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**Bond Investments and Financial Performance of Collective Investment Schemes in
Kenya**

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Abstract

Purpose: The growth of collective investment schemes in Kenya has heightened the need to understand how portfolio diversification influences financial performance. Despite significant expansion in assets under management, concerns persist regarding inconsistent profitability and the sustainability of CIS, suggesting potential inefficiencies in portfolio allocation decisions. This study examined the effect of bond investments on financial performance measured by ROA.

Methodology: The study adopted a descriptive research design and employed a census approach targeting all 31 collective investment schemes registered and operating in Kenya. Secondary data covering the period from 2019 to 2025 was collected from CMA reports and audited financial statements of the respective schemes. Data was analyzed using descriptive and inferential statistics. Inferential analysis comprised Pearson's correlation analysis and panel regression techniques.

Findings: The findings revealed that bond investment positively and significantly influenced financial performance ($\beta = 0.1185$, $p < 0.05$). The model explained 61.84% of the variation in financial performance ($R^2 = 0.6184$), indicating that bond investment is a major determinant of the financial performance of collective investment schemes in Kenya. The study concludes that bond investment significantly enhances the financial performance of collective investment schemes and that an optimal mix of equities, treasury bills, bonds, and real estate investments.

Unique Contribution to Theory, Practice and Policy:

The study recommends that fund managers diversify bond investments across different maturities and issuers. Further, the CMA should promote investment product innovation and strengthen portfolio disclosure requirements to enhance transparency and investor confidence. The study contributes to the body of knowledge on bond investment and financial performance by providing empirical evidence from the collective investment schemes sector in Kenya. The findings are expected to assist fund managers, policymakers, regulators, and investors in designing effective portfolio management strategies that promote sustainable financial performance and growth within the collective investment schemes industry.

Keywords: Bond Investments, Financial Performance, Collective Investment Schemes, Kenya

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INTRODUCTION

The long-term viability and survival of organizations are fundamentally linked to management's ability to allocate and utilize resources efficiently and effectively to promote value creation and economic development (Muchiri & Ombui, 2022). Measuring financial performance, therefore, enables management to assess the use of financial resources and the flow of funds within and outside the organization (Ndanu, 2023). Bett (2024) emphasizes that strong financial performance enhances a firm's market value, supports industry growth, and contributes to overall economic prosperity. Consequently, financial performance has become a central concern for managers, investors, regulators, and other stakeholders, as it reflects how successfully organizations convert strategic and operational resources into tangible economic outcomes (Bobakova, 2023).

In investment management, financial performance reflects an investment vehicle's ability to generate adequate returns while managing risk and preserving investor capital (Muchiri & Ombui, 2022). As such, it remains a central construct in organizational and financial research, providing an objective measure of how firms translate strategic decisions and resource endowments into economic returns (Olweny & Kimani, 2023). In investment-oriented institutions, financial performance is particularly important because it directly influences investor confidence, capital inflows, and long-term sustainability (Muema, 2021).

Portfolio diversification encompasses financial assets such as equities, bonds, and treasury bills, as well as non-financial assets, including real estate and infrastructure (Were & Muturi, 2022). Bond investments involve the allocation of funds to fixed-income securities issued by governments, corporations, or financial institutions, which promise periodic interest payments and repayment of principal at maturity (Shukrani et al., 2022). In Kenya, bond investments predominantly comprise government Treasury bonds and corporate bonds listed at the Nairobi Securities Exchange, serving as a major source of stable income for institutional investors (Muchiri & Ombui, 2022; Were & Wambua, 2020). Bond investments are generally associated with lower risk compared to equities but are exposed to interest rate risk, credit risk, and inflation risk. Kenyan studies indicate that bond investments play a stabilizing role in portfolio diversification and often enhance risk-adjusted performance, particularly during periods of equity market volatility (Muema, 2021; Shukrani et al., 2022). However, the effectiveness of bond investments in improving financial performance depends on yield curve movements, maturity structure, and macroeconomic conditions.

