THE RELATIONSHIP BETWEEN LIQUIDITY AND PROFITABILITY OF INSURANCE COMPANIES IN KENYA

BY

KIIO PETER NGWILI

D61/61023/2013

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI

OCTOBER 2014

DECLARATION

This Research Project is my original work and has not been submitted for an award of a degree at the University of Nairobi or any other institution of higher learning.

Signed….: ..... Date: ……

PETER NGWILI KIIO

REG NO: D61/61023/2013

This Research Project has been submitted for examination with my approval as the University supervisor.

Signed: ..... Date: ……

MR JAMES NG'ANG'A

Lecturer, Department of Finance & Accounting

School of Business, University of Nairobi

ACKNOWLEDGEMENT

I wish to express my sincere gratitude and appreciation to all those who in one way or another contributed to the successful preparation of this research project.

I thank the Almighty God for giving me resources, good health and patience throughout the entire course.

Special thanks go to my lead supervisor Mr James Ng'ang'a for his precious time, positive criticism, suggestions and valuable guidance and encouragement in making this research project a success.

DEDICATION

I wish to dedicate this work to my dear wife Sarah and our daughter Noelle for your understanding, support, encouragement and invaluable patience during my entire study period.

To my Parents Mr & Mrs Stephen Kiio for your material and moral support and making my academic dream a reality.

You all inspired me to work hard.

God bless you all.

ABSTRACT

The study sought to test the relationship between liquidity and profitability of insurance companies in Kenya. The population of the study comprised of all the 49 insurance companies registered with IRA as at 31st December 2013 (Appendix 1). A census was carried out covering all the 49 insurance firms for five years period (1st January 2009 to 31st December 2013). The study used secondary data and the variables were deduced from the audited financial statements of the 49 registered insurance firms for financial periods 2009 to 2013. The collected data was analyzed using descriptive statistics. Profitability was measured by ROA, while liquidity was measured by Quick ratio and Leverage ratio. Firm size as measured by log of net premium and loss ratio were the control variables. The t-test was used to determine the significance of the constant term and the coefficients terms for each of the regressions. The importance of each of the regressions was determined by carrying out the F-test at 95% confidence level. The coefficient of determination R^2 was used to measure the strength to which independent variables explain the variations in the dependent variables. The analysis was done using Statistical Package for Social Sciences (SPSS) software version 21. The study established a positive relationship between quick ratio and profitability of insurance companies in Kenya. The study indicated that leverage ratio has a negative influence on ROA. The study established a positive relationship between log of net premiums and ROA. Finally, the study indicated a negative but significant relationship between loss ratio and profitability of the insurance industry in Kenya. This study recommends that managers should maintain a trade off between profitability and liquidity, invest in liquid assets to improve liquidity as well as focus on exploring opportunities for growth and diversification and proper management of investment portfolios.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

AKI	Association of Kenya Insurers
ASE	Athens Stock Exchange
CCC	Cash Conversion Cycle
CPP	Credit Payment Period
DCP	Debtors Collection Period
IIK	Insurance Institute of Kenya
IRA	Insurance Regulatory Authority
NSE	Nairobi Securities Exchange
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment Ratio
SPSS	Statistical Package for the Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Panigrahi (2013) it is often observed that whenever a financial analysis of companies is done, more emphasis is given on the profitability of the business rather than on its liquidity. This is quite obvious, as the most important financial objective of any business is to earn profit. So, the managers lay more emphasis towards profitability. But another significant variable is liquidity which means the ability of a company to honor short term financial obligations. If the company which is not able to honor its short-term financial obligations, it moves a step ahead towards its bankruptcy. Liquidity management, therefore, involves the amount of investments in liquid assets to meet the short-term maturing obligation of creditors and others.

Liquidity is having enough money in the form of cash, or near-cash assets, to meet the financial obligations. In business, cash is king, particularly during tough economic times or when the markets are turbulent. Without cash, company cannot pay its bills nor carry out growth plans, and it may find it difficult to get credit or take advantage of business opportunities. A company that cannot pay its creditors on time and continue not to honor its obligations to the suppliers of credit, services, and goods can be declared a sick company or bankrupt company.

Current assets are liquid so holding more current assets refer to high liquidity but on the other hand current assets include such items which diminish firm's profitability. It must

be remembered that different items of current assets have different degree of liquidity. Cash is the most liquid asset. For other types of current assets, liquidity concept has two dimensions of time and risk. The speed with which current assets other than cash can be converted into cash is known as time dimension of liquidity consideration. More quickly and rapidly current assets are converted into cash, more liquid those current assets shall be. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. All individual components of working capital including cash, marketable securities, account receivables and inventory management play a vital role in the performance of any firm.

For the business owners, one of the most important tasks is to estimate and evaluate cash flows of the business, to well identify the long run and short run cash inflows and outflows to timely sort out the cash shortages and excess to formulate financing and investing strategies respectively. It also helps in planning the payments to creditors on time to avoid losing reputation and trust of the customers and to avoid potential bankruptcy.

If all the current obligations are met without any delay as and when these become due, creditors and all others will have a feeling of confidence in the financial strength of the organization and this will sustain the credit standing of the organization. But failure to meet such obligations on continuous basis would cause an adversely effect on the credit standing and market reputation resulting in more difficult to finance the level of current assets from the short-term sources. Keeping liquidity is usually costly, but helps avoiding negative effects of unexpected cash-flow shocks.

According to Bhunia (2010) liquidity plays a significant role in the successful functioning of a business firm. A firm should ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business. Liquidity requirement of a firm depends on the peculiar nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability.

One should try neither to maximize nor minimize the liquidity ratios; one should try to optimize them in relation to the objective, which in case of a commercial company is probably the maximization of profit on capital employed. The lower the liquidity ratios are, the more vulnerable the company is to pressure from creditors which it unable to meet and vice versa. Therefore, one should seek to have as little working capital as is consistent with not being unduly vulnerable to pressure from creditors.

1.1.1 Liquidity

According to Farlex Financial Dictionary (2012) liquidity is defined as a large position in cash or in assets that are easily convertible to cash. High liquid produces flexibility for a firm in a low risk position but it also tends to decrease profitability. Barad (2010) defines liquidity as the ability to meet expected and unexpected demands for cash through ongoing cash flow or the sale of an asset at fair market value. Liquidity risk is the risk which arises when an entity will not have enough cash or liquid assets to meet its cash obligations. A firm in order to remain in existence and sustain its activities as a going concern must remain liquid and meet its obligations as and when they become due. Even

though firms traditionally are focused on long term capital budgeting and capital structure, the recent trend is that many companies across different industries focus on working capital management efficiency.

According to Panigrahi, (2013) when there is a poor management of working capital, funds may be unnecessarily tied up in idle assets. This will reduce liquidity of the company and also the company will not be in a position to invest in productive assets like plant and machinery. It will also affect profitability of the company. The existence of an adequate liquidity and its careful management can make substantial difference between the success and failure of an enterprise. According to Bhunia, (2010) liquidity plays a significant role in the successful functioning of a business firm. A firm should ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions.

According to Brealey (2012) liquidity can be expressed in terms of liquidity ratios namely current ratio, quick (acid test) ratio and cash ratio. Current ratio is the ratio of the current assets to the current liabilities and it measures the margin of liquidity. Rapid decreases in the current ratio sometimes signify trouble. However, they can also be misleading. For example, suppose that a company borrows a large sum from the bank and invests it in short-term securities. If nothing else happens, net working capital is unaffected, but the current ratio changes. For this reason it might be preferable to net off the short-term investments and the short-term debt when calculating the current ratio.

According to Brealey (2012) quick (acid test) is an indicator of company's short term liquidity and is calculated as current assets net of inventories divided by current liabilities. It measures a company's ability to meet its short-term obligations with its most

liquid assets thereby excluding inventories. The quick ratio measures the shilling amount of liquid assets available for each shilling of current liabilities. Thus, a quick ratio of 1.5 implies that a company has Sh1.50 of liquid assets available to cover each Sh1 of current liabilities. The higher the quick ratio the better the company's liquidity position and vice versa.

According to Brealey (2012) cash ratio is the ratio of a company's total cash and cash equivalents to its current liabilities. The cash ratio is most commonly used as a measure of company liquidity. A company's most liquid assets are its holdings of cash and marketable securities and that is why analysts also look at the cash ratio. It can therefore determine if, and how quickly, the company can repay its short-term debt. A strong cash ratio is useful to creditors when deciding how much debt, if any, they would be willing to extend to the asking party.

1.1.2 Profitability

According to Farlex Financial Dictionary (2012) profit is defined as a company's total revenue less its operating expenses, interest paid, depreciation and taxes. Profitability is therefore the capacity to make a profit. Profitability is measured through profitability ratios. According to Brealey (2012) profitability ratios include Net profit margin, Return on assets (ROA), Return on equity (ROE) and payout ratio.

According to Brealey (2012) Net profit margin calculated as net income divided by revenues, or net profits divided by sales measures the proportion of sales that finds its way into profits. Profit margin is very useful when comparing companies in similar

industries. A higher profit margin indicates a more profitable company that has better control over its costs compared to its competitors. Return on assets calculated by dividing a company's annual earnings by its total assets measures the performance of the firm and is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. The higher the ROA number, the better, because the company is earning more money on less investment.

According to Brealey (2012) Return on equity calculated as net income divided by shareholders equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The ROE is useful for comparing the profitability of a company to that of other firms in the same industry. Payout ratio calculated as dividends divided by earnings measures the proportion of earnings that is paid out as dividends. The payout ratio is a key financial metric used to determine the sustainability of a company’s dividend payments. A lower payout ratio is generally preferable to a higher payout ratio. Managers don’t like to cut dividends if there is a shortfall in earnings. Therefore, if a company’s earnings are particularly variable, management is likely to play it safe by setting a low average payout ratio. When earnings fall unexpectedly, the payout ratio will rise temporarily. Likewise, if earnings are expected to rise next year, management may feel that it can pay somewhat more generous dividends than it would otherwise have done.

1.1.3 The Relationship between Liquidity and Profitability

According to Ross, Westerfield& Jordan (2000) there is a negative relationship between liquidity and profitability. It therefore becomes a dilemma for managers to balance the two hence the need for a tradeoff between high amounts of net working capital and maximizing profitability. This is referred to as the liquidity-profitability trade-off. This dilemma would be a consequence of the fact that high values used in current assets tend to generate costs for maintenance, not directly adding value to the company and thereby generating profitability.

According to Panigrahi (2012) current assets are liquid so holding more current assets refer to high liquidity but on the other hand current assets include such items such as cash which diminish firm's profitability.

