



Claim Costs and Financial Performance of Insurance Companies Listed at Nairobi Securities Exchange, Kenya.

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ABSTRACT

Financial performance (Profitability) determines an insurance company's ability to make claims payments as at the due dates. The purpose of this study was to examine the relationship between claims cost and financial performance in the insurance firms listed at Nairobi Securities Exchange. A panel data linear regression model was used to estimate the relationship between claims cost and profitability. Secondary data were generated from the financial statements of six insurance firms listed at Nairobi Securities Exchange over a period of 10-years (2009-2018). Using descriptive statistics and simple regression techniques, the data was analyzed with aid of statistical software known as Stata Version 15. The result reveals that RoE of the claims cost has a mean value of 0.1145 and a mean value RoA of 0.0614. The minimum and maximum values of RoE range from -1.2709 to 0.4445. The minimum and maximum values of RoA range from -0.3492 to 0.7855. The standard deviation for claim costs was 0.21995 of RoE which indicates that the claim costs of the firms deviated from the mean up to 11.45%. The standard deviation for claim costs was 0.5441 of RoA which indicates that the claim costs of the firms deviated from the mean up to 6.145%. It further reveals that there is a statistically significant negative influence on both RoA and RoE. The study recommends that Kenyan insurance firms must effectively manage their claims processes so as to reduce the amount of claims for every earned premium.

Keywords: Insurance, claim costs, financial performance, Policyholder, Premium

INTRODUCTION

In almost all sectors of the economy, insurance firms play an important role in contributing to the efficient allocation of resources through risk management globally (Ashturkar, 2014). Initially presenting itself in the form of mutual help, insurance has existed side by side with human civilization. Insurance guarantees financial stability through claim settlements to the insured. Claim costs therefore takes a vital part of the liabilities of insurance services. Ashturkar (2014) confirm that Insurance firms need to effectively provide claims settlements in a prompt, proactive and optimistic way. The study points out that the main drivers behind the poor results of insurance companies in Africa are attributed to poor claims management. The motor insurance subsector has been rated the most inefficiently managed in the line of business due to frequent fraudulent claim costs. This has curtailed the sector's profitability (Kusimo, 2016).

Public insurance companies in Kenya are weighed down by poor market penetration emanating from weak sales, high instances of fraudulent claims, delayed reporting of accidents, and inappropriately resourced labour force. Consequently, the insurance firms are subjected to high claim costs with insufficient premium payments (Wairimu 2010). In addition, Diacon (1983); Harrington & Niehaus, (2006); Epetimehin & Ekundayo (2012) postulate that claim costs and underwriting expenses should be sufficiently covered by premium income. The inability of insurance firms to make timely claims settlement reduces the confidence of policyholders thus impairing market penetration further. Insurance cover is a contract to indemnify the policyholder back to his original financial position before a loss occurred. The prime objective of an insurance company is to reduce claim costs in order to increase profitability for the company's going concern. Policyholders pay premium to the insurer so that in return, the company accepts the liability to make a monetary payment to them on the occurrence of a specified event within the time frame specified in the policy.

Lalithchanadra and Kumari, (2015) single out claim costs as comprising claims processing and payout, which should be the major elements of insurance practices in order to operate smoothly. Yusuf and Dansu (2014) opined that claims from previous years usually surface in succeeding years, which make the insurance businesses challenging and make it very difficult to post profitability, Kenya's insurance industry has witnessed an upsurge of claims from policyholders

The objective of this article is to find out the influence of claims costs on the financial performance of insurance firms listed in Nairobi Securities Exchange (NSE), by comparing the Total Net Claims and Earned Premium, the response variable is financial performance proxied by return on assets and return on equity and the explanatory variable is claim costs. Results from this study will help to ascertain the extent to which the influence of claim costs explain the financial performance amongst insurance companies listed in NSE. Further, there has been wrong belief about insurance practices in Kenya, which is giving professionals concern especially the issue of claims settlement (Vanguard, 2017).

REVIEW OF RELEVANT LITERATURES

The procedures that involve basic management claims were pointed out as follows: The identification and verification of occurrence of losses were the first stage followed by the proof of loss to make sure that the loss occurred accidentally and it was insured as the second stage. Further, the negotiation stage to find out the date of loss occurred as the third process. The assessment of identification of source of funds, the magnitude and allocation of claims were done. In comparison, the operational deals with the operating features of a Claims Costs/Settlement Procedure, and the assessment of processing capacity, claims quantity and outstanding claims register were considered. The efficient and effective analysis of the claim's handling function were obvious. A tool that allows analysis and predictions of the handling procedures is the Claims handling procedures (Krishnan, 2010).