In Kenya, collective investment schemes face intense competition, high investor turnover, and relatively short operational lifespans, mirroring broader survival pressures in competitive markets (Maiyo, 2017). These challenges necessitate sound investment strategies that ensure stable returns, effective risk management, and sustained investor confidence (Muema, 2021; Murigi, 2024). Therefore, bond investment constitute the primary mechanism through which collective investment schemes respond to market competition and operational challenges. By optimizing bond investment and diversification, CIS managers can enhance risk-adjusted returns, retain investors, and improve long-term sustainability. This underscores the importance of empirically examining how different bond investment influence the financial performance of collective investment schemes in Kenya, thereby contributing to academic knowledge and informing investment and policy decisions.

Statement of the Problem

Collective Investment Schemes (CIS) are designed to enhance investment management by pooling investors' savings into a single fund managed under a common investment strategy, thereby enabling diversification that would be difficult for individual investors to achieve (Ndanu, 2023). In Kenya, the CIS sector has expanded rapidly, growing from virtually no schemes in 2001 to 11 in 2008, 16 by 2011, and 31 registered CIS by 2024, with assets under management increasing from KSh 56.6 billion in March 2018 to over KSh 389.2 billion in 2024 (CMA, 2024). Despite this significant growth, CIS has exhibited inconsistent financial performance over the past 7 years, suggesting an inability to deliver satisfactory returns to unit holders (CMA, 2024; Mwathi, Ochieng & Tirimba, 2025). Policy benchmarks consider ROA levels of 5–10% as satisfactory and above 10% as indicative of strong and efficient portfolio management (CMA, 2022; Muema, 2021; Muchiri & Ombui, 2022; Murigi, 2024).

However, CMA reports for the period 2019–2025 indicate that many CIS have consistently recorded ROA values below these thresholds. For instance, ROA remained persistently below the 5% threshold in most years, standing at 4.3% in 2019, and declining further to 3.8% in 2020, before marginally improving to 4.5% in 2021 (CMA 2019; CMA 2022). Although a temporary recovery was observed in 2022, with ROE rising slightly above the satisfactory threshold to about 5.4%, the improvement was not sustained, as ROA declined again to 4.7% in 2023, 4.4% in 2024, and 4.1% in 2025 (CMA 2023; CMA 2025). Persistently low ROA levels, despite growth in assets under management, indicate that CIS expansion has not translated into adequate profitability, contributing to near-collapse among some fund managers and trustees leading to market exit, restructuring, or prolonged inactivity (CMA, 2022; CMA, 2024). Moreover, existing studies reveal persistent conceptual, contextual, and methodological gaps. Conceptually, studies apply differing definitions and measurements, often focusing on bond investment resulting in inconsistent findings drive performance (Muema, 2021; Shukrani et al., 2022; Muchiri & Ombui, 2022; Murigi, 2024). Contextually, much of the evidence is drawn from developed markets or sectors such as banks and insurance firms, limiting its applicability to collective investment schemes in Kenya (Nisra, Peng, & Ashraf, 2018; Singh, 2024; Kioko & Ochieng, 2020; Ndanu, 2023). Additionally, Kenyan studies report mixed results, with some indicating positive effects of bond investment on financial performance and others finding weak or negative relationships (Were, 2022; Wachira, 2021; Kariuki & Muturi, 2022). These gaps underscore the need for a comprehensive panel-based analysis and robust financial performance measures to clarify the bond investment performance relationship among collective investment schemes in Kenya

Objective of the Study

The objective of the study is to assess the effect of bond investments on the financial performance of collective investment schemes in Kenya

Theoretical Review

This section examines the theory related to bond investment

Term Structure of Interest Rates Theory

The Term Structure of Interest Rates Theory originates with Hicks in 1946. The theory seeks to explain the relationship between bond yields and their time to maturity, commonly represented by the yield curve (Hicks, 1946). According to the theory, yields on bonds differ depending on their maturity, and the yield curve may be upward sloping, downward sloping,

or flat. The theory posits that long-term interest rates are influenced by expectations of future short-term rates, risk premiums associated with holding longer maturities, and the supply–demand conditions within different maturity segments of the bond market (Hicks, 1946; Elton et al., 2023). Under the Expectations Theory, long-term interest rates reflect the market’s expectations of future short-term rates, implying that investors are indifferent between holding a long-term bond and rolling over a series of short-term bonds (Hicks, 1946; Mishkin, 2021).

