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**Bond Characteristics and Financial Performance of Investment Firms Listed at Nairobi
Securities Exchange, Kenya**

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Abstract

Purpose: Investment schemes in Kenya have witnessed increased volatility in their earnings, resulting in irregular growth in the industry. This necessitated the need to understand the factors contributing to poor financial returns. Hence, this study aimed to assess the effect of bond characteristics on the financial performance of investment schemes listed at the NSE, Kenya. The specific objectives were to assess the effect of bond liquidity and bond price on the financial performance of investment schemes listed at the NSE in Kenya. The study was anchored on the liquidity preference theory and the expectations theory of the term structure.

Methodology: The target population was 5 investment schemes listed at the NSE and were operational in the period 2016 to 2025. The study adopted a causal research design, drawing on panel data from listed investment firms. Secondary data were sourced from audited financial reports, CMA, and NSE databases. The data were analyzed using panel regression models to establish the relationship between bond characteristics and firm financial performance.

Findings: The findings of the study revealed that bond liquidity has a positive and statistically significant effect ($\beta = 0.1826$, $p = 0.0033$), and bond price was found to have a positive and significant effect ($\beta = 0.0062$, $p = 0.0007$) of CISs listed at the NSE, Kenya. Based on these findings, the study concluded that the combined effect of these bond characteristics variables accounts for 50.89% of the variation in financial performance and thus plays a significant role in influencing the financial performance of CISs listed at the NSE.

Unique Contribution to Theory, Practice and Policy: The study recommends that investment schemes adopt strategies that enhance bond liquidity and bond price through improved transparency and active participation in secondary markets. Additionally, regulatory authorities should continue strengthening the bond market by enhancing market transparency, improving trading infrastructure, and encouraging wider participation in the bond market.

Keywords: *Bond Characteristics, Bond Liquidity, Bond Price, Financial Performance, Investment Firms, Nairobi Securities Exchange, Kenya*

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INTRODUCTION

The health and longevity of any organization reflect management's capability to utilize the firm's resources both efficiently and effectively, ultimately contributing to the broader national economy (Shehu, 2025). Measuring performance plays a critical role, as it provides essential information for informed decision-making and strategic planning. A company's financial performance is largely influenced by intentional and well-executed decisions made by its owners. According to Jensen and Meckling (1976), financial performance serves as an indicator of how effectively a company utilizes its resources to generate profits, making it an essential measure for various stakeholders. Mutisya (2020) describes financial performance in terms of profits, dividends, total or net sales, revenues, investments, and the returns generated.

In recent years, the landscape of corporate financing has shifted significantly in Kenya, with an increasing number of listed firms seeking to complement traditional bank lending and equity capital with portfolios that may include bonds, options, futures contracts, gold funds, warrants, real estate, and production facilities, among other assets. In emerging economies like Kenya, investment firms play an increasing role in financial deepening and access to long-term capital. One of the financial instruments sold in the capital market is bonds. Bonds are crucial investment vehicles that give investment firms chances for risk management, diversification, and steady returns (Kiruga, 2024). According to Dewi (2020), bonds are non-transferable long-term debt instruments that show that bond issuers borrow a specific amount of money from investors with the promise to pay interest at a specific time and settle the underlying debt with bondholders at the designated time.

Bonds offer flexibility in structuring capital, lower financing costs, and enhanced financial leverage. However, the effectiveness of bonds in improving financial performance depends largely on the characteristics of those bonds (Adusei & Owusu-Ansah, 2020). Dewi (2020) asserts that, while issuing bonds can be an effective tool for raising long-term capital, not all bonds impact financial performance in the same way. Bond characteristics refer to the specific features embedded in a debt security that determine its risk profile, pricing, and appeal to investors, including maturity period, interest rate (coupon), par value or face value of a bond, bond price, convertibility, marketability, liquidity, and transferability (Fabozzi 2021).

According to Field (2022), bond liquidity is the ease with which a bond can be purchased or sold on the secondary market without substantially impacting its price is commonly referred to as bond liquidity. According to Lee (2023), more liquid bonds have narrower spreads and fewer price distortions during trading. Muema, Omagwa, and Wamugo (2021) refer to the bond's price as the present value of all anticipated future cash flows, including principal repayment and coupon payments, discounted at the market's necessary rate of return. Because bond pricing incorporates both the time value of money and market views of issuer risk, Choudhry (2019) highlights that it is essential for yield curve analysis, portfolio management, and risk assessment.

In the Kenyan context, the CMA and NSE have undertaken major reforms to enhance transparency and efficiency in bond trading (NSE 2024). Despite this progress, empirical research on how detailed bond characteristics affect firm-level financial performance, particularly for investment firms, remains scarce. Prior studies, such as those by Mwangi, Gachoka, and Muturi (2021) and Mbaya et al. (2023), have explored the general effect of corporate debt or bond issuance on firm performance, but few have disaggregated bonds into their structural characteristics or focused specifically on investment companies. This leaves a

gap in the literature regarding the extent to which bond convertibility, liquidity, marketability, and transferability affect key financial metrics like ROA, ROE, and EPS. This study sought to bridge that gap by focusing exclusively on investment firms listed at the NSE, investigating the relationship between selected bond characteristics and their effect on ROE.