Insurance claim is defined as an insurance contract in which the insurer undertakes to indemnify the insured against a loss, that may or may not arise of payment at a future date or payment of certain amount of money in the happening of a certain event. Being legally valid, insurance is enforceable at law, the loss that is insured against is known as the insured risk. In addition, the major duties of the policyholder under the insurance contract are to settle the agreed premium and to comply with the terms of the policy while the duty of the insurer is to comply with his own terms and promises under the policy and to pay all genuine claims promptly and equitably Irukwu (1989).

Akintayo, (2004) like all other aspects of the Kenyan economy, the insurance industry has many problems. If not all of these problems are capable of being solved by the insurers with the support of the government and the understanding of the insuring public, there is no dispute these facts. Further, in the mind of an average Kenyan citizen is the need of effect insurance policies, though business and life itself involve financial, many of which could be handled through insurance.

Irukwu (1989) suggests that *"a good insurance manager must make efforts towards maintaining an efficient claims department, managed by technically competent and reliable personnel"*. Since the last four decades, insurance firms have been embracing the management concept represented by the Total Quality Management which has assisted managers in the resolution of claims and maintenance of a good insurance culture.

Myers & Smith, (1988) *"the insurer's responsibility to indemnify a policyholder within the terms of the policy"*. When claims are disputed on insubstantial grounds, the insurance industry is brought into disrepute. Hence, insurance companies must ensure payments are promptly made for claims as at when due

Lalithchanadra and Kumari, (2015) claims management process consists of four key aspects: settling claims, detecting fraud, lowering costs and avoiding litigation, Butler and Francis (2010) state that claims payment represents the largest single cost to insurers and 80 per cent of all premiums are spent on claims payment and associated handling charges. Hence, Redja (2008) opined that claims management includes all managerial decisions and processes concerning the settlement and payment of claims in accordance with the terms of insurance contract.

Insurance policy is a great cushion for developmental efforts globally. The reduction of performance of insurance firms in the listed stock market is a major concern worth investigation. Kibet, Tenai & Muthol (2011) postulate that financial performance is a major yardstick with which listed status of firms is determined. Some firms have been delisted for poor financial performance at the NSE over the last decade. Mudaki et al. (2011) observed that inadequate regulatory authority led to dismal financial performance in the insurance industry in Kenya attributable to insufficient funds. In the past ten years resulted to poor performance of insurance industry in Kenya and closure of several firms due to insufficient fund. The Governmental and non-governmental organizations have put great efforts in ensuring that the existence of a favorable environment for doing business in the country especially for the listed firms.

The establishment of Insurance Regulatory Authority in response to declining trends of insurance firms which have not been solved. The regulatory is a branch of the government that is charged with responsibility to regulate, develop and supervise the insurance industry in Kenya. The once-thriving insurance companies that are now struggling are BRITAM, which reported a one-billion-shilling loss in 2015 after making a 2.5-billion-shilling profit in 2014. UAP Group had a decline of 46% from KSH 1.67 billion in 2014 to KSH 896.6 million in 2015. (IRC, 2016). Insurance penetration was 2.9% in 2014; this dropped to 2.8% in 2015; and to 2.75% in 2016. Operating income in the sector was Ksh 20,235,881 million in 2013, but it fell to Ksh 17,232,015 million in 2014, Ksh 14,134,461 million in 2015, and Ksh 12,832,642 million in 2016. (IRA, 2016). On the extreme, there are total collapsing companies such as Stallion insurance and Lake Star insurance companies declined (Gitau, 2013) and had low penetration of insurance industry in the year 2002. Eight insurance firms had either filed for bankruptcy or been placed under receivership by the year 2013. The measure of insurance penetration dropped by 2.93 percent when the GDP was at 25 percent (IRA 2014). This study therefore was motivated to explore firms' characteristics and their contribution or failure in the industry.

Objective of The Study

The General Objective of the study

The main objective of the study was to investigate the influence of claim costs on financial performance of insurance firms listed at the NSE.

Research Hypothesis

The following null hypothesis was tested in this study: Claim costs has no significant influence on financial performance of insurance firms listed in the NSE.

