

**THE RELATIONSHIP BETWEEN FINANCIAL RISK AND FINANCIAL
PERFORMANCE OF INSURANCE COMPANIES IN KENYA**

BY

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

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This research project has been submitted for examination with my approval as the University Supervisor

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DEDICATION

This research project is dedicated to God for granting me life and good health all through my course work and while undertaking this project

I also dedicate it to my parents, Washington and Alice Oluoch, and all my siblings for being a constant source of inspiration. They have given me the drive and discipline to tackle the research project with great enthusiasm and determination. Without their love and support, completing this project would not have been possible

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LIST OF ABBREVIATIONS

AKI	Association of Kenya Insurers
ANOVA	Analysis of Variance
EBIT	Earnings Before Interest and Tax
ERM	Enterprise Risk Management
IRA	Insurance Regulatory Authority
NIS	New Institutional Sociology
NSE	Nairobi Securities exchange
OIE	Old Institutional Economics
PM	Profit Margin
ROA	Return On Asset
ROE	Return On Equity
SPSS	Statistical Package for Social Science

ABSTRACT

Risk management is a process of identifying loss exposures faced by an organization and selecting the most appropriate techniques for treating such exposures (Rejda, 2003). Insurance companies apply various techniques to manage risks. Some of their risks are re-insured by some companies abroad. The financial risk management has gained an important role for financial institutions. Risk management is one of the most important practices to be used especially in insurance companies in order to get higher returns, (Gabriel, 2008). This study endeavored to ascertain the relationship between financial risk and financial performance of insurance companies in Kenya. The objective of the study was to establish the relationship between financial risk and financial performance of insurance companies in Kenya. Secondary Data was collected from Insurance Companies financial reports and multiple regression and correlation analysis were used in the data analysis. From the finding on the adjusted R squared, the study revealed that 91.7% changes in financial performance of insurance companies in Kenya could be accounted for by changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company. The study revealed that a unit increase in financial risk lead to decrease in financial performance of insurance companies in Kenya. The study established that solvency risk was negatively affecting the financial performance of insurance companies in Kenya. The study also found that liquidity risk negatively affected the financial performance of insurance companies in Kenya. The study concludes that capital management risk negatively affect the financial performance of insurance companies in Kenya. Size of the insurance companies was found to positively influence the financial performance of insurance companies in Kenya. From the finding the study recommends that there is need for insurance companies in Kenya to manage the financial risk. The study also recommends that there is need for the management of insurance companies in Kenya to management their liquidity risk and solvency risk. The study also recommends that there is need for insurance companies in Kenya to increase their size through increase in their assets base. There is need for the management of insurance companies to enhance their capital adequacy.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Risk management is a process of identifying loss exposures faced by an organization and selecting the most appropriate techniques for treating such exposures (Rejda, 2003). There are many techniques available for insurance companies to manage risks. These include: loss financing, risk avoidance and loss prevention and control. Management of insurance companies is argued to carefully judge the insurable risks so as not to incur excessive losses in settling claims (Meredith, 2004). Managing risks is an important factor which insurance companies must attend to if they are to achieve financial performance (Okoth, 2003).

Insurance companies apply various techniques to manage risks. Some of their risks are re-insured by some companies abroad. The companies also guide clients on how to minimize and prevent losses (Uganda Insurance Commission 2000). However, these techniques have not been rightly applied, (Rejda, 2003). The companies have been characterized by low risk transfers, low levels of loss prevention and control and are not avoiding highly insurable risks (Rasik, 2002). Kadi (2003) also stated that most insurance companies are accepting to cover all the insurable risks without first carrying out proper analysis of the expected claims from the clients and they have not put in place a mechanism of identifying various methods of reducing risks. They have accumulated claims from clients and this has led to increased losses (Magezi, 2003). He further stated that loss ratios have consistently increased and therefore hindering financial performance. Sentiba & Kuruvilla, (2000) also argued that

Performance of the Insurance sector In Uganda in terms of the premium Size depicted overall growth but other financial measures indicated poor performance.

1.1.1 Financial Risk

Risk is inherent in every business, but organizations that embed the right risk management strategies into business planning and performance management are more likely to achieve their strategic and operational objectives. Risk taking is core to the Insurance company's business, and the risks mentioned earlier are an inevitable consequence of being in business. The insurance's aim is therefore to achieve an appropriate balance between risk and return and minimize potential adverse effects on its performance. This requires more dynamic and sound Risk Management methods to perform well in an ever dynamic and highly competitive insurance industry, which will translate into having a competitive advantage and thus generate growth in profits.

Management of financial risks have been developed, which match the characteristics of the different risks and can be used to assess these. Financial Risk Instruments are derived from an underlying asset, as for example commodities, metals and oil or financial assets, they are called derivatives, (Chisholm, 2010) Futures, forwards, options and swaps are the first generation of derivatives (Berk, 2009). Other derivatives are mainly based upon the four main categories.

The financial risk derivatives have in common that the contract's performance is moved to a future date while the specifications are agreed upon today (Berk, 2009). By using them, the

risk can be fully or partly moved to a third party that has the capacity for that risk or faces the opposite risk exposure so the two risks neutralize (Triantis, 2000). When the company has decided to hedge a risk position fully or partly, it needs to be evaluated which instrument suits best the purpose of the company. The group of linear instruments includes forwards, futures and swaps. They are used when the development of the cash flow is a linear function of the development of the risk factor, as for example when securing import and export transactions and interest rate exposures (Bartram, 2004). All three instruments are binding for both parties of the contract. This means that by the day the contract is made, both parties exactly know when they will receive what (Chisholm, 2010).

In case of forwards and futures this includes a single transaction, while swaps are agreements between two parties to exchange streams of future payments. Therefore the first two are used to secure against volatile prices of the underlying assets and the latter to change the leg of a payment stream (Chisholm, 2010). Options, however, are nonlinear and mainly used for securing financial portfolios. Here the development of the cash flow is nonlinear and for example depends on price and quantity changes due to volatility of the risk factor (Bartram, 2004).

Another important difference in financial risk derivatives is, that only the person selling the option is obliged to fulfil the business stated. The buyer buys the right to decide at expiration date whether he wants to exercise the option and sell (buy) a financial position etc. (Chisholm, 2010). The advantage of using options is that losses at the date of maturity are limited but possible gains are not limited (Glaum, 2000). However hedging in most cases

also eliminates possible chances. Further the security achieved through hedging has its' price due to fees for the instrument and the management's time involved in the process (Brünger, 2008). However, the administrative costs will decrease over time and with increasing routine. Furthermore the price for the hedge is lower the less specialized the instrument and the less volatility involved (Eckbo, 2008).

