LM	Investment Savings – Liquidity and Money Supply

JSE	Johannesburg Stock Exchange
KCB	Kenya Commercial Bank
MMFs	Money Market Funds
MPT	Modern Portfolio Theory
NAV	Net Asset Value
NSE	Nairobi Securities Exchange
OEFs	Open - Ended Funds
OEIC	Open - Ended Investment Company
RBA	Retirement Benefits Authority
ROA	Return on Assets
ROE	Return on Equity
WLA	Weekly Liquid Assets

ABSTRACT

A collective investment scheme is a plan where many investors who share the same financial goal pool together funds and appoint a professional manager of these funds to do the investment on their behalf at a fee. This makes investment in collective investment schemes more cost effective in accessing a several shares/ equity, bonds, fixed deposits and treasury bills. Managing performance of collective investment schemes involves use financial ratios such as liquidity ratios, profitability ratios, asset management ratios and leverage ratios. The general objective of this research project was to determine the effect fund characteristics on the financial performance of collective investment schemes in Kenya. The specific goals of the study were; to investigate the impact of that institutional factors, investment strategy, the regulatory framework and lastly to the scheme products on the performance of collective investment schemes in Kenya financially. The study was grounded on theories such as: the Capital Asset Pricing Model, the Keynesian Theory, the Arbitrage Pricing Theory and lastly the Theory of Financial Deepening. Because of the nature of the variables of the study the population characteristics, the researcher used secondary data in the study. The 21 Nairobi based CISs constituted the target population. Census was used in the study since the population is small. The researcher used the stata method in the analysis of data. Diagnostic tests and panel data modeling was carried out simultaneously. The study took ethical considerations into account The study concentrated on Collective investment schemes in Kenya which operated between 2018 and 2022, a period during which possibly some CISs that either had not existed or were just starting up leading to unbalanced panels being generated. Reliance on secondary data could also have resulted into undetected errors. The study found out and affirmed that institutional factors have a positive significant effect on Return on Investment; the findings further showed that scheme products had a moderating effect on the link between funds characteristics and CIS performance. Study findings will bridge the financial knowledge gap and also make an improvement the available financial academic reference material on financial outcomes of Kenyan Collective Investment Schemes. This study also expanded the available empirical evidence by using Return on Investment metric as a financial performance measure. The study concluded and affirmed that institutional factors have a positive significant effect on Return on Investment. The research conclusions that those fund characteristics have a positive significant effect on return on investment (ROI of the collective investment schemes. The study therefore recommended that fund managers should more actively engage in diversification policies that strengthen the funds characteristics in the firm by probably considering the technology-backed investments which will improve the financial performance of the Collective Investment Schemes. This will help in improving the available knowledge on the elements that promote Returns on Investments of emerging players in the country's finance industry.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Collective investment scheme (CIS) is a strategy of pooling of funds from many investors who share common financial objectives. The funds are managed by registered professional administrators. They are put into an investment portfolio of bonds, shares, and securities that have been chosen with care. CIS's income is distributed to unit holders from capital gains, dividends, and interest income (Mayie, 2018).

Financial performance as per Omollo and others, (2018) is a change in business strategy, internal controls, and the overall business environment, all of which have the potential to increase or decrease over time. Consequently, evaluated based on how effectively it has utilized its available capital to increase shareholder benefits (Gatauwa, 2022). The outcomes of this performance review are used by the company's executives to make decisions and compare financial performance of the company to that of rivals in a similar industry.

The first MMF in Europe was established in France with the same intent as those that sparked industry expansion in the United States: to engage in regulatory arbitrage. In 1981, a significant portion of French term deposits were included an interest rate cap in an effort by the government to lower the cost of bank funding.

Investment firms investing in a variety of funds have increased as the fund industry has really grown in current markets. Capital Markets Authority Amendment Act of 2000 made certain investment vehicles, like mutual funds and unit trusts, legal. This made it possible for both retail and institutional investors in Kenya to add more variety to their portfolios. Since the enlistment of the principal unit trust plot in Kenya in 2002, the market has encountered sensational development as far as offer exchanging volumes, market capitalization, and offer costs, as well as the remarkable development of these assets, with a considerable lot of them being enrolled yearly (Kasanga, 2018).

CIS operations and knowledge in Kenya are still in their infancy, and they are not fully developed. The Zimele Asset Management Company, which was registered by the CMA and the RBA, was the first company in Kenya to establish CIS. The initiative for them then was to pool resources together and invests in various interests - earning instruments like treasury bills, bonds, and commercial paper (CMA, 2020).

In the year 2002, the first unit trust scheme was registered and the market has experienced drastic improvement in share trading, market capitalization and share prices since then. Additionally, these funds have experienced phenomenal growth, with numerous others being registered annually (Gatauwa, 2014; Maiyo, 2017). In addition to providing investors with more options, unit trusts increase returns to between 8% and 10%, as opposed to 3% and 4% for conventional investments like bank deposits, which is still a very slow rate of growth that prompted this study since CIS has been expanding steadily, at a slower pace than anticipated. However, some CIS in Nairobi appear to have a number of issues, such as fierce competition that causes them to fail before they even

launch or very short life span in comparison to other businesses, just as other businesses must navigate the waves of business challenges to maintain momentum (Maiyo, 2017).

1.1.1 Fund Characteristics

According to Kakaruz (2017) financial ratios and other types of analysis can be used to gauge a company's current and past performance using fund characteristics. Based on a predicted indicator in the market, the financial ratio can be used to estimate or predict the company's future performance in comparison to its current performance. Because it has been determined that one aspect of the fund's characteristics indicates the value of the company, investors and shareholders are particularly interested in this aspect.

According to Jones (2019) the expense ratio, expansion, liquidity, and profitability of institutional factors are characteristics. The expense ratio measures the various costs that are incurred in the process of managing funds such as operating and research expenses. When a fund grows in size, it saves money because brokerage fees are lower for larger transactions and research costs rise less than proportionally with fund size. The capacity to quickly trade large quantities without altering the price is referred to as liquidity. The company's capacity to increase or decrease profitability is influenced by such fund characteristics. Poor management of the three fund characteristics - leverage, liquidity, and asset - can drive investors away from the company, reducing its market competitiveness. Therefore, a company's profitability is its capacity to increase revenue over its lifetime.

The process of identifying the best way of investment is through an investment strategy,

according to Jones (2019). The strategy focuses on the risk-reward trade-off for investors. Before making any investment decisions, it is essential to have a well-thought-out investment strategy. Portfolio selection and entry are influenced by investment strategies implemented at the organizational level. The strategies, such as market timing, allow investors to buy at lows and sell at highs to maximize returns. This could also entail purchasing investment instruments at a discount and disposing of them when their prices rise. In order to beat a particular benchmark, this strategy aims to outperform the market and this highly boosts the performance of many collective investment schemes in Kenya.

A solitary regulatory authority ought to have central obligation regarding assets inside its ward. Before the operator begins marketing, funds must be registered or authorized by the regulator. The regulator must be able to issue regulations, enforce them, and inspect and investigate fund management businesses. It should also have sufficient authority to safeguard investors' interests, such as the ability to revoke licenses, suspend dealing, impose fines, revoke fund authorization, initiate civil proceedings, and recommend criminal prosecutions. (Mukherji, 2019). In Kenya, the legal framework governs the CISs like the CIS Act, CMA regulations made by CMA including CIS Regulations and CIS (Conduct of Business) Regulations among others (Capital Markets Authority, 2021). This also plays a major role in upgrading the performance of these collective investment schemes.

Any CIS has investors who have pooled assets (Schemes Products) into a common fund

and a body of overseers of this company's operations (CMA, 2019). As an investment pool, CIS helps to spread risk across a wide range of investments with a small amount. Professional portfolio management necessitates a significant amount of knowledge, experience, resources, and expertise, which individual investor's lack. This also plays a role in increasing the organizational revenues which are part of the performance of the collective investment schemes.

Funds that invest in a variety of securities (Schemes Products), including quoted stocks, government and corporate bonds, money market instruments, and others, can be pooled by thousands of investors through the use of mutual funds or unit trusts. The unit holder is the owner of the professional portfolio manager's funds, and they are entitled to the net income of the fund (Sehhat, 2019). This is determined by dividing the gross revenues by operating expenses like trustee and accounting fees and legal expenses like the stock exchange transaction fee which also forms part of the major boosters of the financial performance of the collective investment schemes in Kenya

1.1.2 Financial Performance

The net income and the company's financial risk are determined by this. During the investment period, the financial situation of the collective investment scheme can have a great impact on the financial well-being of a number of individuals. According to Blome (2017), accounting for defined benefit collective investment scheme plans necessitates numerous estimates. Millions of people worldwide rely on collective investment schemes as their primary source of income.