Agency Theory

Agency theory is about the relationship that exists between business principals and their agents. Most commonly, that relationship is the one between shareholders, as principals, and company executives, as agents. Similarly, agency costs, which include those associated with both debt and equity issuance, determine how much capital a firm need to finance its operation. The costs associated with equity issue might include principal monitoring costs (equity holders), agent bonding costs (managers), and reduced principal welfare as a result of agent actions that deviate from those that maximize principal welfare. Additionally, debt issue increases the owners' and managers' incentives to engage in high-risk projects that provide them with large profits but also raise the possibility that they will fail, which will be shared by the debt holders if it comes to pass. If debt holders have prior knowledge to this, they will charge higher premium hence raising the cost of debt in the process. The opportunity costs resulting from the impact of debt on the firm's investment decisions, the monitoring and bond expenditures by both the bondholders and the owner-manager, and the costs associated with bankruptcy and reorganization are all included in the agency costs of debt (Hunsaker, 2019). Since agency costs are incurred by both equity and debt, the optimal debt-to-equity ratio entails a trade-off between the two cost types. The conflicts of interest between shareholders and management give rise to agency costs.

Jensen and Meckling (1976) introduced two types of conflicts: Shareholders-managers conflicts and Shareholder-bondholder conflicts. Shareholders-managers conflicts; the separation of ownership and control is the root cause of this form of conflict. If managers do not fully control the company, they can only keep a portion of the profit from their value-adding activities, but they are still responsible for covering all of the associated expenditures.

Jensen (1986) suggests that managers would prefer to grow the business's size in order to get the advantage of control rather than acting in the best interests of shareholders to maximize firm value. Managers are compelled to accept initiatives with negative net present value (NPV) and develop their companies beyond the ideal size. Less growth opportunities and more free cash flow might worsen the overinvestment problem. The issuing of debt reduces agency problems since it obligates the business to make cash payments, which discourages managers from investing in initiatives with low net present value (NPV).

The decision to transfer wealth from bondholders to shareholders is made by the shareholders or their agents. The bondholders will demand a higher return on their debts in order to guard against circumstances in which this wealth expropriation may happen. Conflicts may be reduced by high growth opportunity companies employing more long-term financing and less leverage than companies in more developed industries. Jensen and Meckling (1976) suggest that the issue of convertible debt or debt with warrants can be another method of reducing conflicts because it will have lower agency costs than plain debt.

Agency theory has also been criticized for its capacity as a theory. Perrow (1986) postulate that agency theory *does not have a clear problem to which it offers a solution* and it is hardly subject to empirical test since it rarely tries to explain actual events or make predictions (Ghoshal, 2017). Perrow also questioned the possible utility and empirical relevance of the adverse selection and moral hazard problems for organizational analysis.

Another major line of criticism concentrates on the sufficiency of agency theory's conceptual framework. The framework is considered as being too simple or narrow for a theory. In particular, the issue that agency theory seemingly ignores the existence and influence of the third parties, stakeholders or other competing principals outside the agency relationship under examination, has been a very common object for criticism (Shankman, 1999, p. 332). Critics assert that the real world is more complex than agency theory would imply. Agency theory has been also criticized of the narrowness of its focus. It is argued, that in agency relationships, many explanations other than an agent's self-interest and opportunistic behavior for the failure to deliver high performance exist. Though, agency theory is very pragmatic and popular, it still suffers from various limitations and this has been documented by many authors like (Eisenhardt, 1989) & (Shleifer & Daily, 2003). The theory assumes a contractual agreement between the principal and agent for a limited or unlimited future period, where the future is uncertain. The theory assumes that the contraction can eliminate the agency problem, but practically it faces many hindrances like information asymmetry, rationality, fraud and transaction cost. Shareholders' interest in the firm is only to maximize their return, but their role is limited in the firm. The roles of directors are only limited to monitor the managers and their further role is not clearly defined.

A thorough explanation of the link between the kind of firm size and financial performance is provided using agency theory. Manager and owner relationships are comparable to those of agents and principals. Self-centered managers maximize utility for their own interests when a company owner hires them to run the company, which may lead to a fall in performance for some firms. Managers have the capacity to use advantages on behalf of the company owners because they effectively run businesses at the expense of the owners. Principals and agents are present in all insurance firms; hence agency theory is pertinent to this study since managers of the firms, the agents, always gain from the theory.