Firm financing can become a risk for the company due to different reasons. The choice between fixed rate and floating rate debt, the duration of the debt and the overall amount of debt financing are possible sources of risks, which already have been assessed in the paragraph about interest rate risk. The firm wants to be flexible and at the same time lower the costs for financing (Börner, 2006). The duration of loans is important in connection with the assets, which are financed with the loan. Here, often a mismatch between the durations can be observed. Long-term assets are then financed with short-term and adjustable rate loans, leading to a shortfall in cash flows in times of rising interest rates.

This fact again can lead to a worse ranking of the company and worse conditions to get future difficulties regarding follow-up financing over the rest of the lifetime of the asset can occur. Vice versa long-term financing of short-term assets might lead to access financing when the asset is no longer existent. This causes unnecessary interest payments for the company (Vickery, 2006). Finally, a high amount of debt financing can become a risk to the company. In case the return decreases and is lower than the demanded interest rate, the company is not able to pay the interest without making a loss in that year. This consumes part

of the equity and might lead to an even more dramatic situation in the next period (Hermann, 1996).

1.1.2 Financial Performance

Financial institutions such as insurance companies, banks, securities and credit unions have very different ways of reporting financial information (Flemings, 2004) Insurance companies financial performance can be measured using underwriting and profitability ratios (Flemings, 2004). Financial performance is studied and measured by different researchers (Shah et al., 2011) using different measures. Matolcsy & Wright (2011) measured firm performance by ROA (Return on Assets= $EBIT / \text{Average total Assets} - \text{in book value} -$), ROE (Return on Equity = $\text{net profit} / \text{equity} - \text{in book value} -$), Change in market value of equity, Change in market value of equity, adjusted for dividends and risk). Yasser et al. (2011) used return on equity (ROE) and profit margin (PM) for the measurement of firm performance.

Market based measures of companies' performance were done by Shah et al. (2011) by Market value of equity divided by book value of equity and Tobin's Q (market value of equity plus book value of debt/total of assets minus in book value), whereas financial reporting perspective was measured by ROE and Return on investment (net result plus interest) / (equity plus total debt). Bhagat & Black (1999) measured dependent variable firm performance by Tobin's Q, Return on assets (Operating income/Assets), Turnover ratio (Sales/Assets), Operating margin (Operating income/Sales), Sales per employee and also by Growth of Assets, Sales, Operating income, Employees and Cash flows. The study was focus on those measures that are strategically important for the success of the company. In that

direction, the study would measure the financial performance of the companies by looking at profitability (Return on Assets, Return on Equity and Dividend Yield).

ROA refers to the amount of net income returned as a percentage of total assets. It can be decomposed as follows: Return on Assets= EBIT / Average total Assets – in book value.

ROE refers to the amount of net income returned as a percentage of shareholders equity.

Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. Each insurance firm's ROE has been obtained for its annual reports. ROE is expressed as a percentage and calculated as: $\text{Net Income} / \text{Shareholder's Equity} * 100$ Net income is for the full fiscal year, before any dividends are paid to common stockholders but after dividends are paid to preferred stock. Shareholder's equity does not include preferred shares.

1.1.3 Relationship between Financial Risk Management and Financial Performance

Insurers like other business owners are well advised to use sound risk management techniques when planning for the future so as not to deplete the assets of the company (Gold, 1999). He further argued that insurance companies could not survive with increased loss and expense ratios. Preventing losses by taking precautionary measures is a key driver of profitability and a key element in reducing risks (Jolly, 1997). He further stated that insurance companies have a direct financial interest in reducing losses though preventing accidents and ensuring that if one occurs, its effects on human life and environment are minimized. Johnson (2001), asserts that when insurance companies accept a large risk that

would financially affect them, they also insure against a possibility of such large losses so as to spread the risk of loss and improve on their financial status.

1.1.4 Insurance Industry in Kenya

The insurance industry in Kenya has seen a number of changes being introduced and adopted. It is however, worrying to note that eight insurance firms have either collapsed or have been placed under statutory management; representing an average of one insurance company after every four years. These include: - Kenya National Assurance Company, United Insurance Company, Lake Star Assurance Company, Standard Assurance, Access Insurance Company, Stallion Insurance, Invesco Assurance and Blue Shield Insurance Company. In response to this trend, the government of Kenya responded by establishing the Insurance Regulatory Authority (IRA) which is the prudential regulator of the insurance industry in Kenya. IRA became autonomous on 1st May, 2007 through an Act of Parliament. IRA is also responsible for supervising and developing the insurance industry in collaboration with other stakeholders such as agents and brokers.

Kenya's insurance industry leads within the East Africa Community and is a key player in the COMESA region. The industry employs over 10,000 people. According to Ndung'u (2012), the Kenyan insurance market wrote Shs 100 billion of Gross Direct Premiums in the year 2011. It has grown at an average rate of 16% p.a. over the last 5 years. Kenya currently has 45 licensed insurance companies. It is believed that the industry can grow tremendously if the government brings in assets into the industry instead of only playing the role of regulation.

AKI forecast further growth of the industry driven by the projected growth of the economy by 5.7 percent, 6.3 percent and 6.5 percent in the next three years respectively. The common market protocol of the East African Community (EAC) creates a big market full of opportunities. According to Ndung'u (2012), the future trend of the insurance and reinsurance market in Africa was to be spread across countries with free movement and with the opportunity to exploit full cross-border growth. The industry should therefore prepare for this eventuality in a timely manner.

1.2 Research Problem

The financial risk management has gained an important role for financial institutions. Risk management is one of the most important practices to be used especially in insurance companies in order to get higher returns, (Gabriel, 2008). In today's dynamic environment, nothing is constant but risk. Managing financial risk involves setting appropriate risk environment, identifying and measuring the insurances risk exposure, mitigating risk exposure, monitoring risk and constructing controls for protecting the insurance companies from financial risk (Tcankova, 2002).

During the last ten years financial institutions and investors experienced increased volatility in the major and financial commodity markets, with many financial crises. The technological revolution resulted in changes in the operation of markets, increased access to information, changes in the types of services available to investors, and major changes in the production and distribution of financial services (Crouhy et al., 2001). Insurance supervisors, along with

banking and other sector regulators, play an important role in ensuring a stable financial environment. Therefore, financial institutions and modern businesses concerned with their ability to manage risks see the need for sound programs of risk management as an essential part of corporate responsibility. They also consider the insurance industry as a mirror for the financial stability of a country.

Most people hold one or more types of insurance policies, and the annual revenues of insurance companies are large. Insurance companies are also a major employer. They are considered financial intermediaries for two reasons. First, they receive investment funds from their customers. Second, they place their money in a variety of money-earning investments (Mishkin and Eakins, 2006). Three main functions create the value of an insurance company: underwriting, investment, and finance. Insurance companies are in a business of assuming risk on behalf of their customers in exchange for a fee (premium). They make a profit by charging premiums that are sufficient to pay the expected claims to the company, plus ensuring a profit.

