
Selected Investment Choices and Effect on Financial Performance of Insurance Companies in Kenya

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Abstract

The Insurance sector in Kenya contributes significantly to economic development. However, the Insurance firms face challenges that affect their financial performance. This has led to cases of insolvency, mergers, and acquisitions. An understanding of the challenges faced in this industry provides a framework for addressing the negative effects. Hence, this study sought to establish whether the way management of these firms make investment choices may be affecting their financial performance. Specifically, the study focused on four selected investment choices. These included investment in Government securities, real property, quoted ordinary shares and money market securities which were modeled as predictors of the financial performance for the sampled firms. Data was collected for 37 general insurance companies that were in operation in Kenya for the period 2013-2019. Secondary data on financial performance and investment choice for each portfolio was extracted from Aki annual reports, IRA publications and reports, as well as the companies' websites. Return on Equity was used as a measure for financial performance. Correlation and simple regression were used to analyze data and test hypotheses. The findings showed that all these four selected investment choices had positive and significant effect on return on equity for the sampled firms.

Keywords: Financial performance, Investment choice, quoted ordinary shares, Money market securities, Government Securities, real property, Return on Equity.

1 Background

Insurance companies accumulate funds from different policy holders collected as premiums. After payment of the policy benefits, reserving and administrative expenses, the balance of the funds is invested to take care of future cash flow requirements (Aase, 2014). Such financial resources in the hands of insurance companies make the industry one of the most key component in the development of the economy through investment. Insurers aggregate the funds received from various policyholders and make investments in various areas of the economy including in the capital markets and financial institutions such as banks by ways of fixed deposits to facilitate payment of future obligations when they fall due (Omarkhanova, Amerzhanova, Mardenova, Zayakina&Sartova, 2019). Research has found out that Insurance companies invest their own funds and insurance reserves as part of investment activities based on their investment choices

(Kaigorodova, Alyakina, Pyrkova, Mustafina&Trynchuk, 2018). An insurance fund, before it is used for insurance payments, is temporarily free from insurance liabilities cash and in this capacity, it has a significant impact on the change in the size of the investment resources of the insurance company, depending on the availability and volume of insurance liabilities payments.

Studies have related portfolio holding and financial performance of insurance companies in Kenya (Karimi, 2013; Onsongo, 2013; Hussein, 2017). In the European Union (EU) economy, insurance companies are known to be the largest institutional investors with assets of over 10 trillion euros under their management (Developer, 2015). This has resulted to financial stability and growth of the EU economy (Focarelli, 2017). Studies done in Russia, have identified that one of the problems insurers face is lack of developed secondary securities market which creates problems of investment choice. Insurers must find their place in the investment process which is the key to the recovery and stability of the country's economic sectors (Kucherenko, Trynchuk&Dankevich, 2018; Mentel, Brozyna&Szetela, 2017). While mergers and acquisitions have been inevitable in the Kenyan Insurance Industry, most of these are attributed to poor or struggling financial performance of the individual companies.

1.2 Problem statement

Over the last two decades, the insurance Industry in Kenya has faced several challenges, among them insolvency, minimum capital requirements, risk-based capital compliance (RBC), mergers and acquisitions among many challenges (Okoth, 2009). Various insurance companies licensed and regulated to operate in the industry closed due to insolvency. These included Blue shield, Invesco which closed in 2008 but has since been revived, Concord Insurance (2013), Lakestar, Stallion, Access Insurance, Standard Assurance all of which closed in (2009), United Insurance Company Limited (2004) and Standard Assurance Kenya Ltd. At the same time, mergers and acquisitions have been inevitable in this Industry. All these has been attributed to a large extent on poor or struggling financial performance of the individual insurance firms (Developer, 2015). The causes of this poor or struggling financial performance need to be brought to the fore. Hence, this study aims at relating investment choices of these firms to their financial performance to document findings of whether or not, the investment choices could be part of the causes of the challenges faced in financial performance.