Francis and Butler (2010), in their study recommended that insurance company should strive to keep up a healthy relationship with its clients to improve its overall performance by reducing risks. One of the basic areas to observe and to promote such a healthy relationship is to make sure that insurance companies can prudently observe the main five strategic areas of claims management. These include proper control over claim management process, ensuring that they properly understand the need of their clients in order to ensure that they advise them on the right policy cover of model for their business, develop mutually relationship with other service providers in similar field of operation and finally ensure that they get an information required for their advantage.

Scott (2015) emphasizes that while the financial performance of company using ratios, some of the fundamental indicators to prefer in return on Assets was that anything low 5% is not safe. Where return on Equity and return on Investment, anything between 10% and 14% are considered desirable. The term investment and may refer to total assets or net assets. The funds employed in net assets are known as capital employed. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loan.

Greene and Segal (2004), quoted in Kasturi (2006) submitted that the performance of insurance company in financial terms is normally expressed in net premium earned, profitability from underwriting activities, annual turnover, return on investment and return on equity. These can be categorized into profit performance measure and investment performance measure. Yusuf and Dansu (2014) assert that profit is important to investors and management as sources of dividends and growth, while to the policyholder, it provides security against insolvency.

Butler and Francis (2010) assert that an insurance claim is a demand by a person or an organization seeking to recover from an insurer for a loss ascertained (MBA Knowledge Base, 2013). A claim is the defining moment in the relationship between an insurer and the assured as it creates the chance to show that the years spent paying premiums were worth the expense.

In the same vein, Bates and Atkins (2007) assert that claim provides an insurer the opportunity to make a favorable impression on the policyholder. However, impressing the insured with claim payment could be very costly as claims constitute the largest cost of an insurer (Boor, 1998; Harrington and Niehaus, 2006; Bates and Atkins, 2007; SAS, 2012). This notwithstanding, insurers need to take their claim handling function more seriously because if a claim is handled well, it results to higher customer retention (Banjo, 1995; Butler and Francis, 2010).

Michael (2008) suggests that claims range from simple domestic building and contents claims that is settled within days of notification to complex bodily injury claims that remain open for many years. Regardless of its nature, when a claim has been verified to be worthy of payment the insurer then fulfills his promise of reimbursing the insured back to his pre-loss position. There is a clear distinction between mere claim handling and proper claim cost management.

In addition, the Productivity Commission (2002) summarized a good claims cost management as being *proactive in recognizing and paying legitimate claims, assessing accurately the reserve associated with each claim, reporting regularly, minimizing unnecessary costs, avoiding protracted legal dispute, dealing with claimants courteously and, wherever possible, handling claims expeditiously*. Claim cost management includes the review of the claim's performance, monitoring of claims expenses, legal costs, settlement costs, compromises and planning for future payments and avoiding the delay and disputes in the payment of claims.

James (2009) suggests that 20 to 30 percent of an insurer’s claims are in litigation. However, claims that involve attorneys often double the settlement amount and significantly increase an insurer’s expense (SAS, 2012). The cost of claim payouts and expenses is the largest spending category for an insurer, accounting for up to 80 percent of premium income (Harrington and Niehaus, 2006; Amoroso, 2012). Missed recovery opportunities will have considerable implications for the profitability of an insurer. Insurers should also develop the skill and expertise in loss reserving and claims forecasting since this reduces the need for contingent increases of loss reserve. Further, claims managers shall create a balance between avoiding claims delay and reducing loss adjustment expenses. Finally, efforts should be made to minimize litigation expenses.

Financial ratios have been agreed and used as measures of financial performance of a company (Al-Shami, 2008; Malik, 2011). These ratios include Return on Assets (RoA), Return on Equity (RoE) and Return on Invested Capital (ROIC). RoA is a key indicator since it measures profitability on the total assets, which shows how well a company uses its asset to make earnings (Malik, 2011).

Thachappily (2009) postulates that discussed about the profitability ratios as measures the margins and the returns such as; gross or net profit, RoA, RoE, ROCE. Financial ratios should be computed regularly to indicate where the company has weakness or strength. Therefore, ratio analysis is a tool to extend company’s performance.

Ngui (2010) suggests that financial performance of a company is one of the ways which can be used to assess and check how well the company is utilizing its resources to generate income. Good examples to be used when measuring financial performance include operating income, earnings before tax, as well as net asset value.