Local studies done on risk management includes; Odipo (2000) who did a an empirical study on accounting determined measures of systematic risk at NSE, Sang (2001) who did a study on a computer security risk analysis of firms quoted in the Nairobi Stock Exchange, Kibara (2007) who did a survey of internal auditors risk management practices in the banking industry in Kenya and Weru (2010) who did a study on an assessment of information systems risk management practices: a case of practical action . This study endeavored to ascertain the relationship between financial risk and financial performance of insurance

companies in Kenya. The study sought to answer the following research question: does there exist a relationship between financial risk and financial performance of insurance companies in Kenya?

1.3 Objective of the Study

To establish the relationship between financial risk and financial performance of insurance companies in Kenya

1.4 Value of the study

The study will provide useful information to policy makers and regulators to design targeted policies and programs that will actively stimulate the growth and sustainability of the insurance companies in the country. Regulatory bodies such as the Insurance Regulatory Authority can use the study findings to improve on the framework for financial risk management within the insurance sector.

The study findings will benefit management and staff of insurance companies who will gain insight into the importance of financial risk management adherence and its effect on financial risk mitigation in the operation of insurance companies in Kenya and how it influence their performance.

The study is expected to add value to Researchers and Scholars as it will contribute to the literature on the relationship between financial risk management and financial performance of insurance companies in Kenya. It is hoped that the findings will be of benefit to the

academicians, who may find useful research gaps that will stimulate interest in further research in future. Recommendations will be made on possible areas of future studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature relating to the relationship between financial risk management and performance of insurance companies. The literature review has been organized in the following sections. First section covers the theoretical framework on financial risk management, financial risk management, empirical studies on the relationship between financial risk management and performance of Insurance Companies in Kenya, then summary of the chapter.

2.2 Theoretical review

This study is guided by the following theories, the stakeholders' theory, contingency theory and institutional theory, these theories tries to explain relationship between financial risk management and financial performance of insurance companies in Kenya.

2.2.1 Stakeholder Theory

The concept of stakeholder has been acknowledged in the literature after the publishing of the book titled *Strategic Management: A Stakeholder Approach* by Freeman (1984) although the first emergence of the term dates back to a study conducted by Stanford Research Institutes in 1963. Edward Freeman is considered to be the founder of the stakeholder theory and he describes the term stakeholder as any group or individual who can affect or is affected by the achievements of the organization's objectives.

Stakeholder theory highlights the necessity to serve all the stakeholders regardless of the amount of their legal interests in an organization and deals with the relationships with the stakeholders both in terms of the process and the outcome (Gilbert and Rasche, 2008). This theory also suggests that the relationships with stakeholders can be managed effectively and claims that successful business management is based on the relationships and collaboration practices with stakeholders (Sarikaya, 2009).

Stakeholder theory aims at increasing the efficiency of organizations by bringing new definitions to organizational responsibilities. In this respect, the theory suggests that the needs of shareholders cannot be met before the needs of stakeholders are met. Similarly, it claims that developing strategies by considering a broader stakeholder network and interaction will produce more successful results than focusing merely on direct profit maximization attempts (Jamali, 2008). Carroll and Buchholtz (2000) point out that the concept stakeholder has a basic role in understanding enterprise-society relationship. Moreover, this theory involves certain elements such as interests, demands and rights by giving a new dimension to the share concept. Stakeholders might have legal rights on the enterprise as well as the rights in terms of ethic (Carroll and Buchholtz, 2000). To deal with the concept of sharing in such a wide perspective enables enterprises to understand the expectations of society and to meet these expectations more effectively.

Stakeholder theory is an organizational management and ethic theory, which highlights values and morality as the basic characteristics of organizational management (Phillips *et al.*, 2003). In other words, it is possible to consider stakeholders theory as a strategic management method based on ethical principles. The attempts made by enterprises to meet

the demands of their stakeholders are not only to avoid the possible pressures from the stakeholders but also to create a better society. The fact that enterprise-stakeholder relationships as well the relationships among stakeholders are getting more and more complex leads to the acknowledgement of stakeholder theory as a management model to a great extent (Russo and Perini, 2010).

2.2.2 Contingency Theory

How best to organize the IT function is a long-standing question for researchers and practitioners alike (von Simson, 1990). For ERM projects, and for post-implementation support, this issue is critically important, especially with regard to the use of subject matter experts (Worrell *et al.*, 2006). However, until recently (Zhu *et al.*, 2010), research has primarily focused on implementation efforts rather than post-implementation.

Subject matter experts are invaluable contributors to the success of ERM installations, whose knowledge of business practices and system processes are critical to configuring enterprise systems (Volkoff *et al.*, 2004). As a result, project managers often plan carefully and petition strongly to secure the best and the brightest employees from each of the functional business units that will be impacted by an implementation project (Gallagher and Gallagher, 2006).

2.2.3 Institutional Theory

Burns and Scapens (2000) have observed that the social sciences have taken an increasing interest in institutional theory, and that the accounting literature reflects this interest in at least two ways: new institutional sociology (NIS); and old institutional economics (OIE). According to Burns (2000), analytical studies of changes in management-accounting routines

are founded on OIE – which is a heterogeneous body of theory. Authors who can be considered within the paradigm of OIE include Karl Marx and Vilfredo Pareto. Others include various empiricists who were influenced by Darwinist biology and who were affiliated with the German school in the last quarter of the nineteenth century (Santos, 2003). Given the difficulty of defining an “institutionalist author” with any precision, Santos (2003) decided to restrict the term to those authors about whom there is a relative consensus.

Fonseca and Machado da Silva (2002) have observed that, according to the institutional approach, individual behavior is modeled by standards that are originally created and shared in interactions, but which later become incorporated in the form of objective standards and rules about the most efficient way of functioning. From the perspective of OIE, the institution becomes the main object of analysis. According to this view, rational and optimizing behavior no longer proceeds from individual decision-makers (as posited by neoclassical theory). Scapens (1994) emphasized the institutional approach and rejected the postulates of neoclassical theory as being appropriate to understanding management-accounting practices.

It is therefore important to conceptualize the institution; however, no simple and widely accepted definition of an “institution” exists. Burns and Scapens (2000, p. 8) defined an institution on the basis of Barley and Tolbert's (1997) work “presuppositions that are shared and taken for granted, which identify categories of human agents and their appropriate activities and relations”. Scapens (1994) noted that, in the context of the OIE, the first definition of institution was established by Veblen in 1919 “a habit of thought common to the generality of men”. According to Burns (2000), the idea of an institution that has been most frequently applied in OIE came from Hamilton (1932), who considered an institution to be a

way of thinking or acting by something that prevails and continues, which is inserted into the habits of a group or the customs of a people. This definition emphasizes the social and cultural character of an institution, and the importance of habitual behavior. Rowsell and Berry (1993) utilised certain concepts of Selznick (1957), who defined an institution as a natural product of social needs and pressures. The institution is a social system that gives meaning to the integrated aspirations of a group of people. Selznick (1957) contrasted an institution with an administrative organisation – describing the latter as a rational instrument defined to carry out a job.