Statement of the Problem

Investment firms play a crucial role in the growth and stability of Kenya's capital markets by facilitating capital mobilization, asset management, and financial intermediation. However, over the past decade (2016–2025), the ROE of these firms has shown a fluctuating pattern reflecting inconsistent financial performance. Reports from CMA (2018 - 2025), NSE (2016-2025), and individual firm reports show that the average ROE for listed investment firms has not followed a stable trend. For instance, in 2015, the ROE of listed investment firms represented a relatively strong performance, reflecting favorable macroeconomic conditions and solid equity returns before the subsequent years of volatility. In 2016 and 2017, ROE declined to 12.3% and 10.9%. It went up to 11.7% in 2018, dropped again to 9.6% and 6.8 % in 2019 and 2020, only to rise again to 7.3% and 10.2% in 2021 and 2022, respectively. During 2023, 2024, and 2025, investment firms listed at the NSE witnessed a declining ROE to an average of 7.5%, 6.9%, and 5.6%, respectively (CMA, 2024; NSE, 2023).

Specific investment firms have experienced these fluctuations with varying severity; for instance, Centum Investment ROE dropped from 14.8% in 2016 to 3.9% in 2020, driven by declining valuation gains and underperformance in private equity investments (Centum Annual Report, 2020). Trans-Century Plc, which heavily relied on debt and bond financing, has posted consistently low or negative ROE between 2016 and 2023, partly due to poor returns on bond-financed infrastructure projects (Trans-Century Annual Report, 2022). Kurwitu Ventures Ltd, Kenya's first Shariah-compliant investment firm, has reported persistently negative ROE figures, reflecting low asset turnover and negligible revenue streams (Kurwitu Ventures Annual Filings, NSE, 2023). NSE Plc, despite operational diversification, experienced an ROE decline from over 10% in 2016 to around 4.9% in 2022 due to reduced trading volumes and high operating costs (NSE Annual Report, 2022). CMA (2022) has emphasized the growing role of bonds in Kenya's financial markets, yet scholarly inquiry into how these instruments affect firm-level profitability remains limited, especially in the context of listed investment firms in Kenya. Furthermore, the results obtained by the different scholars are not definitive, given that they have exposed inconsistencies in the body of existing literature in different sectors in the region. For instance, some show positive relationships (e.g., Chen & Huang, 2024; Ngugi & Wekesa, 2023), others show negative outcomes (e.g., Abiola & Ajayi, 2020; Mutua & Muriithi, 2023), while a few report no significant effect at all (e.g., Mensah & Boateng, 2022). Also, there is a contextual void since previous studies have been carried out in economies other than Kenya. Huang (2023) studied manufacturing firms in China, Singh & Kumar (2019) studied listed firms in India, Osei and Adjasi (2022) studied the Ghana Stock Exchange, and Abiola and Ajayi (2020) concentrated on the securities market in Nigeria.

Furthermore, prior research lacks methodological consistency in the bond features under review. Some studies focus on convertibility and transferability of bonds (e.g., Kabugo and Wanyama, 2019), others on marketability (e.g., Osei and Adjasi, 2022), while others consider callability and floating vs. fixed bonds (Mwangi and Iraya, 2021). This fragmentation in the literature, along with the scarcity of Kenya-specific studies targeting investment firms, reveals a critical contextual and empirical gap. Given the above, it is clear that further research is required to examine how specific characteristics of bonds influence the financial performance

of investment firms listed at the NSE. Bridging this knowledge gap will provide investment managers, regulators, and policymakers with evidence-based insights into optimizing bond characteristics for improved ROE and long-term financial sustainability.

Objectives of the Study

This section contains the general and specific objectives of the study.

General Objective

The general objective of the study is to assess the effect of bond characteristics and the financial performance of investment firms listed at the Nairobi Securities Exchange, Kenya.

Specific Objectives

- i. To assess the effect of bond liquidity on the financial performance of investment firms listed on the Nairobi Securities Exchange in Kenya
- ii. To establish the effect of bond price on the financial performance of investment firms listed on the Nairobi Securities Exchange in Kenya

Hypotheses of the Study

H0₁: Bond liquidity does not have a significant effect on the financial performance of investment firms listed on the Nairobi Securities Exchange in Kenya

H0₄: Bond prices do not have a significant effect on the financial performance of investment firms listed on the Nairobi Securities Exchange in Kenya

Theoretical Review

This section provided a comprehensive review of the relevant literature on the effects of bond characteristics on the financial performance of listed investment firms at the NSE.

Liquidity Preference Theory

Liquidity Preference Theory was originally developed by Keynes in 1936. The theory holds that investors prefer more liquid, shorter-term assets and therefore require a liquidity premium to hold longer-dated, less liquid securities. In the context of fixed income, this premium raises the yield investor's demand for long-maturity bonds above the average of expected future short-term rates; issuers must therefore offer higher coupon rates on less liquid or longer-dated bonds to attract buyers (Lin, 2011). Despite the expectation of stable short-term rates in the future, the liquidity premium accounts for the yield curve's frequently seen upward slope. The pricing of liquidity and liquidity risk is supported by empirical asset-pricing research, which shows that corporate bond yields and expected returns are greatly impacted by liquidity measures and illiquidity shocks. (Amihud, Mendelson, & Pedersen, 2005; Lin, 2011; Acharya & Pedersen, 2005).

The Liquidity Preference Theory rests on several core assumptions. It assumes that investors are risk-averse and favor liquid assets over illiquid ones since liquidity offers flexibility and instant access to money for spending or wealth reallocation (Keynes, 1936). Furthermore, it presupposes the existence of institutional frictions, information asymmetries, and transaction costs that hinder the complete substitutability of assets with varying maturities or liquidity levels (Vayanos & Vila, 2021). A liquidity premium is also necessary since the theory argues that longer-term securities are by nature less liquid, exposing investors to higher interest-rate and reinvestment risks. These presumptions explain why yields on illiquid bonds typically

outperform those of similar liquid instruments in real-world scenarios (Amihud & Mendelson, 1986).