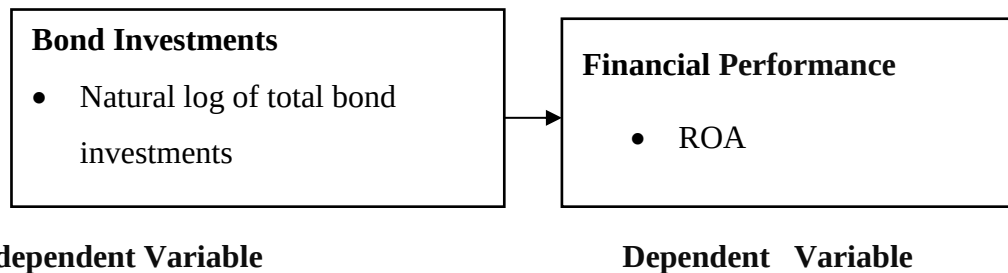
The Term Structure of Interest Rates Theory is based on several assumptions. First, it assumes that investors form expectations about future interest rates and incorporate these expectations into current bond pricing decisions (Hicks, 1946; Mishkin, 2021). Second, it assumes that bonds of different maturities carry different levels of risk, with long-term bonds being more sensitive to interest rate changes than short-term bonds (Fabozzi, 2021). Third, the theory assumes that investors may exhibit maturity preferences, meaning that not all bonds are perfect substitutes across maturities (Culbertson, 1957; Elton et al., 2023). Finally, the theory assumes that macroeconomic factors such as inflation expectations, monetary policy stance, and fiscal conditions significantly influence the shape and movement of the yield curve (Mishkin, 2021; Blanchard, 2021).

Despite its widespread application, the Term Structure of Interest Rates Theory has faced criticism. One major critique is the assumption of neutrality among investors, which is unrealistic given observed risk aversion in financial markets (Fabozzi, 2021; Elton et al., 2023). Additionally, the theory has been criticized for overstating the rigidity of maturity preferences, as investors do substitute across maturities when yield differentials are sufficiently large (Mishkin, 2021). Critiques also argue that yield curve movements may be distorted by market imperfections such as limited liquidity, government dominance in bond issuance, and regulatory constraints, reducing the predictive power of the theory (Bekaert & Harvey, 2017). Kenyan studies similarly note that bond yields may reflect fiscal pressures and monetary tightening rather than pure market expectations, particularly during periods of elevated public borrowing (Were & Wambua, 2020; Muchiri & Ombui, 2022).

The Term Structure of Interest Rates Theory is extensively applied in bond valuation, portfolio management, and monetary policy analysis (Fabozzi, 2021; Elton et al., 2023). In Kenya, the term structure theory is relevant due to the active government securities market, where Treasury bills and bonds of varying maturities form the benchmark yield curve. According to Muchiri and Ombui (2022) and Were and Wambua (2020), movements in Treasury yields significantly affect bond prices and returns. The theory is thus relevant to bond investments because it directly explains how bond yields, prices, and returns vary across maturities in response to interest rate expectations and risk premiums. In the context of collective investment schemes, the term structure framework helps explain how portfolio allocation across short- and long-term bonds influences financial performance (Muchiri & Ombui, 2022; Murigi, 2024).

Conceptual Framework

The independent and dependent variables are presented. Figure 1 shows the conceptual framework for the study.

*Figure 1: Conceptual Framework***Empirical Review**

Sufian (2022) examined the impact of bond investments on the financial performance of the top 100 publicly listed companies in Malaysia. The study adopted a quantitative research design that combined descriptive and explanatory approaches to analyse the relationship between bond investment variables and firm performance. The analysis focused on 100 firm-year observations drawn from non-financial companies listed on the Malaysian Stock Exchange for the year 2021. Multiple regression techniques were employed to analyse the data. The findings revealed that bond-related variables, specifically bond issuance and bond ratings, had a positive and statistically significant effect on financial performance, suggesting that firms with active and well-rated bond investments tend to achieve better financial outcomes.

