

Portfolio Investment And Profitability Of Insurance Companies Listed At The Nairobi Securities Exchange, Kenya: A Theoretical Review

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Abstract

The insurance sector plays a crucial role in the economy by providing protection against risks and mobilizing long-term savings. Insurance companies listed at the Nairobi securities exchange have been experiencing a fluctuating trend in profitability, raising concerns about the sustainability and stability of these firms. The return on assets for insurance companies listed at the NSE in 2020 was negative 1.3% indicating the companies were making losses, it improved to 2.1% in 2021, in 2022 return on assets slightly increased to 2.2% and then it declined to 1.8% in 2023 while in 2024 it rose to approximately 4.1%, depicting a fluctuating trend on profitability. The general objective of the study is to investigate the effect of portfolio investment and profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya. The specific objectives of the study are to determine the effect of equity investment, bond investment, and short-term securities on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya. The research study also determined the moderating effect of liquidity management on the relationship between portfolio investment and financial performance of insurance companies listed at the Nairobi Securities Exchange, Kenya. The study anchored on the modern portfolio theory and is supported by the expected utility theory, liquidity preference theory, and Trade-off theory. An empirical literature study is also being incorporated.

Keywords: *Portfolio Investment, Profitability, Equity investment, Bond investment, Short-term securities*

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I. Introduction

The insurance companies are institutional investors which play a major role in the financial system. These firms mobilize long term savings to supply the required liquidity to the capital markets and provide risk protection to the real economy (IAIS, 2021). The performance of insurance firms globally is dependent on investment income to supplement thin underwriting risk margins which are driven by increased claim cost and market competition (Zheng & Chen, 2021; Muller & Wagner, 2023). In Sub-Saharan Africa, asset allocation strategies and portfolio diversification are key factors of financial health, especially in markets where sovereign debts are volatile (Akinlo & Olarewaju, 2020; Asongu & Odhiambo, 2022). In Kenya, Studies by Ochieng and Muturi (2021) and Kamau and Olweny (2022) indicated that as the gross premiums increased, the overall profitability of the insurance industry was sensitive to the NSE performance and the movement in interest rates issued from government bonds. Portfolio changes positively impacted investment income and negatively affected underwriting at most institutions in Kenya, resulting in unpredictable returns on asset of listed companies. Listed insurers rebalanced their portfolios with fixed-income assets to take advantage of high-interest rates without relying on the volatile equity market (Mwangi & Odongo, 2022). Financial performance is an essential indicator of the insurance institutions in the world, as it sets their solvency ratios, their capacity to meet their claims without delays, and their capacity to deliver value to their shareholders. According to Barros and Wanke (2022), insurers that depended on underwriting premiums alone but had poor investment income performance had a poorer financial performance, indicating the relevance of profit-driven portfolio operations. Mutia and Atheru (2023) demonstrated that increased capitalization of investments and prudent choice of assets had a positive impact on efficiency and financial sustainability among insurance companies in Kenya. As Wandabusi *et al.* (2024) established, firm size and well-developed operational technology are significant to improve the economical sustainability of financial institutions in emerging markets. In research by Kitaka and Njiru (2021), the authors

found that management expenses, though hindering the average profit-efficiency of Kenyan insurers, the institutions with a robust asset base and effective liquidity management achieved significantly higher profitability. Wambua and Gichuhi (2024) discovered that investment performance is the most significant factor that determines financial success in the context of Kenya where it allows institutions to absorb risk, continue operations, and widen their reach in a sustainable manner.

Financial Performance in the Insurance Sector

The insurance sector performance is defined as the efficiency, profitability, solvency, growth, and providing services that are achieved by the insurer (Muriungi & Jagongo, 2021). Performance is measured using ROE, combined ratio, growth in the premiums, and capital adequacy. Macroeconomic volatility, climate-related claims and technological disruption are observed as global performance gaps. Jeong *et al.* (2020) concludes that the United States, Japan, and Korea have general insurers which have underwriting discipline that cushions them against stress in the market. Based on their results, the companies with underwriting discipline exhibit greater solvency buffers and lower adverse selection effect at renewal than other companies. In Sub-Saharan Africa, Horvy *et al.* (2020) discovered that the insurance penetration and ICT diffusion have a positive relationship with growth with ICT playing a significant role as an enabling factor that increases the developmental effect of insurance. In Nigeria, a positive association was found between institutional stability and insurance effectiveness (Bassey & Sunday, 2023). Recent empirical work provides both challenges and opportunities to the insurance industry in Kenya. Commercial downscaling has minimal or no impact on performance but leads to rise in operational efficiency and capital investments. Wako *et al.* (2020) discovered high combined ratios of Kenyan insurance companies, and the insurance profitability on a global scale. Ngundi and Kihara (2021) attributed the differences in performance of NSE-traded companies to strategic capacity, specifically innovation and service quality, which directly affected technical efficiency, whereas Gitonga *et al.* (2022) demonstrated that asset quality predicts financial performance.