1.3 Research Objectives

Specifically, this study sought to;

- a) To establish the effect of choice of investment in government securities on financial performance of Insurance companies in Kenya
- b) To establish the effect of investment in money market on financial performance of Insurance companies in Kenya
- c) To establish the effect of choice of investment in quoted ordinary shares on financial performance of Insurance companies in Kenya
- d) To establish the effect of choice of investment in real property on the financial performance of Insurance companies in Kenya

1.4 Research hypothesis

H0₁ Investment choice in government securities has no effect on the financial performance of Insurance Companies in Kenya

H0₂ Investment choice in money market has no effect on financial performance Insurance Companies in Kenya

H0₃ Investment choice in quoted ordinary shares has no effect on financial performance of Insurance Companies in Kenya

H0₄ Investment choice in real property has no effect on the financial performance of Insurance Companies in Kenya

1.5 Justification for the Research

The findings from this study are useful to top management and investment managers of insurance companies in making informed investment decisions that will assist improve the financial position of their firms. Investors seeking to invest in the insurance sector are keen to identify companies whose investment choices contribute greatly to the financial performance of their prospective companies. The Insurance Regulatory Authority of Kenya would also use the information generated from this research in formulation policies and guidelines that support insurance companies to operate prudently and profitably. The study findings will bridge in the research gap that other scholars are yet to explore thus add up to the corpus of literature on financial management of Insurance firms. The recommendations of this study would be useful in enabling stakeholders to design more effective financial management practices in investment aimed at ensuring better financial performance of Insurance companies in Kenya.

2 Review of Literature

The main theory that informed this study were the Modern Portfolio Theory and the Liquidity theory.

2.1 The Modern Portfolio Theory (MPT)

Markowitz in his MPT theory argued that investors are risk averse and that their risk appetite is limited to the expected returns of their investments, markets are efficient, and that returns are normally random distributed variables. Further, the theory shows that out of a risky asset, an efficient frontier of optimal portfolios can be constructed. Thus, each portfolio on the efficient frontier offers the maximum possible expected return for given levels of risk. Investors therefore hold optimal portfolios on the efficient frontier as they adjust their total market risk by leveraging that portfolio positioned best with the risk-free asset such as government bonds. In summary, this theory demonstrates that organizations/investors make investment choices and manage their investments by diversifying their portfolios (Markowitz, 1999). The Theory was applicable to this study in that, it guides insurance companies in diversification of their investment and in development of their investment strategies. This ensures that the Insurance companies invest prudently by weighing the risk and returns expected from their investment. The concept of diversification is important when an investor is faced by several types of securities or investment opportunities with different levels of risk and probable returns.

2.2 Liquidity preference Theory

Developed by John Maynard Keynes in 1936, the theory asserts that investors prefer to hold assets that can be converted to liquid form or cash. Generally, an investor holds money with three motives namely, precautionary motive, speculative motive, and transactional motive. The theory was applicable in this study in that insurers need liquidity to offset their obligations as they fall due thus, they may hold money with transactional motives. This is in line with Kibanga (2019) in his study to determine factors that affect investment choices for insurance companies in Kenya. The study recommended that insurance companies need to achieve and maintain an optimal liquidity position that holds adequate cash/liquid resources for operational needs while the surplus liquid resources are invested. Insurers may also have precautionary motives, to caution themselves against unforeseen expenditures due to changes in their operations or regulatory framework. Insurers may also have speculative motives in holding cash, due to perceived opportunities that may arise when interest rates may rise thus investing in higher returns, low risk ventures.

2.3 Empirical studies

A study by Auma (2013), on the relationship between portfolio holding and financial performance of insurance companies in Kenya established a positive and strong relationship between portfolio holding and financial performance. Investment in stock and bank deposits had an inverse relationship to profitability in the insurance industry. The study also found out that investment in real estate had a direct relationship with the overall profitability of the insurance industry, whereas increased investment in government securities led to the increase in overall profitability of the insurance companies. These findings relate to those of another study by Kimeu (2015) on the effect of portfolio composition on the financial performance of investment companies listed on the Nairobi Securities Exchange. The conclusions were that portfolio composition affects the financial performance. These findings also collaborated with earlier findings by Kamwaro (2013) in a study on the impact of investment portfolio choice on financial performance of investment companies listed at Nairobi Stock Exchange (NSE). The findings revealed that investment portfolio choice affects the financial performance.

Hussein (2017) in a study on the relationship between investments and financial performance of commercial banks in Kenya concluded that there was an insignificant negative relationship between investments in government securities, investment in properties and return on assets. However, there was a positive insignificant relationship between corporate bonds and return on assets (ROA). Investment in stocks had a positive and significant relation with ROA. Other studies like that by Mwangi (2014) established the determinants of financial performance of general insurance underwriters in Kenya. The conclusions were that financial performance positively related to investment yield. Also Njiiri (2015) related investment and financial performance of insurance companies in Kenya. The results indicated that sampled firms invested their funds mainly in three areas; real estate, deposits with financial institutions and government securities. The conclusions were that investments in real estate, certificates of deposit, Government securities, corporate bonds and stocks had a significant impact on the financial

performance of the insurance companies since they explained more than 50% of the variance in financial performance.