Tebaldi, Nguyen, and Zuluaga (2018) examined the determinants of sovereign bond spreads and their implications for the financial stability of emerging economies. The study adopted a longitudinal quantitative research design and employed panel data econometric techniques to analyze trends in sovereign bond spreads across 31 developing countries over the period 1994–2014. The analysis revealed that fiscal imbalances, external sector vulnerabilities, and global risk conditions significantly influence sovereign bond spreads, thereby affecting the cost of public borrowing and broader macroeconomic stability in emerging markets.

Muema (2021) investigated the effect of bond investments on the financial performance of collective investment schemes in Kenya. The study was anchored on Modern Portfolio Theory and the Efficient Market Hypothesis and adopted a positivist research philosophy with an explanatory research design. The target population consisted of 17 collective investment schemes registered with the Capital Markets Authority that were operational during the period 2010–2018. Secondary data were sourced from the Capital Markets Authority annual reports and the official websites of the respective schemes. Descriptive statistics, correlation analysis, and panel regression techniques were used for data analysis. The results indicated that bond investments did not have a statistically significant effect on the financial performance of collective investment schemes in Kenya.

Shukrani, Ifire, Yeya, and Banafa (2022) investigated the effect of bond investments on the financial performance of investment companies listed at the Nairobi Securities Exchange in Kenya. The research was grounded in Modern Portfolio Theory alongside additional financial decision frameworks and adopted a positivist research philosophy with a descriptive research design. The study utilized secondary data on portfolio diversification and performance measures from companies listed at the Nairobi Securities Exchange. Data were analyzed using descriptive statistics and multiple linear regression techniques. The findings indicated that bond investments had a statistically significant effect on the financial performance of the investment companies listed on the Nairobi Securities Exchange.

METHODOLOGY

The study employed a descriptive research design. This design facilitates quantitative analysis of secondary data to reveal trends and patterns in bond investment and performance across the construction sector. (Kothari, 2014). The target population for this study comprised all CIS registered and operating in Kenya. According to the CMA CIS Report (2024), there are 31 active collective investment schemes duly registered and regulated under the CMA framework in Kenya. The target population consisted of CIS datasets for Kenya covering 2019–2025. Given the small population size, a census approach was employed. All 31 registered CIS will be studied. The study relied exclusively on secondary panel data covering a period of 7 years (2019–2025). Data was extracted from the firms' audited annual financial statements and CMA reports. Supplementary data was obtained from the Kenya KNBS and the CBK, where applicable.

The study collected secondary data utilizing a data collection sheet to systematically collect relevant information from published sources. Data analysis involved both descriptive and inferential statistical techniques. The data will be coded and then imported into STATA 18 software for analysis. Inferential analysis incorporated correlation analysis, panel regression model, and F-statistics. Pearson correlation analysis was used to examine the direction and strength of linear relationships (Field, 2018). A panel regression model will be adopted. F-statistics were further applied to test the overall significance of the regression model and confirm the joint influence of bond investment on financial performance. The panel regression model is specified as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \varepsilon_{it}$$

Where:

Y represents the financial performance of CIS in Kenya

β_0 represents the constant or coefficient of intercept

β_1 represent the coefficients of the independent variables

X_1 represents bond investments

it represents indices for individuals and time

ε represents the error term

FINDINGS AND DISCUSSION

Descriptive Statistics Results

Descriptive statistics were computed to summarize the key characteristics and distribution of the study variables, namely, financial performance measured using ROA, and bond investments. Table 1 presents the descriptive results.

Table 1: Descriptive Statistics Results

Statistics	Obs	Min	Max	Mean	SD	Skewness	Kurtosis
Financial Performance	217	0.0213	0.0478	0.0415	0.0091	0.3724	2.4367
Bond Investments	217	0.1523	0.4975	0.3348	0.0895	0.1986	2.4673

The results in Table 1 indicate that the minimum ROA of 0.0213 and maximum of 0.0478 indicate that financial performance across collective investment schemes ranges between 2.13% and 4.78%, reflecting generally low returns. The mean ROA of 0.0415 (4.15%) suggests that, on average, schemes generate low returns, which supports the problem statement that highlighted declining performance below expected benchmarks. The standard deviation of 0.0091 indicates low variability, implying that most schemes experience similar performance levels. The skewness value of 0.3724 lies within the acceptable range of -1 to +1, indicating approximate symmetry in the distribution (Hair et al., 2019). The kurtosis value of 2.4367 is close to 3, suggesting a mesokurtic distribution and normality of the data (Kline, 2016). These findings are consistent with Kioko and Ochieng (2020), who reported relatively stable but low ROA levels among Kenyan investment schemes, but contradict Baker et al. (2023), who found higher ROA levels in more diversified U.S. firms.