Profitability of Insurance Companies Listed at the Nairobi Securities Exchange, Kenya

Financial performance is described as the efficiency and efficacy in which the assets and liabilities of an insurer are used to produce profits and meet the financial objectives of that insurer. It serves as a serious sign of the health, sustainability, and capability of an insurer to fulfil the policyholder obligations (Kasee & Aluoch, 2025). Financial performance of insurance firms is informed by several internal and external factors in Kenya such as firm-specific, macroeconomic, and regulatory environment (Morara & Sibindi (2021). Financial performance is also measured by using various measures, including profitability ratios, namely ROA, ROE, and underwriting margins, and solvency ratios, liquidity ratios, and efficiency metrics such as the combined ratio (Wangari & Kalunda, 2024). These indicators are essential to all stakeholders, such as investors, regulators, and policyholders, to assess the success of the operations of the insurer and its long-term sustainability (Wambia & Jagongo, 2020). Several studies show a reduction in ROA in Kenya that is subject to complicated interactions of internal operational efficiencies, asset quality, risk management practices, governance structures, and the competitive environment. Omweri *et al.* (2024) have pointed out that there is a worrying drop in the overall claims ratio of the industry, which is largely caused by poor management of risks, which has resulted in enormous financial losses and even the failure of several Kenya insurance firms. Quality of assets as researched by Gitonga *et al.* (2024) is a direct predictor of ROA because more quality assets should come with superior returns. The drivers of financial success in the Kenyan insurance industry were found through corporate governance practices and the gender diversity of the board, as discussed by Kariuki (2023) which affects the efficiency and risk-taking behaviour of insurers, and consequently, the utilisation of the assets and the overall profitability of the insurers, including ROA.

Insurance Companies listed at the Nairobi Securities Exchange, Kenya

The first indigenous-focused insurer, Pioneer General Assurance Society Ltd, was established in 1930, followed by the first local insurer, Jubilee Insurance, in 1937. After independence, foreign branches transitioned to local incorporation, leading to the Insurance Act (Cap 487) in 1985 and the formation of the IRA. The NSE provides a regulated platform for these firms to raise capital, enhances their visibility, and improves corporate governance through listing requirements. The Kenyan insurance market consists of more than 58 licensed insurance companies and several re-insurance companies, although only a six of them which trade on the NSE (Kasee & Aluoch, 2025). The above-listed entities can be regarded as the so-called blue chips of the industry, which must comply with the strict reporting requirements of the IRA and the Capital Markets Authority. By 2023, the five leading providers of long-term insurance represent over 63 percent of the market share, which shows a significant degree of concentration and entry barriers (NCBA Research, 2024). These companies are in an environment where technological innovation has become a survival need. The CIC Group launched the mobile-based products such as Easy Bima with the advent of the COVID-19 pandemic in 2020, which boosted the usage

of digital distribution (Cytonn Investments, 2024). Although these changes have occurred, the increasing cybersecurity risks and low disposable income among consumers who purchase health insurance are some of the threats that the industry has been experiencing, which remains a challenge to the uptake of insurance (AIsedomi & Chijuka, 2024).

Portfolio Investment

Portfolio investment refers to the allocation of funds into marketable financial assets such as bond investments, equity investments, and short-term securities for income generation and risk diversification without exercising control over the issuing entities (Ongore & Kusa, 2021). According to Mwangi and Muturi (2022), portfolio investment comprises of equity, debts such as bonds, and short-term securities aimed at optimizing returns while managing investment risk and liquidity constraints. Bond investments generate interest income with relatively lower risk, equity investments provide dividend income and capital gains with higher risk exposure, while short-term securities such as treasury bills and commercial papers offer high liquidity and capital preservation (Ndonye & Jagongo, 2023). The efficiency of the portfolio investment is also dependent on the investment guidelines which are granted by the IRA, requiring safety, liquidity, and diversification. Mutia *et al.* (2023) showed that equity investment positively and significantly influenced the financial performance of the insurance companies in Kenya. This implies that although government bonds are stable, a diversified portfolio is necessary in the maximization of ROA and in ensuring that the firms can fulfill their long-term obligation to the policy holders (Musembi & Jagongo, 2020).

