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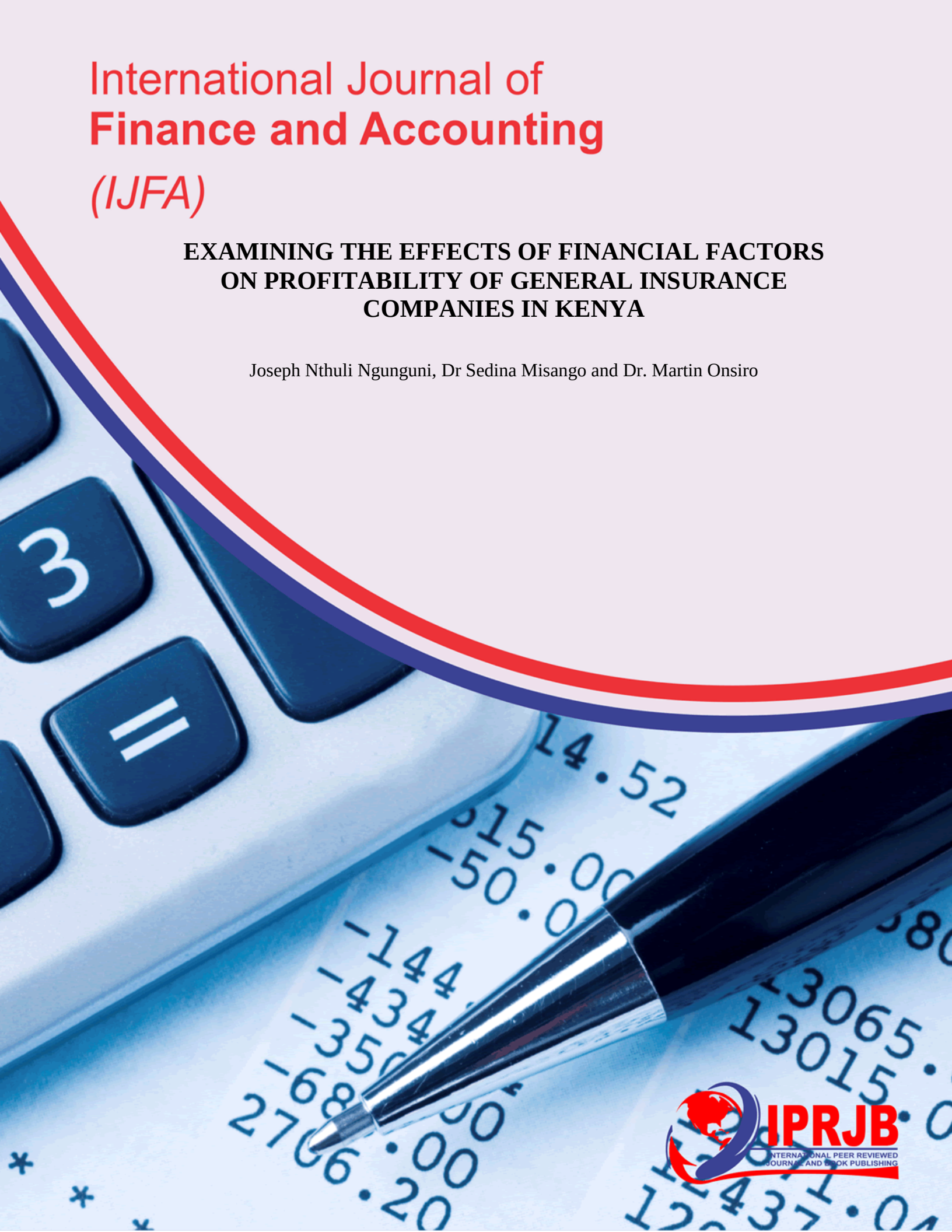

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EXAMINING THE EFFECTS OF FINANCIAL FACTORS ON PROFITABILITY OF GENERAL INSURANCE COMPANIES IN KENYA

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Abstract

***Purpose*:** The objective of this study was to examine the financial factors which affect the profitability of general insurance companies in Kenya. The profitability in this study is represented by ROA, as dependent variable for the period 2013 to 2017. Independent variables in this study were liquidity, leverage, loss ratio and expenses ratio.

Methodology: The type of research design used in this study was both descriptive as well as referential analysis. The study applied a census procedure to study all the 28 general insurance companies and targeted the entire population of 28 companies. Secondary data was collected from individual annual published financial statements of 28 general insurance companies for 5 years; 2013 to 2017, AKI reports and IRA published annual reports. A collection data sheet was used to collect the relevant data from all the 28 general insurance companies. After the data was collected and sorted, it was analyzed using referential analysis (multiple regression analysis). This was assisted by SPSS (Version 20) software.

Findings: The study revealed that the regression coefficient of loss ratio was -0.068, t-statistics -0.415 and p-value of 0.682 while that of leverage ratio was -0.048, t-statistics -0.546 and p-value of 0.590. Liquidity ratio had a regression coefficient of 4.238, t-statistics 3.257 and p-value of 0.003 while expenses ratio had a regression coefficient of -0.281, t-statistics -3.840 and p-value of 0.001.