The minimum bond allocation of 0.1523 and maximum of 0.4975 indicate that investment in bonds ranges between 15.23% and 49.75%, reflecting moderate exposure to fixed income securities. The mean of 0.3348 (33.48%) suggests that, on average, collective investment schemes allocate about one-third of their total portfolio to bonds. This implies that bonds serve as a key component in portfolio construction, primarily for providing stable and predictable income while reducing overall portfolio risk. The relatively moderate allocation further indicates that, although bonds are important, they are not the dominant asset class compared to treasury bills or equities, reflecting a balanced approach between risk and return. The standard deviation of 0.0895 indicates moderate variability across schemes. The skewness value of 0.1986 lies within the acceptable range of -1 to +1, indicating a fairly symmetrical distribution (Hair et al., 2019). The kurtosis value of 2.4673 suggests a mesokurtic distribution (Kline, 2016).

Trend Analysis

Trend analysis was conducted to examine the movement of the financial performance of collective investment schemes in Kenya over the study period from 2019 to 2025.

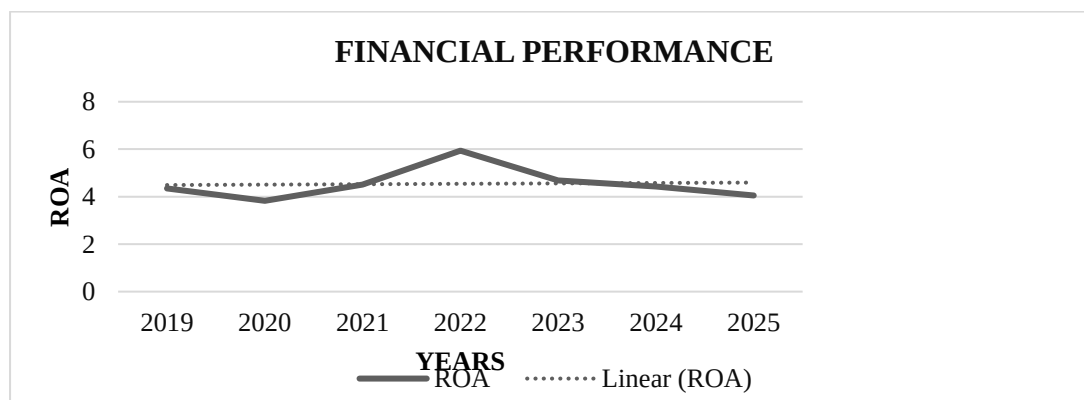


Figure 2: Trend Analysis for Financial Performance

The trend shows that in 2019, ROA stood at approximately 4.3%, indicating moderate performance at the beginning of the study period. However, in 2020, ROA declined to about 3.9%, suggesting a reduction in asset utilization efficiency, possibly due to adverse market conditions. In 2021, financial performance improved to around 4.5%, reflecting a recovery in investment returns. This upward trend continued into 2022, where ROA peaked at approximately 6.0%, representing the highest performance level during the study period. However, in 2023, ROA declined sharply to about 4.7%, indicating a reversal of the earlier gains. The downward trend persisted in 2024, where ROA further decreased to approximately 4.4%, and continued into 2025, reaching around 4.1%. This consistent decline suggests weakening financial performance and reduced efficiency in asset utilization among collective investment schemes.