Liquidity Management

Liquidity management ensures that an insurance company has enough liquid financial resources including cash and cash equivalents to settle its short-term financial obligations. Gitonga *et al.* (2023) have argued that financial stability in the insurance sector requires effective liquidity management because it enables companies to pay their claims in good times without having to sell long-term investments in the portfolio at a loss. IRA (2025) states that it is not only a regulatory mandate to maintain an optimal liquidity ratio but also a strategic requirement to ensure that people have confidence in the insurance market. Liquidity management influences how effectively investment decisions are translated into earnings. While portfolio investments in bonds, equities, and short-term securities generate returns, their contribution to profitability depends on the institution's ability to maintain adequate liquidity to meet short-term obligations, loan disbursements, and withdrawal demands (Wandabusi *et al.*, 2023). Effective liquidity management through optimal cash holdings, liquidity ratios, and maturity matching enhances the positive effect of portfolio investment on profitability by preventing forced asset sales, minimizing funding costs, and enabling timely reinvestment of surplus funds. Conversely, poor liquidity management weakens this relationship, as liquidity shortages may compel microfinance banks to liquidate investments prematurely or rely on costly short-term borrowing, thereby eroding investment returns and overall profitability.

Statement of the Problem

The insurance sector plays a crucial role in the economy by providing protection against risks and mobilizing long-term savings (Muriungi & Jagongo, 2021). According to Cytonn investments (2024) the ROA for insurance firms listed at the NSE in 2020 was negative 1.3% indicating the firms were making losses, it improved to 2.1% in 2021 indicating a recovery from the COVID-19 pandemic. In 2022 ROA slightly increased to 2.2% and then it declined to 1.8% in 2023 while in 2024 it rose to approximately 4.1%. This fluctuating trend on profitability of listed insurance companies raises concerns about the sustainability and stability of the insurance firms listed at the NSE, necessitating the present study which investigates the effect of portfolio investment on the profitability of the listed insurance companies. Studies have investigated the profitability of insurance companies listed at the Nairobi Securities Exchange. Muteru and Omagwa (2024) highlight those macroeconomic variables, particularly inflation, significantly reduce profitability, whereas interest rates positively influence earnings, showing that profitability is highly sensitive to economic conditions. Wandabusi *et al.* (2023) demonstrate that while larger portfolios and diversified investments can enhance performance, portfolio risk has a negative effect, indicating that poor investment strategies undermine profitability. While prior studies identify factors affecting profitability, there is limited empirical evidence on how portfolio investment decisions interact with liquidity management to influence profitability in the Kenyan insurance sector, thus presenting a conceptual gap. Most empirical studies on the profitability of insurance companies have been conducted in developed or multi-country contexts, and their findings may not directly apply to emerging markets like Kenya due to differences in market structures, regulatory systems, and financial infrastructure. For example, Lament and Bukowski (2024) examined the effect of market share on profitability across 15 European countries, Opoku *et al.* (2024) reviewed determinants of non-life insurance firm performance internationally, and Phesa and Msomi (2024) analyzed underwriting profit factors and their relationship with return on assets for general insurers in

South Africa. These studies emphasize that most evidence on insurance profitability is derived from contexts different from Kenya, highlighting a contextual gap.

Research Objectives

The following objectives guided the research investigation.

General Objective

The general objective of this study is to investigate the effect of portfolio investment on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.

Specific Objectives

- i) To establish the effect of equity investment on the Profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.
- ii) To determine the effect of bond investment on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.
- iii) To determine the effect of short-term securities on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.
- iv) To establish the Moderating effect of liquidity management on the relationship between portfolio investment and profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.

Research Hypotheses

The study seeks to test the following null hypotheses:

H₀₁: Equity investment does not have a significant effect on the profitability insurance companies listed at the Nairobi Securities Exchange, Kenya.

H₀₂: Bond Investment does not have a significant effect on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.

H₀₃: Short-term securities do not have a significant effect on the profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.

H₀₅: Liquity Management does not have a significant moderating effect on the relationship between portfolio investment and profitability of insurance companies listed at the Nairobi Securities Exchange, Kenya.