The notions of “habits” and “institutions” are connected through the concept of “routine”. A “habit” is a predisposition or tendency to become involved in previously adopted or acquired forms of action. However, the existence of habits does not exclude the possibility of intentional individual behaviour; indeed, habits can be modified. In contrast to such habits, which are located in the personal sphere, “routines” involve a group of people (Oliver, 1997). Routines are formalized and institutionalized behaviours that are guided by rules. Such routines are reinforced by the process of repeating actions to comply with rules. Routines represent forms of thinking and acting that a group of individuals takes for granted.

Rules and routines provide an “organisational memory” and constitute the basis for the evolution of organisational behaviour. According to Scapens (1994), they are the organisational equivalents of genes in the biological process and, in this sense, evolution is not the creation of optimal behavior, but merely the reproduction and possible adaptation of behaviours over time. Oliver (1997) has emphasized that, from the institutional perspective, companies operate within a social structure of standards, values, and presuppositions about

appropriate or acceptable behaviour. The institutional viewpoint thus suggests that motives for human behaviour go beyond economic optimization to involve justification and social obligation.

In the present study, the concept of institutionalization is clearly important. Oliver (1997) has noted that institutional activities tend to be long-lasting, socially accepted, resistant to change, and not directly dependent on rewards or monitoring of their permanence. In the context of management accounting, Scapens (1994) has observed that, over time, management accounting can constitute a structure that reflects a particular organisation's way of thinking and acting – which is taken for granted and detached from its specific historical circumstances. It thus becomes an unquestioned way of doing things.

2.3 Determinant of Financial Performance

Profitability in insurance companies could be affected by a number of determining factors. These factors, as explained above could be further classified as internal, industry, and macroeconomic factors. However, as will be discussed in the coming consecutive sections of the review, in most literatures, profitability with regard to insurance companies usually expressed in as a function of internal determinants, (Hifza, 2011). Wright (1992) conducted their study on determinants of life and health insurance companies. Hence, most of the researchers focused on internal factors affecting profitability and most of the factors considered are age of company, size of company, leverage ratio, growth rate, volume of capital, tangibility of assets and liquidity ratio.

2.3.1 Firm Age

Newly established insurance companies are not particularly profitable in their first years of operation, as they place greater emphasis on increasing their market share, rather than on improving profitability Athanasoglou *et al.*, (2005). Similarly, Yuqi (2007) indicate that older banks expected to be more profitable due to their longer tradition and the fact that they could build up a good reputation. Obviously, the above empirical studies those include age as one of their explanatory determinant indicates a positive relationship between age and profitability.

Ahamed (2008) found no significant statistical relation between age and profitability of insurance companies in UAE but there exist a positive and statistical significant relation between firm size and profitability. Similarly, Hafiz Malik (2011) in his Pakistan study found that there is significantly positive association between age & size of the company and profitability. The older the firm the more may be the profitability of the firm. This could be justified as experience and efficiency in the operation process may decrease cost of production and he found even that age is the strongest determinant of profitability.

2.3.2 Firm Size

Several studies have been conducted to examine the effect of size on firm profitability. However, the empirical evidences of the linkage between profitability and firm size are somewhat inconsistent. For example, evidence collected by Philip Hardwick and Mike Adams (1999) from UK companies suggests that there is an inverse relation between profitability and firm size. Jay (2007) found that there is a positive and significant

relationship between the age of a company and its profitability as measured by ROA. Similarly, the research conducted on the relationship among firm characteristics including size, age, location, industry group, profitability and growth by Swiss Re (2008) indicated that larger firms are found to grow faster than smaller and younger firms found to grow faster than older firms.

In most literatures the effect of size on banks profitability are represented by total asset. Flamini (2009) indicated that size is used to capture the fact that larger firms are better placed than smaller firms in harnessing economies of scale in transactions and enjoy a higher level of profits. One of the most important questions underlying insurance company policy is which size optimizes insurance profitability. Giving an example of banks, according to Athanasoglou *et al.*, (2005) the effect of a growing size of a bank on profitability has been proved to be positive to a certain extent. Consequently, a positive relationship is expected between size and profitability by many insurance area researchers. However, for firms that become extremely large, the effect of size could be negative due to bureaucratic and other reasons Yuqi (2007). Hence, the size-profitability relationship may be expected to be non-linear. Therefore most studies use the real assets in logarithm and their square in order to capture the possible non-linear relationship. Athanasoglou *et al.* (2005) and Yuqi (2003) found positive relationship between size and profitability.

2.3.3 Liquidity

Liquidity from the context of insurance companies is the probability of an insurer to pay liabilities which include operating expenses and payments for losses/benefits under insurance

policies, when due then shows us that more current assets are held and idle if the ratio becomes more which could be invested in profitable investments. For an insurer, cash flow (mainly premium and investment income) and liquidation of assets are the main sources of liquidity Renbao and Kie (2004). Empirical evidences with regard to liquidity revealed almost inconsistent results. For instance, Naveed (2011) in his investigation in Pakistan found that ROA has statistically insignificant relationship with liquidity. Similarly, several other studies also have been conducted to measure the performance of the insurance companies. In contrast, Chen and Wong (2004) examined that, liquidity is the important determinants of financial health of insurance companies with a negative relationship. Similarly, Hakim and Neaime (2005) observed that liquidity, current capital and investment are the important determinants of banks profitability, which also applies to insurance. Flamini, McDonald, and Schumacher (2009) in their investigation regarding Sub-Saharan countries found significant and negative relationship between bank profitability and liquidity.

2.3.4 Leverage

The trade of theory suggests a positive relationship between profitability and leverage ratio and justified by taxes, agency costs and bankruptcy costs push more profitable firms towards higher leverage. Hence more profitable firms should prefer debt financing to get benefit from tax shield. In contrast to this pecking order theory of capital structure is designed to minimize the inefficiencies in the firms' investment decisions. Due to asymmetric information cost, firms prefer internal finance to external finance and, when outside financing is necessary, firms prefer debt to equity because of the lower information costs. The pecking order theory states that there is no optimal capital structure since debt ratio occurs as a result of

cumulative external financing requirements. Insurance leverage could be defined as reserves to surplus or debt to equity. The risk of an insurer may increase when it increases its leverage. Literatures in capital structure confirm that a firm's value will increase up to optimum point as leverage increases and then declines if leverage is further increased beyond that optimum level.