1.1.4 Insurance Companies in Kenya

Insurance is the equitable transfer of risk or loss, from one entity to another in exchange for payment referred to as premium. The contract entered into by the insurer (company selling insurance) and the insured is meant to protect the insured against unexpected risks. The insurer undertakes to indemnify the insured when loss is incurred, as long as the loss falls under the terms of the contract that was signed by both the insurer and the insured.

Insurance in Kenya is widely grouped as general (non-life) insurance and life insurance. General insurance includes motor-commercial, motor-private, fire-domestic, aviation, fire-industrial and engineering, theft, workmen's compensation, marine. Any insurance

policy that is undertaken and does not cover against the life of an individual is referred to as non – life insurance or general insurance. Cover against the life of an individual is referred to as life insurance. Life insurance includes ordinary life and superannuation which can also be categorized as group life insurance and deposit administration. Insurance business involves the underwriting of various risks by insurance companies and payment of claims once the loss occurs. The consideration price for undertaking this business is a price known as premium that is paid to the insurer by the insured.

The insurance industry was composed of 49 licensed companies as at 31st December 2013 (appendix 1). Other players in the industry are insurance brokers, insurance agents, reinsurance companies and risk managers. The industry is regulated by Insurance Regulatory Authority (IRA), a body formed under the Insurance Act CAP 487 of the Laws of Kenya. The Association of Kenya Insurers (AKI) was established in 1987 as a consultative and advisory body to insurance companies and registered under the society act CAP 108. Insurance Institute of Kenya (IIK) has dealt with training and professional education of insurance in the country. The main college that has specialized in offering Insurance training is The College of Insurance.

According to Insurance Industry Annual Report 2012, the insurance industry recorded a gross written premium of Kshs 108.54 billion in 2012 compared to Kshs 91.60 billion in 2011 representing an increase of 18.49%. Gross earned premium increased by 19% to stand at Kshs 84.38 billion in 2012 compared to 70.92 billion in 2011. (IRA, 2012)

Some of the achievements in insurance industry in 2012 according to the Kenya Insurance Industry Outlook 2013 include growth as indicated by increased premium

income, investment income, business network expansion as well as increased market share. Product development is also another key development which involved new product launch resulting in enhanced product mix. There were also improved claims settlement, claims reduction and minimization of claims management costs. (IRA, 2013)

The Kenya Insurance Outlook 2013 identified Key drivers of insurance industry in 2012. Among them is marketing strength which comprised of reaching new market segments, expanded branch networks, using alternative distribution channels and improved intermediary network. Staffing is another key driver of insurance industry in Kenya in 2012 and involved staff retention and setting of a staff quality assurance and development strategy. (IRA, 2013)

The major challenges noted which can be said to slow down performance include low retention ratio, low penetration as well as high inflation.

1.2 Research Problem

According to the theoretical review, a negatively significant relationship is expected to exist between liquidity and profitability. There is a trade-off between liquidity and profitability; gaining more of one ordinarily means giving up some of the other. For example if a company's balance sheet is listed in order of liquidity with five items namely cash, marketable securities, accounts receivables, inventory and fixed assets it can be observed that moving from cash to fixed assets decreases liquidity. However, as you move from fixed assets to cash profitability increases. In other words profitable

investment for a company is normally its fixed assets and the least profitable investment is cash.

Mathuva (2009) found a highly significant positive relationship between the time it takes the firm to pay its creditors (average payment period) and profitability. Maina (2011) found the relationship between liquidity and profitability was weak and also that all the independent variables had a significant relationship with Return on assets except the quick ratio and cash conversion cycle. The results further showed that there was a strong negative relationship between a firms leverage and quick ratio with its Return on assets. Owolabi&Obida (2012) found causative relationships between profitability expressed in terms return on assets (ROA), return on equity (ROE) and return on investment (ROI) and liquidity management of companies was measured in terms of its Debtors Collection Period (DCP), Creditors Payment Period (CPP) and Cash Conversion Cycle (CCC).

Wambu (2013) found out that there was a positive relationship between profitability and liquidity however, the coefficients from the study were not significant. Lartey, Antwi&Boadi (2013) found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana.

Kamath (1989) found liquidity affects profitability negatively. The other studies, Deloof (2003), Eljelly (2004), Lazaridis&Tryfonidis (2006), Raheman& Nasr (2007), Garcia-Teruel& Martinez-Solano (2007), Mathuva (2009), Falope&Ajilore (2009) and Gill, Biger&Mathur (2010) empirically examined the relationship between profitability and liquidity showed that there exists a significant and negative relationship between them. However, the study conducted by Lyroudi&Laziridis (2000), Sur, Biswas&Ganguly

(2001) and Bardia (2004) found that there was positive relationship between liquidity and profitability.

The theoretical review on the relationship between liquidity and profitability is very clear that a negative relationship is expected between the two variables. However empirical evidence shows mixed results with some showing negative relationship and others showing positive or no relationship. From the above reviews, the researcher concluded that most of the studies support the general notion that there is a negative relationship between liquidity and profitability. The researcher further sought to conduct a study on insurance companies in Kenya to test the existing relationship between liquidity and profitability.

1.3 Research Objective

To test the relationship between liquidity and profitability of insurance companies in Kenya.

1.4 Value Of The Study

The findings on the proposed study would add on the empirical review of liquidity – profitability trade off. Profitability and liquidity are the most prominent issues in the corporate finance literature. The ultimate goal for any firm is to maximize profitability. However, too much attention on profitability may lead the firm into a pitfall by diluting the liquidity position of the organization.

The findings of the proposed study would also contribute to measuring firm's financial position though its profitability ratios. Every stakeholder has interest in the liquidity position of a company. Employees should also be concerned about the company's liquidity to know whether the company can meet its employee related obligations such as salary, pension, provident fund among others.

The findings of the proposed study would act as a guide to Finance managers in insurance companies as well as other sectors to make investment decisions that would satisfy stakeholders interests with regard to liquidity and profitability.

The findings of the proposed study would also be beneficial to the students of finance in terms of empirical review as well as to those who wish to carry further research on the relationship between liquidity and profitability.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two examines the main theories behind liquidity, profitability and empirical studies conducted in this area. It discusses key theoretical considerations from previous studies. The chapter is concluded by summarizing the findings which leads to the identification of the research gap.

2.2 Theoretical review

Keynes (1936) developed the liquidity preference theory while Baumol (1952), Miller & Orr (1966) developed quantitative liquidity theories, Myers &Majluf (1984) developed the Pecking Order Theory while Liquidity and Dynamic Theory of Profit was developed by Clark (1902).

2.2.1 Liquidity Preference Theory

Keynes (1936) was the first to develop the concept of liquidity in his book The General Theory of Employment, Interest and Money to explain determination of the interest rate by the supply and demand for money. Liquidity preference refers to the demand for money, considered as liquidity. The idea that investors demand a premium for securities with longer maturities, entail greater risk, because they would prefer to hold cash, which entails less risk. The more liquid an investment, the easier it is to sell quickly for its full

value. Because interest rates are more volatile in the short term, the premium on short- versus medium-term securities will be greater than the premium on medium- versus long-term securities. For example, a three-year Treasury note might pay 1% interest, a 10-year treasury note might pay 3% interest and a 30-year treasury bond might pay 4% interest.

2.2.2 Baumol's model

Baumol (1952) developed an inventory management model which was applicable in determining the level of cash to be held by the business firms. He described the holding costs and the ordering costs of cash in a fashion similar to those costs associated with inventory. His conclusion was that the rational individual will, given the price level, demand cash in proportion to the square root of the value of these transactions.

2.2.3 Miller & Orr Model

Miller & Orr (1966) developed a model of demand for money. Under the model, the firm allows the cash balance to fluctuate between the upper control limit and the lower control limit, making a purchase and sale of marketable securities only when one of these limits is reached. The assumption is that the net cash flows are normally distributed with a zero value of mean and a standard deviation.

This model provides two control limits – the upper control limit and the lower control limit as well as a return point. When the firm's cash limit fluctuates at random and touches the upper limit, the firm buys sufficient marketable securities to come back to a normal level of cash balance that is the return point. Similarly, when the firm's cash

flows wander and touch the lower limit, it sells sufficient marketable securities to bring the cash balance back to the normal level that is the return point.

2.2.4 Pecking Order Theory of Liquidity

Myers &Majluf (1984) introduced very influential pecking order theory saying; manager prefers to finance deficit of capital by issuing safe security. The theory states that, in the event where retained earnings and other internal source of financing will be low to invest then manager will issue debt and only issue new equity with possibility of issuing junk debt (financial distress possibility).

The theory emerges as a result of asymmetric information existing in the financial markets, that is, corporate managers often have better information about the health of their companies than outside investors. Apart from the transaction costs of issuing new securities, companies have to accept the information costs arising from asymmetric information. In this way, new securities issued on the financial market could be infra–valued because of informational asymmetries, and this is especially true in the case of new equities.

2.2.5 Dynamic Theory of Profit

According to Clark (1902) profit accrues because the society is dynamic by nature. Since the dynamic nature of society makes future uncertain and any act, the result of which has to come in future, involves risk. Thus profit is the price of risk taking and risk bearing. It arises only in a dynamic society which means in a society where changes does not occur

that is, it is static by nature the risk element disappears and hence the profit element does not exist there.

A society is said to be dynamic when there is a change in its population, change in trends of the people, change in stock of the capital, change in the supply of entrepreneurs among others. When all these factors become constant, the future also becomes certain and the risk element disappears from the society.

According to Clark (1902), profit is the result of an adjustment, which is brought about by the entrepreneurs themselves. They may find new techniques of production by inventing new machines. Their use reduces the cost of production and reduces the course of time as well and gives the entrepreneur higher profits. But when the use of machinery and production becomes common and used by the other entrepreneur operating in the economy, the supply of goods increase and the prices fall. Hence the profit margin also goes down. Under this situation the profit is determined by the demand and supply of enterprise at a point where they are equal. This theory is also known as windfall theory of profits. This theory treats profits as a residue in price after deducting costs; hence it is a residual theory of profits.

2.3 Determinants of profitability of insurance companies.

According to Ahmed et al, (2011) the performance of any business firm in addition to playing the role of increasing the value of the specific firm, it also leads to growth of the whole sector of the economy. Assessing the determinants of performance of insurance companies has gained tremendous importance in the corporate finance literature. Insurance companies act as intermediaries in financial institutions and helps in

channeling funds to support business activities in the economy. Every firm is most concerned with profitability. Financial ratio analysis is among the commonly used tool to determine a company's profitability (Lartey, Antwi&Boadi ,2013).

Malik, K. (2011) observes that among the determinants of profitability of Insurance companies are; leverage, size, age of the company among others.

