

**INFLUENCE OF BOND INVESTMENT ON FINANCIAL PERFORMANCE OF  
INSURANCE COMPANIES LISTED AT NAIROBI SECURITIES**

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**ABSTRACT**

The aim of the study was to investigate the influence of bond investment on financial performance of insurance companies listed at Nairobi securities exchange. Theory underpinning this study was Arbitrage Pricing Theory. The study adopted descriptive research design. Target population of the study included 6 insurance companies listed in Nairobi Stock Exchange. The target respondents were finance officers, internal auditors, credit managers, operations managers, valuers and underwriters. Thus the total target population was 36 respondents from the six insurance companies listed in Nairobi stock exchange. The study used questionnaires to collect data. Questionnaires were tested for validity and reliability. The collected data was analyzed using statistical package for social sciences. Data was analyzed using descriptive statistics and inferential statistics and was presented in tables and relevant discussions. Findings indicated that bond investment had a significant influence on financial performance of insurance companies. Hence the study concluded that bond investment have a significant influence on financial performance of insurance firms listed in NSE. The study recommended that the management of insurance firms should focus their attention on coming up with policies to guide their decisions in bond investments.

**Keyword:** Asset Allocation Asset, Bond Investment, Financial Performance, Insurance Companies, Nairobi Securities

**INTRODUCTION**

The insurance industry contributes to economic efficiency and fosters economic growth in several ways. First, insurance improves risk allocation of an economy and reduces transaction costs. Second, by protecting existing assets, insurers provide economic agents with a more stable financial basis. Third, insurers foster governance through their asset holdings by encouraging risk mitigation through warranties and/or risk exclusions, and direct monitoring of risks. Fourth, insurance can be an alternative and supplemental financial support in the event of economic losses caused by, for example, accidents, catastrophes and bankruptcies (Grundl, Dong & Gal, 2016).

The primary purpose of the insurance business is the spreading of risks. Because the risks associated with different policies are not perfectly correlated, the total risk of a portfolio of policies is smaller than the sum of the policies' risks. Thus, insurance functions as a mechanism to diversify Property and Casualty (PC) insurers and Life and Health (LH) insurers' risks, similar

to the role of mutual funds in diversifying investment risks. In fact, because insurers accumulate substantial funds in conducting their business, they also diversify investment risks for their stakeholders by investing in diversified portfolios (Nissim, 2010).

According to JP morgan (2014), since the outbreak of the European sovereign debt crisis, sovereign risk has been one of the main threats to financial stability. Many recent research papers investigate the link between sovereign risk and the banking system. In contrast, research on the effects of sovereign risk on insurance companies is very scarce. This is surprising, given the importance of insurance companies as large institutional investors in sovereign bond markets. Insurers hold roughly 12% of all global financial assets (IAIS, 2011) and they invest a major share of these assets in sovereign bonds.

Financial performance measures are intended to assess the efficiency and effectiveness through which firms turn out resources available to create wealth for the shareholders (Khan, 2004). Financial statement analysis plays an important role to help appraise the financial performance of a firm by extracting useful ratio which help management in identifying deficiencies and take corrective action to improve performance (Mudida & Ngene, 2010). Financial performance measures results of firm's policies and operations in terms of the return on investment (ROI) and return on assets (ROA) or return on equity (ROE).

Most of the literature aiming to estimate the link between firm's financial policy and exact market value of cash holdings has focused on the firms in the United States (U.S.). Pinkowitz and Williamson (2004), Faulkender and Wang (2006), and Denis and Sibilkov (2007) all study how firm's financial characteristics and the value of cash play together. Pinkowitz and Williamson (2004) show that, on average, the market value of a dollar held by a firm is approximately \$1.20, suggesting that shareholders believe the benefits of liquidity outweigh the potential agency problems associated with it. Faulkender and Wang (2006), employing a different methodology, find the market value of a dollar to be \$0.94 on average. Their results imply that the potential agency costs, and tax effects, outweigh the benefits in a mean firm. Denis and Sibilkov (2007) concentrate on firm's financial constraints and investment opportunities and find consistent results.