Despite its influence, the Liquidity Preference Theory has been critiqued for oversimplifying market dynamics. Critics contend that it is difficult to empirically separate liquidity from other factors like default risk, macroeconomic shocks, or institutional mandates (Elton et al., 2001; Benmelech et al., 2018). Furthermore, central bank regulations and policies that affect demand patterns regardless of liquidity in fragmented or interventionist markets skew the traditional liquidity-yield relationship (Vayanos & Vila, 2021). Measurement difficulties also exist: bid-ask spreads, turnover, and Amihud illiquidity ratios can all be used to approximate liquidity, but the results of these proxies are sometimes inconsistent (Amihud et al., 2005). Although liquidity is a priced feature, these restrictions imply that its impact interacts with more general structural and institutional variables.

Liquidity Preference Theory provides a lens to understand how liquidity shapes bond yields and pricing. To draw in investors, illiquid bonds such as those with low issue quantities, minimal secondary trading, or poorer credit ratings demand lower issue prices or higher coupon rates (Chen, Lesmond, & Wei, 2007). In emerging markets, where undeveloped secondary markets exacerbate liquidity risk, this paradigm is essential. For instance, illiquidity premiums considerably raise the cost of debt in Ghana's bond market, as Aboagye and Otchere (2019) showed. Similarly, Oluoch and Ojah (2024) discovered that low trading volumes at the Nairobi Securities Exchange (NSE) in Kenya led to ongoing liquidity problems, which in turn increased investment businesses' borrowing rates. As a result, the theory clarifies why bond issuance and valuation heavily rely on liquidity management.

The link between the Liquidity Preference Theory and bond liquidity is direct and critical. According to the theory, liquidity is a priced risk factor in bond value since investors want compensation for holding illiquid instruments. This is corroborated by empirical evidence: Aboagye and Otchere (2019) pointed out that African corporate issuers experience huge illiquidity discounts, while Chen et al. (2007) demonstrated that liquidity accounts for a sizable share of U.S. corporate bond spreads. Bond liquidity influences financing costs, which in turn influences yield spreads and firm-level financial performance for investment firms in Kenya, where secondary bond markets are still thin (Oluoch & Ojah, 2024). As a result, the Liquidity Preference Theory offers a strong framework for investigating the ways in which liquidity affects the effectiveness, value, and long-term viability of bonds in emerging capital markets.

Expectations Theory of the Term Structure

The Expectations Theory of the Term Structure was first proposed by Irving Fisher (1896) and further formalized by John Hicks (1939). The theory argues that the yield on a long-term bond is basically the geometric mean of the short-term interest rates that are currently and are anticipated to be in the future. In other words, if both offer the same projected return, investors don't care if they own a long-term bond or several short-term bonds. Accordingly, the market's expectations for future short-term rates are reflected in the yield curve's slope (Campbell & Shiller, 1991). The theory assumes risk-neutral investors, who care only about expected returns and are indifferent to maturity risk. It also presumes perfect capital markets, no transaction costs, and no liquidity or risk premiums. Under these conditions, arbitrage ensures that long-term yields align exactly with the average of expected short-term rates (Mishkin & Eakins, 2018).

In practice, the Expectations Theory is used to deduce from the yield curve's form what the market anticipates will happen to interest rates in the future. An upward-sloping yield curve, for instance, indicates that investors anticipate rising short-term rates, whereas a downward-sloping curve indicates expectations of dropping rates. The theory offers a straightforward connection between bond pricing and interest rate expectations: future cash flows are discounted at a series of anticipated short-term rates to determine the price of a long-term bond (Fama, 1984). A major critique of the Expectations Theory is its assumption of risk neutrality, which neglects investors' preference for liquidity and aversion to uncertainty (Keynes, 1936; Lutz, 1940).

Literature indicates that there is a term premium since long-term yields typically outperform the mean of anticipated short-term rates (Campbell & Shiller, 1991; Cochrane & Piazzesi, 2005). Furthermore, the theory finds it difficult to explain yield curves that consistently slope upward, even during times when short-term rates are predicted to stay constant (Shiller, Campbell, & Schoenholtz, 1983). Additionally, the presumption that maturities are ideal replacements is contested by market segmentation and preferred-habitat theories. The Expectations Theory directly relates to bond prices through its mechanism of discounting. The predicted trajectory of short-term interest rates dictates the discount factors used because the bond price is the present value of future cash flows. For example, discount rates rise in response to anticipated increases in future short-term rates, which lowers bond prices by decreasing the present value of cash flows. On the other hand, bond prices rise in anticipation of declining short-term rates.

Conceptual Framework

The conceptual framework depicts the relationship between the independent variables and the dependent variable under study.

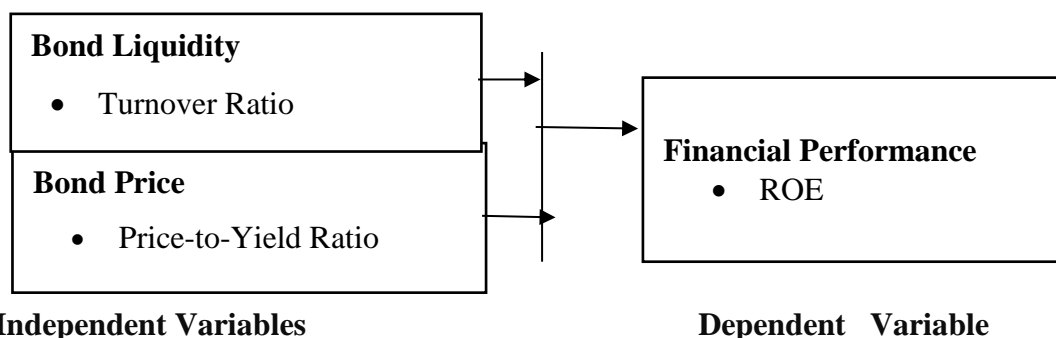


Figure 1: Conceptual Framework

Empirical Review

This section will focus on studies that are related to the current study, their findings, methodology, and critique.