Karimi (2013), in a study to establish the relationship between investment portfolio choice and profitability of investment companies listed at the Nairobi Stock Exchange. The study revealed that investment returns, liquidity, risk and risk assessment positively influence the profitability of investment companies listed in Kenya and hence the choice of investment. Makau&Jagongo (2018) sampled five listed investment companies and concluded that there was a significant positive impact on financial performance from investments in bonds, real estate and listed securities. Onsongo (2013), examined the determinants of financial performance for life insurance companies in Kenya. The study had Return on Assets (ROA) as the measure of financial performance and recommended that allocation of more resources into investments for life insurance companies should enhance better financial performance.

Almajali et al (2012) investigated the factors that mostly affect financial performance of Jordanian Insurance Companies using a sample of 25 insurance companies listed at Amman stock Exchange during the period (2002-2007). ROA was used as a measure of financial performance. Based on the findings, the recommendation was that there should be a consideration of increasing company assets since it leads to a good financial performance.

Mwangi (2013), sought to identify the relationship between underwriting profit (financial performance) and investment income for general insurance companies in Kenya. The study comprised of all the general insurance companies licensed between the year 2000-2011. The study had the dependent variable as income before tax, and the independent variables were investment income as a percentage of admitted assets, assets, general insurance net premium income and underwing profit. The study established that Investment income was critical for an insurer to generate favourable income before tax. Insurers were generating positive income before tax even with negative underwriting profit. The study concluded that there was a weak positive relation between underwriting profit (financial performance) and investment income for the general insurers under the period of study. The research did not narrow down the sources of investment income and their relationship with financial performance.

Kariuki (2017) sought to establish the relationship between portfolio diversification and financial performance of Centum limited. The study focused on a period of 10 years from 2007 to 2016 and used data secondary from audited accounts to collect data. The study concluded that portfolio diversification had a significant positive relationship with financial performance. However, investment in real estate, infrastructure, unquoted stocks and marketable securities portfolio had no significant relationship with financial performance. Another related study by Nyora (2015) looked at the relationship between portfolio holding and financial performance of insurance companies in Nairobi County and concluded that investment in government securities and real estate positively affects financial performance.

Kipleting (2016) sought to determine the effect of investment diversification on financial performance of Commercial banks in Kenya. The study targeted a sample of 40 commercial

banks. Data was collected from both primary and secondary sources. Secondary sources included published audited accounts while primary data was collected from interviews. Exploratory research design was used and data collected was analyzed using explanatory and inferential statistics which was done through ANOVA and multiple regression. The study concluded that there was a positive relationship between investment in government securities, investment in shares, real estate and financial performance of commercial banks in Kenya.

Obiero (2019), sought to investigate the effect of portfolio diversification on the financial performance of investment companies listed at the Nairobi stock Exchange. The study specifically focused on the effect of investment in bonds, listed securities and real estates on the financial performance of listed investment firms namely; centum investment limited, Trans-century limited, Olympia capital holdings limited, Home Africa and Kurwitu ventures ltd. The study adopted a descriptive research design and covered the period 2010 to 2017 and used ROA as the dependent variable and independent variables were investment in bonds, investment in real estates and investments in equity securities. The study concluded that 85.3% deviation of ROA was caused by changes in investments in bonds, real estate investment and listed securities thus they all have significant influence on financial performance of listed Investment firms at the NSE.

Hailu&Aassew (2018), sought to investigate the impact of investment diversification on financial performance of Commercial Banks in Ethiopia covering the period of 2013-2017. The sample size for the study was 17 commercial banks operating in Ethiopia. The study used quantitative research approach and data was analyzed using regression model. The study concluded that investment in government security, insurance, investment size, loan portfolio, financial assets and has positive significant impact on financial performance of Banks in Ethiopia. In addition, investment diversification was found to positively affect the financial performance of commercial banks in Ethiopia.