The majority of CIS firms evaluate their financial performance from two angles: from both the company's and the customer's point of view. The rates of returns on the principal invested are the main focus from a customer's perspective. From a business perspective, returns to customers must be taken into consideration. To determine the profit after interest and taxes, the gross income can be adjusted for expenses and taxes (Omondi, 2017).

According to Martin (2019) Ratios which are used to measure financial performance are ratios for liquidity, profitability, leverage, and market value are all examples (Brunner (2018). The level of an investment scheme's returns compared to a base, like capital or assets is measured using profitability ratios like Return on Equity, Return on Assets and Profit Margin. This is because they measure how effectively management has utilized shareholders' capital is Return on Equity (ROE).

The poverty levels are rising at an alarming rate in the 21st century. According to Retirement Benefits Authority (2019), the annual compound rate of Kenya's retirement pension fund assets increased from 788 billion in 2016 to 1.16 trillion in 2018. Retirement Benefits Authority has set directions for the type of assets in which pension funds should invest and the quantitative limits of these investments. Fixed deposits are limited to 30%, corporate bonds at 20%, offshore investment at 15%, 5% for unquoted shares, 10% for commercial papers real estate and REITS are limited at 30%, immovable property at 30%, private equity and venture capital at 10%, exchange – traded derivatives are limited at 5% and 10% for any other asset.

1.1.3 Collective Investment Schemes

The CIS in Kenya for the year 2022 - 2023 is dominated by CIC Money Market Fund, NCBA Money Market Fund, and Britam MMF, Sanlam MMF among others. The CIC Money Market is a fund with low risk that invests in a diverse portfolio of instruments that earn interest for short periods of time. The primary investments are commercial papers that are credit-rated or have been approved by the public and have a maximum weighted average tenure of 13 months. Other investments include Treasury bills, government securities, and call and fixed deposits in financial institutions that are supervised by the Central Bank of Kenya. It provides monthly interest payments and capital conservations (CIC, 2022). Bonds, commercial paper, fixed deposit accounts, and treasury bills are examples of low-risk, high-yielding investments made by the Britam Money Market Fund, a type of unit trust. The Britam money market fund is the best investment option if an investor intends to use cash for immediate goals. Money market securities whose maturity is below one year that provide it with immediate liquidity and an above-average rate of return are invested here. Each day, unit holders receive the fund's earnings less fund expenses (Britam, 2022). The ICEA MMF primarily invests in interest-bearing assets like short-term bonds and fixed deposits. Suitable for investors who want liquidity - the ease with which they can access their funds - a monthly income in the form of interest on their capital, as well as capital preservation. Retail investors can now access the ICEA MMF's money market fund through an online platform with a lower minimum initial investment. The firm's unit trust offering was promoted on the portal known as ICEA Digit rust with the intention of attracting a larger number of

customers and low-income investors. An investor must have a minimum initial deposit of Sh500 and a maximum additional deposit of Sh20 under the Digit rust (ICEA, 2022).

Sanlam Investments East Africa offers institutional clients individualized portfolios. Insurance companies, retirement funds, and other institutional clients seeking a bespoke investment strategy can benefit from this service. Sanlam Currency Market Asset expects to convey a more significant level of pay contrasted with normal bank' stores. The fund provides immediate liquidity, which is important because capital preservation is paramount. The first option is to put money into a variety of money market securities, such as treasury bills, investment-grade commercial paper, and higher-yielding fixed and call deposits. Usually, this fund invests in money market instruments with a shorter maturity than one year (Sanlam, 2022).

The most prevalent types of CIS are open-ended investment companies, REITs, and unit trusts. Through the fund manager, investors can purchase Unit Trust units at the daily average selling price. They are purchased at any time provided the mutual fund does not exceed its limit. Fund manager purchases units from departing investors and issuing units to new investors (Maina, 2018).

According to Capital Markets Authority (2019), the legalized unit trust funds increased in 2001 from zero to 19, with an asset under management of Ksh71.4 billion. This demonstrates the widespread acceptance of collective investment plans in Kenya. Unit trusts are increasingly being used as investment vehicles by both large and small

investors. They give adaptability that is ordinarily not accessible in elective speculation choices while as yet offering cutthroat returns at low (Mutua,2019).

1.2 Statement of the Problem

Collective investment schemes in Kenya have performed poorly. The poor performance hinders the achievement of as stable financial status as stated in Kenya Vision 2030 (Namu and Nthemba, 2021).

Collective investment schemes' overall performance hasn't been as strong as it could be. According to a report from the Capital Markets Authority for the year 2020, unit trust makes approximately 0.80% of the country's GDP. Despite industry expectations, Kenyan financial performance collective investment schemes have continued to exhibit an unimpressive trend over time. The low returns realized from asset classes as they are pooled into the overall portfolio of various CISs in Kenya are the cause of this trend. According to the findings of a study by the Zamara Group in 2017, the overall returns of CISs were 1.9% of the total investments. This was down from 8.6 percent in 2016. However, in 2016, the returns from collective investment schemes increased to 4.2 percent. The year 2017 and 2018 returns were 2.5% and 3.8% respectively.

According to Kazmi (2017), lower interest rates lead to a revival of the economy, increased investment in new ventures, and consequently, a rise in the demand for mutual funds. In contrast, a rising interest rate raises the cost of borrowing money, which slows investment and slows the growth of the CIS industry. Because the size of the CIS industry increases as the number of investors increase, investor decisions have a direct

impact on the industry's expansion. The presence of Covid -19 has not spared the collective investment schemes in Kenya thus negatively affecting their growth. This can be attributed the lack of disposable income among the household whose income had been affected adversely by the pandemic. Most of the income earned by the households has been dedicated to commodities and basic food items. This left them with no money for investing in the CIS s in Kenya thus its slow growth and stagnation (Kimwaro, 2021).

Fund characteristics and collective investment scheme financial performance has been the subject of empirical research. Unit trusts have been the subject of some local research in Kenya. A research on the determinant's growth of CISs in the Nairobi Securities Exchange list financially was carried out in 2017 by Ayako, Kungu, and Githui. Firm size and liquidity had no significant consequence on financial performance, according to the study.

Kasanga (2011) and Osano (2013) found that investment fund performance is greatly affected by the investment strategies and the asset allocation. With increasing public sensitization on the investment opportunities as well as promotion of the capital markets to the middle and lower-income individuals; an examination of the financial performance of CIS in the country as an alternate investment destination was essential in strengthening the investments flows as well as offer investors alternative channels of investing their funds.

1.3 Objectives of the Study

1.3.1 General Objective

The main reason for this research was to investigate the influence of fund characteristics on financial performance of collective investment schemes in Kenya.

1.3.2 Specific Objectives

- i. To find out the influence of institutional factors on the financial performance of collective investment schemes in Kenya.
- ii. To determine the effect of investment strategy on the financial performance of collective investment schemes in Kenya.
- iii. To find out the influence of regulatory framework on the financial performance of collective investment schemes in Kenya.
- iv. To establish the effect of scheme products on the financial performance of collective investment schemes in Kenya.

1.4 Research Hypothesis

H_0 . There is no relationship between institutional factors and financial performance of collective investment schemes in Kenya.

H_0 . There is no relationship between investment strategy and financial performance of collective investment schemes in Kenya.

H_0 . There is no relationship between regulatory framework and financial performance of collective investment schemes in Kenya.

H_0 . There is no relationship between schemes products and financial performance of collective investment schemes in Kenya.

1.5 Significance of the Study

The research results will benefit academics and practitioners in the financial sector. It will also assist fund managers in better comprehending economic factors, expectations, and choices, enabling them to provide products that cater for their particular preferences.

By highlighting the predominant factors and the actual market returns as a result, it will assist investors in reviewing their asset allocation strategies. Individual, institutional, and private investors will rely heavily on this data when weighing a wide range of investment options.

Economic policymakers who want to increase investment in various sectors will benefit from the study by providing information on how to direct investments toward the critical asset classes and thus formulate policy.

The research will suggest new areas of investigation that have an impact on the mutual fund industry. As the Kenyan mutual fund market expands, it will highlight information that is currently available, anticipated market changes, and the potential for additional research.

1.6 Scope of the Study

This study dealt with characteristics of the fund and financial performance of collective investment schemes in Kenya as the research topic. The study utilized descriptive research design and panel data collected from the 21 CISs in Kenya. The study relied on

information from approved CISs in Kenya which publish their annual performance to the public. The time span was from January to April 2023.