Bond Liquidity and Financial Performance

Jurksas, Teresiene, and Kanapickiene (2021) investigated the determinants of corporate bond liquidity and its implications for pricing in European bond markets over the period 2008–2018. The study used secondary data on bond prices, trading activity, yields, and issue characteristics that were taken from the European Central Bank statistics and the Bloomberg Terminal. The authors used a quantitative research approach and a panel regression model with the Amihud illiquidity index, turnover ratio, and bid-ask spread as the main explanatory factors affecting

corporate bond yield spreads. The results showed that liquidity has a substantial effect on bond pricing, with wider spreads associated with less liquid bonds. In addition to being a priced risk factor, the study found that liquidity is a key channel through which market conditions impact borrowing rates and, eventually, corporate performance.

Moro and Opoku (2022) sought to examine the effect of bond liquidity on the performance of domestic bonds in Ghana. Secondary data was collected on the Government of Ghana bonds issued from 2013 to 2017. A sample of 6 Government of Ghana bonds, which have been on the secondary market for at least two years with a tenor of at least three years, was used by the researcher. Descriptive and inferential statistics were used by the researcher to determine the level of impact of the relationships. Quantitative research design facilitates objective facts regarding a phenomenon, as data have already occurred. The E-Views version 11 was used to conduct the analysis. It was found that bond liquidity had a significantly positive effect on the performance of domestic bonds in Ghana.

Kimwele (2022) examined the relationship between bond market development, liquidity, and financial performance of listed firms in Kenya over the period 2011–2020, a decade marked by regulatory reforms and increased corporate bond issuances at the NSE. The study utilized secondary data from firm-level financial statements, the NSE bond market database, and CMA reports. The study used a panel regression model with a causal research design, using ROA and ROE as stand-ins for financial performance and bond liquidity indicators (turnover ratio, bid-ask spread, and issue size) as explanatory variables. The results showed that bond liquidity had a favorable and significant impact on financial performance, considering that more liquid bonds resulted in lower borrowing costs and higher profitability for firms. Additionally, compared to non-financial firms, investment firms saw larger liquidity impacts, highlighting the significance of bond market efficiency in improving firm outcomes in emerging markets such as Kenya.

Bond Price and Financial Performance

Bonowati (2023) conducted a study to analyze the effect of bond price on bond returns of Indonesian firms. The study used a quantitative approach. Data for the study comes from firm bonds that were traded on the Indonesian Stock Exchange between 2019 and 2021. The study's descriptive research design was used on 59 Indonesian enterprises. As a sample of the 59 firms in the population, 25 companies provided the data for this study. Additionally, a technique with criteria that may be utilized as a specific research sample, purposive sampling, was employed. According to this study, Indonesian companies' bond returns and profitability are greatly impacted by the bond price.

Van der Westhuizen (2024) conducted a study on the effects of bond price on the South African sovereign bond. The study made use of the variation in daily yields, which was determined by comparing the natural logs of zero-coupon yields on successive business days. From all the listed fixed-coupon South African government bonds issued between 2010 and 2020, the sample of government bonds used was chosen. The conventional generalized autoregressive conditional heteroscedasticity model was one of the three GARCH models that were employed. To ascertain the relationship between bond yield and price, a regression model was developed. According to the findings, bond prices positively and significantly affect bond yields.

Kenga's (2024) study was to investigate the effect of bond price on the financial performance of the retirement benefits schemes in Kenya. 87 retirement benefit plans made up the study population, which used a descriptive research approach. 72 units of analysis were produced

using the stratified random sampling technique. This study included both primary and secondary quantitative data. Questionnaires and data observation schedules were used to gather data for the study, and the Statistical Package for the Social Sciences was used for analysis. This study produced regression statistics, correlation statistics, and descriptive statistics. Prior to executing the basic linear regression model, diagnostic tests were performed on the data. Bond prices significantly improve the financial performance of Kenya's retirement benefit plans, according to the results of the hypothesis test.

METHODOLOGY

This study adopted a causal research design, which seeks to establish the cause-and-effect relationship between bond characteristics (independent variables) and financial performance (dependent variable) of listed investment firms. The target population consisted of all investment firms listed at the Nairobi Securities Exchange (NSE) as of 2024. According to the NSE (2024), there are currently five investment firms listed, providing a manageable yet representative sample. Given the relatively small number of listed investment firms, the study adopted a census approach, whereby all firms in the target population are included. The study relied on secondary data drawn from audited annual reports of firms, NSE handbooks, and Central Bank of Kenya (CBK) bond market bulletins.