Unique contribution to theory, practice and policy: The study recommends that the management of general insurance companies in Kenya need to address liquidity and expenses by minimizing expenses and maximizing liquidity in order to be on the safe side as far as profitability is concerned. The study also recommends that regulators and other stakeholders, within the industry, should at regular interval intensify efforts to ascertain the claims handling procedures currently in use by insurance companies in Kenya.

Key words*:* *Profitability, Liquidity, Expenses Ratio, Loss Ratio, Leverage*

1.0 INTRODUCTION

1.1 Background to the Study

According to Insurance Regulatory Authority of Kenya (IRA 2017) Report, the Global Non-Life insurance premiums grew by 2.7 percent in real terms in 2017, down from a growth of 3.1 percent reported in 2016. The Global insurance industry has witnessed a lot of challenges over the years. For example, in 2009 the industry was affected by the world economic turmoil but improved over the years to the impressive results witnessed in 2014. In 2014 there was a remarkable growth of 6.3 percent of global gross domestic product, within the insurance industry as compared to a mere 2.8 percent witnessed in 2013. During the years under review the emerging markets of Latin America and Asia grew much faster than the mature markets of Europe and the America. This growth is attributed to by lower penetration levels as well as higher nominal GDP growth.

Sigma (2017) reports that Africa's insurance industry premium grew by 0.5 percent in real terms in 2017, representing 1.4 percent of the Worlds insurance market share. However, Insurance industry in Africa has a huge potential due to significant population increases, rapidly rising incomes and the relatively low penetration of insurance products for both life and non-life products. African countries have also seen high economic growth over the years and this was the most important catalyst for increasing revenue in Africa. Advances in technology are also fueling growth as a new generation of African consumers grows up in a digital age.

In 2017 the insurance penetration in Kenya stood at 2.73 percent which is considered low compared with the global average of 6.1 percent but one of the highest in Africa which average 0.3 percent (Sigma 2016). The insurance penetration in Kenya, which is the ratio of Gross Direct Insurance Premiums to GDP, declined from 2.88 percent in 2016 to 2.73 percent in 2017. This decline may be attributed to higher nominal growth in GDP of 14.3 percent compared to nominal growth in gross direct premium of 13.2 percent. General insurance business premiums grew by 10.2 percent in 2016 which was lower than the average growth rate of 17.2 percent experienced in the sector during the preceding four years.

1.1.1 Financial factors and profitability

Hamdan (2008) classified profitability determinants of insurance firms as external and internal determinants. He further classified the internal determinants as financial statement variables and non-financial statements variables. The financial statement variables, which are the same as the financial factors, are those variables which are directly driven from items in financial statements such as balance sheet and profit and loss accounts of the insurance companies. This study has identified four financial factors which include; leverage, liquidity, loss ratio and expenses ratio.

Leverage is taken as total debts divided by total assets of insurance firm (Sumaira and Amjad, 2013). Leverage has been cited, in many empirical studies, to refer to the use of a

significant amount of debt to finance the purchase of an asset, or to operate a company, or to acquire another company.

Kumar (2015) asserts that liquidity is a measure of company's ability to meet short term financial obligations and it reflects on the margin of safety a company's management maintains to overcome any adverse situations. Liquidity analysis addresses the ability of a company to generate sufficient cash to cover its expenses and is commonly measured by the current ratio. The current ratio is the relationship between total current assets and total current liabilities. The ratio is determined by dividing the current assets by the current liabilities.

A loss ratio is the relationship between benefits and premiums under a policy. Cytonn Investments (2017) defines Loss ratio as Net Incurred Claims divided by Net Written Premiums then multiplied by 100 percent. This ratio is a factor used to measure the profitability of an insurance company and the lower the ratio, the more profitable an insurance company is and vice versa.

Generally expenses ratio in insurance industry is defined as a ratio which measures profitability of the insurance companies by dividing the expenses associated with acquiring premiums, underwriting and servicing them by the net premiums earned by the company. Schum (2014) argues that the expense ratio is a key indicator of the quality and performance delivery of the top management within an organization. A higher expenses ratio means a weaker operational efficiency and thus the worse the financial performance for the insurance company.

1.1.2 Overview of General Insurance industry in Kenya

AKI (2017) report indicates that, in the year 2017, there were 56 insurance and reinsurance companies licensed by the Authority. These 56 companies comprises of 28 underwriters conducting only general insurance business, 15 conducting long term business, 11 composite companies conducting both long-term and general insurance and 3 composite reinsurers.

1.2 Statement of the problem

IRA Report (2017) shows that in 2017, general insurance business reported an underwriting loss of Ksh 1.013 billion, an improvement from a loss of Ksh 2.13 billion witnessed in 2016. The highest loss-making class was the Motor Private which recorded a loss of Ksh 2.74 billion though an improvement from a loss Ksh 3.19 billion witnessed in 2016. Medical, WIBA, Fire and Aviation classes continued to make losses in 2017. However, the other classes made marginal profits with the highest being Theft class which recorded a profit of Ksh 479,648.05 in 2017. IRA (2017) also shows that general insurance business premiums grew by 2.5 percent in 2017 which was much lower than 12.9 percent experienced in the last four years. This state of profitability in general insurance companies in Kenya is a matter of concern and hence the need for this study.