Data and Methodology

This study is based on the secondary data from the published annual financial reports of six insurance companies in the Nairobi Securities Exchange, covering the periods 2009 to 2018 (10 years). The insurance firms are Kenya Reinsurance Corporation, British - American Insurance Company, CIC Assurance Group of Companies, Liberty Kenya Holdings Limited, Sanlam Kenya Plc and Jubilee Holdings Limited listed in the Nairobi Securities Exchange., and it was census. The data generated from the financial statements of these companies are for financial performance, that is, Return on Assets and Return on Equity.

where:

Return on Asset (RoA) = Net Income before taxes/Total Assets,

Return on Equity (RoE) = Net Income before taxes/Equity

The formulated null hypotheses for this study are;

Hypothesis 1: ROA is not significantly influenced by Claim costs

Hypothesis 2: ROE is not significantly influenced by Claim costs.

The simple linear regression models (adopted from Yusuf and Dansu, 2014) to test these hypotheses are:

Panel data model

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \epsilon_{it} \dots\dots\dots (I)$$

Where: Y = ROA (Return on Assets)

X₁ = Claim costs

ε_{it} =Error term

$$ROA = B_0 + B_1 X_{1it} + \epsilon_{it}$$

$$Y = 0.420 - 0.186X + \epsilon_{it}$$

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \epsilon_{it} \dots\dots\dots (i)$$

Where: Y = ROE (Return on Equity)

X₁ = Claim costs

$$ROE = B_0 + B_1 X_{1it} + \epsilon_{it}$$

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \epsilon_{it} \dots\dots\dots (i)$$

$$Y = 0.420 - 0.069X + \epsilon$$

The dependent variables are ROA in model (i.) and ROE in model (ii.), while the independent variables is X_1

3.2 Variables Used in the Study

Table 1 gives a snapshot view of the variables and description.

Table 1. Description of variables used in the analysis

Dependent Variables

Return on Assets (ROA)
Return on Equity (ROE)

Earnings Before Interest & Tax (EBIT) / Total Assets
Earnings Before Interest & Tax (EBIT) / Shareholders Equity

Independent Variables

Firm Size (LnA)

Logarithm of Total Assets

3.3. Conceptual Framework

Based on the variables used in the study the conceptual framework can be developed in the following manner

Independent Variable

Dependent Variable

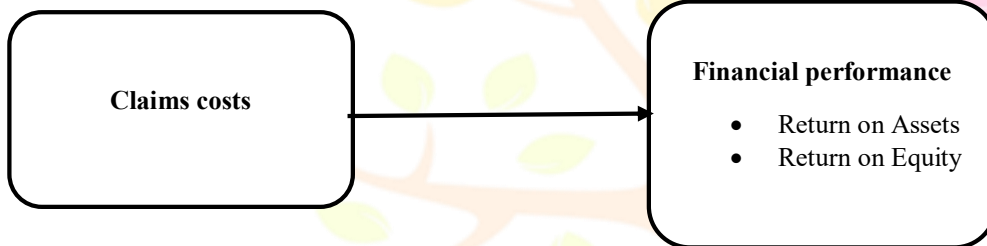


Figure 1. Conceptualization model

DATA ANALYSIS AND DISCUSSION

The data generated were analyzed using descriptive statistics, simple linear regression model with the aid of STATA 15. The variables and formulae used for the study are summarized in the table below. two dependent variables; Return on Assets and Return on Equity and one independent variable- Claim costs.

Table 1. Measurement of variables

Variables	Formulae
Return on Asset (ROA)	Net Income Before Taxes / Total Assets
Return on Equity (ROE)	Net Income Before Taxes / Equity
<i>Note: Compiled by the researchers based on earlier studies. : Variables chosen for the study</i>	

DESCRIPTIVE STATISTICS FOR DEPENDENT VARIABLES

Table 2 Descriptive Statistics for dependent variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	60	.0614464	.1544019	-.3491999	.7854605
ROE	60	.1145244	.2199498	-1.270951	.4445283

Source: Research Data (2023)

Table 2 presents the descriptive results of dependent variables. The study established that financial performance of listed insurance firms was measured by using two dependent variables; Return on Assets and Return on Equity.

Table 2, reveals that RoA had a mean of 0.0614464 which implies that insurance firms listed in the NSE over the study period registered about 6.14% RoA. This means that for every shilling in assets invested by the insurance companies, they earn Ksh 6.14 in profits. This is a good performance indicator against the industry's rate of 5% The standard deviation is 0.1544019 bigger than the mean which suggests more deviation from the mean of ROA over the study period of ten years. This shows stability in the returns on assets while minimum and maximum values are -0.3491999 and 0.7854605 respectively. This implies that there were some firms which made losses to approximately 35% while others made profit to the tune of 78.55% of ROA over ten-year study period.