Data covered ten years (2016–2025), enabling trend analysis and addressing time variation in financial performance. Using secondary data enhances reliability, as such data are independently audited and verifiable (Johnston, 2017). Data on bond characteristics (par value and bond price) were extracted from the NSE handbooks, CMA reports, and CBK bond market bulletins. Financial performance indicator ROE was obtained from annual reports and audited financial statements of the listed investment firms. The study employed both descriptive and inferential statistics. The gathered data were processed, cleaned, coded, and calculated using STATA 18. The following panel regression equation was used to shape the connection between the dependent variable (Financial performance) and the independent variables (Bond characteristics)

$$Y_{it} = \beta_0 + \beta_1 BL_{it} + \beta_2 BP_{it} + \epsilon \dots \dots \dots \text{Equation 1}$$

Where;

Y represents financial performance

β_0 represents a Constant,

β_1, β_2 , represent the regression coefficients of four variables

BL_t represents bond liquidity

BP represents bond price

it represents firm *i* at time *t*

ϵ represents the error term

FINDINGS AND DISCUSSIONS

This section presents and discusses the empirical findings of the study based on data obtained from five investment firms listed at the NSE over the period 2016–2025.

Descriptive Statistics

This section presents the descriptive statistics of the study variables in order to provide an

overview of their distributional properties, measures of central tendency, and variability among investment firms listed at the Nairobi Securities Exchange (NSE). Table 1 presents the descriptive statistics results.

Table 1: Descriptive Statistics

Statistics	Obs	Min	Max	Mean	SD	Skewness	Kurtosis
Financial Performance	50	0.0438	0.1421	-0.0877	0.0227	0.4582	-0.0102
Bond Liquidity	50	0.0267	0.9269	0.4619	0.1435	0.4833	2.5748
Bond Price	50	75.9684	210.5485	112.8384	23.6993	0.5002	1.8978

In line with the dependent variable ROE, the minimum financial performance (ROE) of 0.0438 (4.38%) indicates that in some years, investment firms generated very low returns on shareholders' equity, suggesting weak profitability and possible inefficiencies in asset utilization. The maximum ROE of 0.1421 (14.21%) reflects periods of relatively strong performance, indicating that some firms or years experienced effective capital deployment. However, the mean ROE of -0.0877 (-8.77%) signals an overall deterioration in financial performance across the study period, implying that, on average, the firms incurred losses or failed to generate adequate returns for shareholders. This negative mean directly justifies the statement of the problem, pointing to persistent profitability challenges among NSE-listed investment firms. Similar findings of low or negative average ROE among investment firms have been documented in Kenya by Mwangi and Wekesa (2017) and in emerging markets by Singh (2021), who attribute weak performance to market volatility and inefficient investment strategies.

The standard deviation of 0.0227 indicates low dispersion around the mean, suggesting that poor performance was relatively consistent rather than driven by extreme outliers. The skewness value of 0.4582 lies within the acceptable range of -1 to $+1$, indicating moderate positive skewness and an approximately normal distribution (Hair et al., 2019). This suggests that while a few observations recorded higher profitability, most clustered around low or negative returns. The kurtosis of -0.0102 , which falls within the threshold of -3 to $+3$, indicates a near-mesokurtic distribution, implying no excessive tail risk or extreme values (Kline, 2016).

With respect to the first objective, the minimum of bond liquidity as measured by the bond turnover ratio was 0.0267, suggesting extremely low trading activity for some bonds, indicating poor marketability and high liquidity risk. In contrast, the maximum value of 0.9269 reflects periods of active secondary-market trading, signaling improved investor participation. The mean liquidity ratio of 0.4619 indicates moderate liquidity on average, implying that bonds were traded but not at highly efficient levels. The standard deviation of 0.1435 shows moderate variability, suggesting uneven liquidity conditions across firms and years. Similar liquidity patterns in African bond markets are reported by Aboagye and Otchere (2019) and in Kenya by Oluoch and Ojah (2024), who note that limited secondary-market depth constrains bond market efficiency. The skewness of 0.4833, within the acceptable ± 1 threshold, indicates a mildly right-skewed but approximately normal distribution. The kurtosis of 2.5748, which is below the critical value of ± 3 , indicates a leptokurtic tendency, meaning observations are more clustered around the mean with some extreme values. This implies sporadic liquidity surges amid generally thin trading (Kline, 2016).

Lastly, the bond price as measured by the price-to-yield ratio indicated the minimum bond price ratio of 75.9684, indicating that some bonds traded at deep discounts, reflecting high yields and elevated risk perceptions. The maximum value of 210.5485 suggests premium pricing, often associated with lower yields and strong investor confidence. The mean bond

price ratio of 112.8384 implies that, on average, bonds traded above par relative to yield, indicating moderate market valuation. The standard deviation of 23.6993 reflects considerable variability in bond pricing, pointing to fluctuating market conditions. Comparable evidence is found in Chen, Lesmond, and Wei (2007) and Kimwele (2022) for Kenya, who document significant price dispersion driven by yield volatility and liquidity constraints. The skewness of 0.5002, within the ± 1 benchmark, indicates moderate right skewness and approximate normality. The kurtosis of 1.8978, below the critical ± 3 value, indicates a moderately peaked distribution with some extreme observations (Hair et al., 2019).

Trend Analysis

Trend analysis was conducted using annual averages to examine the temporal behavior of financial performance as measured by ROE over the period 2016 to 2025 to identify systematic patterns, directional movements, and structural changes in the financial performance of listed investment schemes over time. The results are shown in Figure 1.