1.7 Limitations of the Study

The research looked at collective investment schemes in Kenya that have operated between 2010 and 2018. During this time, there is a chance that some CISs were either not there at all or were just starting, which could have led to panels that were not balanced. Using secondary data may result in undiscovered errors. Due to the aforementioned limitations, the findings of the study may not reveal such errors: This may have an impact on the study's final result. However, the study overcame this limitation by ensuring the accuracy of the data and correcting any errors.

1.8 Organization of the Study

Chapter one addressed the study background, statement of the problem, objectives of the study, significance, the scope, the limitations, organization of the study and the chapter summary. Chapter two addressed the theoretical literature, empirical literature review, the chapter summary and the conceptual framework of the study. Chapter three addressed the different research methodologies and approaches applied in the research. The fourth chapter of this study addressed the data analysis, data presentation and interpretation sections. The fifth chapter addressed the summary, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The collective investment schemes literature was reviewed in this section, with an emphasis on theoretical and empirical research on fund characteristics and performance. No much reviewe has been attempted on aggregate venture plans in Kenya in this manner the center is in the agricultural nation like Kenya.

2.2 Theoretical Review

2.2.1 Arbitrage Pricing Theory

Ross (1976) was the author of the theory, an augmentation of the capital resource valuing model (CAPM). Since the theory asserts that share prices are influenced by a variety of factors, in contrast to CAPM, which argued that prices are influenced by one factor (Kazi, 2004), it can be linked to the investment strategy variable of this study . Theory also assumes that the asset returns are explained by systematic factors, unsystematic risk can be diversified away in a portfolio and that no arbitrage opportunities exist. Consequently, asset pricing has been significantly influenced by this theory. The main limitation of the theory is that it lacks a consensus on the key factors of the systematic risk. This theory supports the scheme Financial Performance variable and has been very instrumental in asset pricing because, unlike CAPM which suggested that asset prices are determined by one single common factor, Arbitrage Pricing theory advocates that shares prices are driven by many factors (Kazi, 2004).

2.2.2 Capital Asset Pricing Model

The proponents of Capital Asset Pricing Model (CAPM) were Sharpe (1964), Lintner (1965), and Mossin (1966). The theory supports the investment strategy variable of the study as it was a basic technique used to determine risk and performance related to a particular security. CAPM emphasized the principles of diversification so as to create an efficient portfolio. Sharpe made several assumptions as he came up with the theory; in an efficient market with informed buyers and suppliers, no individual player can influence the price in the market, but rather adapts to the price already arrived by the competitive forces in the market. The theory also assumes a single period investment horizon, implying that investors only intend to hold the security in the current period only and are not interested in what happens afterwards in the subsequent periods (Lee & Rui, 2002). The theory further argued all investors are rational mean variance optimizers.

The theory was used to test how systematic risk influenced the financial performance of Kenyan collective investment schemes. This theory contributes to the study as it explains how investment strategy affects collective investment schemes' financial performance in Kenya in comparison to the market as a whole.

According to studies, there are a few expected in corporate CAPM use. First, the straightforward model might not adequately capture the financial markets behavior. Secondly, betas become unstable over time. This presents challenges when betas from historical data are utilized in the evaluation of future cash flows to calculate costs of equity. Betas ought to change along with capital structures and company fundamentals.

Additionally, beta estimates based on previous data can be affected by statistical estimation error (Levy, 2012).

CAPM provides an explanation of the concept of un-diversifiable risk in unit trust fund investment. The study focuses on determining how institutional factors influence the financial performance in the Kenyan collective investment schemes over time.

2.2.3 The Keynesian Theory

The proponent was John Maynard Keynes in 1936 and the theory supports the regulatory framework variable of the study. He made sense of that an expansion in the general cost level or expansion is brought about by an expansion in total interest which is over the total stock. That's what he contends in the event that the economy is at full result level, an expansion in government use, confidential utilization and an ascent in confidential venture leads to an ascent total interest (Reddy, 2012; Gatauwa, 2020). Ifionu (2017) makes sense of that, expansion pressure is because of the way that at full work of result and with most extreme use of scant assets, an economy can't build its total stockpile to match the rising total interest.

The Keynesian theory emphasizes reducing unemployment rather than reducing inflation. The evidence has led the advocates to the conclusion on benefits of low inflation being negligible. Numerous Keynesians however oppose inflation naturally; opinions regarding the importance of unemployment and inflation have a wide impact on the policies by economists their acceptance by decision-makers. Keynesians advocate more aggressive expansionist policies.

This theory has faced a lot criticism from different quarters. They argue that unless the government intervenes with wages to provide an indication that the market has an internal regulatory framework; the firms that provide response tend to balance the economy. Keynes, on the other hand, wrote while the world was in a deep economic depression and was less optimistic about the market's natural equilibrium. (Gal, 2005) He was of the opinion that when it came to establishing a robust economy, the government was in a better position than market forces. Borrowing results in financial exclusion and higher interest rates. This study makes use of the theory because it explains how the regulatory framework in Kenya influences the financial performance of collective investment schemes.

2.2.4 Financial Deepening Theory

Nnanna and Dogo (1998) the theory's proponents, demonstrate that money-related area development leads to monetary growth and, ultimately, economic growth (Nnanna& Dogo, (1998). The theory supports the scheme products and the investment strategy variables since selection of an appropriate real financial strategy results in financial deepening, particularly with regard to real profit rates and real financing stock. Additionally, the processes of fund mutilations are incompletely the result of a shallow budgetary framework. The depth of finance is taken into account when developing through money-related intermediaries. By itself, financial deepening contributes to development by increasing the effectiveness of speculation. This relationship confirms the positive popularization, ostensibly with the advancement of money related development (Friedman, 1998).

Traditional finance, according to critics, has consolidated in economically developed regions, resulting in widespread financial exclusion of vulnerable groups. Inclusionary finance places an emphasis on the accessibility and long-term viability of financial services, assists those at the bottom of society in gaining production skills, and provides financial services to weak businesses that are capable of technological innovation but face financial constraints.

2.3 Empirical Review

2.3.1 Institutional Factors and Financial Performance

Based on their belief that growth is a sign of progress and an introduction to a sustainable competitive advantage and profitability, businesses use it to measure their performance. Any increase in a company's assets increases profitability and opens up new growth opportunities. Fund size being the first factor this study takes into account. According to Wandia (2017), on the relationship between fund size and the financial performance of organizations, empirical research has demonstrated that a large fund size distributes overhead costs across all portfolio financial assets. When compared to small stock sizes, large portfolios of assets and large fund sizes are more liquid. As a result, their performance improves as well as their liquidity (Islam & Dewri, 2019). The volume of assets purchased each day rises because large portfolios of unit trust funds typically contain a large number of diverse assets. Because larger funds inefficiently invest large sums of money, smaller funds are more financially efficient than larger ones. They additionally have lower monetary assets which they need to spend all the more wisely. The study excluded other variables and only focused on the fund size as the main

variable. This study will include three more variables of the investment strategy, schemes products and the regulatory framework.

Miguel, Ferreira, and Romas (2020) studied the predictors of fund size of mutual trust fund from five African states (Nigeria, Ghana, South Africa, Morocco, and Tanzania). The study findings concluded that large funds reasonably performed better compared to the less funds and that the mutual trust funds that were managed by more skillful and knowledgeable individuals and were charging high fees performed comparatively better than those that charged low fees. The study excluded other variables and only focused on the fund size as the main variable. This study will include three more variables of the investment strategy, schemes products and the regulatory framework.

Kigen (2017) conducted an investigation on the performance of Kenyan pension funds and fund size on 1232 pension schemes registered with the Retirement Benefits Authority. Panel data regression and Pearson correlation coefficient were used to determine that investment and administration costs significantly influence pension fund financial performance. The study only covered the fund size as the only variable, three more variables will be utilized in the current research in order to gather more information on the performance of CIS.

Wuave, Yua, and Yua (2020), studied on The effect of liquidity management on the financial performance of Nigerian banks between 2010 and 2018 found that banks' financial performance, as per ROA, ROE and net interest margin, is positively and significantly affected by liquidity ratio.

Nyanamba, Muturi, and Nyang'au (2017) studied on the factors that affect mutual fund profitability in Kenya. Using secondary data and a descriptive approach, 19-unit trusts were the subject of an investigation that began in 2014 and covered the entire period. According to the study, there was a negative correlation between fund profitability and expenses. No sufficient conclusions were drawn about the entire industry because the works of Nyanamba, Muturi, and Nyang'au were based on a single investment period. The current research utilized funds from the unit trust. In order to provide a comprehensive basis for summarizing results, data were gathered from 2016 to 2022.