The ultimate goal of financial management is to maximize the financial wealth of the business owner(s) (Myers, 2010). Financial managers execute/performs financial management practices that determine the success or disappointment of an organization. Chung and Chuang (2010) has classified financial management practice into Capital structure management, working capital management, financial reporting and analysis, investments decision making and accounting information system. The analysis of firms' investment decisions is particularly relevant when assessing and projecting economic activity. In the context of financial frictions that can significantly affect firms' demand of productive factors and hence future economic output capacity, the financial accelerator literature states that corporate investment is highly volatile and strongly concentrated in certain periods followed by sharp declines (Farinha & Pregon, 2013). In this context, it is argued that the presence of financial frictions exacerbates business cycles. Therefore, examining the relationship between firms' financial health and their investment decisions is an important matter.

The relationship between prudent investment policy making capability of a firm's managers and its advantage in analyzing a target investment's resultant true financial performance is vital,

managers are perceived to have more information than other investors regarding an investment, thus managers are vital in making prudent investment decision analysis that shall lead to better performance of a company in both financial and non financial parameters (Akintoye & Olowolaju, 2008).

### **1.1. Insurance Companies in Kenya**

The Insurance Industry in Kenya is regulated by the Insurance Regulatory Authority (IRA) under Insurance Act, CAP 487. The Insurance Regulatory Authority (IRA) was established to regulate, supervise and develop the insurance industry. According to IRA 2014 statistics, Kenya has 49 licensed insurance companies and 84 Insurance Brokers. According to Kenneth (2000) the Kenyan insurance market is ranked fourth in Africa and with the full liberalization with many foreign insurance companies operating in Kenya. According to the Association of Kenyan Insurers (AKI), the Kenyan Insurance industry has numerous growth opportunities projecting premium rise from Kes. 90bn in 2011 to Kes. 200bn by 2015, a growth of 22.22%.

The minimum capital requirements as described in the insurance Act is paid up share capital for Long term insurance business of Kshs. 150 million, General Insurance business Kshs. 300 million and Reinsurance business Ksh. 800 million, details of the shareholders and shareholding structure of the company, a detailed statement of assets and liabilities in Kenya at the date of application, Central Bank of Kenya certificate specifying the amounts and details of deposits under section 32 of the Insurance Act (equivalent to 5% of the total admitted assets) among other requirements and conditions. Borrowings that affect the capital structure like issue of corporate bond and debt instruments requires an authority from Capital Market Authority (CMA)

A deepening corporate bond market in Kenya provide insurance companies with incentives that encourage them to make capital structure (borrowing) decisions in order to expand their business, open more branches which at the end lead to performance improvement. In Kenya, Britam was granted authority by CMA in June 2014 to issue Kes. 6 Billion Corporate bond to finance local and regional expansion, property investments as well as fund other strategic incentives. On the same note, CMA approved UAP to issue Kes 2 Billion bond in July 2014 towards geographic expansion, investment in property projects, provide additional capital to enhance capacity in existing insurance businesses as well as create other strategic ventures that will help the firm to record monumental growth in revenues and profitability. This study will be seeking to establish how these forms of financing decisions influence the financial performance of the insurance companies in Kenya.

Kenya insurance companies have been spreading their foothold in the region covering EAC, COMESA and SADC. This has been necessitated by insured's in Kenya with interests in manufacturing, tourism, transport & communication, building and construction across the region to be covered by the same insurer (Association of Kenya Insurers, 2015). However, despite the enhanced growth in premiums from both sectors of the industry, insurance penetration continues to be far below the desired benchmark (Akotey, Sackey, Amoah & Manso, 2013). A study by Mwangi and Murigu (2015) studied the factors that affect the profitability of general insurers in Kenya and found that profitability was positively related to leverage, equity capital, and management competence index and negatively related to size and ownership structure.