Lamichhane (2021), sought to examine the effect of investment diversification on financial performance of commercial banks in Nepal. The study used return on assets and return on equity as the dependent variables. The independent variables were investment, Bond Investment, Real estate investment, Total loan portfolio, Government securities investment, corporate sector investment, and Foreign Banks investment. The sample used for the study was 20 commercial banks while data was collected from secondary sources covering the period from 2011 to 2016. The study deployed a regression model to in data analysis The study concluded that investment in bonds, government securities positively resulted to improved financial performance as evidenced by ROA. However, investment in real estate negatively affected financial performance

2.3 Conceptual framework

The conceptual framework in this study showed investment choice as the independent variable and financial performance as the dependent variable. The Investment choices are conceptualized as; government securities, money market, quoted shares, investment in property. Financial performance is denoted by return on equity.

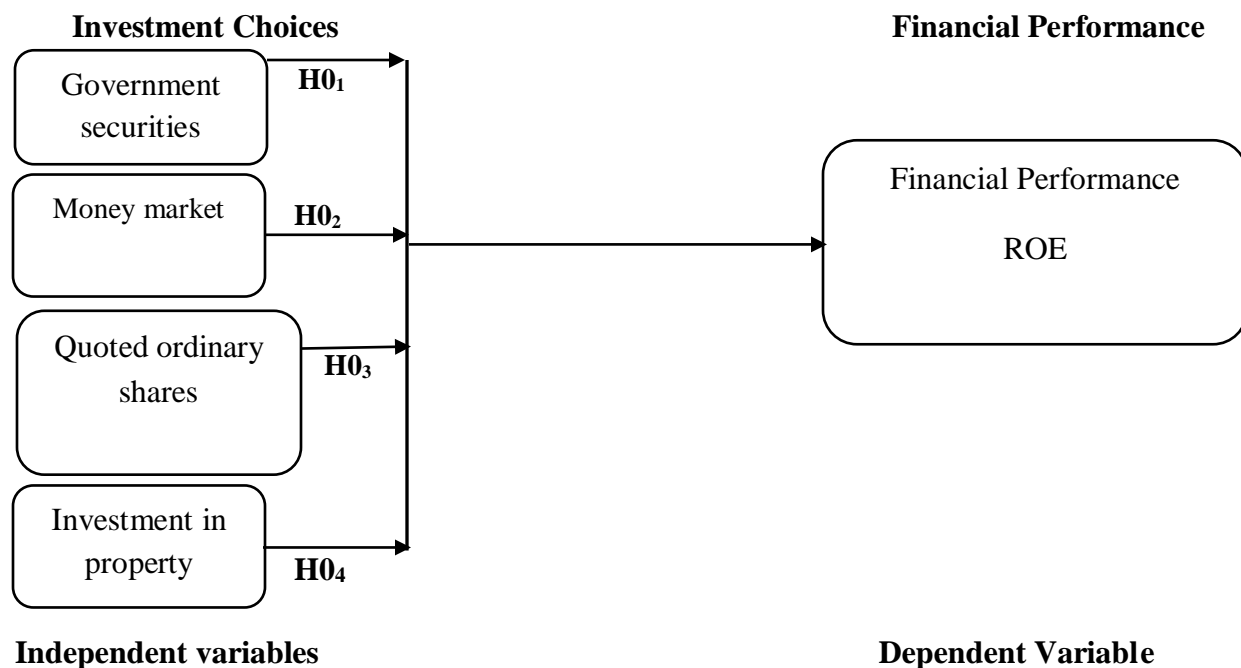


Figure 1: Conceptual Framework showing the Relationship between Investment Choices and Financial Performance of Insurance Companies in Kenya

3. Methodology

The study adopted a descriptive research design. The study population was 54 insurance companies that operated in Kenya between 2013 to 2019. Out of the 54 targeted companies, 37 were purposively selected as the sample. Secondary data was collected from relevant sources that included insurance companies published accounts. The published accounts were obtained from Insurance Regulatory Authority (IRA), Association of Kenya Insurers (AKI) and Insurance Companies websites over the period of the study. Correlation analysis and simple Regression were used to analyse data and test hypotheses.

3.1 Analytical Model

The simple regression model used to analyse for each of the hypothesis was as presented in the equations below;

$$Y = a_0 + b_i X_i + \epsilon$$

Where: Y = financial performance (ROE);

X_i = Selected Investment choice (The choices included government securities, money market, quoted ordinary shares, real property)

b_i = Coefficients of the variables

a₀ = Is the autonomous component, which is the financial performance that is not affected by the factors in question.