2.3.2 Investment Strategy and Financial Performance

During the investment, pension fund managers will make decisions in this process. It might be immediate, medium-term, long-term, or an option (Owinyo, 2017). Long-term investments, which are typically made when there is no immediate need to use the funds invested, include stocks and government bonds.

A sound investment strategy is essential for the high investment returns of Swiss pension schemes, according to Ammann and Ehmann (2017) research on the financial outcomes of Swiss pension funds. It also came to the conclusion that pension funds received the highest return on investment when their investment portfolio contained at least fifty percent listed stocks and long-term government securities. Because it was conducted in Switzerland, this study left a geographical void.

A research on the Leveraged Life Cycle Investment Strategy for Investors in Defined-Contribution Plans was carried out by Wang, Li, and Liu (2017) through the use of

bootstrap and mutually-past simulations. They proposed that the leveraged life cycle strategy can moderately lower risk. An increased retirement age for both genders to 65 years old has a strong positive effect on the sustainability of the pension system and keeps the deficit below 2% of GDP, according to a 2017 study conducted in Belarus by Katerina L. and Kateryna B. Furthermore, Mbutia and Gatauwa (2022) argue that sustainability in institutions is paramount for the effectiveness of the business.

Onyango carried out research with the title "The Influence Investment Strategies and Financial Performance of Pension Funds in Kenya." And concluded that investment strategies that schemes employ with their funds influence their financial performance. The study also asserts that bonds, which are non-risky assets, return less than equity investments, which are risky assets. In this investigation, the independent variable will be the invest strategy rather than the size of the board that was used by Onyangos study to determine the link between the independent and the dependent variables.

2.3.3 Regulatory Framework and Financial Performance

Regulatory authorities should be in charge of all funds within their jurisdictions. Before the operator begins marketing, funds must be registered or authorized by the regulator. The regulator must be able to enforce regulations and conduct inspections and investigations of fund management businesses. It should also have sufficient authority to safeguard investors' interests, such as the ability to revoke licenses, suspend dealing, freeze the assets of funds or fund management companies, impose fines, revoke fund authorization, and recommend criminal prosecution (Cytonn, 2019). The capital markets regulator, the CMA, has been given a lot of authority under the CIS Act to supervise and

intervene in CIS by monitoring them, conducting inspections, investigations, and enforcing the laws and regulations that govern these schemes (CMA, 2019). Because the CMA constantly monitors the projects' activities to ensure compliance with laws and regulations, this should increase investor protection. The regulatory authority needs a sufficient staff with adequate training and compensation to carry out its duties. In addition, the regulator needs sufficient legal authority and independence to carry out its duties in the areas of investigation and enforcement.

Ade (2017) investigated the factors that influence performance in Nigerian pension companies. The review utilized quantitative plan. The study used a sample of 51 Nigerian pension companies through stratified random sampling. Audited statements from these pension companies provided the basis for the secondary data. The study found, through multiple linear regression, that pension firms in Nigeria's financial performance is positively impacted by contributors' age, fund liquidity, fund design, and fund performance.

Ombaba's (2018) study found that companies' return on assets (ROA) was better measured by diversified boards. Consequently, the organization's financial performance and diversity on the board are linked. Directors with the qualities, business experiences, and skills appropriate for the organization in question make up corporate boards. The essential qualities of a board ought to be insight in administration, bookkeeping, the business, client care, calamity reaction, authority, and vital preparation.

2.3.4 Scheme Products and Financial Performance

A professional money manager oversees collective investment schemes on behalf of investors and purchases stocks, bonds, or other securities in accordance with the scheme's specific investment objectives. The investor gets shares or units that are proportional to their share of the assets. The fund manager receives a fee based on the fund's assets in exchange for managing the fund's investment portfolio and administering the fund (Marx, 2018).

According to Isiaka and Okoh (2019), CIS plays a significant role in an economy because it ensures that small investors own a diversified portfolio and reduces risk. It has a number of advantages, such as spreading risk across a variety of investments, which lowers risk compared to investing all of your money in just one or two. Individual investors do not possess the expertise, time, resources, or experience necessary for professional portfolio management. In a similar vein, CISs are extremely cost-effective and simple to invest in (Manoj & Avinash, 2020).

Unit trusts involve financial securities carefully chosen as a group to meet the needs of a particular group of potential investors. Potential investors lack the expertise, knowledge, and time required for portfolio management in addition to not having sufficient financial resources to construct a portfolio. Equity securities are acquired by participants, who are shareholders of unit trusts. Without taking on the risk of managing the portfolio through unit trusts, investors can invest in a portfolio that is well-diversified. Mohamed (2017) explains that many investors can pool together resources; invest in quoted stocks,

government bonds, money market instruments and other securities. These funds are referred to as unit trusts.

According to Makori (2017), the Capital Markets Authority (CMA) has delisted some of the NSE-listed companies because they are in a poor financial position and have also experienced financial decline. Since the NSE serves as a unit trust funds investment forum, the fall also has an impact on their performance (CMA, 2017).

Security reserves involve fundamentally of securities that produce standard pay. Bond OEFs are portfolios of debt securities held by collective investment vehicles. By providing financial and non-financial corporations with an additional source of funding, they complement bank lending and enable diversification of debtors funding sources. For financial brokers, bond OEFs offer broadened openings for nearly minimal price (Morris, et al., 2017). From government bonds and Treasury bills to high-yield bonds, bond funds invest in a variety of bond types. The fund's return is significantly affected by the bonds' maturity. Maturity is directly proportional to dividend received. Bond funds will pay out less than equity funds do, and the majority of their returns will come from the interest they generate.

Mugo asserts that macroeconomic factors directly influence bond market performance in Kenya. A longitudinal research approach was utilized by the study and the results of the regression showed that macroeconomic factors have an effect on bond performance over time. Bond performance and macroeconomic conditions are linked in the near future, according to the VECM. The performance of bond issues is negatively impacted by the

interest rate and currency exchange rate. Inflation was positively correlated with bond performance, at least in the short term. This study suggests monitoring exchange rate and interest rate policies to improve bond performance. The research recommends a strict monetary policy and control over the factors that influence the change in the inflation rate in order to improve bond performance.

2.4 Literature Review and Research Gaps Summary

Figure2.1: Research Gaps

Proponent	Study Area	Findings	Research Gaps	How the Study will fill the existing Gaps.
Miguel, Ferreira, and Romas (2020)	Predictors of fund size of mutual trust fund from five African states.	The size of funds and economic growth rate related negatively with the inflation rate of a country.	The study only considered a single variable (fund size).	The study will include three more variables to obtain more data on CIS.
Ajibade and Jayeoba (2018)	Impact of pension fund features on financial outcome in Nigeria	Density of contributions, fund age and idle contributions had robust effect on	Having been carried out in Nigeria, the study brought forth a geographical gap	The current study will be conducted in a different geographical

		financial outcome of pension funds		area (Kenya)
Naceur and Omran (2017)	Effects of bank regulations, competition, and financial reforms on banks' performance on the Middle East and North Africa (MENA) countries	Bank capitalization and credit risk, have a positive and significant impact on banks' net interest margin, cost efficiency, and profitability	The study was undertaken in a different geographical area which different economic indicators and prospects.	In this case, the study will be conducted a different economic set up.

Source: Researcher (2023)

2.5 Conceptual Framework

This was description of a problem under investigation, presented in form of a diagram representing the variables under study. The conceptual framework in Figure 2.1 guided the researcher. The independent variables under research were institutional factors, investment strategy, and regulatory framework and scheme products. The dependent variable in the study was financial performance.