Significance of the Study

The present research offers useful information to consultants and experts in the financial field to succeed in comprehending and evaluating different points of view and consequences of portfolio investments and allocate their resources to increase returns and improve profitability. The research also creates the background to the analysis of the association between portfolio investment and the performance of the insurance firms in Kenya. The research study also provides a reference on the moderating variable of liquidity management on the correlation between portfolio investment and performance of insurance companies listed at the NSE, Kenya. The current study is a part of empirical studies that contribute to the existing and future researchers in finance especially in investment strategy and performance of the insurance sector. The study emphasizes the importance of portfolio investment decisions in terms of organizational resources leverage to achieve superior financial outcomes. The study also provides a foundation for future research on portfolio investment and to determine the determinants of profitability in the insurance and other financial institutions. This independent study focuses on insurance companies listed at the NSE, Kenya and determined the effect of portfolio investment on the performance, with liquidity management as the moderating variable.

Scope of the Study

The study investigated the effect of portfolio investment on the profitability of insurance companies listed at the NSE, Kenya. The study was conducted in Kenya, and the target population is six insurance companies listed at the NSE, Kenya. The study is conducted in the period of 2020 to 2024. This period allows for the identification of trends in profitability, portfolio investment, and liquidity management, while also accounting for external shocks such as inflation, economic fluctuations, and regulatory changes. The study used secondary data collected from audited annual financial statements, IRA reports, and publications of NSE listed insurance firms.

II. Literature Review

The research study is anchored on the modern portfolio theory and supported by expected utility theory, liquidity preference theory, and the Trade-off theory.

Theoretical Review

The modern portfolio theory was developed by Markowitz (1952). It states that given a risk level, investors can create optimal portfolio, maximize expected return, or give a level of expected return, reducing risk, through diversification of investments in assets that are not strongly correlated. The theory presumes that investors are risk averse and rational individuals, who optimized the expected returns within a certain amount of risk or minimize risk within a certain number of returns through the creation of diversified portfolios. It assumes that markets are efficient, that is, security prices represent all the available information and that asset returns are normally distributed thus risk can be measured only by variance or standard deviation. The model is based on the assumptions that the transaction costs or taxes are nonexistent, the investors are of homogeneous expectations on the returns and correlation of assets, and that investors have unlimited access to capital to borrow or lend it at a risk-free rate. According to MPT, performance in portfolios lies in an appropriate allocation of assets rather than in the choice of stocks and that the diversification can remove unsystematic risk. Zhang *et al.* (2025) demonstrated how diversification and optimisation strategies such as the Sharpe ratio can assist the investor to get the maximum possible returns on the risk involved. This study used the MPT framework to 2018-2024 data by analyzing the risk-return rates of two different stocks (Tesla and Procter and Gamble). Through optimisation to maximize the Sharpe ratio, the study found a portfolio blend, yielding a high annualized growth, with low volatility than when holding Tesla in isolation, and how diversification, the fundamental principle of MPT, can balance growth and stability. These findings confirm the essence of the argument of MPT that investors can optimize the expected returns of a certain degree of risk by constructing their portfolios in a disciplined and diversified manner.

Zhao *et al.* (2025) conducted a literature review on how portfolio optimisation had developed around MPT. The research study reviewed 224 scholarly papers published within the last 3 years (2019-2024) and points out that the classical mean-variance model as the core of MPT is still fundamental, but there are significant criticisms of the research model in terms of its assumptions and practical limitations, especially the fact that the model requires more realistic risk measures and has an attitude of investor risk, in addition to fit to real-world limitations. The review discovered that researchers are expanding MPT with alternative risk measures, trading limitations, multi-stage structures, and machine learning to enhance portfolio efficiency, with an active discussion on its assumptions and the applicability to the real world. The theory anchors this study by supporting the explanatory variables, dependent and the moderating variables of the study. Equity investment, bond investment, and short-term securities, are supported by their diversification in various asset classes to minimize the unsystematic risk to maximize profitability. The dependent variable, which is profitability, also is based on MPT because it predicts that optimal allocation of portfolios increased expected returns. Liquidity management as the moderating variable is conceptually connected to MPT since sufficient liquidity enables insurance companies to make efficient changes in their portfolios, to get profitable opportunities and to fulfill their short-term commitments without expected returns being jeopardized. Thus, MPT anchors this study by offering a framework on how insurance companies can organize their portfolio investments to gain maximum returns at a given risk level.