### **STATEMENT OF THE PROBLEM**

Over the years, the financial market in Kenya has been considered to have undergone tremendous growth. However, the insurance industry has not enjoyed a similar significant growth. According to AKI Insurance industry annual report (2014), only a few top players in the insurance industry dominate the market share with the top 10 players controlling over 60% of the market share as measured by gross written premiums. Most of the industry players are largely not profitable from their core business. This scenario has seen other players exit the market. Mbogo (2010) reported that the Kenyan Insurance market has a low penetration rate which presents the industry with valuable potential as a significant population does not have insurance cover. The consumption of insurance products in Kenya is mainly dominated by Motor, fire industrial and personal accident covers that are normally offered as riders under group medical insurance schemes. Hence, there remains a huge untapped market in the insurance sector which these companies can leverage. The literature done by other researchers on investment decisions and their effect on financial performance has focused more on developed markets (like USA and UK); little is empirically found about developing economies like Kenya, where the capital markets are less efficient and suffers from high level of information asymmetry than capital markets in developed countries. In the Kenyan context, studies on the relationship between investment policies and financial performance have emphasized more on sectors such as banking, parastatals, firms listed at NSE and microfinance institutions. The insurance sector in Kenya has been largely under-researched and ignored in this context. This study sought to fill these gaps by examining the influence of asset allocation policies on the financial performance of insurance firms Listed at Nairobi Securities Exchange.

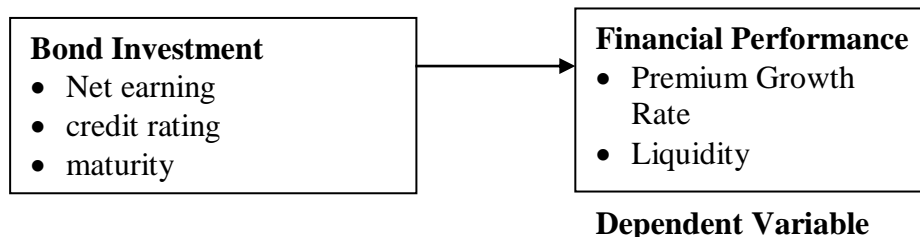
### **OBJECTIVES OF THE STUDY**

Influence of bond investment on financial performance of insurance companies listed at Nairobi securities.

### **RESEARCH HYPOTHESES**

Bond investments have no significant influence on financial performance of insurance firms listed in Nairobi securities exchange.

### **CONCEPTUAL FRAMEWORK**



### **THEORETICAL REVIEW**

#### **6.1 Arbitrage Pricing Theory**

Ross (1976) developed the Arbitrage Pricing Theory that assumes that assets return is dependent

on various macroeconomic, market and security specific factors. It states that the expected return of an investment or a financial asset can be modeled as a linear relationship of various macroeconomic variables or where degree of correlation to changes in each variable is represented by a beta coefficient. The asset value should equal the expected end of period asset value or future cash flows discounted at the rate implied by the model. If the asset value changes, arbitrage should bring it back to the line.

Charging a price at least as high as the competitive price (reservation price) increases the market value of the company. Charging a lower price would reduce the company's market value. Thus, financial models and financial prices are among the key items of information that insurers should have at their disposal when making financial decisions about tariff schedules, reinsurance contract terms, among others. Though many different specific forces can influence the return of any individual stock, the internal and external factors tend to cancel out in large and well diversified portfolio. Insurance companies are corporations and insurance policies can be interpreted as specific types of financial instrument or contingent claim thus it is natural to apply financial models to insurance pricing, (Cummins,1987).

The theory can help the insurance companies to decide whether a security is undervalued or overvalued thus avoid making losses. It is also very useful for building portfolios because it allows managers to test whether their portfolios are exposed to certain internal or external factors that would affect the financial performance of institutions. Doumpos and Gaganis (2012) estimated the performance of non-life insurers and found that macroeconomic indicators such as gross domestic product growth, inflation and income inequality influence the performance of firms.

## **EMPIRICAL REVIEW**

### **7.1 Bond Investments**

Performance is determined by the availability of informed traders. These informed traders may be determined by their "familiarity" with the bond being traded, or with close substitutes (close substitutes may be other bonds issued by the same issuer). More informed traders, means more performance, for larger bonds (O'Hara, 2001). Ezekiel (2013) on his study on the impact of investment portfolio choice on financial performance of investment companies in Kenya. The study revealed that investment portfolio choice affects the financial performance of investment companies listed in the Nairobi Securities Exchange. The study found that investment in bonds positively influences the financial performance of investment companies listed in the NSE.