Various studies are not able to specify the relationship between the various factors which determine the financial performance of general insurance companies. Specifically, the findings by Wabita (2013), Mwangi (2013), and Mutugi (2012) were not conclusive and hence the need to carry out further research. This study hypothesizes that financial factors affect the performance of the insurance sector either negatively or positively and hence are important to be studied. These factors could be analyzed further to ensure the stability of the industry.

1.3 Research Objectives

Based on the above general objective, the study considered the following specific objectives:

i. To analyze the effects of leverage on profitability of insurance companies in Kenya.

ii. To determine the effects of liquidity on profitability of insurance companies in Kenya.

iii. To establish effects of loss ratio on the profitability of insurance companies in Kenya.

iv. To examine the effects of expenses ratio on profitability of insurance companies in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

The theoretical underpinning of this research can best be explained by three theories; namely, the Pecking Order Theory, the Agency Theory and Risk and Uncertainty Bearing Theory of Profit. These theories were reviewed here below.

2.1.1 The Pecking Order Theory

Pecking order theory was originally suggested by Donaldson (1961) and later modified by Myers and Nicolas (1984). The pecking order states that companies arrange their sources of finance in a hierarchy depending on the cost of financing. They prefer to use internal financing first and raise equity capital as the last resort. This means therefore that internal funds are preferred over the other two sources, and then when it is exhausted, debt is issued next, and when debt is no longer tenable, equity is considered. Equity therefore becomes the last source to be considered when all other sources are exhausted.

According to the pecking order theory there is no optimal capital structure because debt ratio occurs as a result of cumulative external financing requirements. Leverage increases the risk of an insurance company. This theory was useful in this study as far as leverage is concerned. The theory explains the limitations of leverage as a source of financing in an organization. However much an organization would want to finance its operations through debt financing it may not be possible according to this theory. Researchers have

established that pecking order theory could be used to explain the inverse relationship between profitability in companies and the debt ratio. It is therefore true to say that Pecking order is relevant to leverage factor, in this study, in determining profitability of a given firm.

2.1.2 Agency Theory

Agency theory was popularized by Aichian and Demsetz (1972) and was further developed by Jensen and Meckling (1976), who defined agency theory as the relationship between the principals, such as shareholders and agents such as the company executives and managers. Leverage may lead to bankruptcy and management of insurance companies should avoid situations of high levels of leverage or situations where they are unable to pay their debts as this may negatively affect them. The managers of an insurance company should decide on the levels of debt a company should hold and hence the agency theory guides them.

Agency theory has direct reference to the capital structure of any organization as well as the liquidity and leverage of the company. Liquidity of any company tests the ability of the management to meet their financial obligations. A more liquid company shows a more efficient management and vice-versa. As far as profitability is concerned, the agency theory plays a very significant role, as the agents (Managers) are the ones who make the very decisions which make the company take steps towards profitability. This study is applicable to agency theory through the liquidity variable as well as generally through profitability variables**.**

2.1.3 Risk and Uncertainty Bearing Theory of Profit:

This theory was propounded by Knight (1921) and it explains that profits are a necessary reward of the entrepreneur for bearing risk and uncertainty in a changing economy. Profits arise as a result of uncertainty of the future. Entrepreneurs have to undertake investment work under conditions of uncertainty. They have to make estimates of the future conditions regarding demand for their products and by considering other factors which affect prices and costs of their products. They make contracts with the suppliers of factors of production, in view of their estimates and anticipations in advance at fixed rates of remuneration.

According to this theory it is the uncertainty of the future that drives profitability. Insurance companies are risk bearing entities and hence their profits can be explained by this theory. The theory was relevant when dealing with the riskiness of insurance company and is therefore it fits well when discussing the Loss ratio and Expenses Ratio and their effect on the profitability of insurance companies. These ratios measure basically the underwriting risk as well as investment risk of insurers.

2.2 Empirical Review

2.2.1 Effect of Leverage on Profitability

Abate (2012) studied the factors affecting the profitability of insurance companies in Ethiopia. The study used financial data of nine insurance companies in Ethiopia and covered a period of nine years. Return on Assets (ROA) was used as a proxy for insurance companies' profitability. Both descriptive and regression analysis were employed in data analysis. The study established that the most important determinants of profitability were: growth, leverage, volume of capital, size, and liquidity; where growth, size, and volume of capital are positively related with profitability while liquidity ratio and leverage ratio are negatively related to profitability.

Amal (2012) conducted an investigation of the factors that mostly affect financial performance of Jordanian insurance companies using financial data covering the period 2002 to 2007 for 25 insurance companies in Jordan. The findings of the study showed that leverage, liquidity, size of the company and management competency index have a significant impact on the financial performance of the insurance companies in Jordan while the age of the company had no significant impact on its financial performance.