Independent Variables

Dependent Variable

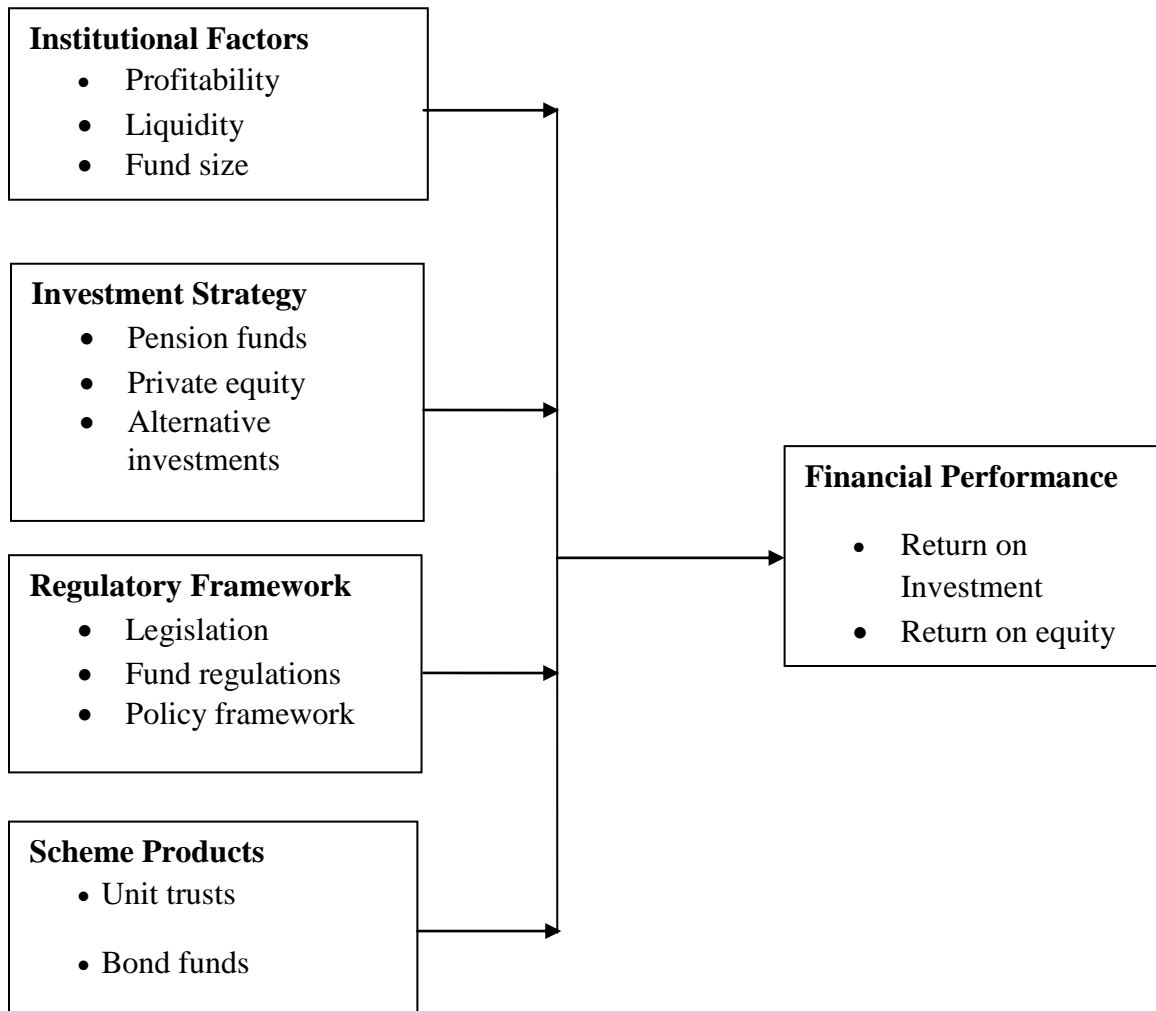


Figure 2.1: Conceptual Framework

Source: Researcher (2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The sections covered in chapter three included descriptive research design, the target population, the sample and sampling design, data collection, research procedures, data analysis, methods and the chapter summary.

3.2 Research Philosophy

This involves the way people around the world view particular phenomena or objects (Saunders, Lewis, & Thornhill, 2017) through focusing on theories that guide research strategy (Ihuah & Eaton, 2017). Saunders, Lewis, and Thornhill (2017) affirm that positivism, interpretivism, and realism are the three primary research philosophies. The researcher will follow a positivist approach to research.

According to positivism, events have a direct impact on people's perceptions of businesses, so representation is directly related to perceptions (Willig, 2017). In positivism, according to Saunders, Lewis, and Thornhill (2017), a data collection strategy heavily relies on an existing theory when formulating a hypothesis and credible data can only be obtained from observable phenomena. A positivist scientist should be withdrawn from the subject of the review, endeavor to control for predisposition, and select a widespread or general example to be objective while concentrating on a peculiarity (Creswell, 2017). Because it is presumed a link between the fund characteristics and the

financial performance of Kenyan collective investment schemes exists, positive thinking was the most effective strategy for this study.

3.3 Research Design

According to Crewell (2019) a descriptive research design which involved measuring a set of variables as they exist naturally and sought to provide answers to immediate questions about a current state of affairs. According to Denscombe (2017), Researchers can draw inferences about the relationship between variables from related variations of independent and dependent variables. Empirical data was an advantage in this design because of its emphasis on producing data based on real world observation through a purposeful and structured approach.

3.4 Target Population

Mugenda (2019) defined a population as a group of people who can be observed who share similar characteristics. This study included 21 Kenyan collective investment schemes as its target population.

3.5 Sampling Technique and Sample Size

Bryman (2019) define a sample as a subset or a smaller group of the population chosen for research. The methods used to select a sample are referred to as sampling techniques, and they can be based on probability sampling or non-probability sampling where every

unit or individual has the same, known chance of being chosen in probability sampling (Kothari, 2017).

The various collective investment schemes that listed on the Nairobi security exchange and derived from the licensees and approved institutions as of December 31, 2022, served as the sampling frame for this research. This information was obtained from the Capital Markets Authority (CMA). Data was collected from secondary sources which are licensed CISs in Kenya which publish their financial statements in each financial year. The sampling technique was a census since the size of the population is small.

3.6 Data Collection Methods

Since the CISs publish their financial statements at the end of each fiscal year, the researcher used data in this study. An optional examination technique was planned utilizing estimation factors, for example, ostensible, ordinal, and span and proportion scales as suggested by Kothari (2017). The financial statements of the Kenyan CISs that have been chosen were examined by the researcher.

3.7 Data Analysis and Presentation Methods

Coding, data collection, and review data entry was used to analyze the data. Denscombe (2017) says that coding is the assigning of a number to a collection of data with the primary goal of making it possible to analyze such data quantitatively. Measures of central tendency were presented and analyzed using descriptive statistical methods. This included graphical and numerical techniques for analyzing a lot of data and breaking it down into smaller, more understandable chunks. Denscombe (2017) asserts that this

procedure is an essential step in comprehending the data. The descriptive statistical approach that was used consists of a standard deviation, mean and percentage frequencies.

Spearman's rank correlation coefficient, which is a statistic used to measure the relationship between paired positions assigned to individual scores on two variables, was used to draw inferences about the relationships between the variables, according to Healey (2011). In order to dictate the factor structure and strength of the factors affecting the performance of Collective Investment Schemes, a factor analysis approach was used to confirm or refute the findings of previous research. Qualitative data was also cleaned and checked for completeness prior to analysis. In this case, the data was coded and entered into the Statistical Package for the Social Sciences, where the results will be displayed in figures and tables. Stata and e-views program was also used to compute simple tests.

3.7.1 Operationalization of the Variables

The variables in this research include institutional factors, investment strategy, and regulatory framework and scheme products. The financial performance of collective investment schemes is the dependent variable.

Table 3.1: Operationalization and Measurement of Variables.

Variables	Type	Operationalization	Measurement
Financial Performance	Dependent Variable	Generation of returns	ROI, ROE, Profit margins.
Institutional Factors	Independent Variable	Increase fund size, profitability and liquidity.	Fund size, profitability, Liquidity.
Investment Strategy	Independent Variable	Investment Portfolio diversification.	Pension funds, private equity, Alternative investment.
Regulatory Framework	Independent Variable	Increase the protection of investors.	Legislation, fund regulation, policy framework.
Scheme Products	Independent Variable	Diversification of investment Portfolio.	Unit trusts, mutual funds, bond funds.

Source: Researcher (2023)

3.8 Empirical Model

Empirical model relies on observation rather than theory. The idea is that if you observe some particular outcome following some particular circumstance then you can reliably predict that outcome in the future. A panel data model was chosen for this study.

3.8.1 Panel Data Model

In panel data, collection of quantities collected from multiple individuals, arranged chronologically and assembled at regular intervals. It is organized sequentially and contains consistently gathered perceptions. Panel data, like cross-sectional data, include observations of a group of people. Board data series exhibiting bases on watching out for the conceivable dependence across data insights inside a comparative get-together.

Researchers examine the observations of a collection of cross-sectional units over time in a dataset by employing a panel data model. It's possible to have data that spans several years and covers multiple businesses' production or multiple nations' gross domestic product. Methodologies specific to the structure of these panel data series make up the distinct subfield of time series modeling that deals with their modeling.