According to Ringui (2012), companies could proceed to perform better if the political, macroeconomic and regulatory factors in the country are favourable for the corporate bond market to thrive. What is implied here is that if companies are encouraged by all these factors to pursue debt financing, then positive gains could be seen in these companies performance. Ringui (2012) puts it forward that bond issues could make these companies more profitable.

Bao (2008) discovered that a bond's performance is related to several bond characteristics. In particular, performance increases with a bond's age and maturity. Volume is negatively associated with age. Bonds are more liquid for the first two years after the issuance before they settle into portfolios. Alexander et al. (2000) argued that as a bond becomes more seasoned it gradually disappears from the market as it get absorbed into portfolios of buy-and-hold

institutions such as insurance companies and retirement funds agencies.

He and Nasser (2003) analyzed factors affecting bond performance in the Thai Secondary bond market, focusing on bond characteristics as well as macroeconomic factors using monthly data. Empirical results revealed that credit rating is the most significant factor to the investors when selecting bond as an investment. They found that the secondary market for investment-grade corporate bonds might be much more illiquid than is generally thought. This suggests that the bond characteristics also explain performance in addition to the individual dealer's bid-ask spread.

Krishnamurthy and Vissing-Jorgensen (2012) find that government borrowing affects Treasury-corporate yield spreads by altering the premium investors are willing to pay to hold safe and liquid assets. Baker, Greenwood, and Wurgler (2003) highlight predictability in corporate bond returns that Greenwood, Hansen, and Stein (2010) attribute to macro liquidity provision by firms in response to fluctuations in the supply of Treasuries across the yield curve. Graham, Leary and Roberts (2014) find that the debt and leverage policies of larger, more credit-worthy firms are more sensitive to variation in government debt than are the policies of smaller, less creditworthy firms whose debt is a more distant substitute for Treasuries.

Consistent with government debt influencing corporate policy, these findings are also more difficult to reconcile with the alternative of mis-measured investment opportunities because larger, more creditworthy firms exhibit financial and investment policies that are *less* procyclical (Korajczyk & Levy, 2003). Complementing these results were Krishnamurthy and Vissing-Jorgensen (2013) findings showing that the supply of short term Treasuries is negatively correlated with the supply of short-term debt issued by the financial sector. Thus, while the financial sector helps fill excess demand for safe short-term securities, the nonfinancial corporate sector helps fill excess demand for safe long-term securities.

## **7.2 Financial Performance**

Insurance companies like banks provide financial intermediation by facilitating the flow of funds from surplus spending units to deficit spending units through the process of issuing insurance cover to policyholders and investing the premium generated in productive sectors (Gatsi & Gadzo, 2013). The financial performance of the insurance companies plays a pivotal role in the growth of the industry as a whole, which ultimately contributes to the success of an economy. The insurance companies endanger their financial performance by assuming different types of risks (Wani & Showket, 2015). The financial performance of insurance companies can be analyzed at micro and macroeconomic level, being determined by both internal factors represented by specific characteristics of the company, and external factors regarding connected institutions and macroeconomic environment (Burca & Batrinca, 2014).

Measuring financial performance of an organization is very important since it determines whether the organization has been able to achieve its financial objectives or not. There are a variety of measures that organizations can use or adopt in measuring their financial performance. One such category of measures is the liquidity measures that determine the ability of the business to meet its financial obligations without disrupting any of its activities. These measures usually rely on the relationship between assets and liabilities of the organization. The other type of measures are solvency measures which determine the amount of borrowed capital used by the business relative the amount of owner's equity capital invested in the business (Ismailia, 2011).



For insurance firms, profit performance measures the difference between premiums earned (revenues) and expenses over a period of time, usually twelve month. Profits are cheap source of funds for firms' expansion and survival in competitive environment (Pandey, 2007). In assessing the profitability of individual insurance firms, Association of Kenya Insurers (AKI) and Insurance Regulatory Authority (IRA) consider the gross earned premiums, re-insurance ceded investment and other incomes, claims incurred and commissions/expenses from underwriting activities.