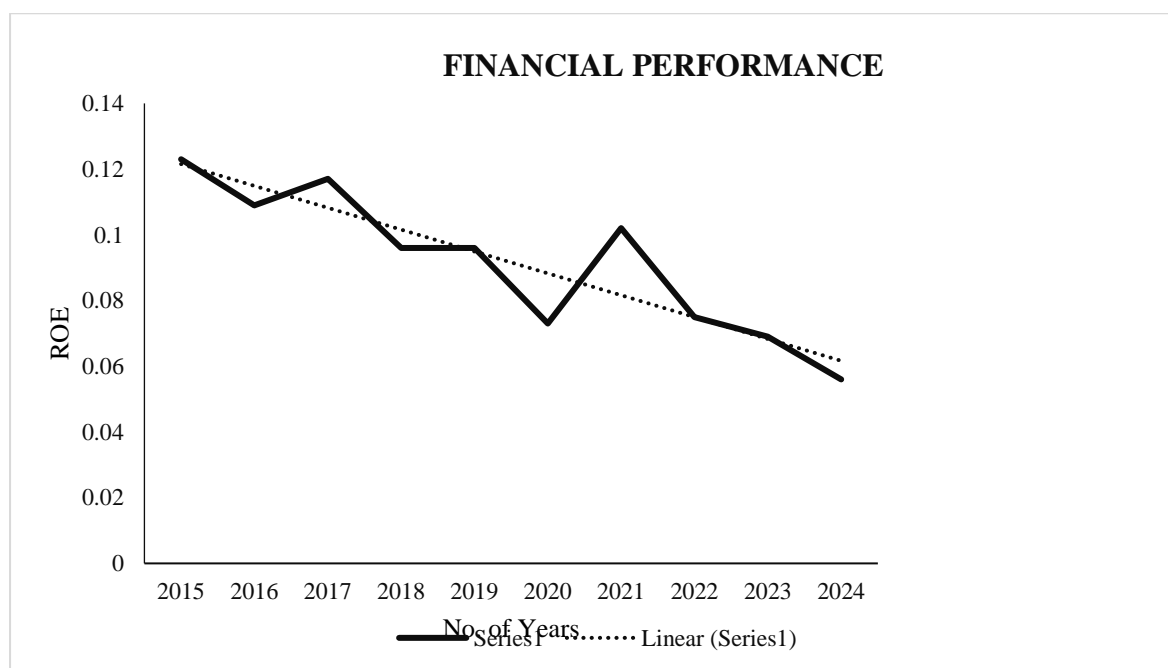


Figure 1: Trend Line for Financial Performance

The figure shows the trend of Return on Equity (ROE) over the period 2015–2024, with the solid line representing annual ROE values and the dotted line indicating the linear trend. Overall, the trend line slopes downward, signalling a gradual deterioration in financial performance over the study period. In the early years (2015–2017), ROE remained relatively high, fluctuating around the 11–12% range. This suggests stronger profitability and more effective utilization of shareholders' funds, likely supported by favourable macroeconomic conditions, relatively stable financing costs, and improved operational efficiency.

From 2018 to 2020, ROE declines noticeably, reaching a trough around 2020. This period coincides with heightened economic uncertainty, tightening financial conditions, and the disruptive effects of the COVID-19 pandemic, which adversely affected revenues, increased credit risk, and elevated operating costs for firms. A temporary recovery is observed in 2021, where ROE rebounds, reflecting post-pandemic economic reopening, improved demand conditions, and short-term policy support. However, this recovery is not sustained. From 2022

to 2024, ROE resumes its downward trajectory, falling to its lowest levels by 2024. This persistent decline suggests underlying structural challenges affecting firm profitability.

The persistent downward trend in ROE, despite intermittent recoveries, directly reinforces the problem statement of the study. It demonstrates that firms' financial performance has been unstable and generally declining, raising critical questions about the underlying drivers of this deterioration. In particular, the inability of firms to sustain profitability over time suggests that financial structure and bond characteristics may play a significant role. Therefore, this trend justifies the need for the present study by highlighting a clear performance problem that warrants empirical investigation.

Inferential Analysis

Inferential statistics were employed to examine the relationships between bond characteristics and the financial performance of investment firms listed at the NSE, Kenya.

Correlation Analysis

Correlation analysis was conducted to determine the strength, direction, and statistical significance of the relationship between financial performance and bond characteristics of the investment firms. The results are presented in Table 2.

Table 2: Correlations Matrix

Correlation	ROE	Bond Liquidity	Bond Price
ROE	1.0000		
Bond Liquidity	0.4621**	1.0000	
Sig. (2-tailed)	0.0013		
Bond Price	0.5013**	0.3367*	1.0000
Sig. (2-tailed)	0.0005	0.0173	
N	50	50	50

$p < 0.05$ (weak significance), $p < 0.01$ (strong significance), $N = 50$

The correlation results reveal that bond liquidity has a moderate, positive, and significant correlation with financial performance ($r = 0.4621$, $p = 0.0013$). This finding suggests that improved bond liquidity enhances firm performance by increasing investor confidence and facilitating easier access to capital markets. Finally, the findings indicate that bond prices have a moderate positive and statistically significant relationship with financial performance ($r = 0.5013$, $p = 0.0005$). This suggests that higher bond prices, which reflect stronger investor demand and lower perceived risk, are associated with improved financial outcomes for issuing firms.

Model Summary

The model summary statistics were examined to assess the overall explanatory power of the regression model and the goodness of fit between the observed and predicted values of financial performance. Table 3 presents the model summary.

