THE EFFECT OF FIRM SIZE ON PROFITABILITY

OF INSURANCE COMPANIES IN KENYA

WELDON KIPKOECH KIGEN

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DECLARATION

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

Signature …….. Date……

WELDON KIPKOECH KIGEN

D61/60023/2011

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

Signature ……. Date……..

MR. HERICK ONDIGO

Lecturer,

Department of Finance and Accounting,

School of Business,

University of Nairobi.

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DEDICATION

I would like to dedicate this research project to my wife, daughter and friends who nurtured in me the desire to work hard and have been my greatest supporters. They have given me the inspiration to pursue my education to the highest level.

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LIST OF ABBREVIATIONS

AKI- Association of Kenya Insurers

GDP-Gross domestic Product

IRA- Insurance Regulatory of Kenya

NP- Net Profit

ROA-Return on Assets

ROC- Return on Capital Invested

ROE-Return on Equity

Shs- Kenya Shillings

ABSTRACT

Insurance services are now being integrated into wider financial industry and the insurance sector plays an important role in service based economy of Pakistan. Profitability is one of the most important objectives of financial management because one goal of financial management is to maximize the owner` s wealth and profitability is very important determinants of performance. This study investigated the effect of size on the profitability of insurance companies of Kenya. Specifically this study examined the effects of total assets, leverage and market share on profitability (ROA). A key indicator of insurance companies profitability is return on assets (ROA), defined as the before tax profit divide by total assets (TA). Profitability is dependant variable while total assets, leverage and market share are independent variables. A census study of 48 general and long term insurance companies which cover the period of 2009- 2013. Secondary data obtained from the financial statements of insurance companies and annual reports of Insurance Regulatory Authority (IRA). The study was quantitative in nature. Regression model was used to analysis the secondary data collected for the insurance companies. The findings show that there is no relationship between profitability and total assets of the insurance companies and there is significantly positive relationship between size as measured by market share of the insurance companies and profitability. The result also shows leverage had significant on profitability of insurance companies. The study recommends that in order for both general and long term insurance companies to increase their profitability, the companies should engage in activities which will lead to increase in market share. This includes recruiting more agents and increase in marketing through print and social media.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Firm performance can be measured using different ways and by applying different methods; however, one of the most widely applied methods refers to financial analyses that use profitability ratios as key measures of firm's overall efficiency and performance (Kaguri, 2013). Although a great number of theories have tried to explain the reasons why some firms are more profitable than others, and numerous studies have investigated different variables that may influence firm performance, the issue of firm business success continues to be an inexhaustible subject that draws attention of many practitioners and researchers. This research focused on effect of firm size on profitability of Insurance Companies in Kenya.

Insurance sector plays important role in the financial services, contributing to economic growth, efficient resource allocation, creation of liquidity, facilitation of economies of scale in investment and spread of financial losses (Haiss and Sumegi, 2008). Insurance companies face intense pressure to improve performance, increase profitability, deliver superior customer service, increase shareholder returns and to increase customer base with the sole role of increasing wealth to the shareholders. Measuring the company's profitability is a central task both in accounting practice and theory. The stakeholders of the company need the profitability information for their decision making both in the short and in the long run.

Insurance company performance can be estimated by measuring its profitability which is related to such factors as company's size, loss ratio, investment ratio, capital structure, growth of written insurance premium, asset quality and management efficiency. Institutional and political environments also play vital role in performance of insurance companies. Business growth has become an important strategy for insurers to survive and become profitable. Insurers practice cash flow underwriting to vie for more business and raise more premium income, and then invest the cash income to cover underwriting loss with investment profit (Chen, 2004). This business strategy is viable when the overall investment environment is stable. When the investment environment becomes highly unpredictable, insurance companies may be trapped in the predicament of being squeezed from both underwriting profit and investment profit.

1.1.1 Firm Size

The size of a company is the amount and variety of production capacity and ability a company possesses or the amount and variety of services a company can provide concurrently to its customers (Jonsson, 2007). The increase in firm size is aimed at gaining from economies of scale. Economies of scale exist when a given proportionate increase in inputs results in a larger than proportionate increase in output. Reinhard's (1983) oligopoly model suggests that size is positively related to a firm's ability to produce technologically complicated products which in turn leads to concentration. Such markets are supplied by few competitors and are therefore, more profitable. Thus, larger firms have access to the most profitable market segments.

The empirical relationship between a firm's size, structure, and profitability has found that size is positively correlated with profitability, with the profit rate of the market positively correlated with the concentration ratio and negatively correlated with the marginal concentration ratio (Collins & Preston, 1969). Collins & Preston (1969) show that the positive association between firm size and profitability stems from implementing greater differentiation and specialization strategies and should therefore lead to higher efficiency.