Murungi (2013) also carried out a study on the relationship between macroeconomic variables and financial performance of insurance companies in Kenya. The financial performance of insurance companies was measured by Return on Assets computed from the financial statements of the firms. The other macroeconomic variables were obtained from the figures available from the Central Bank of Kenya. The study took the form of a descriptive research design with a target population of 46 insurance companies that were registered by the Association of Kenya Insurers in the year 2013. The findings reveal that interest rate, gross domestic product, claim ratio and expense ratio were statistically significant in influencing financial performance of insurance companies.

Akotey and Amoah (2012) researched on determinants of performance of life insurance companies in Ghana. The findings revealed that life insurers have been incurring underwriting losses which detract from their financial performance. The high underwriting losses as the results showed is due to overtrading, high claims payments and high managerial expenses. The study further showed that gross written premiums and total assets have a negative effect on investment income. This may be due to the excessive attention on marketing to grow premiums without a proportionate allocation of resources towards the management of their investment portfolios. This is evidenced in the low levels of investment income in the industry. The study concluded that Life insurers' financial performance was measured by three parameters: investment income, underwriting profit and overall sales profitability. These parameters capture the key operations of life insurers.

According to a study done by Wabita (2013) on the determinants of financial performance of insurance companies in Kenya, from his finding it was established that finance performance positively affects the growth of an insurance company, financial performance negatively influence leverage and an insurance companies tangible assets affects financial performance positively. Mutungi (2012), on factors that influence financial performance of life assurance companies in Kenya. It was revealed that financial performance of an insurance company is determined by capital structure, innovation and ownership structure are determinants of financial performance. Omondi and Muturi (2013), on their study of effects of financial performance in insurance companies in Nairobi it was established that leverage (ratio of debt-equity) and ROA has a negative effect on financial performance and that liquidity and company size has a positive influence on firms performance. Mwangi (2013), he established that financial performance of Kenyan insurance companies is influenced by interest rate fluctuations, liquidity, and competition.

## **RESEARCH METHODOLOGY**

Research design is the strategy for a study and the plan by which the strategy is to be

implemented. This study employed descriptive research design to assist the researcher in determining the influence of asset allocation policy on financial performance of insurance companies listed at Nairobi securities exchange. The population for this study included the insurance companies in Kenya. There were 55 insurance companies licensed to operate in Kenya (IRA, 2017). However of the 55, only six of them are listed in Nairobi securities exchange. As such the target population of the study included the six insurance companies listed in Nairobi securities exchange. The target respondents included the finance officers, internal auditors, credit managers, operations managers, valuers and underwriters. Thus the total target population was 36 respondents from the six insurance companies listed in Nairobi stock exchange. Based on the small population of the study the study employed a census. The study employed the use of questionnaires as the main tools for collecting data. A questionnaire is a research instrument which consists of a series of questions designed to assist the researcher in getting information from the respondent (Mugenda & Mugenda, 2010). The study employed Cronbach alpha ( $\alpha$ ) to test the reliability of the research instrument. Tabulation of data was used to enable a meaningful description of the distribution of scores with the use of frequencies and percentages, means and standard deviation presented in tables. Inferential statistics was done to establish the relationships between variables and the strength of prediction. This was done using correlation, simple linear regression analysis and multiple regression analysis. Tabulation of data allows for space conservation, comparison of responses, detection of errors and omissions and gives a basis for statistical computation (Kothari, 2011). Analysis was done using statistical package for social sciences (SPSS).

## **FINDINGS AND ANALYSIS**

A total of 36 questionnaires were distributed to the respondents. Out of the 36 questionnaires, 34 of them were returned out of which 30 of them were properly filled. The 30 properly filled questionnaires represented a response rate of 83.3% which can be characterized as an excellent indicator that the results are externally valid and therefore can be generalized. A response rate below 51% is considered inadequate in social sciences (Pinsonneault & Kraemer, 1993). Babbie (1990) suggested that a response rate of 60% is good; 70% is very good.

### **9.1 Descriptive Statistics**

#### **9.1.1 Bond Investments**

The study further sought to examine the respondents' views in regard to bond investments by insurance firms Listed in NSE. The percentage responses along the Likert categories, means and standard deviations were computed to aid in making deductions. The findings were as presented in Table 1.