Mwangi and Murigu (2015) studied the determinants of financial performance of general insurance companies in Kenya for periods between 2009-2010 and 2012-2013. This study concluded that leverage, equity capital, management competence index was positively related to profitability but profitability related negatively to size and ownership structure of the companies. However the study did not find any relationship between performance and retention ratio, liquidity, underwriting risk and age. Their final recommendation for general insurance companies in Kenya was that, to perform better they should increase quality of staff, leverage and equity capital.

2.2.2 Effect of Liquidity on Profitability

In Kenya, Omondi and Muturi (2013) researched on factors affecting performance of listed companies on NSE in Kenya. The research sampled 29 listed firms at Nairobi Securities Exchange in Kenya. Their study findings showed that leverage had significant effect on financial performance of companies. The study also found that liquidity had significant positive effect on financial performance.

Odalo and Achoki, (2016) studied Liquidity and Financial Performance in Agricultural Firms listed at the Nairobi Securities Exchange in Kenya. The study sought to establish the effect of liquidity on the financial performance of agricultural companies listed at the Nairobi Securities Exchange in Kenya. The results indicated that there was positive and significant relationship between liquidity and ROA as well as with ROE but positive and insignificant relationship with EPS.

Empirical studies on liquidity have established that liquidity is a measure of profitability however they were unable to show the significance of liquidity to profitability. Mehari and Aemiro (2008) were able to establish that liquidity showed positive relation to performance of insurance companies but the relationship was statistically insignificant. However, Omondi and Muturi (2013) found that liquidity had significant positive effect

on financial performance. Odalo and Achoki, (2016) concurred that there is positive and significant relationship between liquidity and ROA as well as with ROE.

2.2.3 Effect of Loss ratio on Profitability

Malik (2011) conducted a research on various factors affecting profitability of insurance companies in Pakistan for the periods 2004-2009. The study showed that the volume of capital was positively related with profitability whereas loss ratio and leverage ratio indicated negative relationship with profitability.

Doğan (2013) investigated the influence of firm-specific factors such as; loss ratio, leverage ratio, liquidity, size of the company, and age of the company on the profitability of insurance companies listed on the Istanbul Stock Exchange in Turkey for the period 2005–2011. The study, however, found that loss ratio, leverage ratio, current ratio, and age of the company influenced significantly but negatively the profitability of insurance companies.

Berhe and Kaur (2017) investigated on the Determinants of insurance companies profitability, an Analysis of insurance sector in Ethiopia, especially on internal or firm specific variables: - size of insurance companies, capital adequacy, leverage ratio, liquidity ratio, and loss ratio and external or macro variables (market share, growth rate of GDP and inflation rate). Their findings among other conclusions found that, factors such as leverage ratio, loss ratio, market share and annual inflation rate have insignificant impact on profitability.

Afolabi (2018) examined the effect of claims payments on the profitability of insurance companies in Nigeria. The findings in this study have revealed that ROA, which is a measure of profitability, has an indirect relationship with loss ratio and net claims, but a direct relationship with expense ratio.

Most studies have not fully concurred that loss ratio has significant but negative relationship to profitability. Malik (2011), for example, found that loss ratio and leverage ratio have significant and inverse relationship with profitability. The same was confirmed by Doğan (2013) who found that loss ratio influenced significantly but negatively the profitability of insurance companies. On the other hand, Berhe1 and Kaur (2017) found that, factors such as leverage ratio, loss ratio, market share and annual inflation rate have insignificant impact on profitability. Afolabi (2018) on his part found there is indirect relationship between ROA and loss ratio. This study would like to confirm the true position of the effect of loss ratio; whether it affects profitability significantly or insignificantly.

2.2.4 Effect of Expenses ratio on Profitability

Pervan and Kramarić (2010) directed their investigation on the determinants of the Croatian non-life insurance companies' profitability during the period from 2003 to 2009. The determinants of profitability studied included insurance-specific, industry-specific, and macroeconomic variables. The results of the study indicate that ownership, expense

ratio, and inflation have a negative and significant influence on profitability. Yusuf and Dansu (2014) examined the relationship between claims cost and profitability in the Non – life sector of the Nigerian insurance industry. The results revealed that profitability correlates directly with Net Claims and Expense Ratio but correlates inversely with Loss Ratio.

Mwangi and Iraya (2014) carried out a research which sought to establish the relationship between selected such factors as; growth of premiums, size of insurer, retention ratio, earning assets, investment yield, loss ratio, and expense ratio and financial performance of general insurance underwriters in Kenya. The study employed multiple linear regression analysis with data for 22, 23 and 25 underwriters for the 2010, 2011 and 2012 years respectively. The study established that financial performance was positively related to earning assets and investment yield. However financial performance was negatively related to loss ratio and expense ratio.

Mazviona, Dube and Sakahuhwa (2017) examined the factors affecting the performance of insurance companies in Zimbabwe for twenty short term insurance companies. The findings of the study suggest that expense ratio, claims ratio and the size of a company have negative and significant impact on insurance companies' performance.