2.3.1 Liquidity Ratio

According to Stolowy&Lebas, quick ratio is a measure of assets that can be easily converted in to cash. The quick ratio is a liquidity measure ratio. This ratio is calculated by the total of cash and cash equivalents, marketable securities and account receivables divided by current liabilities. Ahmed et al. (2011) noted that ROA had statistically insignificant relationship with liquidity. Cheng and Wong (2004) found that liquidity is one of the important determinants of financial health of insurance companies. Companies with more liquid assets are less likely to fail because they can realize cash even in difficulty situations.

2.3.2 Leverage Ratio

Chung, Firth & Kim (2002) defines leverage as total debts divided by total assets. According to Adams and Buckle (2003), the degree of financial leverage reflects insurance companies' ability to manage their economic exposure to unexpected losses. This ratio represents the potential impact on capital and surplus of deficiencies in reserves due to financial claims. There is an expected negative relationship between the return on assets and the insurance leverage.

2.3.3 Size

According to Fiegenbaum& Thomas (1990) insurance company's size is measured in terms of premium volume. Economies of scale provide one theoretical basis for arguing that firm size is related to profitability. There is and expected positive relationship between firm size and profitability. The scale economy justification for a positive relationship between firm size and profitability is prominent in the works of Alexander (1949), Stekler (1964), Hall and Weiss (1967) and Scherer (1973).

2.3.4 Loss Ratio

Mehari & Aemiro (2013) noted that the loss ratio of an insurance company as measured by the ratio of incurred claims to earned premiums was statistically significant to explain performance of insurance companies.

2.4 Empirical Review

Lyroudi & Lazoridis (2000) conducted a study examining the cash conversion cycle as a liquidity indicator of the food industry for Greece companies. They tried to determine its relationship with the current and the quick ratios, with its component variables, and investigated the implications of the cash conversion cycle in terms of profitability, indebtness and firm size. Five hypotheses were formed to investigate the contemporary liquidity measure of the cash conversion cycle. The data was taken from the major companies in the food and beverage industry of Greece, which was a representative sector of the Greek industry as a whole and a very crucial industry for the whole economy, with rapid growth and expansion domestically and internationally.

The methodology that was followed included regression and correlation analysis, as well as t-tests of two independent sample means. The results indicated that there was a significant positive relationship between the cash conversion cycle and the traditional liquidity measures of current and quick ratios. The cash conversion cycle was positively related to the return on assets and the net profit margin but had no linear relationship with the leverage ratios. On the other hand, the current and quick ratios had negative relationship with the debt to equity ratio, and a positive one with the times interest earned ratio. Finally, there was no difference between the liquidity ratios of large and small firms.

Deloof (2003) conducted a study on the relationship between working capital management and corporate profitability on Belgian firms. He is investigated a sample of 1,009 large Belgian non-financial firms out of the population of 5,045 firms for the 1992-1996 period. Profitability was measured by gross operating income. Trade credit policy and inventory policy were measured by number of days, accounts receivable, accounts payable and inventories, and the cash conversion cycle was used as a comprehensive measure of working capital management.

He used correlation and regression analysis to measure the impact of working capital management on corporate profitability. They found a negative relation between gross operating income and the measures of working capital management (number of days, accounts receivable, inventories and accounts payable and cash conversion cycle). The coefficient of the accounts receivable variable was negative and highly significant. The coefficients of the other variables included in the model were also highly significant.

A significant negative relation was found between gross operating income and number of days inventories. Regression showed a very significant negative relation between gross operating income and number of days, accounts payable. The coefficient of the cash conversion cycle variable was negative. The results suggested that managers could increase corporate profitability by reducing the number of days, accounts receivable and inventories. Less profitable firms wait longer to pay their bills.

Eljelly (2004) conducted a study examining the relationship between profitability and liquidity as measured by current ratio and cash gap (cash conversion cycle). The study was based on a sample of 29 joint stock companies in Saudi Arabia. He used correlation and regression analysis for analysis and found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio. This relationship was more evident in firms with high current ratios and longer cash conversion cycles. At the industry level, however, the study found that the cash conversion cycle or the cash gap was of more importance as a measure of liquidity than current ratio that affects profitability. The size variable was also found to have significant effect on profitability at the industry level. Finally, the results were stable over the period under study.

Lazaridis & Tryfonidis (2006) conducted a study investigating the relationship between working capital management and profitability of listed companies in the Athens stock exchange. They used a sample of 131 companies listed in the Athens Stock Exchange (ASE) for the period of 2001-2004. The purpose of their study was to establish a relationship that was statistically significant between profitability, the cash conversion cycle and its components for listed firms in the ASE. They use regression analysis with

the gross operating profit as the dependent variable and independent variables being number of days accounts receivables, number of days accounts payables and cash conversion cycle. They observed that the net operating profit was negatively correlated with the variables of number of days accounts receivables, number of days accounts payables and cash conversion cycle.

The results of their research showed that there was statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle. They concluded that managers could create profits for their companies by handling correctly the cash conversion cycle and keeping each different component (accounts receivables, accounts payables, inventory) to an optimum level.

Garcia-Teruel & Martinez-Solano (2007) conducted a study on the effect of working capital management Small and medium enterprises profitability on Spanish firms. They collected a panel of 8,872 small to medium-sized enterprises covering the period 1996-2002 and tested the effects of working capital management on SME profitability using the panel data methodology. The results which were robust to the presence of endogeneity demonstrated that managers could create value by reducing their inventories and the number of days for which their accounts were outstanding. Moreover, shortening the cash conversion cycle was also seen to improve the firm's profitability.

Mathuva (2009) conducted a study on the influence of working capital management components on corporate profitability on Kenyan listed firms. A sample of 30 firms listed on the Nairobi Stock Exchange for the periods 1993 to 2008 was used. Both pooled Ordinary Least Square method and the fixed asset regression models were used. He found

out that there exists a highly negative relationship between the time it takes firms to collect cash from their customers (account collection period) and profitability. He also found out that there exists a highly significant positive relationship between the period taken to convert inventories into sales (the inventory conversion period) and profitability. He also found out that there exists a highly significant positive relationship between the time it takes the firm to pay its creditors (average payment period) and profitability.

Erasmus (2010) conducted a study investigating the relationship between working capital management and firm profitability for a sample containing both listed and delisted South African industrial firms. The results obtained from the full sample revealed statistically significant negative relationships between a firm's profitability (as quantified by the return on assets in the narrower sense) and its net trade cycle, debt ratio and liquidity ratio. Similar results were observed when the listed firms were investigated separately. In the case of firms that delisted during the period under review, however, the liquidity and debt ratios appeared to play a more important role than the net trade cycle. Based on the results of this study, it would appear that management could attempt to improve firm profitability by decreasing the overall investment in net working capital.

Maina (2011) conducted a study examining the relationship between liquidity management and profitability of the Oil companies in Kenya and covered the period 2007- 2010. A regression model was developed to determine the relationship between the dependent variable (Profitability of the firms) and independent variables (liquidity position). The independent variable used in the model consisted of Current ratio, quick ratio, cash conversion cycle, while leverage and the age of the firm were used as control

variables. Pearson's correlation and regression analysis were used for the analysis and tests of significance were carried out for all variables using t-test at the 95% level of significance. The results indicated that the relationship between liquidity and profitability was weak and also that all the independent variables had a significant relationship with ROA except the quick ratio and cash conversion cycle. The results further showed that there was a strong negative relationship between a firms leverage and quick ratio with its ROA.

Owolabi&Obida (2012) conducted a study on liquidity management and corporate profitability of selected manufacturing companies listed on the Nigerian stock exchange. A sample of 12 manufacturing companies quoted on the Nigerian Stock Exchange was selected and used to determine the relationship between liquidity management and corporate profitability. The study used secondary data extracted from the published financial statement of the selected companies for the period of five years (2005-2009). The liquidity management of companies was measured in terms of its Debtors Collection Period (DCP), Creditors Payment Period (CPP) and Cash Conversion Cycle (CCC). Profitability in the other hand could be measured using the Return on Investment Ratio (ROI), Return on Equity (ROE) and Return on Asset (ROA).

The combined descriptive statistics for all the companies showed a fair liquidity management. The average debtor's collection period of the companies (251 days) was shorter than the average creditor's payment period (318 days). The companies could also settle 211 % of their current liability from their operating activities. The companies had an average time lag of 673 to turn their investment in raw material to cash. This period seemed too long and could have had a negative effect on liquidity. On the average Return

on Asset was 86%, Return on Equity averaged at 154% while Return on Investment was 73%. This was fair as it represented the industry performance in the period under review.

The analysis also showed that most of the companies selected for analysis reported good levels of profitability in terms of their return on assets (ROA), return on equity (ROE) and return on investment (ROI). They concluded that there exists a relationship between ROA, ROE and ROI and the company's DCP, CPP and CCC and it was possible to drive some causative relationships between them.

Panigrahi (2013) conducted a comparative study on liquidity position of five leading Indian cement companies. The study covered a period of 10 years, 2000-2001 to 2009-2010. Secondary data was used. The techniques of mean, standard deviation, coefficient of variation, ratio analysis, and Motaal's ultimate rank test were applied to analyze the data. It was found that the liquidity position of small companies were better as compared to big ones and the growth rate of current ratio, quick ratio and working capital to current assets of all the companies were negative which indicated an unsound liquidity position. Moreover, low or negative working capital in some cases indicated the aggressive working capital management policy of the firms which implied minimal investment in current assets by the companies so as to derive a higher rate of return.

Velnampy&Kajananthan(2013) analyzed cash position and profitability among listed telecommunication firms in Sri Lanka over a periodfrom 2005 - 2011. The objective of the study was to establish the causality that exists between the profitability and cashposition. This was prompted by the need to unravel the mystery on whether profits are driven by cash position or thevice versa. The study was carried out by analyzing the

two firms' profit measured by return on assets and return onequity as the dependent variable and the cash position as liquidity measure in relation to the sales, total assets andcurrent liabilities as the independent variables. Pearson correlation analysis was used to find out the relationshipsbetween these variables and regression analysis was used to find out the impact of cash position on profitability.

Statistical Package for the Social Sciences (SPSS)was utilized to support the analysis and to provide a basis for the conclusions drawn. Based on the descriptive analysis,there was no big fluctuation in the cash position ratios, return on equity and return on assets among Dialog telecom plcand Sri Lanka telecom plc. Based on the correlation analysis, there was a significant relationship between cash positionratios and return on equity & assets in the Sri Lanka telecom plc. In contrast; there was no significant relationship betweencash position ratios and return on equity & assets in the Dialog telecom plc in the Sri Lankan context. Further, Sri Lankatelecom plc cash position ratios had the influence or impact on the profitability measures comparing with Dialog telecom plc in the Sri Lankan context.