Further, the table 2 shows that the mean value of RoE was 0.1145244. This implies that shareholder received 11.45% return on investment in shares that is quite impressive as compared to industry's average of 6.2%. The minimum and maximum were -1.270951 and 0.4445283 respectively for the period of 10 years (2009 to 2018), this means that some shareholders did not receive return invested in equity due losses made by the other firms while others made profits. The standard deviation was 0.2199498 indicating considerable deviation around the mean. Therefore, the positive of ROA and ROE indicate that the insurance firms listed at the NSE recorded an increase in financial performance in the period of 2009 to 2018

SIMPLE REGRESSION ANALYSIS OF CLAIM COSTS AND ROA

Regression analysis is an important statistical method for the analysis of data. By applying regression analysis, we are able to examine the relationship between a dependent variable and one or more independent variables.

Table 3 Simple Regression analysis on ROA

ROA	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Claim costs	-0.186	0.036	-5.167	0.000	-0.113	0.664
Constant	0.042	0.053	0.792	0.005	0.071	0.138
R-squared:	0.574					
RMSE	50.2122					
Prob	0.000					

Source: Research data (2023)

More specifically, regression analysis helps researcher to understand how the typical value of the dependent variable changes when any one of the explanatory variables is varied, while on the other hand, independent variables are held constant (Mugenda & Mugenda, 2010). Wan (2013) contends that regression analysis helps in generating an equation that describes the statistical relationship between one or more predictor variables and the response variable. The R squared was used to check how well the model fitted the data. Table 3 Simple Regression analysis on ROA was supported by coefficient of determination R square of 0.574. This means that independent variable explains 57.4% of the variations in the dependent variables

The results revealed that there was a negative and significant relationship between claim costs and ROA ($\beta = -0.186$, $p = 0.000$). This was supported by a calculated t-statistic of -5.167 that was less than the critical t-statistic of 1.96. This implies that an increase in claim costs would result to a decrease in ROA. These findings agreed with that of Campello (2006) who found out that claim costs negatively affected corporate performance under external financing. The empirical studies have been able to find out the claim costs highly influenced the profitability of insurance firms in Nigeria. A profit-oriented insurance firms must imbibe the culture of strategic claims management. This does not view claims related functions of insurance companies as activities connected to loss occurrences. Claim managers should closely liaise with other sections of the insurer from the inception of a policy to its conclusion. This will not only enhance payment of only genuine claims; it will also aid the profitability of the firm through reasonable cost control.

SIMPLE REGRESSION ANALYSIS OF CLAIM COSTS AND ROE**Table 4 Simple Regression Analysis on RoE**

ROE	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Claim costs	-0.069	0.023	-3.115	0.000	-0.409	0.755
Constant	0.420	0.062	0.530	0.003	0.092	0.528
R-squared:	0.829					
RMSE	45.130					
Prob	0.000					

Source: Research data (2023)

Table 4 Simple Regression Analysis on ROE, the simple regression analysis was calculated between independent variable (Claim costs) and dependent variable (RoE) of insurance firms listed at NSE. The R squared was used to check how well the model fitted the data. The study was supported by coefficient of determination R square of 0.829. This means that claim costs explain 82.9% of the variations in the dependent variable; ROE.

Further, the results revealed that there was a negative and significant relationship between claim costs and ROE ($\beta = -0.069$, $p=0.000$). This was supported by a calculated t-statistic of -3.115 that was lesser than the critical t-statistic of 1.96.

DIAGNOSTIC TESTS

Diagnostic tests were conducted before doing regression analysis based on the assumption of ordinary least squares method. There tests included normality, linearity, unit root test, multicollinearity test, heteroscedasticity test and autocorrelation test.

TEST FOR NORMALITY**Table 5 Normality Test**

Variable	Obs	Skewness	Kurtosis
ROA	60	0.14310	0.23000
ROE	60	0.14310	0.23000
Claim Costs	60	0.20000	0.56000

Source: Research data (2022)

Table 5 Normality Test, the data was subjected to normality tests by examining the skewness and kurtosis of the distribution. The results in table 5 shows that the variables were normally distributed because the skewness values varying between -3 to + 3 (Mugenda & Mugenda, 2003). This falls within the acceptable range for the data normally distributed. In addition, the kurtosis values varied from -4 to +4 (Mugenda & Mugenda, 2003), which implies that the variables under study were normally distributed and not fit for further analysis.