4 Results and Discussion

4.1 Descriptive statistics

The Industry wide statistics for general insurers show that over the seven-year period under review Investment choice in government securities was most preferred choice by the insurers with Ksh. 291,017,163,000 followed by Investment choice in Investment property and Investment choice in quoted ordinary with investments amounting to Ksh. 180,938,967,000 and Ksh. 66,879,261,000 respectively. Investment in money market was the least preferred choice with investments amounting to Ksh. 2,721,778,000. Return on equity over the seven-year period was 0.28. The table below shows the summary of the results;

Table 1: Invested funds in various invested investment choices

ROE	Investment in Government securities	Investment in money market	Investment in Quoted ordinary shares	Investment in property
0.28	291,017,163,000	2,721,778,000	66,879,261,000	180,938,967 ,000

4.1.1 Mean and standard deviation

The mean and standard deviation for the various investment choices were computed over the seven-year period as shown by Table 2

Table 2: Descriptive statistics

Mean and Standard Deviations of the selected investment Choices

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
ROE (%)	256	-144.459	298.614	7278.861	28.43305	54.103218
Investment Property	218	0	3713400	180938967	829995.26	783674.468
Government Securities	257	.0	7332330.0	291017163.0	1132362.502	1407242.8689
Money Market	130	0	388929	2721778	20936.75	67492.352
Quoted Ordinary Shares	232	0	3894316	66879261	288272.68	580426.250
Valid N (listwise)	127					

The amounts are in “thousands”, and ROE in “percentage”

Descriptive results in Table 2 above shows the descriptive statistics of general insurance companies considered for the study over the seven-year period. The most preferred investment choice was government securities whose average was Ksh. 1,132,362,502. In the year 2019, Invesco Assurance company did not file mandatory returns hence for the said year it had nil entries in all the investment choices. All the other general insurance companies invested in government securities as one of their preferred investment choices. Investment choice in property is the second most preferred with a mean of Ksh. 829,995,260 while quoted ordinary

shares and money market had a mean of Ksh. 288,272,680 and Ksh. 20,936,750 respectively. This shows that general Insurance companies have their preferred investment choices as; government securities, investment property as their second choice of investment while money market was the least preferred investment choice

4.2 Correlational Analysis

Before testing for the effect of each selected investment choice on financial performance, the study used a Pearson’s correlation to establish relationships between the selected investment choices and financial performance of the sampled companies. Financial performance was measured using return on equity while investment choices in government securities, investment in real property, money market and quoted ordinary shares represented the independent variables. The correlation results are as presented in Table 3 below.

Table 3: Pearson Correlation coefficient analysis for the relation between Investment Choices and Financial Performance, and Correlation between the Investment Choices

		ROE	Government Securities	Investment Property	Money Market	Quoted Ordinary Shares
ROE	Pearson Correlation	1	.292**	.265**	.347**	.345**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	256	256	217	129	231
Government Securities	Pearson Correlation	.292**	1	.339**	.117	.551**
	Sig. (2-tailed)	.000		.000	.184	.000
	N	256	257	218	130	232
Property	Pearson Correlation	.265**	.339**	1	.208*	.504**
	Sig. (2-tailed)	.000	.000		.019	.000
	N	217	218	218	128	209
Money Market	Pearson Correlation	.347**	.117	.208*	1	.481**
	Sig. (2-tailed)	.000	.184	.019		.000
	N	129	130	128	130	130
Quoted Ordinary Shares	Pearson Correlation	.345**	.551**	.504**	.481**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	231	232	209	130	232

** . Correlation is significant at the 0.01 level (2-tailed).

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

The Pearson correlation test results showed that return on equity had a positive relationship with all the investment choices. However, the relationship was significant for only two of the investment choices. Government securities had (Pearson’s $r = 0.292$, $p < 0.05$), investment in property (Pearson’s $r = 0.265$, $p < 0.05$). The positive relationship between return on equity with money market (Pearson’s $r = 0.347$), and quoted shares (Pearson’s $r = 0.345$) were not significant. Investment choice in government securities had a positive relationship with

Investment choice in property (Pearson’s $r = 0.339$), money market (Pearson’s $r = 0.117$) and quoted ordinary shares (Pearson’s $r = 0.551$). Money market had a positive relationship with Investment choice in property (Pearson’s $r = 0.208$) and quoted ordinary shares (Pearson’s $r = 0.481$) while Investment choice in quoted ordinary shares had a positive relationship with investment in property.