Wambu (2013) conducted a on the relationship between the profitability and the liquidity of commercial banks in Kenya. The aim of this study was to establish whether the profitability of commercial banks is affected by the liquidity levels of the bank. The population of the study comprised of all 44 commercial banks in Kenya operating in the years 2008 to 2012. The study involved secondary data collection of the return on assets, to measure profitability and Central Bank of Kenya liquidity ratio and current ratio to measure liquidity during a specific year. The study used secondary data obtained from audited financial statements of the banks at the end of the years of study.

The study used descriptive statistics that is regression analysis and correlation to establish the relationship between the study variables. Profitability measured by Return on Assets (ROA) was the dependent variable while current ratio and Central Bank of Kenya liquidity ratios were the independent variables. He found out that there was a positive relationship between profitability and liquidity of commercial banks in Kenya; however, the coefficients from the study were not significant. Liquidity was found to be one of the determinants of profitability of commercial banks in Kenya over the years of study.

Lartey, Antwi&Boadi (2013) conducted a study on the relationship between liquidity and profitability of listed banks on the Ghana Stock Exchange for the period 2005-2010. Seven out of the nine listed banks were involved in the study. The study was descriptive in nature. It adopted the longitudinal time dimension, specifically, the panel method. Document analysis was the main research procedure adopted to collect secondary data for the study. The financial reports of the seven listed banks were studied and relevant liquidity and profitability ratios were computed. The trend in liquidity and profitability were determined by the use of time series analysis. The main liquidity ratio was regressed on the profitability ratio. It was found that both the liquidity and the profitability of the listed banks were declining. Again, it was also found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana.

Boadi&Lartey (2013) conducted a study to find out the determinants of the profitability of insurance firms in Ghana. Secondary data on financial reports were collected from sixteen insurance firms in Ghana for the period 2005 to 2010.The study was quantitative in nature. It adopted the longitudinal time dimension, specifically, the panel method and ordinary least square regression. The study discovered that, apart from tangibility which

has a negative relationship, there was a positive relationship between leverage, liquidity and profitability of insurance firms in Ghana. It was also concluded that, the profitability model adopted was explained in respect to all the independent variables and that the degree of error was less than 20%. Finally, it was suggested that the explanatory variables used in that study should be regressed on Return on Equity to find their extent of relationship on profitability.

2.5 Summary of Literature Review

Lyroudi&Lazoridis (2000), Mathuva (2009), Wambu (2013) and Lartey, Antwi&Boadi (2013) shows a positive relationship between liquidity and profitability while studies conducted by Deloof (2003), Eljelly (2004), Lazaridis&Tryfonidis (2006), Garcia-Teruel& Martinez-Solano (2007) showed that there exists a negative significant relationship between them.

Maina (2011) found the relationship between liquidity and profitability was weak and also that all the independent variables had a significant relationship with Return on assets except the quick ratio and cash conversion cycle. The results further showed that there was a strong negative relationship between a firms leverage and quick ratio with its Return on assets. Owolabi&Obida (2012) found causative relationships between profitability expressed in terms return on assets (ROA), return on equity (ROE) and return on investment (ROI) and liquidity management of companies was measured in terms of its Debtors Collection Period (DCP), Creditors Payment Period (CPP) and Cash Conversion Cycle (CCC).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter three focuses on the methodology to be used in testing the relationship between liquidity and profitability. It identified the research design, the population to be studied, data collection, source of the data to be collected and data analysis.

3.2 Research Design

The study used descriptive research design. According to Cooper & Schindler (2011), descriptive research design is a research design concerned with finding out who, what, where, or how of the research. It describes a population with respect to important variables. The design is used for various purposes one of which is to determine relationships between variables. The design fitted the study which aimed to determine relationships between variables, that is liquidity and profitability.

3.3 Population

The population of the study comprised of all the 49 insurance companies registered with IRA as at 31st December 2013 (Appendix 1). A census was carried out therefore the study covered all the 49 insurance firms for five years period (1st January 2009 to 31st December 2013). This was influenced by the availability of the audited financial reports.

3.4 Data Collection

The study employed secondary data and the variables were deduced from the audited financial statements of the 49 registered insurance firms for financial periods 2009 to 2013. The financial statements were purchased from IRA offices.

3.5 Data Analysis

Multiple linear regression was used to determine the relationship between liquidity (independent variable) and profitability (dependent variable). The collected data was analyzed using descriptive statistics which employs tools such as percentages, mean, and standard deviation to help the researcher describe data. Profitability was measured by ROA, while liquidity was measured by Quick ratio and Leverage ratio. Firm size as measured by log of net premium and loss ratio were the control variables

The quick ratio, leverage ratio, loss ratio and size of the firm were regressed with the values of ROA as follows;

$$Y_i = \beta o + \beta_1 QR + \beta_2 LV + \beta_3 lnNP + \beta_4 LOSS + \varepsilon_i$$

Where;

Y_i represents profitability indicated by ROA

βo represents the constant

$\beta_1, \beta_2, \beta_3, \beta_4$ represents the regression coefficients

QR represents quick ratio

LV represents leverage ratio

lnNP represents firm size as measured by log of net premiums

LOSS represents loss ratio

ε_i represents the error term

The variables are calculated as follows;

ROA = (Net income before Taxes/ Total assets)

QR (Quick Ratio) = Current assets/current liabilities

LV (Leverage ratio) = Total liabilities/ Total assets

NP= Log of net premiums (Total premium earned- Reinsurance ceded)

LOSS Ratio= Net claims incurred/ Net earned premiums

3.5.1 Test of Significance

The t-test was used to determine the significance of the constant term and the coefficients terms for each of the regressions. The importance of each of the regressions was determined by carrying out the F-test at 95% confidence level. The coefficient of determination R^2 was used to measure the strength to which independent variables explain the variations in the dependent variables. The analysis was done using Statistical Package for Social Sciences (SPSS) software version 21.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis of information collected on the relationship between liquidity and profitability of insurance companies in Kenya. The study included the 49 insurance companies in Kenya. A census of all the 49 insurance companies in Kenya was carried out.

4.2 Descriptive Statistics

Table 4.: Profitability and Liquidity of Insurance Companies in Kenya

	2009	**2010**	**2011**	**2012**	**2013**	**Mean**	**Std.Dev**
ROA	0.0169	0.0463	0.0298	0.0485	0.0524	0.0388	0.0299
QR	4.8410	5.0455	5.6215	5.6568	5.9935	5.4316	4.8593
LV	0.7676	0.7376	0.7551	0.7522	0.8147	0.7654	0.7312
Log NP	7.8057	7.8803	7.9555	8.0418	8.0617	7.9490	7.7686
Loss Ratio	0.636	0.594	0.589	0.589	0.603	0.6022	0.5976

Source: Author 2014

From Table 4.1 above, Return on Assets (ROA) for the insurance companies in Kenya increased steadily from 0.0169 in 2009 to 0.0524 in 2013 with a mean of 0.0388 in the five years. Quick Ratio (QR) showed a steady increase over the five years under investigation recording a low of 4.8410 in 2009, 5.0455 in 2010, 5.6215 in 2011, 5.6568 in 2012 and 5.9935 in 2013. The mean for QR was 5.4316 for the five years period. Leverage Ratio (LV) also had a steady increase from 0.7676 in 2009, to 0.7376 in 2010, to 0.7551 in 2011, to 0.7522 in 2012, to 0.8147in 2013 recording a mean score of 0.7654 over the five-year period. Similarly, Log of net premiums (Log NP) showed a steady growth from 7.8057 in 2009, to 7.8803 in 2010, to 7.9555 in 2011, to 8.0418 in 2012, to 8.0617 in 2013. Log of net premiums for the five years had a mean score of 7.9490. However, Loss Ratio indicated variations in results (was not steady) recording a high of 0.636 in 2009 and a low of 0.589 in 2011. Loss Ratio for the five years under investigation was 0.6022.

4.3 Regression Results

A multiple regression analysis was conducted to study the relationship between liquidity and profitability of insurance companies in Kenya. Regression analysis is useful in testing the nature of influence of independent variables on a dependent variable. Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (profitability indicated by ROA) that is explained by all the four independent variables (quick ratio, leverage ratio, log of net premiums, and loss ratio).

Table 4.: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.902	0.813604	0.754	0.157

Source: Author 2014

The four independent variables (liquidity factors) that were studied, explain only 81.4% of the profitability of insurance companies in Kenya as represented by the value of R^2. This therefore means the four liquidity factors (quick ratio, leverage ratio, Net premiums, and loss ratio) explains 81.4% of liquidity factors influencing profitability of insurance companies in Kenya, while other factors not studied in this research contributes 18.6% of profitability of insurance companies in Kenya. Therefore, further research should be conducted to investigate the other (18.6%) factors influencing profitability of insurance companies in Kenya.

Table 4.: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.652	4	.204	8.752	.009
	Residual	1.239	36	.008		
	Total	3.891	40			

Source: Author 2014

The significance value is 0.009which is less than 0.05 thus the model is statistically significance in predicting how quick ratio, leverage ratio, log of net premiums and loss ratio influences profitability of insurance companies in Kenya. The F critical at 5% level of significance was 2.46568. Since F calculated (value = 8.752) is greater than the F critical (2.46568) this shows that the overall model was significant.

Table 4.: Coefficients of Determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.732	0.864		2.089	0.035
	Quick Ratio	0.550	0.110	0.376	3.539	0.016
	Leverage Ratio	-0.633	0.958	-0.398	-3.461	0.025
	Log of Net Premiums	0.387	0.736	0.267	2.886	0.033
	Loss Ratio	-0.539	0.025	-0.323	-2.820	0.037
Dependent Variable: ROA						
Source: Author 2014						

The coefficient of regression in table 4.4 above was used in coming up with the model below:

ROA=0.732+ 0.550QR-0.633LV+ 0.387LogNP-0.539LR

Where ROA is Return on Asset (a measure of profitability), QR is Quick Ratio, LV is

leverage ratio, LogNP represents Log of Net Premiums while LR is Loss Ratio. The study established that all the variables were significant if their significance value was less than 0.05. The four variables (Quick Ratio, Leverage Ratio, Log of Net Premiums, Loss Ratio) were correlated with profitability of insurance companies in Kenya,With quick ratio and log of net premiums having a positive correlation and leverage ratio and loss ratio having a negative correlation.