Table 3: Model Summary

Model	Multiple R	R Squared	Adjusted R Square	S.E. Regression	Obs
1	0.7134	0.5089	0.4763	0.0187	50

The model summary results indicate that the regression model explains a considerable proportion of the variation in financial performance among the sampled investment firms. The R value of 0.7134 demonstrates a strong correlation between the observed and predicted values of financial performance, suggesting that bond characteristics collectively have a meaningful association with firm performance. The coefficient of determination ($R^2 = 0.5089$) indicates that 50.89% of the variation in financial performance is explained by the combined effects of bond liquidity and bond price. This implies that bond characteristics play a substantial role in shaping the financial outcomes of investment firms listed at the NSE, Kenya.

The adjusted R^2 of 0.4763 further confirms that even after adjusting for the number of explanatory variables, the model retains strong explanatory power, explaining 47.63% of the variations in financial performance. The remaining 52.37% may be attributed to other firm-specific or macroeconomic factors not included in the model, such as managerial efficiency, market volatility, and regulatory conditions. The standard error of the regression (0.0187) represents the average distance between the observed values of financial performance and the values predicted by the regression model. In this study, it indicates that, on average, the predicted financial performance deviates from the actual values by approximately 0.0187 units of ROE.

Analysis of Variance (ANOVA)

The Analysis of Variance (ANOVA) test was conducted to determine whether the regression model provides a statistically significant explanation of the relationship between bond characteristics and the financial performance of investment firms listed at the NSE. Table 4 presents the results.

Table 4: ANOVA Result

Model	Sum of Squares	df	Mean Square	F	Sig	Obs
Regression	0.0178	4	0.0045	12.8674	0.000	50
Residual	0.0156	45	0.0003			
Total	0.0034	49				

The ANOVA results indicate that the regression model is statistically significant in explaining the relationship between bond characteristics and the financial performance of investment firms listed at the NSE, Kenya. The model produced an F-statistic of 12.8674 with a p-value of 0.000, which is lower than the conventional significance level of 0.05. This implies that the independent variables, bond liquidity and bond price, jointly have a statistically significant effect on financial performance.

Regression Coefficient Result

Panel regression analysis was estimated to determine the influence of bond characteristics on the financial performance of investment firms listed at the NSE. The coefficient results are shown in Table 5.

Table 5: Random Effect Regression Coefficients Result

	Coefficient		t	Sig	95% Conf.	
	B	Std Error			Interval	
(Constant)	-0.0584	0.0142	-	0.0002	-0.0866	-
Bond Liquidity	0.1826	0.0587	4.1127	0.0302		
Bond Price	0.0062	0.0017	3.1095	0.0033	0.0647	0.3005
			3.6471	0.0007	0.0028	0.0096

The panel regression equation based on the random regression coefficients is presented as;

$$Y = -0.0584 + 0.1826X_{lit} + 0.0062 X_{2it}$$

Where Y is the financial performance of CIS listed at the NSE, Kenya

X_1 represent bond liquidity

X_2 represents the bond price

Hypothesis Test Results

This subsection presents the hypothesis testing results based on the findings of the random effects regression model.

H₀₁: Bond Liquidity has no Significant Effect on the Financial Performance of Collective Investment Schemes Listed at the NSE, Kenya

The first objective of this study was to establish the effect of bond liquidity on the financial performance of CISs listed at the NSE, Kenya. The null (H_{01}) hypothesis stated that bond liquidity has no significant effect on the financial performance of CISs listed at the NSE, Kenya. The findings in Table 4.13 show that the bond liquidity coefficient value of $\beta = 0.1826$, $p = 0.0033$. The results imply that holding other factors constant and bond liquidity is controlled, a unit increase in bond liquidity will increase the financial performance of CIS by 0.1826. The increase will be significant given the p-values of 0.0033 ($P > 0.05$). The study thus rejects the null hypothesis and concludes that bond liquidity has a positive and statistically significant effect on the financial performance of CISs listed at the NSE, Kenya.

The findings resonate with those of Kimwele (2022), Jurksas, Teresiene, and Kanapickiene (2021), Chen and Jiang (2021), and Nzau, Kung'u, and Onyuma (2019), who all reported that improved liquidity in bond markets enhances financial outcomes by lowering financing costs and improving market efficiency. However, contrary to the findings is a study done by Chukwuani (2018), Moro and Opoku (2022), and Aboagye and Otchere (2019), who found that liquidity improvements in some do not necessarily translate into improved firm performance due to market inefficiencies and limited secondary trading activity.

H₀₄: Bond Price has no Significant Effect on the Financial Performance of Collective Investment Schemes Listed at the NSE, Kenya

Finally, the study sought to establish the effects of bond price on the financial performance of CISs in line with the fourth hypothesis. The null hypothesis (H_{04}) stated that bond price has no significant effect on the financial performance of CISs listed at the NSE, Kenya. The results show the coefficient value of 0.0062 and a p-value of 0.0007. The results thus reveal that holding other factors constant and bond price is controlled, a unit increase in bond price will have a positive and statistically significant effect on the financial performance of CISs listed at

the NSE, Kenya. The increase will be significant given the p-value of 0.0007 ($P > 0.05$). The positive relationship suggests that higher bond prices reflect stronger investor demand and lower perceived credit risk, which may enhance firm valuation and financial performance. The study thus rejects the null hypothesis and concludes that bond price has a positive and statistically significant effect on the financial performance of CISs listed at the NSE, Kenya.

The results are in agreement with those of Bonowati (2023), Van der Westhuizen (2024), and Kenga (2024), who all reported that bond prices significantly improve the financial performance of firms in the diverse sectors of the economy. Similarly, Chen et al. (2021) reported that higher bond valuations are associated with improved corporate performance due to increased investor confidence and lower financing costs. However, the results contradict those of Luu (2024), Nwude et al. (2016), and Ngabirano (2019), Bao, Pan, and Wang (2011), who argued that bond prices reflect market frictions and trading constraints rather than firm fundamentals, and therefore, in some contexts, bond prices may not always serve as reliable indicators of firm performance.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This section presents the summary of the study findings, conclusions drawn from the results, and recommendations based on the study objectives.