3.8.2 Regression Model

The panel regression model will be used for the study's analysis since the study will utilize a panel data. Fund characteristics will be expressed as a function of institutional factors, investment strategy, and regulatory framework and scheme products.

$$\text{Fund characteristics } it = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_{it} \dots \dots \dots 1$$

Whereby:

β_0 - Constant

X_{1it} – Institutional Factors

X_{2it} – Investment Strategy

X_{3it} – Regulatory Framework

X_{4it} – Scheme Products

$\beta_1 - \beta_4$ = Regression coefficients

ϵ_{it} = Error term

3.9 Diagnostic Tests

These are tests that are used in a study to test the accuracy of the data obtained for such a study. Various diagnostic tests were utilized as discussed below.

3.7.1 Multicollinearity Test

This is a statistical test where several independent variables in a model are correlated. Collinearity occurs when the correlation coefficient of two variables is ± 1.0 and it results in less reliable statistical inferences in independent variables leading to misleading results in determining the reliability of each independent variable in predicting the dependent variable in a statistical model.

3.7.2 Normality Test

According to Ghasemi (2012), this is used to determine whether sample data has been drawn from a normally distributed population (within some tolerance e.g. Student's t - test and the ANOVA test, require a normally distributed sample population.

3.7.3 Stationarity Test

Riya and Priya (2020), this property of time series states that the value of the variable doesn't change with time or rather variation in time does not bring changes in the value of a variable. Accurate prediction and forecasting is needed so as to have a true analysis of the variables. Augmented Dickey – Fuller (ADF) test is widely used to test for stationarity.

3.7.4 Autocorrelation test

The Durbin-Watson is the mostly used test statistic that detects autocorrelation from a regression analysis. It produces a test number range from 0 to 4. This analysis helps to recognize the recurring patterns, which would be a tool for technical analysis in the capital markets, Wensong Zhou (2007).

. The Durbin-Watson test is most commonly used with the Autoregressive- Moving-Average Model (ARMA).

3.7.5 Heteroscedasticity Test

According to W. Khaled (2019), this is a systematic change in the spread of the residuals over the range of measured values. It uses the Ordinary Least Squares (OLS) regression which assumes that all residuals are drawn from a population that has a constant variance and that the error terms are normally distributed. The residuals should be constantly variant so as to satisfy the regression assumptions.

3.7.6 Model Specification Test

This involves determining the independent variables to include or exclude from the process of building a statistical model: This involves selecting an appropriate functional form for the model and choosing which variables to include, Resour (2020). The Hausman Specification test is used to test hypothesis in terms of bias or consistency of the data.

3.8 Ethical Considerations in the Study

The researcher will have a moral responsibility to treat the information with the utmost propriety because some of the information that will be collected is sensitive. The researcher will conceal the identities of the respondents and reassure them that the provided information will remain private because the respondents may be reluctant to disclose some information. Concerning confidentiality, respondents' privacy will be protected and kept anonymous. Unique identifier codes will be given to the respondents to safeguard their identities and the responses they provide. Participants will be informed and consent will be requested. The right of participants to decline or withdraw during the process will be included in the informed consent, as will the anticipated duration of the research.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter contains the research findings and discussion sections. The main objective of the study was finding out how fund characteristics influence financial performance of collective investment schemes in Kenya. The specific objectives of the study included; to find out the influence of institutional factors on the financial performance of collective investment schemes in Kenya, to identify the effect of investment strategy on the performance of collective investment schemes in Kenya, to examine the influence of regulatory framework on the performance of collective investment schemes in Kenya; and to establish the effect of scheme products on the performance of collective investment schemes in Kenya. The chapter also presents diagnostic tests applied on the panel data, the correlation analysis between the variables and the panel regression results.

4.2 Descriptive Analysis

This part represents the summary of the extracted research data that was analyzed using Stata version 15. The research focused on 21 collective investment schemes in Kenya. Despite the challenges in access of all financial statements for the Kenyan CISs from the CMA, data from 14 companies were available (66%). Cooper and Schindler (2014) proposed a response rate above 60% to be meeting the threshold for analysis of quantitative analysis and can be relied upon in making inferences for the whole population. A summary of descriptive statistics is shown below;

Table4.1: Summary of Descriptive statistics

Variable	Observed	Mean	Std. Dev.	Min	Max
Institutional factors	125	7.908	0.857	5.184	8.956
Investment strategy	125	0.446	1.731	-3.96	3.123
Regulatory framework	125	6.271	1.957	0	8.949
Scheme products	125	8.014	0.859	5.699	9.305
Return on investment (ROI)	125	0.382	0.253	0.01	0.988

Source: Research Data (2023)

Table 4.1 Shows results which showed that the firms held 7.908 million on average in institutional factors; the highest holding was 8.956 million while the lowest was 5.184 millio with a standard deviation of 0.857 showing that the difference in the allocation of investment funds to institutional factors was moderate. The study also found out that there were average institutional factors with 6.091million in the selected firms with a standard deviation of 2.432 indicating that investment finds that were allocated to bonds in the CIS firms had a high spread. The study also noted that money market holdings averaged 6.271 million. However, a standard deviation of 1.957 showed high deviations across the firms from the average money market holding. The results also showed that the CIS firms had scheme products of 8.014 on average. The findings also indicated there was a standard deviation of 0.859, implying moderate deviation in the size of the collective investment firms from the average Scheme products.

The results findings also showed that between 2018 and 2022, the analyzed results showed that the firms had a return on investment (ROI) of 0.382. The lowest return on

investment (ROI) between 2018 and 2022 was 0.01 while the standard deviation was 0.253, indicating that the return on investment (ROI) on average was low.

These findings will help the collective investment schemes to come up with better strategies on how to improve in their performance, considering the level of fluctuations and instability in the current economic environment in Kenya.

4.3 Diagnostic Tests

The conducted diagnostics tests ensured that the panel data observed the main assumptions for linear regression.

4.3.1 Multicollinearity Test

This test was done to find out whether explanatory variables in the regression model had any level of association (Baltagi, 2005). As a rule of thumb, the main tests for collinearity are the Variance Inflation Factor and the Tolerance Values.

Table 4.2: Collinearity Results

Variable	VIF	1/VIF
Institutional factors	1.53	0.653594
Investment strategy	2.91	0.343642
Regulatory framework	1.42	0.706343
Scheme products	1.34	0.748256

Source: Research Data (2023)

The Collinearity Tests usually utilize the Variance Inflation Factor AND Tolerance Values. As a standard the VIF should be above one and below 10. Further, a tolerance

value above 0.1 confirms no collinearity issues within the data set (Oakshott, 2014). In the table above, all VIF values are lower than 10, indicating no collinearity issues within the predictor variables adopted in this research. The tolerance values (1/VIF) were above 0.1 affirming that there were no excessive collinearity concerns within the study variables.

4.3.2 Normality Test

These are used to find out if the sample was drawn from a population that is normally distributed (Kothari & Garg, 2014). Kurtosis and Skewness tests were used by the study to test for normality of the data set.

Table 4.3: Normality Results

Variable	Obs.	Skewness	Kurtosis
Institutional factors	125	(3.40)	6.67
Investment strategy	125	(1.43)	1.31
Regulatory framework	125	(1.99)	3.89
Scheme products	125	(0.91)	0.66
Return on investment (ROI)	125	(2.03)	8.63

Source: Research Data (2023)

According to Tabachnick, Fidell and Ullman (2007) the criteria for interpretation of the normality tests should be guided by; skewness values should not be greater than 2 while kurtosis values should not be greater than 10 for data to be considered normal. Table 4.3

show that Skewness values for the study variables were all less than +2 while the Kurtosis values were lower than 10, indicating normality.

4.3.3 Heteroscedasticity Test

Heteroscedasticity refers to regression disturbances with inconsistent variables across different observations (Garson, 2012). The research carried out a Breusch-Pagan / Cook-Weisberg test so as to identify heteroscedasticity in the disturbances of the regression model.

Table 4.4: Heteroscedasticity Results

Breusch-Pagan test for heteroscedasticity

Ho: Constant variance

Variables: ROI fitted values

chi2(1) = 0.01

Prob > chi2 = 0.0000

Source: Research Data (2023)

The first set of fitted model return on investment (ROI) results showed Prob > chi2 = 0.000, significant at 5% level (below 0.05). This indicated that there was no heteroscedasticity because the variance was constant.