For instance Renbao and Rie (2004) stated that leverage beyond the optimum level could result in higher risk and low value of the firm. Empirical evidences with regard to leverage found to be statistically significant relationship but negative. For instance Renbao and Kie (2004), in Canada, Hamadan (2008) in UAE, Hifza (2011) in Pakistan, Sylwester (2011) in UK Swiss Re (2008) in Egypt and Flamini (2009) in Sub-Saharan countries found that negative but statistically significant relationship between leverage and profitability of firms. Harrington (2005) stated that the relationship between leverage and profitability has been studied extensively to support the theories of capital structure and argued also that insurance companies with lower leverage will generally report higher ROA, but lower ROE. Since an analysis for ROE pays no attention to the risk associated with high leverage.

2.3.5 Volume of Capital

In most of the studies concerning insurance companies" volume of capital measures as the difference between total assets and total liabilities and in some cases it is measured by the ratio of equity capital to total asset. Insurance companies" equity capital can be seen in two ways. Narrowly, as stated by Uhomoibhi T. Aburime (2008), it can be seen as the amount contributed by the owners of an insurance (paid-up share capital) that gives them the right to

enjoy all the future earnings. More comprehensively, it can be seen as the amount of owners' funds available to support a business. The later definition includes reserves, and is also termed as total shareholders' funds. No matter the definition adopted, volume of capital is widely used as one of the determinants of insurance companies' profitability since it indicates the financial strength of the firm. As it has been expected positive relationship between profitability and capital has been demonstrated by Athanasoglou *et al.* (2005).

Studies conducted in different countries found that for non-life insurance companies, size of capital is one of the important factors that affect ROA, Malik (2011) examined the relationship between volume capital and return on asset for Pakistan insurance industry and found positive and statistically significant relationship between insurance capital and profitability. Similarly Al-Shami (2008), found in his investigation that there exists a positive and significant relationship between volume of capital and profitability of the UAE insurance companies.

2.3.6 Tangibility of Assets

Tangibility of assets in insurance companies in most studies is measured by the ratio of fixed assets to total assets. A recent study by Ahmed, (2011) investigates the impact of firm level characteristics on performance of the life insurance sector of Pakistan over the period of seven years. For this purpose, size, profitability, age, risk, growth and tangibility are selected as explanatory variables while ROA is taken as dependent variable. The results of OLS regression analysis revealed that leverage, size and risk are most important determinant of performance of life insurance sector whereas ROA has statistically more of insignificant

relationship with, tangibility of assets. However, Malik (2011) found that there exists a positive and significant relationship between tangibility of assets and profitability of insurance companies and argued that the highest the level of fixed assets formation, the older and larger the insurance company is. In contrast to this, Li (2007) in UK found no significant relationship between tangibility of assets and profitability of insurance companies.

2.4 Empirical Review

The issue of risk and management accounting was also examined in manufacturing and not-for-profit organizations (Collier and Berry, 2002). They conducted an exploratory case study to understand the relationship between risk and budgeting. The budgeting process is a formal method by which plans are established for future time periods, thereby implying a consideration of risk. However, there was a separation between budgeting and risk management. Despite managerial perceptions of risk, in which each organization faced some sort of risk, there was no explicit regard to risk in the budgeting process or the content of the budget document. Budgeting did not appear to be a tool used in managing risk (Collier and Berry, 2002).

Soin (2005) investigated the contribution of management accounting and control information on the practice of risk management in the UK financial services sector. Consistent with Williamson (2004), she argued that management accounting has a potential role in supporting risk management. Soin (2005) examined whether current MASs support the changing patterns of demand for information about risk by corporate stakeholders. However, the study suggested that risk management systems in the financial services sector were not

utilizing management accounting techniques and that there was no clear role for management accountants in risk management. The lack of emphasis on management accounting control systems in the financial services sector was cited as the reason for the findings. There was some emphasis on budgeting, cost control, and performance measurement, but not in relation to risks.

Ali (2006), did a study on credit risk management: a survey of practices. The study sought to investigate the current practices of credit risk management by the largest US-based financial institutions. Owing to the increasing variety in the types of counterparties and the ever-expanding variety in the forms of obligations, credit risk management has jumped to the forefront of risk management activities carried out by firms in the financial services industry. This study is designed to shed light on the current practices of these firms. A short questionnaire, containing seven questions, was mailed to each of the top 100 banking firms headquartered in the USA. It was found that identifying counterparty default risk is the single most-important purpose served by the credit risk models utilized. Close to half of the responding institutions utilize models that are also capable of dealing with counterparty migration risk. Surprisingly, only a minority of insurance companies currently utilize either a proprietary or a vendor-marketed model for the management of their credit risk. Interestingly, those that utilize their own in-house model also utilize a vendor-marketed model. Not surprisingly, such models are more widely used for the management of non-traded credit loan portfolios than they are for the management of traded bonds.

Mikes (2006), on the other hand, examined both risk management and management accounting control as multiple control systems in an organization. She conducted a case

study to explore the changing context and internal dynamics of a multiple control system acting as the divisional control in a financial services organization. Based on a political and institutional perspective, the study showed how two control systems, namely, firm-wide risk management system and accounting controls, complemented each other (as the contingency theory suggests), as well as competed with each other for relevance and attention from top management. Accounting control has been found to possess institutional appropriateness compared to risk control (ERM) and was extensively used in decision making (Mikes, 2006).

Collier *et al.* (2007) investigated the roles of management accountants in managing risk. Similar to Williamson (2004) and Soin (2005), they viewed that management accountants – who have skills in analysis of information, systems, performance, and strategic management – should play a significant role in developing and implementing risk management. The survey results show that there was little integration between management accounting and risk management and that the involvement of management accountants in risk management was only marginal. However, results from post-survey interviews indicated that management accountants did actually play an important role in risk management, especially in analyzing the impact of risks to support risk managers. The finance director was identified as having a pivotal role in risk management (Collier *et al.*, 2007), and, in most organizations, management accounting functions are normally under the responsibility of the finance director.

Woods (2009) conducted a case study on the risk management control system in a public sector organization. Contingent variables that affected the risk management system at the operational level were central government policies, information and communication

technology, and organizational size. The most important contingent variable was central government policies as many of the strategic objectives were driven by government policy and resources were also determined by the central government (Woods, 2009). This is similar to financial institutions where government regulation drives the risk management system.

Sania (2012) did a study on the risk management practices in Islamic banks of Pakistan. The purpose of this paper is to evaluate the degree to which Islamic banks in Pakistan use risk management practices (RMPs) and techniques in dealing with different types of risk. A standardized questionnaire is used which covers six aspects: understanding risk and risk management (URM), risk assessment and analysis (RAA), risk identification (RI), risk monitoring (RM), credit risk analysis (CRA) and RMPs. This study found that the Islamic banks are somewhat reasonably efficient in managing risk where URM, RM and CRM are the most influencing variables in RMPs.