The observed trend clearly supports the problem statement, which highlighted a declining pattern in the financial performance of collective investment schemes in Kenya. Although there was a temporary improvement between 2021 and 2022, the overall trend from 2019 to 2025 shows a general decline in ROA, particularly in the later years. The trend analysis findings are consistent with the descriptive statistics, which reported a mean ROA of approximately 4.15%, indicating generally low but stable performance across the study period. The relatively low standard deviation observed in the descriptive statistics further supports the trend results, showing that fluctuations in ROA are limited but consistently below optimal levels.

Inferential Analysis

Inferential analysis was conducted to establish the nature and significance of the relationship between bond investment and financial performance of collective investment schemes in Kenya.

Correlation Analysis

Correlation analysis was conducted to determine the strength and direction of the relationship between bond investment and the financial performance of collective investment schemes in Kenya.

Table 2: Correlation Analysis Results

Variables	ROA	Bond Investment
ROA	1.0000	
Bond Investment	0.4937***	1.0000

Notes:*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Bond investment was positively and significantly correlated with financial performance ($r = 0.4937$, $p < 0.01$), indicating a moderate relationship. The result implies that increased allocation to bonds contributes to improved financial performance by providing predictable income streams and reducing portfolio volatility. The finding is consistent with Muriithi (2022), who reported that fixed-income securities play a stabilizing role in investment portfolios.

Model Summary

Panel regression analysis was conducted to determine the extent to which bond investment explains variations in the financial performance of CIS in Kenya.

Table 3: Model Summary

Model	R	R-Squared (R ²)	Adjusted R-Squared	Standard Error	Obs	F-Statistic	Prob (F-Statistic)
1	0.7864	0.6184	0.6112	0.0087	217	85.4263	0.0000

The results presented in Table 3 indicate that the regression model has a correlation coefficient (R) of 0.7864, suggesting a strong positive relationship between bond investment and the financial performance of collective investment schemes. The coefficient of determination (R²) of 0.6184 indicates that approximately 61.84% of the variation in financial performance, as measured ROA, is explained by bond investment.

However, the remaining 38.16% of the variation in financial performance is explained by other factors not included in the model. The adjusted R² value of 0.6112 implies that after adjusting for the number of explanatory variables included in the model, approximately 61.12% of the variations in financial performance remain explained by the model. The relatively small difference between R² and adjusted R² indicates that the model is stable and does not suffer from overfitting. The standard error of regression of 0.0087 indicates a relatively low level of prediction error, implying that the estimated values of financial performance are close to the observed values. This demonstrates the accuracy and reliability of the regression model. Further, the F-statistic of 85.4263 with a corresponding probability value of 0.0000 indicates that the overall regression model is statistically significant at the 5% significance level.

Analysis of Variance (ANOVA)

Analysis of Variance (ANOVA) was conducted to determine the overall significance of the regression model.

Table 4: ANOVA Results

Source of Variation	Sum of Squares	df	Mean Square	F-Statistic	Prob.
Regression	0.0258	4	0.0065	85.4263	0.0000
Residual	0.0161	212	0.0001		
Total	0.0419	216			

The ANOVA results presented in Table 4 indicate that the regression model is statistically significant. The model yielded an F-statistic of 85.4263 with a corresponding probability value of 0.0000, which is less than the conventional significance level of 0.05. The regression sum of squares of 0.0258 indicates the portion of variation in financial performance explained by the independent variable, while the residual sum of squares of 0.0161 represents the unexplained variation attributable to factors not included in the model. The relatively higher regression sum of squares compared to the residual sum of squares further demonstrates the strong explanatory power of the model.

Regression Coefficient Results

Following the confirmation of the overall significance of the regression model through the ANOVA test, coefficient analysis was conducted to determine the magnitude, direction, and statistical significance of the effect of each bond investment on the financial performance of collective investment schemes in Kenya.

Table 5: Random Effects Regression Coefficient Results

Variables	Coefficient (β)	Std. Error	z-Statistic	P-value	Confidence Interval
Constant	0.0084	0.0042	2.00	0.047	(0.0002,
Bond Investment	0.1185	0.0354	3.35	0.001	0.0166) (0.0491, 0.1879)

Based on the random effects regression results, the estimated regression model was

$$Y_{it} = 0.0084 + 0.1185X_{1it}$$

The objective sought to assess the effect of bond investment on the financial performance of collective investment schemes in Kenya. The findings revealed that bond investment has a positive and statistically significant effect on financial performance ($\beta = 0.1185$, $p < 0.05$). This suggests that increasing allocation to bonds enhances financial performance through predictable interest income and reduced portfolio volatility. The null hypothesis that bond investment has no significant effect on financial performance is therefore rejected.