Studies carried out by past researchers agreed that expenses ratio is negatively related to profitability. Mazviona et al (2017 established that financial performance was negatively related to both loss ratio and expense ratio for general insurance companies. In their study Pervan and Kramarić (2010) were able to indicate that ownership, expense ratio, and inflation have a negative and significant influence on profitability. Yusuf and Dansu (2014) revealed that profitability correlates directly with Net Claims and Expense Ratio but correlates inversely with Loss Ratio. Mwangi and Iraya (2014) on their part also established that financial performance was negatively related to loss ratio and expense ratio. This study would try to confirm the fact that expenses ratio affects profitability negatively.

2.3.6 Research Gaps

A lot of empirical studies have been directed towards determinants of Insurance companies' financial performance. Mwangi and Iraya (2014), for example, studied on various determinants of financial performance of insurance companies. Other researcher such as, Akotey et al. (2013) and Charumathi (2012) covered financial performance of life insurance companies. These studies considered various variables such as firm size, premium growth, age, cost of capital, leverage, investment performance, liquidity, loss ratio, retention ratio and management competence among others as determinants of financial performance. None of the above researchers have studied the effects of financial factors to the profitability of insurance companies. There is therefore no consensus on which factors may affect the profitability of companies significantly either negatively or positively. This study therefore has found it necessary to focus on financial factors.

There are contradictory conclusions on some of the factors affecting profitability of firms. From Empirical studies on liquidity there are almost inconsistent results. For example, Naveed et al (2011) in their study in Pakistan found that ROA has no significant relationship with liquidity. In contrast, Chen and Wong (2004) investigated the effects of liquidity on the financial health of insurance companies and found that liquidity is the most important determinant of financial health of insurance companies. Similarly, Hakim and Neaime (2005) conducted research on banks profitability and observed that the important determinants of banks profitability are current capital, liquidity, and investment. In their investigations, regarding Sub-Saharan countries, Valentina, et al (2009) found significant and negative relationship between bank profitability and liquidity.

2.4 Conceptual Framework

The conceptual frame work of this study is as shown in figure 1 below.

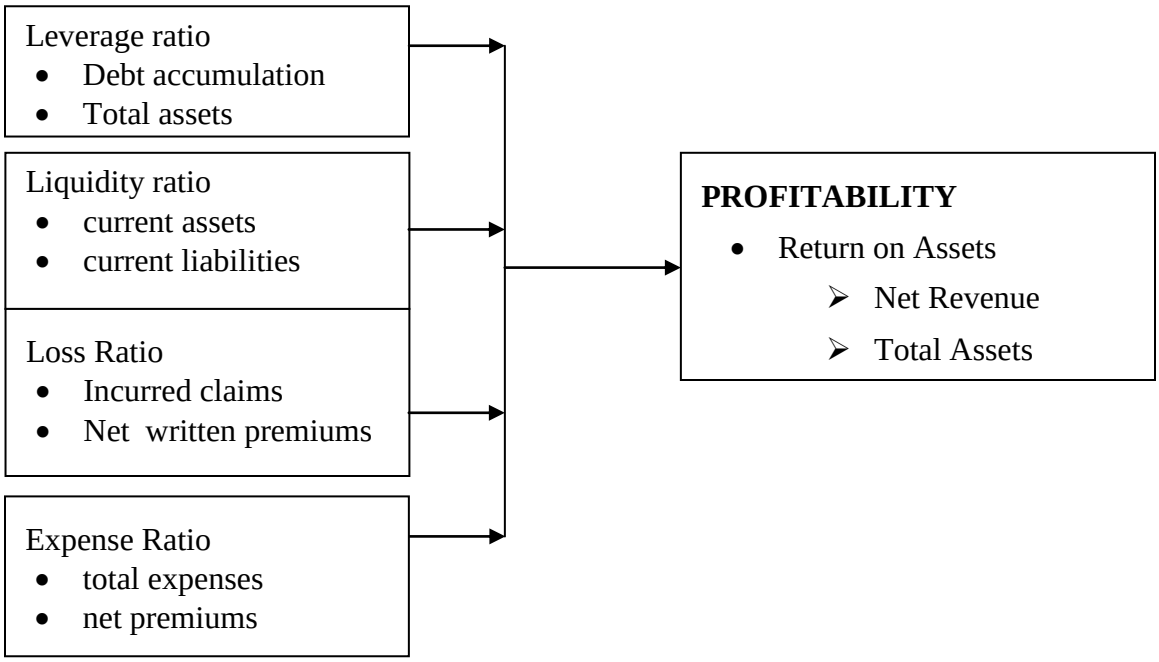

Fig 2.1: Conceptual Framework

Source; Researcher (2019)

Figure 1 is a conceptual framework which depicts relationship between independent variables and dependent variables. The independent variables were shown as leverage, liquidity, loss ratio and Expense ratio. The leverage ratio was measured by debt accumulation and total assets while liquidity ratio was measured by current assets and

current liabilities. The loss ratio was measured by claims incurred and net written premiums while expense ratio was measured by total expenses and net premiums.