4.3.4 Autocorrelation Test

This is the automatic relation between values of a variable and lagged values of the same variable (Sharifzadeh, 2010). The study employed the Durbin-Watson statistics in testing for the presence of serial correlation within the data set.

Table4.5: Autocorrelation Results

Model	F-value	Durbin-Watson Statistic
Return on Investment (ROI)	19.77	1.79

Source: Research Data (2023)

The results above show a Durbin-Watson = 1.98; 1.79 which is less than 2.5 indicating there was no notable correlation in the model. This information was used to advise the collective investment schemes to put more efforts ad invest in other variables that have a significant effect on their performance.

4.3.5 Stationarity Test

The study applied the Levin-Lin-Chu test. Baltagi (2005) opined that the Levin-Lin-Chu test are the most appropriate when conducting stationarity tests for panel data. This test helps in testing the stationarity in the panel data. The test examines the stationarity (Ha) or presence of unit roots tests (Ho) within the panel data using the following criterion; if $P\text{-value} < 0.05$ use stationary alternative.

Table4.6: Stationarity Results

Variable	LLC Test	Statistics	P-Value
Return on investment (ROI)	Unadjusted t	-8.6845	
	Adjusted t*	-2.6931	0.0035
Institutional factors	Unadjusted t	-9.374	
	Adjusted t*	-8.967	0.0000

Investment strategy	Unadjusted t	-12.2746	
	Adjusted t*	-10.1620	0.0000
Regulatory framework	Unadjusted t	-7.2518	
	Adjusted t*	-5.8136	0.0000
Scheme products	Unadjusted t	-2.7984	
	Adjusted t*	-2.3444	0.0043

Source: Research Data (2023)

Based on the null hypothesis that formed the basis of the test, that the panels contain unit roots against an alternative of stationary panels. The findings of the study indicated an LLC p-statistic as follows; return on investment (ROI) ($P=0.0035<.05$), Institutional factors ($P=0.0000<.05$), Investment strategy ($P=0.0000<.05$), regulatory framework ($P=0.0000<.05$) and schemes products ($P=0.0000<.05$). This is an indication that the variables exhibited stationarity since the adjusted t* had a significance p-value at 5% significance level. Further, stationarity test results showed that the pooled first-order autoregressive parameter with lags resulted in ROI result of ($P=0.0000<.05$). Hence, the findings showed there was no stationarity violation in the variables utilized in the study.

4.3.6 Model Specification Test

A test used to find out the model that is most suitable between the fixed model and random effects model. A Chi-square statistic p-value that is greater than 0.05 in the test shows that a random effect model is more preferred (Torres-Reyna, 2007).

Table4.7: Model Output Fitted for Return on investment (ROI)

Variable	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b- V_B)) S.E.
Institutional factors	7.284446	7.043355	.2410909	.4381418
Investment strategy	-.5951007	-.483099	-.1120017	.0933647
Regulatory framework	.658118	.5841992	.0739188	.1632675
Schemes products	.6049617	.7787183	-.1737566	.1334993
Chi Sq. Statistics = 1.92				
Prob>chi2 = 0.5888				

Source: Research Data (2023)

Results of the test showed that the values of the panel regression on both sets had Prob>chi2 values greater than 0.05, this made the research to adopt the random effects model in the regression analysis.

4.4 Correlation Analysis

Correlation tests were applied by the study to identify the level and the strength of the relationship among the variables at 95% confidence level, so as to find out the level of the relationship between performance of collective investment schemes and the four variables.

Table4.8: Correlation Matrix

Return on investment (ROI)	Institutional factors	Investment strategy	Regulatory framework	Scheme products
----------------------------	-----------------------	---------------------	----------------------	-----------------

Return on investment (ROI)	1.000				
Institutional factors	0.1013*	1.000			
Investment strategy	0.3467*	0.4317*	1.000		
Regulatory framework	0.2568*	0.2229*	0.6032*	1.000	
Scheme products	0.1163	0.9631*	0.4058*	0.1959*	1.000
	0.0146	0.0000	0.0000	0.0279	

Source: Research Data (2023)

The study conducted correlation test between funds characteristics and return on investment schemes (ROI). Objective one reviewed institutional factors. The results showed that institutional factors had a significant, weak and positive effect on return on investment (ROI) ($r = 0.1013$, $Sig = 0.0400 < .05$). The second objective focused on determining influence of investment strategy, and results showed that investment strategy had a weak, positive effect on return on investment (ROI) ($r = 0.3467$, $Sig = 0.0101 < .05$). Objective three aimed at establishing the influence of regulatory framework and the results showed that regulatory framework had a weak positive and significant effect on return on investment (ROI) ($r = 0.2568$, $Sig = 0.0237 < .05$). Objective four reviewed how scheme products and the results indicated that scheme products had a weak positive and significant influence on return on investment (ROI) ($r = 0.1163$, $Sig = 0.0146 > .05$).

4.5 Panel Regression Analysis

The Hausman specification tests were applied by the study to rule out between the fixed effects and random effects model and random effects model was adopted in the study. The study hypotheses tested whether funds characteristics significantly affects financial performance of collective investment schemes.

4.5.1 Effect of Funds characteristics on Return on investment (ROI)

The panel regression models goal aimed at finding out the influence of funds characteristics on the return on investment (ROI) of the CIS.

Table4.9: Regression of Funds characteristics and Return on Investment (ROI)

Variable	Coefficient	Std. Error	Z	P> z
Institutional factors	7.0430	1.8220	3.870	0.0400
Investment strategy	-0.4830	0.6930	0.700	0.0101
Regulatory framework	0.5840	0.9160	0.640	0.0237
Scheme products	0.3240	0.2130	0.7100	0.0146
_cons	-18.0770	14.1680	-1.280	0.2020
Weighted Statistics				
R-sq:		Obs =	125	
within = 0.15570		Groups =	14	
between = 0.00520		Wald chi2(3) =	19.770	
overall = 0.03770		Prob > chi2 =	0.0000	

Source: Research Data (2023)

The Wald chi-square statistic for the model was 19.77 and a p-value of 0. 000. The p-value higher than 0.05 insinuated that at 0.05 significance level, we reject the null

hypothesis and conclude that funds characteristics have a positive significant effect on CISs return on investment (ROI). The coefficient of determination ($R\text{-sq} = 0.0377$) that statistically proved significant, $\text{Prob} > \text{chi}^2 = 0.000 < 0.05$ indicating that 3.77% of the variations in return on investment (ROI) of collective investment schemes were expounded by the institutional factors, investment strategy, and regulatory framework and scheme products. The low level of R-square can be as a result of a low explanatory power of the selected independent variables on CISs return on investment (ROI). Therefore, incorporating more predictor values could improve the strength of the model.

4.6 Discussion of the Findings

The first objective aimed at finding out the influence of institutional factors on the performance of collective investment schemes in Kenya while the first hypothesis posited that institutional factors have no significant effect on CIS's financial performance. Results indicate that institutional factors positively influence the return on investment (ROI) of the firm, therefore rejecting the null hypothesis ($P > |z| = 0.0400 < .05$). This shows that every unit increase in Institutional factors results to a rise in the return on investment (ROI).

The second was to identify the influence of investment strategy on the financial performance of collective investment schemes in Kenya while the second hypothesis proposed that investment strategy has no significant effect on CIS's financial performance. Findings indicate that investment strategy has a positive and significant effect on return on investment (ROI) ($P > |z| = 0.0101 < .05$). The study therefore rejects the

null hypothesis. The third objective was to find out the influence of regulatory framework on the financial performance of collective investment schemes in Kenya in which the third hypothesis opined that regulatory framework have an insignificant effect on CISs financial performance. Findings indicate a positive and significant effect on return on investment (ROI) (current ratio) ($P > |z| = 0.0237 < .05$), thereby the study rejects the null hypothesis. Nguthu (2009), studied on asset allocation influence on retirement benefit funds' performance in Kenya found out that 37% of the variability among funds' performance was due to policy differences of the various funds with 63% due to other factors among the 40 Retirement Benefit Schemes that he sampled.

The fourth objective sought to study the effect of scheme products on the financial performance of collective investment schemes in Kenya alongside which the fourth hypothesis opined that schemes product have an insignificant effect on CIS's financial performance. Results indicate that investment strategy have a positive and significant effect on return on investment (ROI) ($P > |z| = 0.0146 < .05$). The study therefore rejects the null hypothesis. Mohamad and Abdullah (2012) argue that the trade-off theory implies that financial leverage as part of the scheme product has a positive relationship with the firms' performance. It also explains how the corporations distribute their finances between equity and debt.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The specific objectives, key methodology and a summary of key findings are the sections provided in this chapter. The chapter captures recommendations for further research, contributions to knowledge, a highlight of key limitations encountered and recommendations for further study.