From the regression model, taking all factors (Quick Ratio, Leverage Ratio, Log of Net Premiums, Loss Ratio) constant at zero, profitability of insurance companies in Kenya was 0.732. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in quick ratio will lead to a 0.550increase in profitability of insurance companies, a unit increase in leverage ratio will lead to a 0.633decrease in profitability of insurance companies, a unit increase in log of net premiums will lead to a 0.387 increase in profitability of insurance companies while a unit increase in loss ratio will lead to a 0.539 decrease in profitability of insurance companies. This infers that leverage influences the profitability of insurance companies in Kenya the most.

4.4 Findings and Interpretation of Findings

The study established a positive relationship between quick ratio and profitability of insurance companies in Kenya. These results are in line with Lartey, Antwi and Boadi (2013) findings that indicated that a higher quick ratio indicates greater liquidity and therefore influences company profitability positively. Ahmed et al. (2011) noted that there is a significant impact of liquid ratio on ROA; the results also revealed that ROA is significant affected by three ratios current ratio, quick ratio and liquid ratio. Also, the

results are in line with Cheng and Wong (2004) who found that whereas size and capital have positive association with insurer's profitability, loss ratio and leverage have strong inverse relationship with profitability.

The study indicated that leverage ratio has a negative influence on ROA. This result concurs with Fiegenbaum and Thomas (1990) who concluded that highly levered and low liquid insurance companies relatively have better profitability. Lyroudi and Lazoridis (2000) noted that profitability of institution is significantly influenced by liquidity. Further, the results reflect others by Deloof (2003) who indicated that there is a negative and significant impact of financial leverage on profitability.

This study used log of net premiums as measures of firm size and sought to establish its influence on profitability of insurance companies in Kenya. The study established a positive relationship between log of net premiums and ROA. Net premiums refer to the premium earned by a life insurance company after deducting the reinsurance ceded. The premium base of life insurers decides the quantum of policy liabilities to be borne by them. Further, the study confirms other study results by Mathuva (2009) who found a positive and significant impact of size on profitability.

Finally, the study indicated a negative but significant relationship between loss ratio and profitability of the insurance industry in Kenya. The study calculated loss ratio by dividing net claims incurred by net earned premiums.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study was conducted to establish the relationship between liquidity and profitability of insurance companies in Kenya. This chapter provides a summary of findings presented in Chapter Four. Further, it provides a conclusion and recommendations of the main findings based on the study's objectives. Therefore, this chapter is structured into discussions, conclusions, recommendations and areas for further research.

5.2 Summary of Findings and Discussion

This study sought to investigate the relationship between liquidity and profitability of insurance companies in Kenya. The study applied a descriptive research design. The study data gathered systematically over a period of time in order to answer a research question. A census of all the 41 insurance companies in Kenya was conducted. Data was obtained from secondary sources such as the financial statements of the insurance companies. A multiple regression model was employed. A computer package SPSS (Statistical Package for the Social Sciences) version 21 was used to solve the multiple regression equation used in this study. From the regression model, the study found out that quick ratio, leverage ratio, log of net premiums, and loss ratio influenced profitability of the company. While quick ratio and log of net premiums influenced profitability of the insurance companies positively, leverage ratio and loss ratio influenced profitability of

the insurance companies negatively. The study found out that the intercept was 0.732 for all the five years considered in the study. The four independent variables that were studied (quick ratio, leverage ratio, log of net premiums, and loss ratio) explain a substantial 81.4% of profitability of insurance companies in Kenya as represented by adjusted R^2 (0.814).

5.3 Conclusions

The study concluded that there is a relationship between quick ratio and profitability of insurance companies in Kenya. The QR ratio takes into account short-term investment and assets which are more liquid. Striving to maintain financial liquidity on a high level indicates keeping a large share of current assets, especially cash. This increases the financial liquidity levels and companies are able to settle their liabilities as and when they fall due. Companies with more liquid assets are less likely to fail because they can realize cash even in difficulty situations.

The study concludes that there is a negative but significant relationship between leverage ratio and ROA in insurance companies. This means that insurance companies are able to manage their economic exposure to unexpected losses.

Further, this study concludes that there is a positive relationship between log of net premiums and ROA in insurance companies. Therefore the study concludes that firm size influences profitability of insurance companies positively. This means that there is a direct relationship between net premiums and profitability of insurance companies in Kenya.

Further, the study sought to establish the relationship between loss ration and profitability of Insurance companies in Kenya. The study concludes that a significant but negative relationship exists between loss ration and profitability.

5.4 Limitations of the Study

The study was limited to Insurance companies in Kenya; therefore, the findings may not be representative of other organizations outside this definition. Also, since the study used combined data of the insurance companies, it may not necessarily reflect true position of each individual insurance company, rather that of the whole industry in Kenya..

The study was carried over a five year period covering year 2009 to year 2013. This period may not include some other economic factors which may influence the performance of Insurance companies which if taken in to account may give a different conclusion or even a wrong conclusion may be arrived at.

Another limitation is developing a model which would enable the researcher to study the relationship between dependent and independent variables. When developing this model, there was a great need to define the dependent variables and independent variables. If the model is incorrect, the process of analysis may not give the right results.

5.5 Recommendations and Suggestions

5.5.1 Policy Recommendations

Managers should balance between profitability and liquidity of their companies. This means they should maintain a trade off between profitability and liquidity. Profitability

plays an important role in the financial position of enterprises. All stakeholders should have an interest in both the liquidity position as well as profitability of a company.

Further, the study recommends that insurance companies should invest in liquid assets that improve liquidity of the company to ensure that it's able to meet its short run financial obligation as and when they fall due. The study recommends that the insurance companies should invest in liquid assets that are diversified, have residual maturities appropriate for the institution's specific cash flow needs, assets that are readily marketable or convertible into cash and have minimal credit risk.

Corporate managers of insurance companies should especially focus on exploring opportunities for growth and diversification and management of investment portfolios in view of changing equity market conditions. Financial strength, firm size and financial leverage also cannot be ignored in profitability management of insurance companies

5.5.2 Suggestions for Further Research

This study was carried out to determine the relationship between profitability of insurance companies in Kenya. It would be interesting to carry out a similar study in different industries apart from insurance industry. The study focused on insurance companies since there is a regulatory requirement that require a certain level of Liquidity be maintained.

This study recommends that a cross border study be carried out to determine the relationship between profitability of insurance companies with different economies.

Kenya is a developing country and somebody may want to carry a similar study in a developed world and compare the results.

The study further recommends that different independent variables may be used instead of the four used in this study(Quick Ratio, Leverage Ratio, Log of net premiums and Loss ratio). The dependent variable can also be changed and use Return on Equity as the dependent variable as opposed to ROA.

REFERENCES

Adams, M., & Buckle, M. (2003).The determinants of corporate financial performance in the Bermuda insurance market.*Applied Financial Economics*, *13*(2), 133-143.

Ahmed, N, Ahmad, Z. & Ahmed, I(2010). Determinants of Capital Structure: A Case of Life Insurance Sector of Pakistan. *European Journal of Economics, Finance and Administrative Sciences, (24): 1450-2275*

Alexander, S. S. (1949).The effect of size of Manufacturing Corporation on the distribution of the rate of return.*The Review of Economics and Statistics*, 229-235.

Barad, M. M. (2010).*A study of Liquidity management of Indian Steel Industry* (DoctoralDissertation, Saurashtra University).

Bardia, S. C. (2004).Liquidity Management (A Case Study on TISCO).*Icfai University Journal of Industrial Economics*, *1*(4), 38-46.

Bhunia, A. (2010). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry. *International Journal of research in commerce and management*, *1*(5), 213.

Boadi, E. K., Antwi, S., &Lartey, V. C. (2013). Determinants of Profitability of Insurance Firms in Ghana.*International Journal of Business and Social Research*, *3*(3), 43-50.

Brealey, R. A. (2012). *Principles of corporate finance*.Tata McGraw-Hill Education.

Chen, R. and Wong, K. A. (2004) the determinants of financial health of Asian Insurance Companies.*The Journal of Risk and Insurance, 71, (3), 469- 499*

Chung, R., Firth, M., & Kim, J. B. (2002).Institutional monitoring and opportunistic earnings management.*Journal of Corporate Finance*, *8*(1), 29-48.

Cooper, D.R. & Schindler, P.S. (2011).Business research methods. London. The McGraw−Hill

Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, *30*(3-4), 573-588.

Eljelly, A. M. (2004). Liquidity-profitability tradeoff: an empirical investigation in an emerging market. *International Journal of Commerce and Management*, *14*(2), 48-61.

Erasmus, P. D. (2010). Working capital management and profitability: The relationship between the net trade cycle and return on assets. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, *19*(1), 2-10.

Falope, O. I &Ajilore, O.T (2009). Working Capital Management and Corporate Profitability: Evidence from Panel Data Analysis of Selected Quoted Companies in Nigeria. *Research journal of Business Management*, *3*(3), 73-84.

Farlex Financial Dictionary (2012).Farlex, Inc.

Fiegenbaum, A., & Thomas, H. (1990). Strategic groups and performance: the US insurance industry, 1970–84. *Strategic Management Journal*, *11*(3), 197-215.

García-Teruel, P. J., & Martinez-Solano, P. (2007).Effects of working capital management on SME profitability.*International Journal of Managerial Finance*, *3*(2), 164-177.

Gill, A. Biger, N., &Mathur, N. (2010). The relationship between working capital management and profitability: evidence from The United States. *Business and Economics Journal*, *10*, 1-9.

Hall, M., & Weiss, L. (1967).Firm size and profitability.*The Review of Economics and Statistics*, 319-331.

IRA (2012),*Insurance Regulatory Authority, 2012. Retrieved from http://www.ira.go.ke*

IRA (2013),*Insurance Regulatory Authority, 2013. Retrieved from http://www.ira.go.ke*

Kamath, R. (1989). How useful are common liquidity measures. *Journal of Cash Management*, *9*(1), 24-28.

Keynes, J. M. (2006). *General theory of employment, interest and money*.Atlantic Publishers &Dist.

Lartey, V. C., Antwi, S., &Boadi, E. K. (2013).The Relationship between Liquidity and Profitability of Listed Banks in Ghana. *International Journal of Business and Social Science,* 4*(3).*

Lazaridis, I., &Tryfonidis, D. (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange.*Journal of financial management and analysis*, *19*(1).

Lyroudi, K., &Lazaridis, Y. (2000). The cash conversion cycle and liquidity analysis of the foodindustry in Greece.

Maina, H. K. (2011). *Relationship between the liquidity and profitability of oil companies inKenya* (Doctoral dissertation).

Malik, H. (2011). Determinants of insurance companies profitability: an analysis of insurance sector of Pakistan. *Academic Research International*, *1*(3), 315-321.