4.3 Testing of Hypotheses

There were four objectives in this study and the corresponding hypotheses were that each of the four selected investment choices (government securities, money market, quoted shares and real property) had no effect on the financial performance of the sampled firms. A simple regression was used to test for the effects. This section presents the results and interpretations in relation to the study objectives and research hypotheses.

4.3.1 Effect of Choice of Investment in Government Securities on Financial Performance

The first objective of the study was to establish the effect of investing in government securities on the financial performance of Insurance companies in Kenya. It was hypothesized (H_{01}) that investing in government securities has no effect on the financial performance of Insurance companies in Kenya. The model used was $Y = \beta_0 + \beta_2 X_2 + \epsilon$. The results of the analysis are presented in Table 4 below.

Table 4: Simple regression Results for the effect of investment choice on government securities on ROE

Model Summary									
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				
					Square Change	F Change	df1	df2	Sig. Change
1	.292 ^a	.085	.082	51.8425	.085	23.725	1	254	.000

a. Predictors: (Constant), Government Securities

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63763.906	1	63763.906	23.725	.000 ^b
	Residual	682661.447	254	2687.643		
	Total	746425.353	255			

a. Dependent Variable: ROE

b. Predictors: (Constant), Government Securities

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	15.668	4.167		3.760	.000
	Government Securities	1.123E-5	.000	.292	4.871	.000

a. Dependent Variable: ROE

The results in Table 4, shows that the R^2 for the model is 0.085 indicating that investment choice in government securities explains only 8.5% of the variation in ROE (financial performance). This indicates that there could be other factors not included in the model that affect ROE that account for the 91.5%.

The ANOVA results indicate that the model is statistically significant ($F= 23.725$, $p = 0.00$ thus $p < 0.05$). The regression model $Y = \beta_0 + \beta_1 X_1 + \epsilon$ was used and the standardized coefficients show that $ROE = 15.668 + 0.00001123 * \text{Government Securities}$ which implies that the effect of investment choice in government securities on ROE is positive and statistically significant at ($p < 0.05$). A unit increase in government securities results to an increase in ROE by 0.00001123. From the simple regression model results the null Hypothesis H_{01} , that investing in government securities has no effect on the financial performance of Insurance companies in Kenya was rejected. This means that investing in government securities has a positive effect on ROE. The findings of the studies conducted by Hailu&Tassew (2018); Lamichhane (2021); Kamwaro (2013); Kimeu (2015); Obiero (2019), Nyora (2015), Auma (2013) and Makau&Jagongo (2018) which established that investment in government securities has a positive significant effect on financial performance corroborate the research findings.

4.3.2 Effect of Investment Choice in Money Market on ROE

The second objective sought to establish the effect of investing in money market on the financial performance of Insurance companies in Kenya. Hypothesis (H_{02}) stated that investing through money market has no effect on financial performance Insurance companies in Kenya. This was tested using simple regression model $Y = \beta_0 + \beta_2 X_2 + \epsilon$ and the results are as shown in Table 5

Table 5: Regression Results on the Effect of Investment Choice in Money Market on ROE

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. Change	F
					Change	F Change	df1		
1	.347 ^a	.120	.113	47.5956	.120	17.341	1	127	.000
a. Predictors: (Constant), Money Market									

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39283.797	1	39283.797	17.341	.000 ^b
	Residual	287698.090	127	2265.339		
	Total	326981.887	128			

a. Dependent Variable: ROE

b. Predictors: (Constant), Money Market

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	16.289	4.391		3.710	.000
	Money Market	.00026	.000	.347	4.164	.000

a. Dependent Variable: ROE

The results in Table 5, shows that the R² is 0.12 indicating that investment choice in money market explains only 12% of the variation in ROE (financial performance). This implies that there could be 88% of other factors which affect ROE and are not included in the model. The ANOVA results indicate that the model is statistically significant (F= 17.341, p =0.00, thus, p<0.05). The standardized coefficients results show that Y (ROE)=16.289+0.00026X₂, where X₂ represents the money market, were significant at 0.05 level of significance (p= 0.00, p<0.05). A unit increase in money market results to an increase in return on equity by 0.00026 units. This means that the choice of investment in money market has a positive and significant effect on ROE. The simple regression model results thus reject the null Hypothesis H₀₂, that investing in money market has no effect on the financial performance of Insurance companies in Kenya. The null hypothesis is therefore rejected.