The dependent variable was profitability of insurance companies. The profitability was measured by Return on Assets (ROA). Return on Assets is the ratio of Net Revenue against total assets. Profitability of insurance companies is influenced by several factors which include the financial factors depicted in the conceptual framework. This study had therefore focussed on the financial factors affecting profitability of general insurance companies in Kenya. The particular attention was on financial factors such as leverage, liquidity, loss ratio and expenses ratio which have a bearing on profitability of insurance companies but were never focused together by the previous researchers. The study also wished to unravel the contradictory conclusions exhibited by different studies.

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The type of research design used in this study was both descriptive as well as multiple regression designs. This would help to gather reliable data on the financial factors which affect the profitability of insurance companies in Kenya.

3.2 Target Population

The study targeted the entire population of 28 general insurance companies in Kenya. The study looked at the financial statement of all the 28 insurance companies for a period of 5 years from 2013 to 2017.

3.3 Sample Size and Sampling Procedure

This study applied a census procedure to study all the 28 general insurance companies in Kenya.

3.4 Data Collection Procedure

For this study, the researcher personally collected the data, using a specifically designed data collection form for this purpose. Only secondary data was collected from IRA database, AKI reports and the individual insurance companies' audited and published financial statements.

3.5 Data and Data Sources

Data was collected from secondary source. In order to meet the objectives of the study, data was collected from published financial statements of all the 28 general insurance companies for 5 years - 2013 to 2017 retrieved from their websites and from IRA database as well as AKI reports. To ensure that the data was valid, the researcher used more than one source. Most of data was obtained from IRA database and AKI reports, but a cross reference was done using information from the websites of the various firms as well the insurance survey reports from Cytonn Investments Management, together

with information from the Kenya National Bureau of Statistics. A collection data sheet was used to collect the relevant data from all the 28 general insurance companies**.**

3.6 Data Analysis

Multivariate regression was performed on the data using the following general multiple regression model:

$Y=\alpha+\beta_1X_1+ \beta_2X_2+\beta_3X_3+\beta_4X_4 + Ɛ;$

Where: Y is the estimate of Profitability as measured by Return on Assets (ROA)

α is the regression constant (y-intercept);

X_1, X_2, X_3, X_4, are the independent variables (leverage, liquidity, loss ratio and expenses ratio respectively);

β_1, β_2, β_3, β_4, are regression coefficients for the independent variables;

Ɛ is the random variable which expresses how much Y may vary due to other factors that are not included in the model;

Significance of the relationships was tested at 95 percent confidence level.

After collecting and sorting the data, it was analyzed using descriptive statistics (Mean and Standard Deviation) and multiple regression analysis, assisted by SPSS (Version 20) computer software. Data was presented by use of tables, graphs and charts.

4.0 FINDINGS

4.1 Descriptive Statistics

This type of statistic was performed to measure the central tendency and dispersion of the data. Key results were shown using mean, standard deviation, minimum and maximum values of the collected data.

Table 1 Descriptive Statistics of the Variables incorporated in the model

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	28	10.09	85.00	49.2393	19.21284
Loss	28	28.89	112.00	59.2214	15.92193
Leverage	28	9.98	171.80	66.0000	28.53589
Liquidity	28	.90	8.90	2.9357	1.93012
Expenses	28	35.59	205.01	69.2396	38.51562

Source: Field Data, 2019

Return on Assets (ROA) was used to measure the profitability of general insurance companies in Kenya. As indicated in table 1, the general insurance companies in Kenya achieved on average a positive ROA over the 5 years under review. On average the mean ROA was 49.24 percent with a standard deviation of 19.21 percent. This implies that

there was a big dispersion between the highly profitable general insurance companies and the lowly profitable insurance companies.

Loss ratio, which was one of the independent variables used in this study to measure the profitability of insurance companies, had a mean of 57.67 percent and a standard deviation of 12.29 percent. Leverage ratio had a mean of 64.90 percent and a standard deviation of 17.56 percent. The mean leverage ratio of 64.90 percent showed that general insurance companies in Kenya were highly geared for the period under review.

The average liquidity ratio was 2.94 points with a standard deviation of 1.94 points. This showed that most of the general insurance companies in Kenya were liquid during the period under review since the average liquidity ratio was above the recommended value of 2:1.Expenses ratio had a mean of 69.24 percent with a standard deviation of 38.1 percent. This meant that on average, general insurance companies spent 69.24 percent on expenses which was rather too high. With a standard deviation of 38.1 percent, it also meant that there was a big dispersion between general insurance companies spending more on expenses and those low on expenses.

4.2 Measures of goodness of fit

Coefficient of determination which measures the Goodness of fit for the model was used together with F-statistic to determine how perfect the model could be relied upon for future prediction. Coefficient of determination (F – Squared) and significance of F-statistic was given in table 2.