LINEARITY TEST (PANEL LINE PLOT FOR ROA AND ROE).

The researcher conducted a panel line plots to establish the movement of the variables overtime.

Panel line plot for ROA and ROE.

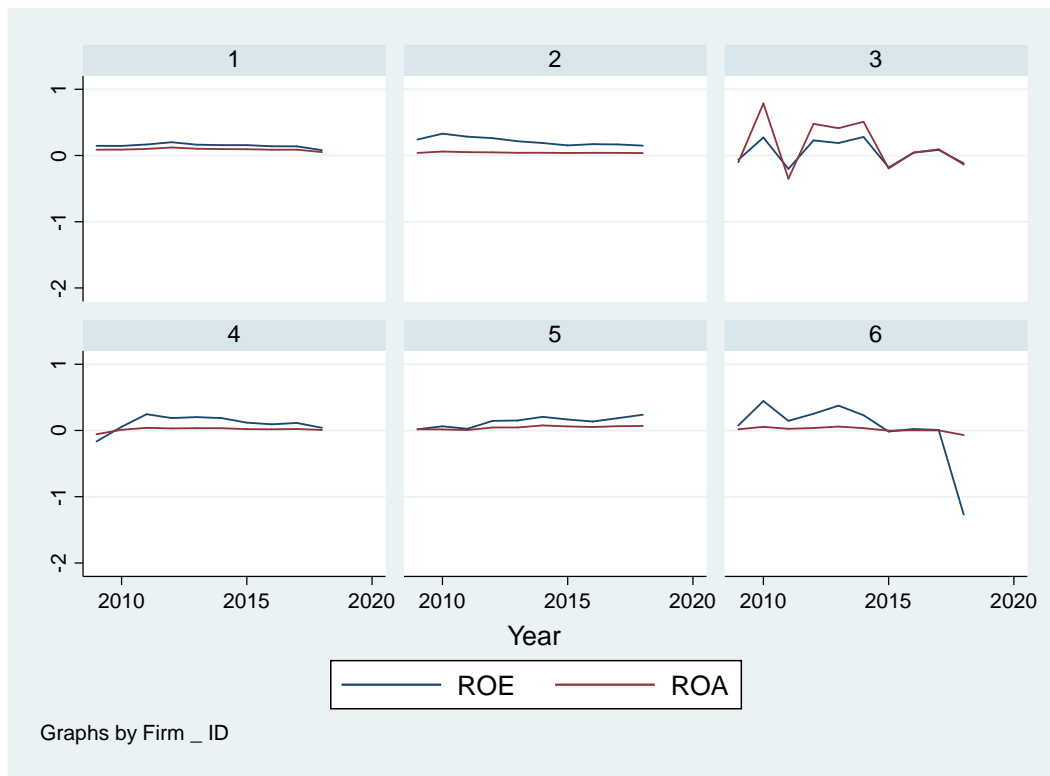


Figure 1 Panel line plot for ROA and ROE

Source: Research data (2023)

1 = Kenya RE, 2 = Jubilee, 3 = BRITAM, 4= Liberty, 5= CIC, 6 = Sanlam

The trend line shows that RoE was higher than that of RoA for firm 1, firm 2, firm 4 and firm 5 while firm 3 and firm 6 fluctuated during the period of study. In 2018 there was a sharp drop for RoE. The decrease was attributed to the post-election violence of 2017 which spilled over to 2018. The line plot established that the response variables do not show wide variations in the long run and therefore, they depict mean variation. This is shown in the figure 4.1 above. Pervan and Višić (2012) postulate that return on assets gives investors an idea of how effectively the company can convert the money invested into net income. The higher the RoE the better, because the company is earning more money on less investment. De Wet & Du Toit (2007) postulate that Return on equity is the measure of a company's net income divided by its shareholders' equity. RoE is a gauge of a corporation's profitability and how efficiently it generates those profits. The higher the RoE, the better a company is at converting its equity financing into profits.