**Table 1: Descriptive Statistics on Bond Investments**

	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
i. Insurance firms adopt bond investments to increase their working capital	36.7	53.3	3.3	3.3	3.3	4.17	.913
ii. Companies are aware of different investment portfolio like bonds	43.3	50	3.3	0	3.3	4.30	.837
iii. Bond issues to insurance firms ensures insurance firms are more profitable	26.7	53.3	13.3	3.3	3.3	3.97	.928
iv. Insurance firms consider credit rating before selecting bond as an investment	23.3	70	3.3	0	3.3	4.10	.759
v. The short maturity periods of bonds investments ensures continued cash flows in the insurance company	23.3	63.3	6.7	3.3	3.3	4.00	.871
vi. Bonds comprise the greatest investment of this insurance company due to their short maturity period	13.3	56.7	10	13.3	6.7	3.57	1.104
Valid N (listwise)	30						

From the table, a majority of the respondents comprising of 53.3% agreed and 36.7% strongly agreed that insurance firms adopt bond investments to increase their working capital, registering a mean of 4.17 and a standard deviation of .913. Further, 50% and 43.3% of the respondents agreed and strongly agreed respectively that the companies are aware of different investment portfolio like bonds. The findings had a mean of 4.30 and a standard deviation of .837. In addition, 53.3% agreed and 26.7% strongly agreed that bond issues to insurance firms ensures insurance firms are more profitable while 3.3 % of the respondents disagreed and strongly disagreed respectively, registering a mean of 3.97 (Agree) and standard deviation of .928. On the other hand, respondents agreed with a mean of 4.10 and standard deviation of .759 that the insurance firms consider credit rating before selecting bond as an investment. 70% of the respondents agreed and 23.3% strongly agreed. 63.3% of the respondents agreed that short maturity periods of bonds investments ensures continued cash flows in the insurance company while 3.3% of the respondents strongly disagreed and disagreed respectively registering a mean of 4.00 and standard deviation of .871. In addition the respondents agreed that bonds comprise the greatest investment of this insurance company due to their short maturity period. 56.7% of the respondents agreed while 13.3% of the respondents strongly agreed and disagreed respectively with the assertion, registering a mean of 3.57 and a standard deviation of 1.104.

**9.1.2 Financial Performance of Insurance Companies**

Further the study sought to establish the respondents views on the status of financial performance of insurance firms listed in NSE. The percentages, means and standard deviation values were computed for making deductions. The findings from the analysis were as presented in Table 2

**Table 2: Descriptive Statistics on Financial Performance of Insurance Companies**

	SA (%)	A (%)	N (%)	D (%)	SD (%)	Std. Mean	Std. Dev
i. Insurance companies have sufficient liquidity to meet their daily financial obligations	30	53.3	16.7	0	0	4.13	.681
ii. Insurance companies have capital structure that sustains operations within the companies	6.7	86.7	3.3	0	0	3.97	.490
iii. Insurance companies have the capacity to collect enough premiums that leads to premium growth rate	10	66.7	20	3.3	0	3.83	.648
iv. Companies have adopted innovation that leads to cut down operational costs	26.7	66.7	3.3	3.3	0	4.17	.648
v. Insurance companies generate their income through the premium paid	20	63.3	10	6.7	0	3.97	.765
vi. Insurance companies finance their operations through debt financing rather than equity capital	23.3	36.7	13.3	23.3	3.3	3.53	1.196
vii. Premiums collected by insurance companies increases firms profitability	23.3	66.7	10	0	0	4.13	.571
Valid N (listwise)	30						