Mathuva, D. (2009). The influence of working capital management components on corporateprofitability: a survey on Kenyan listed firms. *Research Journal of Business Management*, *3*(1), 1-11.

Mehari, D &Aemiro, T (2013). Firm specific factors that determine insurance companies performance in Ethiopia.*European journal 9(10), 1857-7881*

Myers, S. C., &Majluf, N. S. (1984). Corporate financing and investment decisions when firmshave information that investors do not have. *Journal of financial economics*, *13*(2), 187-221.

Owolabi, S. A., &Obida, S. S. (2012). Liquidity management and corporate profitability: Casestudy of selected manufacturing companies listed on the Nigerian stock exchange. *Business Management Dynamics*, *2*(2), 10-25.

Panigrahi, A. K. (2012). Impact of Working Capital Management on Profitability–A Case Studyof ACC Ltd. *Asian Journal of Management*, *3*(4), 210-218.

Panigrahi, A. K. (2013). Liquidity Management of Indian Cement Companies–A ComparativeStudy.*IOSR Journal of Business and Management (IOSR-JBM) e-ISSN*, 49-61.

Raheman, A., & Nasr, M. (2007). Working capital management and profitability–case ofPakistani firms. *International review of business research papers*, *3*(1), 279-300.

Ross, S. A., Westerfield, R. W., & Jordan, B. D. Fundamentals of Corporate Finance. 2000.

Scherer, F. M. (1973).The determinants of industrial plant sizes in six nations.*The Review of Economics and Statistics*, 135-145.

Stekler, H. O. (1964). The variability of profitability with size of firm, 1947–1958.*Journal of the American Statistical Association*, *59*(308), 1183-1193.

Stolowy, H. &Lebas J. M., (2006).*Financial Accounting and Reporting, A Global Perspective.*London, Cengage Learning EMEA

Sur, D., Biswas, J., &Ganguly, P. (2001). Liquidity Management in Indian Private SectorEnterprises: A Case Study of Indian Primary Aluminium Producing Industry. *Indian Journal of Accounting*, *32*.

Velnampy, T., &Kajananthan, R. (2013). Cash Position and Profitability of Telecommunication Sector in Sri Lanka. *Greener Journal of Social Sciences*, *3*(6), 324-333.

Wambu, T. M. (2013).The relationship between profitability and liquidity of commercial banksin Kenya. Unpublished MBA Project, University of Nairobi.

APPENDICES

Appendix 1: List of Registered Insurance Companies in Kenya as 31st December 2013

1. AAR Insurance Kenya Limited
2. Africa Merchant Assurance Company Ltd
3. AIG Kenya Insurance Company Limited
4. APA Insurance Limited
5. APA Life Assurance Limited
6. British American Insurance Co
7. Cannon Assurance Company Ltd
8. CFC Life Assurance Limited
9. CIC General Insurance Limited
10. CIC Life Assurance Limited
11. Continental Reinsurance Limited
12. Corporate Insurance Company
13. Directline Assurance Company Ltd
14. East Africa Reinsurance Company Ltd
15. Fidelity Shield Insurance Company Ltd
16. First Assurance Company
17. GA Life Assurance Limited
18. GA Insurance Limited
19. Gateway Insurance Company Ltd
20. Geminia Insurance Company
21. ICEA Lion General Insurance Co
22. ICEA Lion Life Assurance Co Ltd
23. Intra Africa Insurance Company Ltd
24. Invesco Assurance Company Ltd

25. Kenindia Assurance Company Ltd
26. Kenya Orient Insurance Ltd
27. Kenya Reinsurance Corporation Ltd
28. Madison Insurance Company Ltd
29. Mayfair Insurance Company Ltd
30. Mercantile Insurance Company Ltd
31. Metropolitan Life Insurance Company Ltd
32. Occidental Insurance Company Ltd
33. Old Mutual Life Assurance Co Ltd
34. Pacis Insurance Company Ltd
35. Pan Africa Life Assurance Ltd
36. Phoenix of East Africa Insurance Co Ltd
37. Pioneer Assurance Co Ltd
38. Real Insurance Company Limited
39. Resolution Insurance Company Limited
40. Takaful Insurance of Africa Ltd
41. Tausi Insurance Company Ltd
42. The Heritage Insurance Company Ltd
43. The Jubilee Insurance Company Ltd
44. The Kenyan Alliance Insurance Co Ltd
45. The Monarch Insurance Company Ltd
46. Trident Insurance Company Ltd
47. UAP Insurance Company
48. UAP Life Assurance Limited
49. Xplico Insurance Company

Source: Insurance Regulatory Authority (IRA) website (www.ira.go.ke)

Appendix II: Raw Data

Total assets (000)					
	2009	2010	2011	2012	2013
1. AAR Insurance Kenya Limited	3,595,014	4,576,532	7,634,222	7,735,221	7,627,292
2. Africa Merchant Assurance Company Ltd	1,412,297	1,861,571	1,777,627	2,310,991	2,628,064
3. AIG Kenya Insurance Company Limited	1944617	2,462,986	2,596,037	4,186,820	4,220,996
4. APA Insurance Limited	5,555,183	7,069,553	7,643,218	9,288,824	9,536,639
5. APA Life Assurance Limited	1,064,253	1,592,363	1,620,366	2,038,926	2,269,774
6. British American Insurance Co	14,504,080	21,423,167	20,587,829	29,960,754	27,107,586
7. Cannon Assurance Company Ltd	2,949,450	3,458,812	3,931,206	4,374,562	4,879,944
8. CFC Life Assurance Limited	11,258,719	13,964,907	13,403,147	18,091,887	18,762,218
9. CIC General Insurance Limited	3,489,482	6,565,908	11,113,241	12,729,761	15,493,203
10. CIC Life Assurance Limited					
11. Continental Reinsurance Limited	892,211	625,421	677,222	987,373	1,453,772
12. Corporate Insurance Company	784,850	1,220,354	1,293,589	1,681,360	1,847,974
13. Directline Assurance Company Ltd	1,523,009	2,304,355	2,908,634	3,508,460	4,237,689
14. East Africa Reinsurance Company Ltd	2,617,121	376,109	3,802,953	4,697,998	4,516,216
15. Fidelity Shield Insurance Company Ltd	1,242,949	1,550,657	1,702,948	2,226,088	2,409,783
16. First Assurance Company	2,102,007	3,252,029	3,807,956	4,811,442	5,538,210
17. GA Life Assurance Limited	2,301,877	4,025,039	4,540,414	5,542,595	6,521,031
18. GA Insurance Limited					
19. Gateway Insurance Company Ltd	1,429,455	1,335,977	2,105,846	2,033,204	2,335,193
20. Geminia Insurance Company	1,479,461	1,833,984	2,039,012	2,947,764	3,187,186

21. ICEA Lion General Insurance Co	22,784,300	3,494,455	17,285,735	29,570,517	28,051,953
22. ICEA Lion Life Assurance Co Ltd	5,123,248	5,880,806	6,295,924	8,950,974	9,143,404
23. Intra Africa Insurance Company Ltd	835,568	906,419	1,166,617	1,281,819	1,365,210
24. Invesco Assurance Company Ltd		1,602,459	1,108,183	1,255,679	1,641,994
25. Kenindia Assurance Company Ltd	11,508,778	3,934,272	16,011,702	22,053,567	21,008,799
26. Kenya Orient Insurance Ltd	608,398	723,811	995,964	1,272,510	1,379,067
27. Kenya Reinsurance Corporation Ltd	15,000,633	16,072,736	17,815,755	23,787,957	24,426,830
28. Madison Insurance Company Ltd	3,505,183	1,205,559	3,570,999	5,945,158	5,298,503
29. Mayfair Insurance Company Ltd	779,304	1,029,697	9,304,732	2,172,568	5,300,590
30. Mercantile Insurance Company Ltd	998,940	666,127	1,380,421	1,640,269	1,677,979
31. Metropolitan Life Insurance Company Ltd	450,317	476,278	567,265	607,453	637,581
32. Occidental Insurance Company Ltd	1,024,588	1,212,743	1,550,739	1,938,521	2,103,387
33. Old Mutual Life Assurance Co Ltd	7,565,979	9,498,945	6,587,343	10,962,077	11,775,617
34. Pacis Insurance Company Ltd	429,087	737,090	826,161	998,457	1,179,649
35. Pan Africa Life Assurance Ltd	6,422,317	9,261,839	9,702,095	14,686,549	1,764,977
36. Phoenix of East Africa Insurance Co Ltd	2,001,901	2,077,250	1,767,169	1,961,912	1,809,650
37. Pioneer Assurance Co Ltd	823,340	1,886,595	1,021,167	997,508	1,171,622
38. Real Insurance Company Limited	-	1,696,766	2,074,047	2,712,322	3,058,745
39. Resolution Insurance Company Limited	2,396,676	3,947,027	4,769,024	4,233,544	4,298,373
40. Takaful Insurance of Africa Ltd	107,789	34218588	508,793	645,899	771,116

41. Tausi Insurance Company Ltd	-	1,453,342	1,334,998	1,821,756	2,083,409
42. The Heritage Insurance Company Ltd	5,063,098	4,021,461	5,976,986	4,833,748	5,366,566
43. The Jubilee Insurance Company Ltd	16,022,657	22,347,065	22,977,811	28,831,175	33,025,433
44. The Kenyan Alliance Insurance Co Ltd	2,744,052	2,626,908	3,165,291	3,518,620	3,668,796
45. The Monarch Insurance Company Ltd	1,282,375	989,048	999,872	1,129,670	1,231,311
46. Trident Insurance Company Ltd	2,182,039	2,196,863	2,715,008	3,043,789	4,316,362
47. UAP Insurance Company	6,464,008	7,179,275	7,539,194	6,668,546	8,676,633
48. UAP Life Assurance Limited	2,133,210	2,647,637	2,927,380	3,667,565	5,513,948
49. Xplico Insurance Company	-	0	465,365	871,714	816,488