Expected utility theory was first formulated by Bernoulli (1738) who contended that individuals do not choose decisions by the expected monetary value only, but the expected utility (or subjective value) of the results. Subsequently the theory was developed by Neumann and Morgenstern (1944) who gave an axiomatic derivation showing how rational decisions made under risk could be modeled as the maximization of an expected utility function. EUT has rational agents who have transitive preferences, complete, as well as able to put numerical utilities on outcomes, and the ability to compute the probability weighted sum of utilities. The other important assumptions are the known probabilities of all the outcomes, risk aversion defined by a concave utility function and such decisions follow independence and continuity axioms of utility theory. According to these assumptions, a decision-maker rests always to the choice, which has a higher expected utility, even though it does not necessarily have a higher expected monetary payoff. Goeree and Garcia (2023) investigated to what extent individual choices observed under risk are consistent with the fundamental assumptions of the expected utility theory, especially utility maximization, and concavity of the utility function. Applying experimental choice data and a non-parametric framework of testing, authors discovered that a significant percentage of choices did not adhere to the axioms that were supposed to be followed by the expected utility maximization. They found that the patterns of choice exhibited by many people are not consistent with stable, concave, utility functions, which argue against the descriptive usefulness of the expected utility theory in explaining the determinants of real-life decisions made in a risky context. The paper is also an addition to the discussion as it identifies systematic violations to the main assumptions of the theory.

Dohmen and Gerasimou (2024) examined whether people learn to pick consistent decisions according to the theory of expected utility when they are faced with a series of decisions in a risky choice scenario, and to examine the influence of learning, and cognitive processes in the explanation of conformity or nonconformity to expected utility maximization. The authors revealed that with repeated use of similar risky choices, individuals would behave in a way that was consistent with expected maximization of utility using controlled laboratory

experiments. The findings indicated that with time, a considerable proportion of respondents changed their decisions to achieve expected utility axioms, which indicated that learning, experience, and cognitive adaptation enhance adherence to the theory. Such results do confirm the normative applicability of the expected utility theory but also recognize the probability that deviations can exist because of low experience or a limited rationality and hence the argument on its applicability is not declining. The theory supports the independent variables, equity investment, bond investment, and short-term securities and the dependent variable, which is profitability. According to the theory, rational investment decisions made by insurance companies under uncertainty to maximize expected utility as a trade-off among every financial instrument is evaluated on its risk-return trade-off basis. Through the process of distributing resources in equities, bonds and short-term securities, firms have diversified portfolios to maximize returns and exposure to financial risks. The dependent variable, profitability, is the manifestation of the actualized results of these utility-maximizing decisions, which shows the degree to which effective portfolio decisions can lead to financial performance. Hence, EUT offers a good theoretical basis in the association of investment choices in various financial tools with the profitability of insurance companies.

Liquidity preference theory was developed by Keynes (1936). It posits that the interest rate is set by the demand and supply of the money, as the incentive to forgo liquidity, not as a saving benefit. People are more likely to keep assets in their most liquid form (cash) to serve three motives, namely, transactions (daily needs), precaution (emergencies), and speculation (exploiting changes in interest rates) and speculative demand of money is inversely related to interest rates. The main assumptions of this theory are that people can only possess money in two forms (money or bonds), the money supply is fixed by the central authority in the short term and that the demand of money needed to access transactions and precaution demand is mainly dependent on the income level, and the demand of money to pursue speculative gains is very interest elastic. Tche *et al.* (2025) evaluated the applicability of the liquidity preference theory to the contemporary developing financial set ups especially in Africa. With the use of panel data covering 32 African countries (1990-2021) and tools of Granger causality and generalized method of moments, the results revealed that the addition of funds in the financial system provided by microfinance banks reduces interest rates and increases the monetary demand and economic development-a finding that is also in line with Keynesian liquidity preference claims on money demand and investment behavior.

Jossa *et al.* (2021) assessed how the liquidity preference theory of Keynes is a valid explanation of the rate of interest determination compared to the loanable funds theory. The objective of the study was to discover the conceptual and analytical flaws of the liquidity preference theory especially its suppositions about money demand motives and to establish whether the loanable funds framework offers a more logical and realistic view of the movement of interest rates. The paper observed that the theory of loanable funds is more effective in the determination of the interest rate in comparison to the theory of liquidity preference, and the assumption of the latter on the dynamics of the money demand and the interest rates is limited. The theory supports short term securities as one of the independent variables of the study. Money market instruments like Treasury bills, short-term securities, according to LPT, are very liquid and safe thus they are best suited to firms that are trying to strike a balance between safety and returns and be able to fulfill their short-term liabilities. As mentioned in the theory, the liquidity preference impacts investment decisions, such that the firm invests into liquidity instruments to minimize the risk of unexpected occurrences, interest rate changes, or payment of claims. Thus, LPT offers an excellent theoretical rationale of the analysis of the role of short-term securities in affecting the profitability of insurance companies.