Summary

The study examined the influence of bond characteristics on the financial performance of CISs listed at the NSE in Kenya.

Bond Liquidity and Financial Performance of Collective Investment Schemes Listed at the Nairobi Securities Exchange, Kenya

The study established that bond liquidity plays an important role in influencing the financial performance of collective investment schemes listed at the Nairobi Securities Exchange. The findings showed that increased liquidity in the bond market contributes positively to the performance of these investment schemes. Higher liquidity allows bonds to be traded easily in the secondary market, which enhances investor confidence and improves the ability of firms to raise funds through bond financing. As a result, collective investment schemes that operate in more liquid bond markets tend to experience improved financial outcomes.

Bond Price and Financial Performance of Collective Investment Schemes Listed at the Nairobi Securities Exchange, Kenya

In line with the fourth objective, the study further revealed that bond price plays a significant role in determining the financial performance of collective investment schemes listed at the Nairobi Securities Exchange. Higher bond prices were associated with improved financial performance. This suggests that when bonds issued by firms attract strong investor demand and are valued highly in the market, the issuing firms tend to experience improved financial outcomes. Higher bond prices often reflect favorable investor perceptions regarding the financial strength and stability of the issuing firms.

Conclusion

Based on the findings of the study, several conclusions were drawn

Bond Liquidity and Financial Performance

The null hypothesis was rejected, and the conclusion was that bond liquidity significantly improves the financial performance of CISs listed at the NSE, Kenya. The study thus concludes

that bond liquidity is an important determinant of financial performance and, therefore, improved liquidity in the bond market enhances the performance of collective investment schemes by improving access to capital and increasing investor confidence in the bond investment market.

Bond Price and Financial Performance

The study rejected the null hypothesis and made a conclusion that bond price significantly increases the financial performance of CISs listed at the NSE, Kenya. The study concluded that bond price is an important market indicator that reflects investor confidence in bond securities. Higher bond prices are associated with improved financial performance, suggesting that favorable market valuation of bonds contributes positively to firm outcomes.

Recommendations

Based on the findings and conclusions of the study, several recommendations are proposed for firms, investors, and regulators in the capital markets.

Bond Liquidity and Financial Performance

Collective investment schemes and issuing firms should prioritize strategies that enhance bond market liquidity. Firms should increase transparency and provide timely financial disclosures to improve investor confidence in bond instruments. In addition, investment firms should actively participate in the secondary bond market by promoting regular trading of their securities. Enhanced liquidity will make bonds more attractive to investors and enable firms to access financing more efficiently

Bond Price and Financial Performance

Collective investment schemes and issuing firms should implement measures aimed at strengthening market confidence in their bond instruments in order to sustain favorable bond prices. Firms should maintain sound financial management practices, strengthen corporate governance structures, and ensure consistent disclosure of financial information to investors. Strong governance and financial transparency will improve investor trust and support stronger demand for the bonds issued by these firms.

Recommendations for Policy and Practice

Regulators and policymakers, particularly capital market authorities, should continue to promote the development and efficiency of the bond market. This can be achieved by improving regulatory frameworks that enhance transparency, strengthening market infrastructure to support active bond trading, and encouraging broader participation by both institutional and retail investors. In addition, regulatory institutions should support initiatives aimed at improving financial literacy among investors to increase participation in the bond market and deepen capital market development in Kenya.

Suggested Areas for Further Research

Although this study contributes to the understanding of how bond characteristics influence the financial performance of collective investment schemes listed at the Nairobi Securities Exchange, there are several areas that future studies can explore to deepen and broaden this line of research. First, future research can incorporate additional bond-related variables that were not examined in the present study. While this study focused on bond liquidity, coupon rate, maturity, and bond price, other bond characteristics, such as bond yield, bond size, credit rating, bond issue volume, and duration, may also influence the financial performance of firms.

Including these variables may provide a more comprehensive understanding of how the structure and features of bond instruments affect the financial outcomes of firms.

Second, future studies may expand the sectoral scope of analysis beyond collective investment schemes. Researchers may examine the relationship between bond characteristics and financial performance in other sectors such as commercial banks, insurance companies, manufacturing firms, and non-financial corporations. A broader sectoral analysis would help determine whether the relationship identified in this study is unique to collective investment schemes or whether it applies more widely across different sectors of the economy.

Third, future research could consider longer time periods or larger datasets to capture broader economic cycles and market dynamics. Extending the study period may provide additional insights into how bond characteristics influence financial performance under different economic conditions, such as periods of financial stability, economic downturns, or capital market reforms.

Fourth, future research may focus on investor behavior and market perception in the bond market. Understanding how investors interpret bond characteristics and how these perceptions influence bond demand and pricing could provide valuable insights into the mechanisms through which bond market dynamics affect firm performance. Overall, further research in these areas will contribute to strengthening knowledge on bond markets and their role in shaping financial performance in emerging capital markets.

Finally, the coefficient of determination indicated that a significant portion (50.89%) of the variation in financial performance was explained by the bond characteristics examined in this research, while the remaining variation (49.11%) may be attributed to other factors not captured in the model. Future studies could therefore incorporate additional firm-specific variables such as management efficiency, portfolio diversification, operational performance, and investment strategy in order to provide a more comprehensive explanation of the determinants of financial performance.

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