Table 2 Model Summary Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.807[a]	.651	.590	12.30217	.651	10.714	4	23	.000

Predictors: (Constant), Expenses, Leverage, Liquidity, Loss

Dependent Variable: ROA

Source: Field Data, 2019

From table 2 it was noted that the value of R was 0.807, which indicated that there was a strong linear relationship between ROA and the independent variables. The coefficient of determination denoted by R-squared was 0.651, which meant that 65.1 percent of the variations in Profitability (ROA) could be explained by the independent variables in the regression model, while other factors that were not included in the model, were responsible for the remaining 34.9 percent. Probability of F-Statistic in the model was 0.000 which was much less than our significance level of 0.05, indicating that the

regression equation fitted the data well. In general, the regression equation was a true representative of the data obtained from secondary sources.

4.3 Regression Coefficients Analysis

Table 3 Regression coefficients analysis table

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	63.433	11.863		5.347	.000
Loss	-.068	.163	-.056	-.415	.682
Leverage	-.048	.088	-.071	-.546	.590
Liquidity	4.238	1.301	.426	3.257	.003
Expenses	-.281	.073	-.564	-3.840	.001

Dependent Variable: ROA

Source: Field Data, 2019

Reading from the table 3, the study revealed that the regression coefficient of loss ratio was -0.068, t-statistics -0.415 and p-value of 0.682. With a P-value of 0.682 which meant that the relationship between loss ratio and ROA was not statistically significant. The t-statistics of -0.415 showed that loss ratio had no effect on profitability of general insurance companies in Kenya.

The regression coefficient of leverage ratio was -0.048, t-statistics -0.546 and p-value of 0.590. These results showed negative regression coefficient, which meant there was a negative relationship between leverage ratio of general insurance companies and ROA, which is a measure of profitability, but with a p-value of 0.590 it meant that the relationship was statistically insignificant. As shown on table 3 the regression coefficient of liquidity ratio was 4.238, t-statistics 3.257 and p-value of 0.003, which showed positive correlation and with a $p < 0.05$ it meant that the correlation between liquidity with ROA was statistically significant. This implies that liquidity ratio had a positive and statistically significant influence on profitability of general insurance companies in Kenya. Since the beta coefficient was significant it therefore meant that for every 1-unit increase in liquidity ratio, profitability would increase by 4.238 units.

The last independent variable shown on the table 3 was expenses ratio with a regression coefficient of -0.281, t-statistics -3.840 and p-value of 0.001. This indicated that the values are significant at 95 percent confidence level. This implied that expenses ratio had negative but statistically significant influence on profitability of general insurance companies in Kenya. Since the beta coefficient was significant it indicated that for every 1-unit increase in expenses variable, profitability would decrease by 0.281 units.

The linear regression equation was used to predict ROA, based on Loss ratio, Leverage ratio, liquidity ratio and Expenses ratio. The regression equation takes the form: - $\hat{Y}$

$=\alpha+\beta_1X_1+ \beta_2X_2+\beta_3X_3+\beta_4X_4 + \varepsilon$. In this equation, $\hat{Y}$ is the predicted ROA. The predictors were Loss ratio, Leverage ratio, Liquidity ratio and Expenses ratio, which are denoted by X_1, X_2, X_3 and X_4, respectively. The regression coefficients are α, β_1, β_2 β_3 and β_4. From table 9 below, the beta coefficients are $\alpha = 63.433$, $\beta_1 = -0.068$, $\beta_2 = -0.048$, $\beta_3 = 4.238$ and $\beta_4 = -0.281$.

The predictor equation therefore would be:-

$$\hat{Y} = 63.433 - 0.068X_1 - 0.048X_2 + 4.238X_3 - 0.281X_4 + \varepsilon;$$

Where;

X_1= for Loss ratio,

X_2 = Leverage ratio,

X_3 = Liquidity ratio and

X_4 = Expenses ratio.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the findings

5.1.1 Effect of Loss Ratio on Profitability

The result of this study showed that loss ratio which is given by the ratio of incurred claims to earned premium had a negative and insignificant relationship with profitability of general insurance companies in Kenya. The negative coefficient of this variable indicated that as the general insurance companies increased the number of claims, in relation to the earned premium, it would negatively affect profitability. However, the effect was not significant and the management of the companies need not bother a lot with loss ratio. Nevertheless, the negative coefficient may have some limited effect on profitability and hence the need to address high loss ratio. This means that the level of loss ratio must be maintained the minimal so as to reduce the possible problems that may be associated with it.

Looking at empirical results of past researchers on loss ratio of insurance companies, this study concurred with most of them by making the same conclusion that loss ratio has negative and insignificant correlation with profitability. Some of these researchers include: - Malik (2011) who concluded that there was negative relationship with profitability, same conclusion as Doğan (2013), Berhe and Kaur (2017)) and Afolabi (2018) though, Doğan (2013) found the relationship to be statistically significant the other researchers found loss ratio to be negative and insignificant in relation to profitability.