Hameeda (2012) conducted a study on risk management practices of conventional and Islamic banks in Bahrain. The purpose of this paper is to report empirical evidence regarding the risk management practices of banks operating in Bahrain. A sample of bankers was surveyed through a questionnaire and the results used to examine if the risk management practices are significantly associated with the type of bank (conventional or Islamic) and if those practices are positively affected by understanding risk, risk management, risk identification, risk assessment analysis, risk monitoring and credit risk analysis. Several statistical and econometric methods were used to test the hypotheses. Banks in Bahrain are found to have a clear understanding of risk and risk management, and have efficient risk

identification, risk assessment analysis, risk monitoring, credit risk analysis and risk management practices. In addition, credit, liquidity and operational risk are found to be the most important risks facing both conventional and Islamic banks. Furthermore, the risk management practices are determined by the extent to which managers understand risk and risk management, efficient risk identification, risk assessment analysis, risk monitoring and credit risk analysis. Islamic banks are found to be significantly different from their conventional counterparts in understanding risk and risk management. The levels of risks faced by Islamic banks are found to be significantly higher than those faced by conventional banks. Similarly, country, liquidity, and operational, residual, and settlement risks are found to be higher in Islamic banks than in conventional banks.

Bezzina, (2014), conducted a study on risk management practices adopted by financial firms in Malta. The purpose of this paper is to bring to light the risk management practices adopted by financial firms in the small island state of Malta. It seeks to: first, identify the risk management strategies and mechanisms that these firms adopt to manage risks, maximise opportunities, and maintain financial stability; second, determine whether these practices are perceived as contributing to principled performance; third, examine the extent to which risk management capabilities offer competitive advantage to firms, and fourth, investigate whether corporate social responsibility (CSR) is a key driver of risk management corporate strategies. A self-administered questionnaire purposely designed for the present study was distributed among the 156 credit institutions, investment firms and financial institutions registered with the Malta Financial Services Authority. Overall, 141 firms participated in the study (a response rate of 90.4 per cent) and the responses were subjected to statistical

analysis in an attempt to answer four research questions. Maltese financial firms have sound risk management practices that link positively with added value and principled performance. Although competitive advantage has been given less weight by these firms, the implemented risk management mechanisms allow for a strong risk culture, defined risk management goals, accountability and continual improvement. CSR forms part of the firms' risk management corporate strategies and is valued as part of these firms' corporate culture, while financial/economic factors are viewed as key in driving effective risk management principles.

2.5 Summary of Literature Review

This chapter has reviewed the existing literature on the relationship between financial risk management and financial performance, most of the literature review in this study has been conducted in the developed countries, Collier *et al.* (2004) found that there was very little integration between risk management and management accounting. The study found that the systems and controls that were in place in the UK financial services sector were very closely matched to the requirements set out by the regulator (Soin, 2005). This study sought to bridge the existing research gap between the developed countries and developing countries like Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the research design, population of the study, sample size, data sources and data analysis procedure together with the model specification.

3.2 Research Design

Dooley (2007) notes that a research design is the structure of the research, it is the “glue” that holds all the elements in a research project together. The causal study design was employed in this research. Causal research suggests causal linkages between variables by observing existing phenomena and then searching back through available data in order to try to identify plausible causal relationships. It was concerned with determining cause and effect relationship and to understand which variable is dependent and which is independent. This research design was the best in explaining if two variables are related or if they vary. This was established by use of enough information and data for testing cause and effect relationship. It aimed to explore the relationship between financial risk and financial performance of insurance companies in Kenya.

3.3 Target Population

The population for this study was 49 insurance companies in Kenya. The study period was 5 years period starting from year 2009 to year 2013. The study period was selected since it is recent and it showed the existing relationship between financial risk management and

financial performance of insurance companies in Kenya. Mugenda and Mugenda, (2003), explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The study period was 5 years period from where secondary data was selected.

3.4 Data Collection

Secondary data from Insurance Companies annual report will be collected on the study variable, this include, Financial Performance of the company which was measured using return on Assets (ROA), Exchange Rate Risk , Financial risk, Solvency Risk and Liquidity risk . The study was collect secondary data for the last 5 years starting year 2009 to 2013.

3.5 Data Analysis Techniques

Data analysis was done using SPSS Version 20 whereby inferential statistics was applied whereby a multiple regression model was employed. Multiple regression analysis is a statistical method utilized to determine the relationship between one dependent variable and one or more independent variables (Hair et al., 2010). This study employed a multiple linear regression analysis using Return on Assets (ROA) as proxy for the firm's financial performance as dependent variables and independent variables comprising of exchange rate risk, financial risk, solvency risk and liquidity risk.

3.5.1 Analytical model

The following Multiple Regression Equation Model was applied in this study,

$$FP = \beta_0 + \beta_1 CMR + \beta_2 FR + \beta_3 SR + \beta_4 LR + \beta_5 SIZE + \epsilon$$

Where:

β_0 : The intercept of equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: Coefficients for independent variables.

FP: is the financial performance of insurance companies, it was measured using Return on Assets, return on assets for insurance j in year t , which was used to measure financial performance.

CMR: is the capital management risk, capital management risk was measured using the ratio of capital and reserve to total assets for insurance company j in year t .

FR: Financial Risk, was measured by the ratio of debt over the total assets of the company

SR: Solvency Risk, solvency risk was measured by ratio of change in interest rate over interest rate in the previous year

LR: Liquidity Risk, this was measured by liquidity ration which is ratio of currents assets over current liabilities

Size: is the size of the insurance companies which was measured using measured using the natural logarithm of total assets held by insurance companies.

ε_{it} = Error term

3.5.2 Test of Significance

Analysis of Variance (ANOVA) was used to test the regression model level of significance at 95% confidence level and 5 % level of significance. F-test and T-test was used to test for any significant difference between financial performance of insurance companies and financial risk. Adjusted R squared was used to determine the variation in the dependent variable due to changes in the independent variables.

3.5.3 Correlation Analysis

Correlation analysis is the statistical tool that can be used to determine the level of association of two variables (Levin & Rubin, 1998). This analysis can be seen as the initial step in statistical modeling to determine the relationship between the dependent and independent variables. Prior to carrying out a multiple regression analysis, a correlation matrix will be developed to analyze the relationships between the independent variables as this would assist in developing a prediction multiple models. Correlation analysis helped to detect any chance of multicollinearity. Correlation value of 0 shows that there is no relationship between the dependent and the independent variables. On the other hand, a correlation of ± 1.0 means there is a perfect positive or negative relationship (Hair et al., 2010). The values was interpreted between 0 (no relationship) and 1.0 (perfect relationship). The relationship was considered small when $r = \pm 0.1$ to ± 0.29 , while the relationship was be considered medium when $r = \pm 0.3$ to ± 0.49 , and when $r = \pm 0.5$ and above, the relationship was be considered strong.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data findings to establish the relationship between financial risk and financial performance of insurance companies in Kenya. These data were collected from the company's financial reports. Multiple linear regressions and correlation analysis were used to establish the relationship between financial risk and financial performance of insurance companies in Kenya. The study covered a period of 5 years from years 2009 to 2013.