The Trade-Off Theory was developed by Modigliani and Miller (1963) on the idea that debt offers tax benefits and was later formalized by Kraus and Litzenberger (1973) who came up with the idea of balancing the benefits of debt and the costs of financial distress. It assumes that in the process of selecting the optimal balance between debt financing and equity financing, firms weigh the advantages of debt financing, including tax breaks offered on interest, against the cost of financial distress and bankruptcy. In this theory, the firms strive to achieve a favorable capital structure to maximize the value of the firm by balancing marginal benefits with marginal costs. This makes excessive debt and excessive liquidity real costs with a crucial assumption that firms must balance between real costs of attaining high returns on the one hand and not going into distress on the other. The theory acknowledges that excess liquidity may also decrease profitability as opportunity cost of idle assets and insufficient liquidity may enhance the risk of financial distress and default on short term obligations. Kuncoro *et al.* (2025) examined the connection between capital structure and liquidity and the profitability of the firms in the context of the Trade-off theory. The authors established that capital structure (debt to equity) and liquidity (current and cash ratios) have a positive impact on profitability with liquidity decreasing the risks of leverage. This can be proven to support the theory which assumes that to be able to balance the advantages of debt such as tax benefits against the cost, firms keep themselves liquid and thus find an optimal capital structure which results in improved performance. Liquidity management as the moderating variable of the study is supported by the theory. The proportion of capital invested in investments depends on liquid assets due to liquidity management since the firms are to allocate some capital to non-distress investments that have a higher rate of returns. It also facilitates

exploration of the portfolio investment choices- investment in bonds, equity, and short-term securities- since these choices indicate how firms respond to risk and returns in their capital and liquidity choices.

Empirical Review

This section presents previous studies done on equity investment, bond investment and short-term securities and profitability of insurance companies listed at the NSE, Kenya.

Equity Investment and Profitability

Mutia *et al.* (2024) determined the association between equity investments and the financial performance of Kenyan insurance firms. Using a causal research design, the study covered a period of ten years (2014-2023) from 55 insurance firms in Kenya. It utilized secondary panel data collected from IRA and company reports. Data was analyzed using Panel regression analysis and diagnostic tests were conducted. The results revealed a positive significant association between equity investment and financial performance. One of the criticisms of this study is that it failed to ascertain the mediating and moderating influence on the connection and therefore a contextual gap, the present study ascertains the moderating influence of liquidity management on the association between portfolio investment and performance of insurance firms listed at the NSE, Kenya. Boyante *et al.* (2022) established the influence of quoted equity investments and financial performance of pension funds in Kenya. Descriptive research design was used, where secondary data was gathered from Retirement Benefits Authority (RBA) records covering 294 pension schemes in the period between 2016 to 2021. Multi-linear regression was used to analyze the data. The researcher established that the negative and statistically significant effect of quoted equity investments on the financial performance of pension funds existed. One of the criticisms about this study is that it was conducted on pension funds, whose findings may not be applicable to the insurance sector, this contextual gap is addressed in the current study. Muema *et al.* (2021) established the impact of equity investments, bond investments on the financial performance of the Collective Investment Schemes in Kenya. The research study employed secondary panel data to test the impact of equity and bond investments on the return on assets (ROA) of collective investment scheme (CIS). The research established a negative but statistically insignificant impact on ROA of the equity investments, which had a substantial effect on liquidity. A critique of this study is that it was carried out on CIS which restricts its immediate application to insurance firms whose operations are different in terms of risk and liability management, the current study addresses this contextual gap by conducting its study on NSE, listed insurance firms.