5.2 Summary of the Study

The study aimed at investigating the effect of various funds characteristics within the firms on their financial performance. The main problem of the study was the poor performance of the Collective Investment Schemes in Kenya which led to the investigation on the relationship between the performance and the four variables. The study presented the study background with a conceptualization of the variables and the statement of the problem. The variables of the study were institutional factors, investment strategy, regulatory framework; and schemes products. The study further reviewed various theories which anchor the study i.e. The Arbitrage Pricing Theory, Capital Asset Pricing Model, Keynesian Theory and The Financial Deepening Theory in addition to empirical literature to capture research gaps.

First, the study examined the Institutional factors within the Kenyan CIS firms. Findings revealed that the firms held 7.908 million on average in Institutional factors. According

to Wandia (2017), on the relationship between fund size and the financial performance of organizations, empirical research has demonstrated that a large fund size distributes overhead costs across all portfolio financial assets. Secondly, the study reviewed the Investment strategy within CIS firms and generally the findings showed that on average investment strategy within the selected firms was 6.091 million. A sound investment strategy is essential for the high investment returns of Swiss pension schemes, according to Ammann and Ehmann (2017) research on the financial outcomes of Swiss pension funds. Third objective examined the Regulatory framework within the selected firms and the findings indicate that firms invested on average of 6.271 million in the investment class. The study also examined the scheme products within the CIS firms as a moderator variable. The findings showed that the size of the firms was 8.014 million Kenyan shillings on average. Individual investors do not possess the expertise, time, resources, or experience necessary for professional portfolio management. In a similar vein, CISs are extremely cost-effective and simple to invest in (Manoj & Avinash, 2020).

The regression coefficients indicated that institutional factors had a significant effect on firm's performance, Wandia (2017). The results also established that institutional factors had a positive and significant effect on CISs return on investment (ROI), implying that an increase in equity holdings improves return on investment (ROI). The results also revealed that investment strategy had a significant and negative effect on the return on investment (ROI) of the CIS firms, Ammann and Ehmann (2017). The panel regression results on the third objective revealed that regulatory framework had a positive and significant effect on return on investment, (Cyttonn, 2019).

The second panel result indicated that scheme products had a positive and significant effect on return on investment (ROI) and a negative and significant moderating effect on the relationship funds characteristics and return on investment (ROI).

5.3 Conclusions

Based on the study findings, the study concluded that institutional factors have a positive significant effect on return on investment (ROI). The findings showed that increasing the equity holding within the firm will improve the quick ratio within the firm. A higher reliance on institutional factors within the CIS lowers the interest charges from other forms of investments and this will improve the firm return on investment (ROI) position.

The results indicate that investment strategy in the collective investment Schemes have no significant effect on the return on investment (ROI) of Kenyan CIS firms. This affirmed that increased use of the investment strategy increased interest charges on the bonds accruing to the firms hence reducing the profitability of CIS.

The findings were an indication that the current level of investments in within a harmonized regulatory framework did not support better return on investment (ROI) of the firms.

Lastly, the general objective aimed at determining the influence of the fund's characteristics on financial performance on Kenyan CIS firms. The research further concluded that funds characteristics had a significant and positive effect on the return on investment (ROI) of the CISs in Kenya.

5.4 Recommendations of the Study

The research conclusions that those fund characteristics have a positive significant effect on return on investment (ROI) of the collective investment schemes. The study therefore recommended that fund managers should more actively engage in diversification policies that strengthen the funds characteristics in the firm by probably considering the technology-backed investments which will improve the financial performance of the Collective Investment Schemes.

5.5 Contribution to Knowledge

The research findings will improve the academic reference material on financial outcomes of Kenyan CIS that are currently available. Many other research studies just focused on Profitability ratios on their examination of financial performance unlike this study expanded on available empirical evidence by using return on investment (ROI) as a measure of financial performance. The study enhanced the knowledge by extending available evidence on the moderating effect of scheme products on the effect of funds characteristics on CIS firms' financial performance.

5.6 Limitations of the Study

The study was limited to Collective investment schemes in Kenya which operated between 2018 and 2022, a period during which possibly some CISs that either had not in existed or were just coming up hence resulting to generation of unbalanced panels. Dependence on secondary data would also result to undetected errors in the study and

failure to detect such errors affected the final outcome of the study. However, the study scrutinized data for completeness and editing data for errors accordingly so as to overcome this limitation.

5.7 Suggestion for Further Research

Having focused on collective investment schemes in Kenya, further studies should be undertaken focusing on examining the effect of funds characteristics on other institutions outside the capital markets in Kenya. This will help to improve the available knowledge on the elements that promote returns on investments of emerging players in the country's finance industry. More studies should be conducted and utilize both primary and secondary data to examine how the same factors impacts firm the return on investments through incorporating different financial performance measures.

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APPENDICES

APPENDIX I: Introduction Letter

REF: Application to Take Part in the Research Study

I am a Kenyatta University MBA Finance student and currently researching on the influence of fund characteristics on financial performance of collective investment schemes in Kenya. Kindly find time from your busy schedule and provide the requested information. A lot of privacy will be assured on the information provided. On your request, a copy of the complete report will be provided. Your timely feedback and cooperation will be of great help in the study.

Yours,

Kalekye Sylvia

APPENDIX II: Data Collection Instrument (Secondary Data Review Guide)

CIS Name	Year	Institutional Factors	Investment Strategy	Regulatory Framework	Scheme Products	Financial Performance
-	2018					
-	2019					
-	2020					
-	2021					
-	2022					

Source: Researcher (2023)

APPENDIX III: List of Collective Investment Schemes

1. African Alliance Kenya Unit Trust Scheme
2. Amana Unit Trust Funds Scheme
3. Apollo Money Market Fund
4. British American Unit Trust Scheme
5. CIC Unit Trust Scheme
6. Commercial Bank of Africa Unit Trust Scheme
7. Cytonn Money Market Fund
8. Diaspora Unit Trusts Funds Scheme
9. Dry Associates Money Market Fund
10. Equity Investment Bank Money Market Fund
11. Genghis Capital Unit Trust Fund
12. ICEA Money Market Fund
13. Kasha Money Market Fund
14. Madison Money Market Fund
15. Nabo Capital Money Market Fund
16. NCBA Money Market Fund
17. Old Mutual Money Market Fund
18. Sanlam Pesa & Money Market Fund

19. Stanbic Cash Trust Scheme

20. Standard Investment Bank Unit Trust Scheme

21. Zimele Unit Trust Scheme

APPENDIX IV: NACOSTI Research License


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **682123** Date of Issue: **24/May/2023**

RESEARCH LICENSE




This is to Certify that Ms. Sylvia Ndamu Kalekye of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu, Nairobi on the topic: Fund Characteristics and Financial Performance of Collective Investment Schemes in Kenya for the period ending : 24/May/2024.

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See overleaf for conditions

APPENDIX V: Research Authorization Letter



KENYATTA UNIVERSITY
GRADUATE SCHOOL

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Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 9th May, 2023

TO: Kalekye Sylvia Ndanu
C/o Accounting & Finance Dept.

REF: D53/OL/CTY/20535/2020

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 26th April, 2023 approved your Research Project Proposal for the M.B.A Degree Entitled, "Fund Characteristics and Financial Performance of Collective Investment Schemes in Kenya".

You may now proceed with your Data Collection, Subject to Clearance with 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.

DR. HARRIET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Accounting and Finance Department.

Supervisors:

1. Dr. James Gatauwa
C/o Department of Accounting and Finance
Kenyatta University

11/11



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Our Ref: D53/ OL/CTY/20535/2020

DATE: 9th May, 2023

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

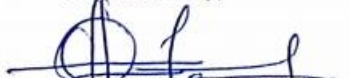
**RE: RESEARCH AUTHORIZATION FOR KALEKYE SYLVIA NDANU –
REG. NO. D53/OL/CTY/20535/2020**

I write to introduce Ms. Kalekye Sylvia Ndanu who is a Postgraduate Student of this University. She is registered for M.B.A degree programme in the **Department of Accounting and Finance**.

Ms. Kalekye intends to conduct research for a M.B.A Project Proposal entitled, **“Fund Characteristics and Financial Performance of Collective Investment Schemes in Kenya”**.

Any assistance given will be highly appreciated.

Yours faithfully,


**PROF. ELISAHIBA KIMANI
DEAN, GRADUATE SCHOOL**

EM/nn