4.2 Analysis and Interpretation

4.2.1 Regression Analysis

Table 4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.961 ^a	.924	.917	.20158

Source: Research Findings

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.917 an indication that there was variation of 91.7% on financial performance of insurance companies in Kenya due to changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company at 95% confidence interval . This shows that 91.7% changes in financial performance of insurance companies in Kenya could be accounted for by changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the

table above there was a strong positive relationship between the study variables as shown by 0.961.

Table 4.2: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.999	5	6.000	147.645	.000 ^b
	Residual	2.479	45	.041		
	Total	32.478	50			

Source: Research Findings

From the ANOVA statics, the study established the regression model had a significance level of 0.000 which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($147.645 > 1.684$) an indication that capital management risk, financial risk, solvency risk, liquidity risk and size of the company significantly influence the financial performance of insurance companies in Kenya. The significance value was less than 0.05 indicating that the model was significant.

Table 4.3: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	1.014	.121		.119	.906
	Capital Management Risk	-.724	.053	-.801	-13.621	.000
	Financial Risk	-.064	.046	-.054	-1.389	.001
	Solvency Risk	-.011	.026	-.018	-.423	.004
	Liquidity Risk	-.025	.034	-.028	-.728	.050
	Size	.175	.063	.173	2.767	.007

Source: Research Findings

The established regression equation was

$$Y = 1.014 - 0.724 X_1 - 0.064 X_2 - 0.011 X_3 - 0.025 X_4 + 0.175X_5$$

From the above regression equation it was revealed that holding capital management risk, financial risk, solvency risk, liquidity risk and size of the company to a constant zero, financial performance of insurance companies in Kenya would stand at 1.014, a unit increase in capital management risk would lead to decrease in financial performance of insurance companies in Kenya by a factor of 0.724, a unit increase in financial risk would lead to decrease in financial performance of insurance companies in Kenya by factors of 0.064, a unit increase in solvency risk would lead to decrease in financial performance of insurance companies in Kenya by a factor of 0.011, a unit increase in liquidity risk would lead to decrease in financial performance of insurance companies in Kenya by a factor of 0.025, also unit increase in size of the insurance company would lead to increase in financial performance of insurance companies in Kenya by a factor of 0.175.

At 5% level of significance and 95% level of confidence, liquidity risk had a 0.050 level of significance; company size showed a 0.007 level of significance, solvency risk had a 0.004 level of significance, financial risk showed 0.001 level of significance while capital management risk showed 0.00 level of significance hence the most significant factor is capital management risk. Overall capital management risk had the greatest effect on financial performance of insurance companies, followed by financial risk, solvency risk, size while liquidity risk had the least effect to the financial performance of insurance companies in Kenya. All the variables were significant ($p < 0.05$).

4.2.2 Correlations Analysis

Table 4.4: Correlations

		ROA	CMR	FR	SR	LR	Size
ROA	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	51					
CMR	Pearson Correlation	-.953**	1				
	Sig. (2-tailed)	.000					
	N	51	51				
FR	Pearson Correlation	-.127	.080	1			
	Sig. (2-tailed)	.304	.522				
	N	51	51	51			
SR	Pearson Correlation	-.488**	.475**	.095	1**		
	Sig. (2-tailed)	.000	.000	.444			
	N	51	51	51	51		
LR	Pearson Correlation	-.829**	.797**	.119	.545**	1**	
	Sig. (2-tailed)	.000	.000	.339	.000		
	N	51	51	51	51	51	
Size	Pearson Correlation	.640**	.624**	.127	.429**	.598**	1
	Sig. (2-tailed)	.000	.000	.307	.000	.000	
	N	51	51	51	51	51	51

Source: Research Findings

The study conducted a Pearson moment correlation, to determine the strength of the relationship between the study variable. From the findings on the correlation analysis between financial performance of insurance companies and various independent variable, the study found that there was positive significant correlation between financial performance of insurance companies and size of insurance companies as shown by correlation factor of 0.640, the study also found a negative correlation between financial performance of

insurance companies and capital management risk as shown by correlation coefficient of 0.953, association between financial performance of insurance companies and financial risk was found to have negative relationship as shown by correlation coefficient of 0.127, the study found that there was a negative correlation between financial performance of insurance companies and solvency risk as shown by correlation coefficient of 0.488 and relationship between financial performance of insurance companies and liquidity risk was found to have a negative correlation as shown by correlation coefficient of 0.829.

4.3 Interpretation of the Findings

From the finding on the adjusted R squared, the study revealed that there was a variation of 91.7% on financial performance of insurance companies in Kenya due to changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company, this clearly shown that 91.7% changes in financial performance of insurance companies in Kenya could be accounted for by changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company. From the finding on the correlation analysis the study found that there was strong positive relationship between the financial performance of insurance companies in Kenya and capital management risk, financial risk, solvency risk, liquidity risk and size of the company

From the finding of the ANOVA statistics, the study established capital management risk, financial risk, solvency risk, liquidity risk and size of the company significantly influence the financial performance of insurance companies in Kenya. The established regression equation was $Y = 1.014 - 0.724 X_1 - 0.064 X_2 - 0.011 X_3 - 0.025 X_4 + 0.175X_5$ From the above regression equation it was revealed that holding capital management risk, financial risk,

solvency risk, liquidity risk and size of the company to a constant zero, financial performance of insurance companies in Kenya would stand at would stand at 1.014, a unit increase in capital management risk, financial risk, solvency risk, liquidity risk would lead to decrease in financial performance of insurance companies. The study also revealed that a unit increase in size of the insurance company would lead to increase in financial performance of insurance companies in Kenya.

The issue of risk and management accounting was also examined in manufacturing and not-for-profit organizations (Collier and Berry, 2002). T. Despite managerial perceptions of risk, in which each organization faced some sort of risk, there was no explicit regard to risk in the budgeting process or the content of the budget document. Budgeting did not appear to be a tool used in managing risk (Collier and Berry, 2002). Ali (2006) found that identifying counterparty default risk is the single most-important purpose served by the credit risk models utilized. Sania (2012) found that the Islamic banks are somewhat reasonably efficient in managing risk where URM, RM and CRM are the most influencing variables in RMPs. Hameeda (2012) , the study found that banks have a clear understanding of risk and risk management, and have efficient risk identification, risk assessment analysis, risk monitoring, credit risk analysis and risk management practices.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The researcher had intended to establish the relationship between financial risk and financial performance of insurance companies in Kenya.