From the table, findings indicate that respondents, agreed that insurance companies have sufficient liquidity to meet their daily financial obligations.53.3% of the respondents agreed while 30% strongly agreed with the assertion returning a mean of 4.13 and a standard deviation of .681.Further the findings also demonstrated that the respondents agreed that insurance companies have capital structure that sustains operations within the companies.86.7% of the respondents agreed while 6.7% strongly agreed, registering a mean of 3.97 and a standard deviation of .490. 66.7% of the respondents agreed and 10% strongly agreed that insurance companies have the capacity to collect enough premiums that leads to premium growth rate. The findings had a mean of 3.83 and a standard deviation of .648. In addition 66.7% of the respondents agreed and 26.7% strongly agreed that companies have adopted innovation that leads to cut down operational costs. (9.9%) of the respondents were undecided and disagreed with the assertion registering a mean of 4.17 and a standard deviation of .648. 63.3% of the respondents agreed and 20% strongly agreed respectively that insurance companies generate their income through the premium paid, registering a mean of 3.97 and a standard deviation of .765. Also 36.7 % of the respondents agreed that insurance companies finance their operations through debt financing rather than equity capital, while 23.3% of the respondents strongly agreed and 23.3% of the respondents disagreed with the assertion, registering a mean of 3.53 and a standard deviation of 1.196.Finally the respondents agreed that premiums collected by insurance companies increases firms profitability.66.7% of the respondents agreed while 23.3% strongly agreed with the assertion, registering a mean of 4.13 and a standard deviation of .571.

**9.2 Correlation Analysis**

**9.2.1 Bond Investment and Financial Performance**

To examine the relationship between bond investment and financial performance of insurance firms listed in NSE was examined. Composite mean scores for bond investment were correlated with composite mean scores for financial performance. Pearson correlation coefficient was used to establish the relationship. The findings from the analysis were as presented in Table 3.

**Table 3: Correlations between Bond Investments and Financial Performance of Insurance Companies**

		Bond Investments	Financial Performance
Bond Investments	Pearson Correlation	1	.452*
	Sig. (2-tailed)		.012
	N	30	30
Financial Performance	Pearson Correlation	.452*	1
	Sig. (2-tailed)	.012	
	N	30	30

\*. Correlation is significant at the 0.05 level (2-tailed).

From the table, findings indicated the presence of a relatively weak positive significant ( $r=.452$ ,  $p=0.012$ ) relationship between bond investment and financial performance. This shows that changes in financial performance are dependent on changes in bond investment. Hence, increment in bond investment leads to an increment in financial performance in insurance firms listed in NSE. Hence bond investments play a significant role in determining the financial performance of insurance firms.

**9.3 Regression Analysis**

The hypothesis  $H_{01}$  that bond investment has no significant influence on financial performance of insurance firms listed in NSE. To ascertain the hypothesis, simple regression analysis was undertaken. The findings from the analysis were as presented in table 4.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 <sup>a</sup>	.204	.176	.33186

a. Predictors: (Constant), Bond Investment

From the model summary, the R-squared value was 0.204. This meant that bond investment could significantly account for up to 20.4% of the total variance in financial performance in insurance companies. This demonstrates that a variation in bond investment have a substantial impact on financial performance in insurance companies. The remaining 79.6% of the variation in financial performance can be attributed to factors not included in this model. To assess the

significant of bond investment contribution to financial performance of insurance companies, analysis of variance was undertaken at  $p < 0.05$ . the findings from the analysis were as presented in table 5

**Table 5: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.791	1	.791	7.185	.012 <sup>a</sup>
	Residual	3.084	28	.110		
	Total	3.875	29			

a. Predictors: (Constant), Bond Investment  
 b. Dependent Variable: Financial Performance

From the table, an F-value ( $F_{(1, 28)} = 7.185, p = .012$ ) was obtained which was found to be significant at  $p < .05$  level of significance. This demonstrates that bond investments significantly influenced the financial performance in insurance companies. Therefore, the null hypothesis  $H_{01}$  that bond investments have no significant influence on financial performance of insurance firms listed in Nairobi securities exchange was rejected. The researcher therefore concluded that bond investments had a significant influence on the financial performance in the insurance firms.

**CONCLUSIONS AND RECOMMENDATIONS**

The study observed that bond investment played a key role in determining the financial performance. Findings demonstrated that a majority of insurance firms adopt bond investments to increase their working capital and ensure they are more profitable. Hence the study concluded that bond investment have a significant influence on financial performance of insurance firms listed in NSE. The study demonstrated that bond investments play a significant role in determining the financial performance of the insurance firms. As such, when proper investment decisions are made that increases the bond investments, the financial performance of insurance firms would be enhanced.

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