5.1.2 Effect of Leverage Ratio on Profitability

Leverage ratio is determined by debt to assets ratio which was calculated as total debts divided by total assets. Leverage refers to the use of significant amount of debt to finance

the purchase of an asset, or to operate a company, or to acquire another company. Debt is the total amount of all liabilities (current and noncurrent) and it includes bonds payable, bank loans, loans from others, accounts payable, and all other amounts owed by an organization.

Generally, the cost of borrowed capital is much less than the cost of additional equity and according to the pecking order theory; borrowed capital is given preference over equity. As a result, it is usually wise for a corporation to use some debt to finance its operations. The results signify that there was no major problem if insurance companies increase or decrease their debt as there may be no major impact on the profitability. In other words, according to the study the increase or decrease of debt did not directly affect profitability of any insurance company.

The results of this study showed that leverage has negative and insignificant relationship with ROA. These results concurred with, Berhe and Kaur (2017); Berteji and Hammami (2016), who found an insignificant relationship between leverage and performance of insurance companies. Abate (2012) also found negative relationship between leverage and profitability. He however established that the relationship was significant. The same results were shown by Amal (2012) who found that leverage is negatively related to profitability. However, Almajali, Alamro and Al-Soub (2012) and Mwangi and Murigu (2015) contradicted with the findings as they found that leverage had positive but significant relationship with ROA.

5.1.3 Effect of Liquidity Ratio on Profitability

Liquidity is the ability of a firm to generate sufficient cash to cover its expenses and is commonly measured by current ratio. The current ratio is the relationship between total current assets and total current liabilities. Liquidity of any company tests the ability of the management to meet their short financial obligations. It meant that those companies with high liquidity are more efficient in cash management and vice-versa. Therefore, insurance companies with high liquidity levels have higher profit levels than those with low levels of liquidity. This could be explained by the fact that insurance companies with high liquidity have more ability to settle short term debts and other operational expenses and thus facilitating better service delivery to its customers which will in turn translate to more profitability

The findings of the study indicated that liquidity had a positive and significant effect on profitability of general insurance companies in Kenya. This implied that liquidity levels had significant effect on the profitability of insurance companies, which in turn meant that insurance companies' profitability is affected by low or high liquidity. The results of this study were in line with the findings of Omondi and Muturi (2013); Odalo and Achoki, (2016) who concurred that there was positive and significant relationship between liquidity and ROA, but the findings of Berteji and Hammami (2016) and Mehari and Aemiro (2008) were contrarily to those of this study as they found that liquidity had no significant relationship with profitability of Insurance companies.

5.1.4 Effect of Expenses Ratio on Profitability

The results of this study showed that there was a strong but negative relationship between expenses ratio and profitability. These results were in agreement with what Pervan and Kramarić (2010), Mwangi and Iraya (2014) and Mazviona, Dube and Sakahuhwa (2017) found that expenses ratio and profitability have strong negative correlation. The finding of this study, however they contradicted the results of Yusuf and Dansu (2014), who concluded that profitability correlated directly with Expenses ratio.

5.2 Conclusions

This study aimed at examining the effects of financial factors which affect the profitability of the general insurance companies in Kenya. The study findings gives a clear insight of the nature and characteristics of the factors affecting the profitability of general insurance companies in Kenya and this would help the government and insurance companies' management to formulate and enforce various financial management reforms and set up the necessary policies for the industry. Multiple regression analysis was used to establish the relationship that exists between the independent and dependent variables of the study. The dependent variable is the profitability of general insurance companies in Kenya that is measured by Return on Assets (ROA). While the independent variables in this study were liquidity, leverage, loss ratio and expenses ratio.

The study was able to conclude that liquidity and expenses were the main financial factors which affected profitability of general insurance companies in Kenya either positively or negatively. The other two financial factors of loss ratio and leverage in this study were found not to impact significantly on the profitability of general insurance companies in Kenya. The research established that liquidity showed positive and significant relation with ROA, which could be attributed to the fact that insurance companies with high liquidity have high ability to settle short term liabilities and other operational expenses and thus facilitating better service delivery to the customers. Leverage and loss ratio were found not to impact significantly on profitability and therefore it means that general insurance companies in Kenya were not affected by high or low levels of leverage and loss ratio. Hence the management of these insurance companies should not worry a lot on the increase or decrease of leverage and loss ratio levels.

5.3 Recommendations

The study recommendations that regulators and other stakeholders, within the industry, should at regular interval intensify efforts to ascertaining the claims handling procedures currently in use by insurance companies in Kenya. The Government needs to regularize the industry and come up with a legislation to curb and curtail fraudulent claims in the insurance industry and at the same time regularize fast and efficient payment of clients' claims. The study will be of great importance to the Insurance Regulatory Authority whose mandate is to regulate the activities of the insurance industry. By highlighting factors affecting profitability in insurance industry, IRA will be influenced to put more

emphasis on application of effective corporate governance practices and effective control systems that will encourage application of effective financial procedures. The study also recommends that future researchers could look at increased number of independent variables which will generate more useful information and enhance further the scope of the future studies. The study further recommends that in future researchers may also consider comparison of the performance of financial factors with non-financial factors.

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