% RETURN ON ASSETS I.E (NET PROFIT/TOTAL ASSETS) (000) X100					
	2009	**2010**	**2011**	**2012**	**2013**
1. AAR Insurance Kenya Limited	2.235	1.683	11.065	3.911	7.996
2. Africa Merchant Assurance Company Ltd	4.443	4.336	2.326	2.914	2.354
3. AIG Kenya Insurance Company Limited	5.88	10.395	11.138	8.197	9.951
4. APA Insurance Limited	2.841	2.677	3.466	1.508	2.048
5. APA Life Assurance Limited	0	4.139	0.249	2.636	1.908
6. British American Insurance Co	1.554	3.454	2.317	2.56	2.76
7. Cannon Assurance Company Ltd	7.827	8.301	2.774	8.752	8.004
8. CFC Life Assurance Limited	-4.535	1.42	-2.137	1.83	0.657
9. CIC General Insurance Limited	1.7016	1.6692	2.5878	4.584	3.8868
10. CIC Life Assurance Limited	1.1344	1.1128	1.7252	3.056	2.5912
11. Continental Reinsurance Limited	2.836	2.782	4.313	7.64	6.478
12. Corporate Insurance Company	6.373	6.197	1.828	10.134	7.438
13. Directline Assurance Company Ltd	3.055	2.395	6.076	6.794	6.72
14. East Africa Reinsurance Company Ltd	4.573	48.182	2.695	6.027	5.928
15. Fidelity Shield Insurance Company Ltd	9.406	11.151	3.584	6.192	6.65
16. First Assurance Company	5.247	6.029	6.273	6.856	6.63

17. GA Life Assurance Limited	3.279	2.8446	2.0178	2.6454	3.6516
18. GA Insurance Limited	2.186	1.8964	1.3452	1.7636	2.4344
19. Gateway Insurance Company Ltd	2.235	1.683	32.065	0.911	13.996
20. Geminia Insurance Company	24.085	3.586	4.939	11.62	9.202
21. ICEA Lion General Insurance Co	3.5232	8.9544	5.985	4.476	5.1264
22. ICEA Lion Life Assurance Co Ltd	2.3488	5.9696	3.99	2.984	3.4176
23. Intra Africa Insurance Company Ltd	4.943	10.519	15.587	7.143	13.01
24. Invesco Assurance Company Ltd	0	2.415	6.958	1.097	0
25. Kenindia Assurance Company Ltd	2.272	10.472	-0.964	0.775	0.323
26. Kenya Orient Insurance Ltd	5.842	0.328	3.13	4.119	3.453
27. Kenya Reinsurance Corporation Ltd	0.731	8.75	6.714	7.804	7.242
28. Madison Insurance Company Ltd	1.858	10.36	0.954	2.296	2.686
29. Mayfair Insurance Company Ltd	0.218	2.194	0.207	1.347	0.467
30. Mercantile Insurance Company Ltd	4.35	7.328	4.113	7.837	7.495
31. Metropolitan Life Insurance Company Ltd	-19.646	-10.346	-23.852	-16.947	11.535
32. Occidental Insurance Company Ltd	9.22	3.639	4.928	5.875	4.807
33. Old Mutual Life Assurance Co Ltd	-6.559	0	4.579	-0.216	1.854
34. Pacis Insurance Company Ltd	4.257	7.469	3.349	4.464	4.815
35. Pan Africa Life Assurance Ltd	-0.541	1.177	-0.172	-0.027	-0.254
36. Phoenix of East Africa Insurance Co Ltd	3.172	7.73	1.192	3.769	3.858
37. Pioneer Assurance Co Ltd	4.307	5.547	2.918	3.167	3.893
38. Real Insurance Company Limited	0	0	0	0	0
39. Resolution Insurance Company Limited	1.858	10.36	0.954	2.296	2.686
40. Takaful Insurance of Africa Ltd	0	0	0	0	0
41. Tausi Insurance Company Ltd	0	0	-8.001	-1.824	-4.224
42. The Heritage Insurance Company Ltd	0.853	4.903	10.732	11.29	14.314
43. The Jubilee Insurance Company Ltd	3.4	15.168	3.089	2.546	3.308
44. The Kenyan Alliance Insurance Co Ltd	11.358	11.018	4.515	2.502	4.388
45. The Monarch Insurance Company Ltd	-0.141	11.486	5.405	13.26	13.728
46. Trident Insurance Company Ltd	15.06	3.195	2.08	21.789	16.216
47. UAP Insurance Company	2.55	4.785	12.608	12.44	15.297
48. UAP Life Assurance Limited	-5.125	-1.812	-11.496	0	-6.538
49. Xplico Insurance Company	0	0	1.615	38.771	28.7

Net claim incurred (000)					
	2009	2010	2011	2012	2013
1. Africa Merchant Assurance Company Ltd	475,421	553,374	643,946	753,880	812,558
2. AIG Kenya Insurance Company Limited	480,970	559,833	651,462	762,679	822,041
. APA Insurance Limited	1,998,067	2,325,680	2,706,332	3,168,353	3,414,959
6. British American Insurance Co	729,931	849,614	988,673	1,157,458	1,247,548
7. Cannon Assurance Company Ltd	214,757	249,969	290,883	340,542	367,048
9. CIC General Insurance Limited	1,981,425	2,306,309	2,683,791	3,141,964	3,386,516
12. Corporate Insurance Company	72,457	84,338	98,141	114,896	123,839
13. Directline Assurance Company Ltd	705,876	821,615	956,091	1,119,314	1,206,435
15. Fidelity Shield Insurance Company Ltd	314,037	365,529	425,356	497,972	536,731
16. First Assurance Company	875,439	1,018,980	1,185,760	1,388,191	1,496,240
18. GA Insurance Limited	579,444	674,452	784,842	918,829	990,345
19. Gateway Insurance Company Ltd	200,417	233,278	271,460	317,803	342,539
20. Geminia Insurance Company	232,041	270,087	314,293	367,949	396,588
21. ICEA Lion General Insurance Co	665,659	774,804	901,619	1,055,542	1,137,699
23. Intra Africa Insurance Company Ltd	219,109	255,035	296,778	347,443	374,486
24. Invesco Assurance Company Ltd	321,795	374,559	435,864	510,274	549,991
25. Kenindia Assurance Company Ltd	1,075,960	1,252,380	1,457,361	1,706,160	1,838,957
26. Kenya Orient Insurance Ltd	285,709	332,556	386,986	453,052	488,315
28. Madison Insurance Company Ltd	335,807	390,867	454,842	532,492	573,938
29. Mayfair Insurance Company Ltd	328,490	382,351	444,932	520,890	561,433
30. Mercantile Insurance Company Ltd	47,163	54,896	63,881	74,787	80,608
32. Occidental Insurance Company Ltd	446,712	519,957	605,060	708,355	763,489
34. Pacis Insurance Company Ltd	151,433	176,262	205,112	240,128	258,818
36. Phoenix of East Africa Insurance Co Ltd	53,924	62,765	73,038	85,507	92,162
38. Real Insurance Company Limited	457,666	532,708	619,898	725,726	782,212
40. Takaful Insurance of Africa Ltd	91,930	107,004	124,518	145,775	157,121
41. Tausi Insurance Company Ltd	152,670	177,703	206,788	242,091	260,934
42. The Heritage Insurance Company Ltd	529,518	616,341	717,219	839,662	905,016
43. The Jubilee Insurance Company Ltd	2,478,346	2,884,708	3,356,858	3,929,936	4,235,819
44. The Kenyan Alliance Insurance Co Ltd	185,601	216,034	251,393	294,310	317,217
45. The Monarch Insurance Company Ltd	67,510	78,580	91,441	107,052	115,384
46. Trident Insurance Company Ltd	172,652	200,961	233,853	273,776	295,085
47. UAP Insurance Company	1,565,165	1,821,797	2,119,976	2,481,896	2,675,072
49. Xplico Insurance Company	88,962	103,549	120,497	141,068	152,048

Net Premium Earned (000)					
	2009	2010	2011	2012	2013
1. Africa Merchant Assurance Company Ltd	1,280,312	1,024,324	1,206,080	1,323,375	1,437,409
2. AIG Kenya Insurance Company Limited	1,672,837	1,338,366	1,575,847	1,729,102	1,878,097
3. APA Insurance Limited	4,405,080	3,524,318	4,149,676	4,553,243	4,945,591
5. British American Insurance Co	2,186,036	1,748,955	2,059,290	2,259,562	2,454,266
6. Cannon Assurance Company Ltd	758,116	606,537	714,161	783,615	851,138
9. CIC Insurance Limited	4,814,871	3,852,174	4,535,707	4,976,817	5,405,664
12. Corporate Insurance Company	239,645	191,730	225,750	247,705	269,049
13. Directline Assurance Company Ltd	1,921,475	1,537,291	1,810,069	1,986,103	2,157,243
15. Fidelity Shield Insurance Company Ltd	774,836	619,913	729,911	800,897	869,909
16. First Assurance Company	1,913,417	1,530,844	1,802,478	1,977,774	2,148,197
17. GA Life Assurance Limited	1,305,726	1,044,656	1,230,020	1,349,643	1,465,940
19. Gateway Insurance Company Ltd	444,467	355,599	418,697	459,416	499,003
20. Geminia Insurance Company	657,169	525,773	619,067	679,273	737,805
21. ICEA Lion General Insurance Co	2,242,532	1,794,155	2,112,512	2,317,959	2,517,695
23. Intra Africa Insurance Company Ltd	560,206	448,197	527,725	579,048	628,944
24. Invesco Assurance Company Ltd	1,416,402	1,133,203	1,334,280	1,464,042	1,590,197
25. Kenindia Assurance Company Ltd	2,099,479	1,679,704	1,977,752	2,170,094	2,357,089
27. Kenya Reinsurance Corporation Ltd	1,077,812	862,312	1,015,321	1,114,064	1,210,062
28. Madison Insurance Company Ltd	681,223	545,018	641,726	704,136	764,811
29. Mayfair Insurance Company Ltd	646,326	517,098	608,852	668,065	725,631
30. Mercantile Insurance Company Ltd	203,056	162,457	191,283	209,886	227,972
32. Occidental Insurance Company Ltd	1,008,054	806,501	949,607	1,041,959	1,131,743
34. Pacis Insurance Company Ltd	511,591	409,302	481,929	528,798	574,364
36. Phoenix of East Africa Insurance Co Ltd	211,494	169,208	199,232	218,608	237,445
38. Real Insurance Company Limited	1,221,067	976,924	1,150,270	1,262,137	1,370,894

40. Takaful Insurance of Africa Ltd	264,918	211,949	249,558	273,828	297,423
41. Tausi Insurance Company Ltd	427,112	341,714	402,349	441,478	479,520
42. The Heritage Insurance Company Ltd	2,033,776	1,627,138	1,915,859	2,102,181	2,283,324
43. The Jubilee Insurance Company Ltd	5,428,895	4,343,428	5,114,130	5,611,493	6,095,029
44. The Kenyan Alliance Insurance Co Ltd	711,934	569,589	670,657	735,880	799,290
45. The Monarch Insurance Company Ltd	251,948	201,573	237,340	260,422	282,862
46. Trident Insurance Company Ltd	421,186	336,973	396,765	435,352	472,866
47. UAP Insurance Company	4,234,976	3,388,224	3,989,434	4,377,417	4,754,614
49. Xplico Insurance Company	439,610	351,713	414,122	454,396	493,551