UNIT ROOT TESTS

Table 6 Levin-Lin-Chu unit-root tests

Levin-Lin-Chu unit-root test for ROA

Ho: Panels contain unit roots Number of panels = 6
 Ha: Panels are stationary Number of periods = 10
 AR parameter: Common Asymptotics: N/T -> 0
 Panel means: Included
 Time trend: Included
 ADF regressions: 1 lag
 LR variance: Bartlett kernel, 6.00 lags average (chosen by LLC)

	Statistic	p-value
Unadjusted t	-7.1540	
Adjusted t*	-1.9310	0.0267

Source: Researcher data 2023

Table 7 Levin-Lin-Chu unit-root test for ROE

Ho: Panels contain unit roots Number of panels = 6
 Ha: Panels are stationary Number of periods = 10
 AR parameter: Common Asymptotics: N/T -> 0
 Panel means: Included
 Time trend: Included

ADF regressions: 1 lags average (chosen by AIC)

LR variance: Bartlett kernel, 6.00 lags average (chosen by LLC)

	Statistic	p-value
Unadjusted t	-9.9329	
Adjusted t*	-6.6749	0.0000

Source: Research data 2023.

The panel data was subjected to unit root tests in order to find out stationary conditions.

The results in tables 6 below exhibit the unit root tests results for ROA and ROE based on the Levin-Lin-Chu unit-root test. The LLC was applied due to its applicability in a balanced panel. At the top of output table 6 summarizes the exact specification of the dataset. The Adjusted t* statistic is -1.9310 with a p-0.0267 for ROA while the Adjusted t* statistic is -6.6749 with a p-0.000 for ROE which are significantly less than the 5% significant level. Therefore, the null of both the panels contain unit roots is strongly rejected in Favour of the alternative hypothesis that all variables are stationary.

Gujarati & Porter (2003) posit that a unit root test was conducted using the Levin-Lin-Chu test to establish whether the variables were stationary or non-stationary. The reason of carrying out this test was to avoid spurious regression results being obtained by using non-stationary series. Results in Table 6 showed that all variables were stationary (i.e., absence of unit roots) at 5% level of significance. In conclusion, the study concludes that all the variables under consideration did not have unit roots because the p-values were less than 0.05 and all were statistically significant. This means that the results obtained were not spurious.

HETEROSCEDASTICITY TEST

Table 7. Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance			
Ha: Heteroscedasticity			
Variable: fitted values	RoA	RoE	
Pro>chi ² (1)	.0000	0.000	
Chi ² (2)	0.7468	0.6914	

Source: Research data (2023)

Breusch-Pagan/Cook-Weisberg test was used to test for heteroskedasticity. The null hypothesis in the test is that error terms have a constant variance (i.e., Homoskedasticity). The results in the Table 4.8 below indicate that the error terms are heteroskedastic, given that both p-values (ROA=0.000 and ROE=0.000) were less than the 5% significant level. That means that there was no Heteroskedasticity, the regression model does not violate the homoscedasticity assumption. Therefore, it means that the null hypothesis of the errors terms was homoscedastic and was not rejected because heteroskedasticity was not a problem in the data.

CONCLUSION AND RECOMMENDATION

Financial performance in insurance sector is influenced by many factors including rising claims payments. Positive financial determines an insurance firm's ability to make claims payments at they fall due. The purpose of this study is to investigate the influence of claims costs on the financial performance of insurance firms listed on NSE. The result reveals that RoE of the claims cost has a mean value of 0.1145 and a mean value RoA of 0.0614. The minimum and maximum values of RoE ranging from -1.2709 to 0.4445. The minimum and maximum values of RoA ranging from -0.3492 to 0.7855. The standard deviation for claim costs was 0.21995 of RoE which indicates that the claim costs of the firms deviated from the mean up to 11.45%. The standard deviation for claim costs was 0.5441 of RoA which indicates that the claim costs of the firms deviated from the mean up to 6.145%. It further reveals that there is a statistically significant negative influence on both RoA and RoE. The study recommends that Kenyan insurance firms must effectively must manage their claims processes so as to reduce the amount of claims for every earned premium.

The study recommends that claims managers in the Kenyan insurance sector must effectively manage their claims processes, in order to reduce the amount of claims for every premium earned. Further, attention be accorded other administrative costs and underwriting costs which could affect profitably negatively.

The study contributes to the body of knowledge in the following ways; study would assist the firm managers to evaluate claim costs as the study discovered that the stated characteristic contributed to financial performance. By undertaking the study, the claim costs and financial performance were explored. This adds value to the past findings and enable users to have information and a deeper understanding of the need for enhancing claim costs to improve on financial performance. The study also offered a logical ground on which empirical indicators and hypotheses could be identified and tested to verify the theories. It contributed to the body of knowledge and to other researchers, as they will be able to appreciate the effects of the underlined firm characteristics, inspire similar and further research in other areas, and contribute to the existing literature on financial performance.

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