5.2 Summary

The objective of the study was to establish the relationship between financial risk and financial performance of insurance companies in Kenya. Secondary Data was collected from Insurance Companies financial reports and multiple regression and correlation analysis were used in the data analysis. From the finding on the adjusted R squared, the study revealed that there was a variation of 91.7% on financial performance of insurance companies in Kenya due to changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company, this clearly shown that 91.7% changes in financial performance of insurance companies in Kenya could be accounted for by changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company. From the finding on the correlation analysis the study found that there was strong positive relationship between the financial performance of insurance companies in Kenya and capital management risk, financial risk, solvency risk, liquidity risk and size of the company

From the finding of the ANOVA statistics, the study established capital management risk, financial risk, solvency risk, liquidity risk and size of the company significantly influence the

financial performance of insurance companies in Kenya. The established regression equation was $Y = 1.014 - 0.724 X_1 - 0.064 X_2 - 0.011 X_3 - 0.025 X_4 + 0.175X_5$ From the above regression equation it was revealed that holding capital management risk, financial risk, solvency risk, liquidity risk and size of the company to a constant zero, financial performance of insurance companies in Kenya would stand at 1.014, a unit increase in capital management risk, financial risk, solvency risk, liquidity risk would lead to decrease in financial performance of insurance companies. The study also revealed that a unit increase in size of the insurance company would lead to increase in financial performance of insurance companies in Kenya.

5.3 Conclusion

From the finding the study revealed that a unit increase in financial risk lead to decrease in financial performance of insurance companies in Kenya, thus the study concludes that financial risk negatively affects the financial performance of insurance companies in Kenya.

The study established that solvency risk was negatively affecting the financial performance of insurance companies in Kenya, the study also found that solvency risk significantly affected the financial performance of insurance companies in Kenya, thus the study concludes that solvency risk negatively affect the financial performance of insurance companies in Kenya.

The study also found that liquidity risk negatively affected the financial performance of insurance companies in Kenya, thus the study concludes that liquidity risk negatively affect the financial performance of insurance companies in Kenya.

The study concludes that capital management risk negatively affect the financial performance of insurance companies in Kenya, as it was found that , capital management risk negatively affects the financial performance of insurance companies in Kenya.

Size of the insurance companies was found to positively influence the financial performance of insurance companies in Kenya.

5.4 Policy Recommendations

From the finding the study recommends that there is need for insurance companies in Kenya to manage the financial risk as it was found that financial risk negatively affects their financial performance.

The study also recommends that there is need for the management of insurance companies in Kenya to management their liquidity risk and solvency risk as it was revealed that an increase in solvency risk and liquidity risk lead to decrease in financial performance of insurance companies.

The study also recommends that there is need for insurance companies in Kenya to increase their size through increase in their assets base as it was found that an increase in size would lead to increase in their financial performance.

There is need for the management of insurance companies to enhance their capital adequacy as it was found that capital management risk negatively affect the financial performance of insurance companies in Kenya

5.5 Limitations of the Study

This study was limited to the precision of data obtained from companies' financial reports; secondary data was extracted on the diaspora deposits, diaspora loan, inflation, real exchange rate, real interest rate, insurance company size and financial performance of Insurance companies.

The study was limited to establish the relationship between financial risk and financial performance of insurance companies in Kenya, in attaining its objective the study was limited to 5 years period starting from year 2009 to year 2013.

The study was also limited to 49 insurance companies; the study was based on 5 years period from year 2009 to 2013 years. A longer duration of the study would have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

5.6 Areas for Further Research

The study sought to establish the relationship between financial risk and financial performance of insurance companies in Kenya, the study recommends a study to be done on the relationship between financial risk management and financial performance of insurance companies in Kenya.

Capital adequacy play an important role on performance of insurance companies' in Kenya, there is also a need to conduct a study on the relationship between capital adequacy and financial performance of insurance companies in Kenya

From the finding the study recommends that a study should be done on the determinants of financial performance of insurance companies in Kenya

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APPENDICES

Appendix I: Introductory Letter

From: **ADRIAN RANDIKI OBUDHO**

To: Respondent

Dear, Respondent

RE: Questionnaire

I am a student at University of Nairobi pursuing Masters of Business Administration. I am carrying out a study on **THE RELATIONSHIP BETWEEN FINANCIAL RISK AND FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA.**

You are kindly requested you to assist in the collection of secondary data, from your organization so as to enable me accomplish the study. Please, note that all the information given shall be treated purely and used for academic purposes and shall be treated as confidential. Thank you for taking your time to complete the questionnaire and for your time and cooperation.

Yours sincerely

ADRIAN RANDIKI OBUDHO

Student UoN Kenya

Appendix II: Data Collection Sheet

Name of the insurance companies						
	ROA	CMR	FR	SR	LR	Assets
2009						
2010						
2011						
2012						
2013						

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

1. AAR Insurance Kenya Limited
2. APA Insurance Limited
3. Africa Merchant Assurance Company Limited
4. Apollo Life Assurance Limited
5. AIG Kenya Insurance Company Limited
6. British-American Insurance Company (Kenya) Limited
7. Cannon Assurance Limited
8. Capex Life Assurance Company Limited
9. CFC Life Assurance Limited
10. CIC General Insurance Limited
11. CIC Life Assurance Limited
12. Continental Reinsurance Limited
13. Corporate Insurance Company Limited
14. Directline Assurance Company Limited
15. East Africa Reinsurance Company Limited
16. Fidelity Shield Insurance Company Limited
17. First Assurance Company Limited
18. G A Insurance Limited
19. Gateway Insurance Company Limited
20. Geminia Insurance Company Limited
21. ICEA LION General Insurance Company Limited
22. ICEA LION Life Assurance Company Limited
23. Intra Africa Assurance Company Limited
24. Invesco Assurance Company Limited
25. Kenindia Assurance Company Limited
26. Kenya Orient Insurance Limited
27. Kenya Reinsurance Corporation Limited
28. Madison Insurance Company Kenya Limited

29. Mayfair Insurance Company Limited
30. Mercantile Insurance Company Limited
31. Metropolitan Life Insurance Kenya Limited
32. Occidental Insurance Company Limited
33. Old Mutual Life Assurance Company Limited
34. Pacis Insurance Company Limited
35. Pan Africa Life Assurance Limited
36. Phoenix of East Africa Assurance Company Limited
37. Pioneer Assurance Company Limited
38. Real Insurance Company Limited
39. Resolution Insurance Company Limited
40. Shield Assurance Company Limited
41. Takaful Insurance of Africa Limited
42. Tausi Assurance Company Limited
43. The Heritage Insurance Company Limited
44. The Jubilee Insurance Company of Kenya Limited
45. The Monarch Insurance Company Limited
46. Trident Insurance Company Limited
47. UAP Insurance Company Limited
48. UAP Life Assurance Limited
49. Xplico Insurance Company Limited

Source: www.ira.go.ke (2013)