4.3.3 Effect of Choice of Investment in Quoted Ordinary Shares on ROE

The third objective was to establish the effect of investment in quoted ordinary shares on financial performance of Insurance companies in Kenya. Hypothesis (H₀₃) stated that investment

in quoted shares has no effect on financial performance of Insurance companies in Kenya. This was tested using simple regression model $Y = \beta_0 + \beta_3 X_3 + \epsilon$. The results are as shown by Table 6 below.

Table 6: Regression Results on the effect of Investment Choice in Quoted Ordinary Shares on Financial Performance

Model Summary									
Model	R	R Square	Change Statistics						
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.345 ^a	.119	.115	51.9388	.119	30.890	1	229	.000

a. Predictors: (Constant), Quoted Ordinary Shares

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83330.770	1	83330.770	30.890	.000 ^b
	Residual	617759.401	229	2697.639		
	Total	701090.171	230			

a. Dependent Variable: ROE

b. Predictors: (Constant), Quoted Ordinary Shares

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	21.430	3.819		5.611	.000
	Quoted Ordinary Shares	3.274E-5	.000	.345	5.558	.000

a. Dependent Variable: ROE

Results in Table 6 above, shows that the R^2 for the model is 0.119 indicating that investment choice in quoted ordinary shares explains only 11.9% of the variation in ROE (financial performance). This indicates that there could be 88.1% of other factors which affect ROE and are not included in the model. The ANOVA results indicate that the model is statistically significant ($F = 30.89$, $p = 0.000$, thus, $p < 0.05$). The standardized coefficients show that $ROE = 21.423 + 0.00003274 * \text{Quoted Ordinary Shares}$ which indicates that the effect of investment choice in quoted shares on ROE is positive and statistically significant ($p < 0.05$ at 5% level of significance). A unit in quoted ordinary shares results to 0.00003274 increase in ROE. The simple regression model results thus fail to support the null Hypothesis H_{01} , that investing in quoted companies shares has no effect on the financial performance of Insurance companies in Kenya. The null hypothesis is therefore rejected. This means that the choice of investment in

quoted ordinary shares has a significant effect on ROE. The findings are similar to Kipleting' (2016) who found out that investment in quoted ordinary shares has a positive significant effect on financial performance.

4.3.4 Effect of Investment Choice in Real Property on Financial Performance

The fourth objective sought to establish the effect of choice of investment in property on the financial performance of Insurance companies in Kenya. Hypothesis (**H₀₄**) stated that investment in property has no effect on the financial performance of insurance companies in Kenya. This was tested using simple regression model $Y = \beta_0 + \beta_4 X_4 + \epsilon$. The results were as shown in Table 7.

Table 7: Regression Results on Effect of Investment Choice in Property on ROE

Model Summary										
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				Sig. Change	F
					Change	F Change	df1	df2		
1	.265 ^a	.070	.066	51.2167	.070	16.215	1	215	.000	

a. Predictors: (Constant), Investment Property

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42534.289	1	42534.289	16.215	.000 ^b
	Residual	563976.740	215	2623.148		
	Total	606511.028	216			

a. Dependent Variable: ROE

b. Predictors: (Constant), Investment Property

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	14.858	5.084		2.923	.004
	Investment Property	1.791E-5	.000	.265	4.027	.000

a. Dependent Variable: ROE

As shown in Table 7, the model shows the R² value of 0.07 which implies that the model explains 7.0 % of the variations in ROE. This indicates that there are 93.0% other variables that explain the variations in ROE, not included in the model. The ANOVA results indicate that the model is statistically significant (F= 16.215, p =0.00, thus, p < 0.05). The standardized coefficients ($\beta = .265$, t =4.027, p = 0.000) showed that $ROE = 14.858 + 0.00001791 * Investment$

Property. This implies that there is a positive effect of investment choice in property on ROE which is statistically significant ($p = 0.000$, which is less than 0.05 at 95% confidence interval). A unit increase in investment in property results to 0.00001791 increase in ROE. From the simple regression model results the null Hypothesis H_{04} , which stated that investing choice in property has no effect on the financial performance of Insurance companies in Kenya was rejected. This means that investment choice in property has a positive significant effect on ROE. The study findings concur with the study conducted by Nyora (2015); Kamwaro (2013); Kipleting (2016) and Auma (2013) that Investment in property has a positive and significant effect on financial performance.