The findings are supported by the Term Structure of Interest Rates Theory, advanced by Hicks (1939) which posits that the yields of fixed-income securities vary according to their maturity periods, with investors demanding higher returns for holding longer-term securities due to increased exposure to interest rate risk and uncertainty. The findings are consistent with Sufian (2022); Hanin, Noriza, and Mohamad (2017); Muriithi (2022), who established that fixed-income securities positively influence financial performance through stable income generation and capital preservation. Similarly, Kiboi and Bosire (2022), who reported that long-term fixed-income investments enhance portfolio returns when appropriately matched with investors' risk preferences and investment horizons. However, the findings contradict Lamichhane (2021), Muema (2021) and Tebaldi, Nguyen, and Zuluaga (2018) who argued that excessive allocation to fixed-income securities may reduce portfolio performance during periods of strong equity market growth, as investors forego opportunities for higher returns available in growth-oriented assets.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This section presents a summary of the study findings, conclusions drawn from the findings, recommendations and suggestions for further research.

Summary

The descriptive findings indicated that bond investments formed an important component of the portfolios maintained by collective investment schemes. Correlation analysis revealed a positive relationship between bond investment and financial performance, suggesting that schemes with higher bond allocations tend to experience better financial outcomes. The regression analysis further confirmed that bond investment has a positive and significant effect on financial performance. The findings suggest that bonds contribute to portfolio stability and income generation, thereby enhancing the overall financial performance of collective investment schemes.

Conclusion

The study concludes that bond investment positively contributes to the financial performance of collective investment schemes. Bonds provide predictable and regular income streams

through interest payments, thereby supporting portfolio stability and reducing earnings volatility. The findings indicate that bond investments enable collective investment schemes to balance risk and return by providing a relatively stable source of income compared to more volatile asset classes. The study therefore concludes that bond investments are a critical component of diversified portfolios and play an important role in promoting sustainable financial performance through income generation and capital preservation.

Recommendations

The study recommends that collective investment schemes adopt active bond portfolio management strategies by diversifying across government bonds, corporate bonds, and infrastructure bonds with varying maturities. Rather than relying solely on conventional fixed-income securities, fund managers should exploit opportunities presented by long-term infrastructure and green bonds, which often provide attractive yields while supporting sustainable economic development. Additionally, bond portfolios should be structured based on interest rate expectations to maximize returns and minimize exposure to interest rate risk.

Suggestions for Further Research

The study established that bond investments significantly influences the financial performance of collective investment schemes in Kenya. However, the model explained 61.84% of the variation in financial performance, implying that 38.16% of the variation remained unexplained. This suggests the existence of other factors outside the scope of the current study that may influence the financial performance of collective investment schemes. Consequently, further research is recommended in the following areas.

First, future studies should investigate the influence of firm-specific factors such as fund size, fund age, management efficiency, management fees, operating expenses, and asset growth on the financial performance of collective investment schemes. Examining these factors may help explain part of the variation in financial performance that was not captured by the portfolio diversification variables included in this study.

Second, future research should explore the contribution of alternative and emerging asset classes such as private equity, infrastructure investments, commodities, exchange-traded funds (ETFs), green bonds, and real estate investment trusts (REITs) to financial performance. This would broaden the understanding of diversification strategies beyond the traditional asset classes examined in this study.

Third, future studies should consider using alternative measures of financial performance such as risk-adjusted returns, Sharpe Ratio, Treynor Ratio, Jensen's Alpha, and Net Asset Value growth. This would provide a more comprehensive evaluation of the effectiveness of portfolio diversification strategies.

Finally, comparative studies involving collective investment schemes, pension funds, insurance companies, and other institutional investors within Kenya and across the East African region should be undertaken. Such studies would facilitate cross-sector and cross-country comparisons and enhance the generalizability of findings regarding the relationship between bond investments and financial performance.

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