Bond Investment and Profitability

Kasee and Oluoch (2025) established the impact of investment decision and financial performance of Kenya insurance companies. The research design employed is cross-sectional research design based on 56 secondary data on insurance and reinsurance companies in Kenya. Descriptive and inferential statistics such as multiple regression and correlation analysis were used to analyze the data. The research established that corporate bonds had a moderate positive association with financial performance and hence investments in bonds have a positive effect on the ROA of insurers. The positive results were even stronger with regards to government securities and stocks also played a role in performance. A critique of this study is that it was carried out using cross-sectional design, which does not indicate the causal effect, explanatory research design was used in the current study to address the methodological gap. Kenga *et al.* (2024) determined the impact of investing in bonds diversification on financial performance of retirement benefits schemes in Kenya. The research design used in this study was quantitative research design and the panel data collected was through the retirement benefits schemes in Kenya. Data was analyzed using regression analysis. The researchers found that investment diversification in bonds had a positive significant effect on the financial performance of retirement benefits schemes and foreign exchange rate volatility was significant in moderating the relationship between bond diversification and performance. A critique of this study is that it was done on retirement benefits schemes, therefore the findings of this study may not be generalizable to insurance sector while the current study addresses this contextual gap. Roba *et al.* (2022) tested the moderating variable of portfolio rebalancing on the financial performance of pension funds in Kenya on the determinant of listed corporate bond investments. The research design was descriptive and based on the secondary panel data that was sourced by the Retirement Benefits Authority (RBA) over a span of six years (2016-2021). The study population was 1 258 registered pension schemes out of which 294 schemes were picked. The multiple linear regression was used in data analysis, as well as diagnostic tests to test the validity and reliability of model estimates. The researchers came up with the observation that listed corporate bond investment had a statistically negative influence on the financial performance of pension funds. A critique of this study is that it employed descriptive research design which does not indicate the causal effect between variables, the current study addresses this methodological gap using explanatory research design.

Short-term Securities and Profitability

Kumar and Narasimhan (2024) established how short-term securities market surveillance strategies affect the stock prices and volume. The methodology employed in the study was an event study, which involved the analysis of panel data to assess the effect of Additional Surveillance Measures on 245 events of a short-term change in security prices and the trading volume. The results show that cumulative abnormal returns on stocks drop substantially after getting incorporated into the short-term surveillance system and are characterized by significant variations in average abnormal volume. A key critique of this study is that it used an event study methodology which may not indicate causal effect, the current study used explanatory research design to bridge this methodological gap. Linus *et al.* (2025) determined the impact of short term securities on financial returns of pension funds. The research study further established the relationship between various financial asset classes such as short-term securities exposures and financial pension fund asset portfolio returns was examined. The research employed secondary data. The results indicated that risk-return profile of pension fund portfolios had a meaningful effect on short-term securities, which led to reduced volatility but not always risk-adjusted performance relative to higher yields. A critique of this study is that it was done on pension funds and not in financial institutions such as insurance companies which have their own set of regulatory and performance considerations, a contextual gap which is addressed by the present study. Aser *et al.* (2024) investigated how investing in treasury bills affected the financial performance of Tier 3 Kenyan commercial banks. The study used secondary data from 2015 to 2022. Data was analyzed using descriptive and inferential techniques. The study findings indicated that treasury bills investment had a meaningful effect on the bank's financial performance. A critique of this study is that it concentrated on commercial banks which operate under a different regulatory environment from the insurance sector, a contextual gap was addressed by the current study.

Portfolio Investment, Liquidity Management, and Profitability

Tarawallie and Bein (2025) established the influence of liquidity management on sustainable profitability of financial firms across BRUCS countries (Brazil, Russia, India, China, South Africa) and the moderating effect of firm size. Panel data was used from 2000-2022 and applied Generalized method of moments. The results indicated the larger firms benefited more from liquidity management approaches to achieve sustainable profitability. A critique of this study is that it used liquidity management as the explanatory variable while the present study uses liquidity management as the moderating variable. Effiong and Enya (2020) investigated the influence of liquidity risk management on the financial performance of consumer goods companies. The research design involved was quantitative explanatory research. It relied on secondary information collected from published annual reports and analyzed the data using regression analysis techniques. The results revealed a statistically significant connection between liquidity risk management and financial performance with long-term debt, quick ratio and cash defensive interval, which presented strong effects on EPS and ROA while long term debt and cash ratio were influential in explaining ROA. A critique of study is that the sectorial focus on consumer goods firms limits its applicable to the insurance industry which operates under a distinct risk environment and system of regulation. Murithi *et al.* (2020) determined how liquidity management impacts the financial performance of MFIs in Kenya. A descriptive research design was used. The primary data was conducted using structured questionnaires and secondary data was derived through the resources of audited financial statements at the CBK website, CBK Annual Supervision Reports and AMFI annual reports. The research period spanned five years (2012-2016) and targeted 26 MFIs that registered with AMFI and CBK. Descriptive and inferential techniques were used to analyze the data, with findings indicating that liquidity management practices had an impact on the financial performances of MFIs in Kenya. While maturity gap and asset quality showed insignificant negative effects, capital adequacy had a positive and statistically meaningful effect. A critique of this study is that it utilized liquidity management as an explanatory variable whereas the present study used liquidity management as the moderating variable.