5. Summary and Conclusions

The conclusions on this study were derived on the inferences of data analysis. The first objective of the study was to establish the effect of government securities as a choice of investment on the financial performance of Insurance companies in Kenya. The findings revealed that there was a positive relationship between Investment choice in government securities and ROE. The study had hypothesized (H_{01}) that investing in government securities has no effect on the financial performance of Insurance companies in Kenya. The simple regression found a significant effect of choosing to invest in government securities. The results of the co-efficients to the model $Y=15.668 + 0.00001123X_1$ were both significant at 0.05 , the p -values were lower than 0.05 ($p=0.00$) hence statistically significant. Thus, hypothesis H_{01} was rejected as there was a statistically significant positive effect of investing in government securities on financial performance of insurance companies in Kenya. The co-efficient 0.00001123 implied that a unit increase in investment in government securities would result to an increase in financial performance.

The second objective of the study was to determine the effect of investing in money market on financial performance of insurance companies in Kenya. The findings revealed that investing in money market had a positive effect on financial performance (ROE). Hypothesis H_{02} stated that investing through money market has no effect on financial performance Insurance companies in Kenya The results of the co-efficients to the model $Y=16+ 0.00026X_2$ were both significant at 0.05 , the p -value was lower than 0.05 ($p=0.00$) hence statistically significant. The constant term implied that at zero investment in money market, financial performance would be 16 units. The co-efficient 0.00026 implied that a unit increase in investment in money market would result to an increase in financial performance. The results indicated that investment choice in money market had a positive and statistically significant effect on financial performance (ROE). Thus, null hypothesis was thus rejected and the alternative adopted.

The third objective of the study was to establish the effect of investment in quoted shares on the financial performance of Insurance companies in Kenya. The study found out that there was a positive relationship between investment choice in quoted shares and financial performance. Hypothesis (H_{03}) stated that investment choice in quoted shares has no effect on financial performance of Insurance companies in Kenya. The results of the co-efficient to the model $Y=21.43+ 0.00003274X_3$ were both significant at 0.05 , the p -value was lower than 0.05

($p=0.00$) hence statistically significant. The constant term implied that at zero investment in quoted shares, financial performance would be 21.43 units. The co-efficient 0.00003274 implied that a unit increase in investment in quoted shares would result to an increase in financial performance. The results indicated that investment choice in quoted shares had a positive and statistically significant effect on financial performance (ROE). The regression results showed that investment choice in quoted ordinary shares had a statistically significant effect on financial performance. Hence the Null hypothesis was rejected and the alternative adopted.

The fourth objective of the study was to establish the effect of investment in real property on the financial performance of Insurance companies in Kenya. The hypothesis H_{04} had predicted that investing in real property has no effect on the financial performance of insurance companies in Kenya. The results of the co-efficients to the model $Y=14.858+ 0.00001791X_4$ were both significant at 0.05, the p-values were lower than 0.05 ($p=0.00$) hence statistically significant. The constant term implied that at zero investment in property, financial performance would be 14.858 units. The co-efficient 0.00001791 implied that a unit increase in investment in property would result to increase in financial performance. The results indicated that investment choice in property had a positive and statistically significant effect on financial performance (ROE). The regression results showed that investment choice in property had a statistically significant effect on financial performance. Hence the null hypothesis H_{04} was rejected and the alternative adopted.

Recommendations

From the study findings and conclusions, all the selected investment choices had a positive and significant effect on return on equity for the sampled companies. These investment choices seem to favour good financial performance for these firms. Hence, Insurance companies should put more weight (proportion of investment) on these four selected choices. Insurance companies' regulator (IRA) should also amend the investment ceilings for general insurance companies to ensure they invest more on these investment choices since they have been proofed to have a higher contribution to return on equity.

This study focused on all general insurance companies. This study recommends further studies on long term insurance companies to determine the effect of these selected investment choices on financial performance. In addition, the period of insurance under the study was seven years from 2013-2019, similar studies to determine the effect of investment choice on ROE need to be carried out to determine a long-term relationship between the variables.

In this study, only four investment choices were selected. The study recommends further studies that include more choices of investment to determine other investment choices that may have either similar results or better results than those established in this study. Similar studies also need to be carried out using other measures of financial performance such as return on asset (ROA) to determine if there are any deviations or similarities with the findings from this study.

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