Total Liability (000)					
	2009	2010	2011	2012	2013
1. Africa Merchant Assurance Company Ltd	950,495	1,144,204	1,287,295	1,624,940	1,793,340
2. AIG Kenya Insurance Company Limited	1,823,527	2,195,159	2,469,678	3,117,452	3,440,528
3. APA Insurance Limited	3,957,010	4,763,444	5,359,144	6,764,797	7,465,864
5. APA Life Assurance Limited	1,011,566	1,217,721	1,370,005	1,729,345	1,908,565
6. British American Insurance Co	15,651,382	18,841,114	21,197,319	26,757,178	29,530,146
7. Cannon Assurance Company Ltd	1,395,747	1,680,198	1,890,318	2,386,131	2,633,417
8. CFC Life Assurance Limited	9,409,439	11,327,071	12,743,596	16,086,122	17,753,200
9. CIC General Insurance Limited	3,635,907	4,376,900	4,924,260	6,215,848	6,860,025
10. CIC Life Assurance Limited	1,443,453	1,737,627	1,954,928	2,467,688	2,723,426
12. Corporate Insurance Company	496,223	597,353	672,056	848,330	936,246
13. Directline Assurance Company Ltd	1,669,352	2,009,564	2,260,873	2,853,879	3,149,639
14. East Africa Reinsurance Company Ltd	1,767,582	2,127,814	2,393,911	3,021,811	3,334,975
15. Fidelity Shield Insurance Company Ltd	774,392	932,212	1,048,792	1,323,880	1,461,080
16. First Assurance Company	2,038,279	2,453,677	2,760,526	3,484,586	3,845,710
18. GA Insurance Limited	2,421,842	2,915,411	3,280,002	4,140,316	4,569,396
19. Gateway Insurance Company Ltd	790,389	951,469	1,070,456	1,351,227	1,491,261
20. Geminia Insurance Company	1,073,008	1,291,686	1,453,220	1,834,386	2,024,492

21. ICEA Lion General Insurance Co	3,752,951	4,517,798	5,082,778	6,415,943	7,080,856
22. ICEA Lion Life Assurance Co Ltd	15,172,675	18,264,847	20,548,985	25,938,793	28,626,948
23. Intra Africa Insurance Company Ltd	379,884	457,304	514,492	649,439	716,743
24. Invesco Assurance Company Ltd	499,763	601,615	676,850	854,382	942,926
25. Kenindia Assurance Company Ltd	11,254,657	13,548,342	15,242,651	19,240,656	21,234,653
26. Kenya Orient Insurance Ltd	488,329	587,850	661,364	834,834	921,352
27. Kenya Reinsurance Corporation Ltd	5,366,722	6,460,453	7,268,375	9,174,802	10,125,629
28. Madison Insurance Company Ltd	2,542,939	3,061,187	3,444,009	4,347,340	4,797,875
29. Mayfair Insurance Company Ltd	1,013,844	1,220,465	1,373,092	1,733,241	1,912,865
30. Mercantile Insurance Company Ltd	625,199	752,614	846,733	1,068,823	1,179,590
31. Metropolitan Life Insurance Company Ltd	223,177	268,661	302,258	381,538	421,079
32. Occidental Insurance Company Ltd	807,119	971,609	1,093,115	1,379,829	1,522,827
33. Old Mutual Life Assurance Co Ltd	5,269,927	6,343,932	7,137,282	9,009,325	9,943,002
34. Pacis Insurance Company Ltd	323,586	389,533	438,246	553,194	610,524
35. Pan Africa Life Assurance Ltd	7,969,625	9,593,824	10,793,595	13,624,654	15,036,639
36. Phoenix of East Africa Insurance Co Ltd	336,282	404,816	455,441	574,899	634,478
37. Pioneer Assurance Co Ltd	390,560	470,156	528,952	667,691	736,887
38. Real Insurance Company Limited	1,185,433	1,427,023	1,605,481	2,026,584	2,236,608
40. Takaful Insurance of Africa Ltd	207,514	249,805	281,045	354,760	391,525
41. Tausi Insurance Company Ltd	693,984	835,418	939,892	1,186,417	1,309,371
42. The Heritage Insurance Company Ltd	1,736,319	2,090,179	2,351,569	2,968,364	3,275,989
43. The Jubilee Insurance Company Ltd	17,465,893	21,025,420	23,654,787	29,859,217	32,953,664
44. The Kenyan Alliance Insurance Co Ltd	1,311,166	1,578,379	1,775,766	2,241,533	2,473,833
45. The Monarch Insurance Company Ltd	300,316	361,520	406,730	513,412	566,619
46. Trident Insurance Company Ltd	1,277,922	1,538,361	1,730,743	2,184,701	2,411,112
47. UAP Insurance Company	3,397,921	4,090,413	4,601,946	5,808,994	6,411,007

48. UAP Life Assurance Limited	2,455,602	2,956,050	3,325,724	4,198,030	4,633,091
49. Xplico Insurance Company	175,951	211,810	238,298	300,801	331,974

Current Liabilities (000)					
	2009	2010	2011	2012	2013
1. Africa Merchant Assurance Company Ltd	104,116	107,052	110,313	117,261	120,359
3. AIG Kenya Insurance Company Limited	602,912	619,909	638,792	679,029	696,969
4. APA Insurance Limited	49,059	50,442	51,979	55,253	56,713
5. APA Life Assurance Limited	325,601	334,780	344,978	366,708	376,396
6. British American Insurance Co	841,780	865,511	891,876	948,054	973,102
7. Cannon Assurance Company Ltd	218,508	224,669	231,512	246,095	252,597
8. CFC Life Assurance Limited	510,318	524,705	540,688	574,745	589,930
9. CIC General Insurance Limited	307,196	315,856	325,477	345,979	355,120
10. CIC Life Assurance Limited	270,453	278,078	286,549	304,598	312,646
11. Continental Reinsurance Limited	7,473	7,684	7,918	8,417	8,639
12. Corporate Insurance Company	59,388	61,063	62,923	66,886	68,653
13. Directline Assurance Company Ltd	53,220	54,720	56,387	59,939	61,523
14. East Africa Reinsurance Company Ltd	645,477	663,674	683,890	726,968	746,175
15. Fidelity Shield Insurance Company Ltd	159,099	163,584	168,567	179,185	183,919
16. First Assurance Company	298,696	307,117	316,472	336,406	345,294
17. GA Life Assurance Limited	21,810	22,424	23,107	24,563	25,212
18. GA Insurance Limited	801,843	824,449	849,562	903,075	926,934
19. Gateway Insurance Company Ltd	43,703	44,935	46,303	49,220	50,520
20. Geminia Insurance Company	214,341	220,383	227,096	241,401	247,779
21. ICEA Lion General Insurance Co	763,287	784,805	808,711	859,651	882,363
22. ICEA Lion Life Assurance Co Ltd	15,886	16,334	16,832	17,892	18,365
23. Intra Africa Insurance Company Ltd	30,287	31,141	32,090	34,111	35,012
24. Invesco Assurance Company Ltd	42,674	43,877	45,214	48,062	49,332
25. Kenindia Assurance Company Ltd	314,422	323,286	333,133	354,117	363,473
26. Kenya Orient Insurance Ltd	176,698	181,680	187,214	199,006	204,264

27. Kenya Reinsurance Corporation Ltd	606,350	623,444	642,435	682,901	700,943
28. Madison Insurance Company Ltd	165,523	170,189	175,373	186,420	191,345
29. Mayfair Insurance Company Ltd	98,007	100,770	103,839	110,380	113,296
30. Mercantile Insurance Company Ltd	91,857	94,447	97,324	103,454	106,187
31. Metropolitan Life Insurance Company Ltd	31,441	32,327	33,312	35,410	36,346
32. Occidental Insurance Company Ltd	84,676	87,063	89,715	95,366	97,886
33. Old Mutual Life Assurance Co Ltd	475,533	488,940	503,833	535,569	549,719
34. Pacis Insurance Company Ltd	50,508	51,932	53,514	56,885	58,388
35. Pan Africa Life Assurance Ltd	383,544	394,357	406,369	431,966	443,379
36. Phoenix of East Africa Insurance Co Ltd	70,480	72,467	74,674	79,378	81,475
37. Pioneer Assurance Co Ltd	44,454	45,707	47,099	50,066	51,389
38. Real Insurance Company Limited	108,634	111,697	115,099	122,349	125,581
39. Resolution Insurance Company Limited	12,375	12,724	13,111	13,937	14,305
40. Takaful Insurance of Africa Ltd	22,181	22,806	23,501	24,981	25,641
41. Tausi Insurance Company Ltd	54,865	56,412	58,130	61,792	63,425
42. The Heritage Insurance Company Ltd	287,937	296,055	305,073	324,289	332,857
43. The Jubilee Insurance Company Ltd	881,911	906,774	934,395	993,252	1,019,494
44. The Kenyan Alliance Insurance Co Ltd	123,201	126,674	130,533	138,755	142,421
45. The Monarch Insurance Company Ltd	102,987	105,890	109,116	115,989	119,053
46. Trident Insurance Company Ltd	74,688	76,793	79,133	84,117	86,339
47. UAP Insurance Company	191,411	196,808	202,803	215,577	221,273
48. UAP Life Assurance Limited	1,463,599	1,504,861	1,550,700	1,648,377	1,691,927
49. Xplico Insurance Company	52,562	54,044	55,690	59,198	60,762

Current Assets, Current Liabilities, Total Assets, Total Liability, Total premium earned, Reinsurance ceded, Net claims incurred and Net earned premiums (000) for the insurance industry in Kenya for the five years covered by the study					
	2009 (yr 1)	2010 (yr 2)	2011 (yr 3)	2012 (yr 4)	2013 (yr 5)
Current Assets	59,819,537	64,104,455	73,598,845	78,725,220	85,614,874
Current Liabilities	12,356,972	12,705,340	13,092,353	13,917,029	14,284,720
Total Assets	178,403,820	223,490,785	245,597,207	311,215,873	317,136,762
Total Liability	136,934,853	164,842,005	185,456,578	234,100,112	258,360,974
Total premium earned	65,012,837	76,908,988	91,806,433	111,911,370	117,308,168
Reinsurance ceded	1,090,695	997,221	1,547,974	1,818,191	2,046,831
Net claims incurred	18,582,064	21,628,871	25,168,942	29,465,751	31,759,190
Net earned premiums	31,023,721	38,776,859	45,657,457	50,097,768	54,414,636