Conceptual Framework

According to Kothari (2008) a conceptual framework is a systematic illustration designed to show how different research variables relate to one another. It shows the researcher's conceptualization and interaction of the variables in the study.

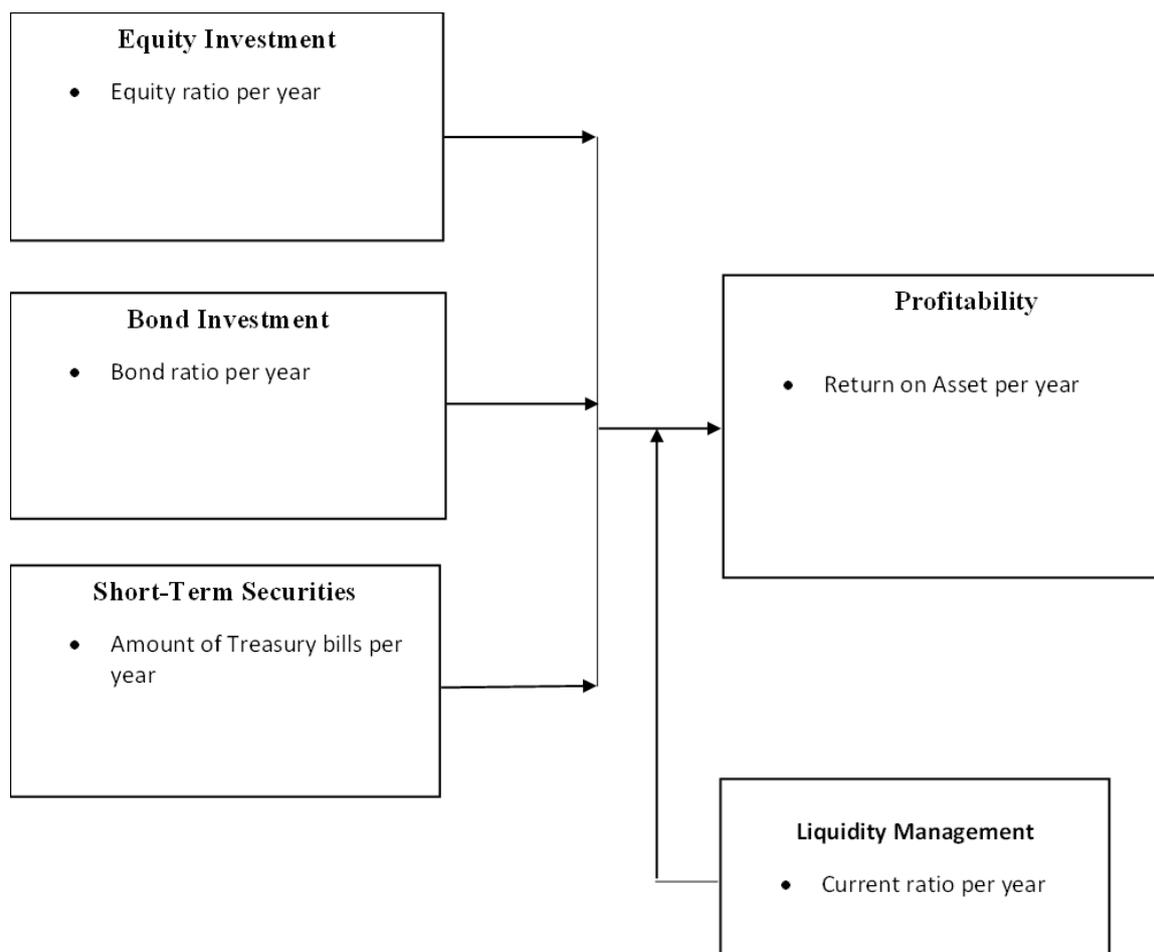


Figure 2.1: Conceptual Framework
Source: Researcher (2026)

Figure 2.1 shows how portfolio investment which includes equity investment, bond investment, and short-term securities affects the profitability of listed insurance companies listed at the NSE, with liquidity management as the moderating variable.

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