Firm size represents a contingent factor that falls into the category of organization characteristics. According to Woodward (1965), the best indication of ‘‘bigness’’ is the size of the management group. Firm size is commonly measured by gross sales or gross value of assets number of employees and sales turnover.

Larger firms are able to produce the same goods more cheaply because they have achieved more learning and greater cumulative experience and they are able to spread their fixed costs over a greater amount of production. Similar to the argument advanced by-Bowman suggested that quality management is able to achieve the dual goals of higher market share and higher profitability (Abreu & Mendes, 2001).

1.1.2 Profitability

Profitability is the amount of money a company can engender with whatever resources the company has. The goal of companies is maximization of profit. Profit maximization is a good thing for a company, but can be a bad thing for consumers if the company starts

to offer substandard services or charge higher prices for the services (Ongore & Kusa, 2013).

Financial performance of an insurance company can be measured by profitability. Based on Codjia (2010), financial performance was looked at the statement of an accounting summary that details a business organization's revenues, expenses and net income. A corporation may prepare a statement of financial performance on a monthly, quarterly or annual basis (Codjia, 2010).

The profitability performance can be measured using ROA. The higher the ROA ratio, the better bank profits (Rasiah, 2010). According to Rushdi & Tennant (2003), profitability can be measured in a number of ways including return on assets, return on equity (ROE) or profit margins. In addition, ROA and Return on Asset (ROE) are the indicators of measuring managerial efficiency (Samad, 2000).

Capital structures in firms are made up of shareholders' funds, reserves and retained profits. In addition, capital can also represents a source of funds along with deposits and borrowings which is regulated by the capital adequacy requirements. The asset of insurance company can be financed by capital or debt. However, debt financing can be more risky compared to capital financing in view of the credit risk and liquidity risk faced by the commercial banks (Williams, 2003).

1.1.3 Effect of Firm Size on Profitability

Size is an important determinant of profitability. There are a few studies that discussed this relationship. Niresh & Velnampy (2014) found a weak relationship between size

indicators and profitability of the listed manufacturing firms in Sri Lanka. They stated that the reason for the weak relationship is found in separation of ownership from management in modern corporations that shifted manager's focus from profit maximization to managerial utility maximization. Papadogonas (2005) stated that size is positively related to the profitability.

According to Glancey (1998) when larger firms take advantage of the scale economies then a positive relationship is expected between profitability and size of the firm. When owners of a firm struggle to gain profit for expending business or increasing their personal income, then organizations become large. When the management of small firms is interested in non-monetory returns then the firms gain low profitability. There can be a positive relationship of firm size and profitability but at a specific threshold size, it may become negative.

Salman & Yazdanfar (2012) identified that company size has a critical role in determining profitability. Persistence of profitability is greater in larger companies, because compared with smaller companies, the larger ones have more access to resources and consequently they have more flexibility to the changes in a dynamic market. And also older firms may benefit from their greater business experience, established contacts with customers, and easier access to resources So the most studies about the size and profitability have proved a positive significant relationship, such as: Salman & Yazfandar (2012); Pervan & Visic (2012);

Chen & Wong (2004) and Mike (1996) find that size, investment and liquidity are major determinants for profitability. Malik (2011) suggest that size and capital have strong positive association with insurers' profitability, loss ratio and leverage have strong inverse relationship with profitability. Charumathi (2012) finds on Indian life insurance context that profitability of life insurers is positively and significantly influenced by the size (as explained by logarithm of net premium) and liquidity. The leverage, premium growth and logarithm of equity capital negatively and significantly influence the profitability of Indian life insurers.

1.1.4 Insurance Companies in Kenya

The industry is governed by the Insurance Act and regulated by the Insurance Regulatory Authority (IRA). IRA was created by the Insurance (Amendment) Act of 2006 and came into operation on 1st May 2007 but the insurance industry is not as much developed as financial institutions like banks. The Act has been amended; the recent amendment was done in March 2014 and the Act is referred as Insurance (Amendment) Act, 2014. The Authority was established with the mandate of regulating, supervising and developing the insurance industry. Before the establishment of IRA, these functions were performed by the Department of Insurance in the Ministry of Finance. Association of Kenya Insurers (AKI) was set in 1987 as an advisory body for insurance companies in Kenya.

According to the IRA Insurance Report for the year 2013, there were 48 licensed insurance companies, 3 reinsurance companies, 187 insurance brokers, 29 medical insurance providers, 134 insurance investigators, 4631 insurance agents, 27 insurance

surveyors, 22 loss adjusters, 2 claim settling agent and 8risk managers (IRA Report, 2013).

The performance of the Kenyan economy improved in 2013 compared to 2012. Real Gross Domestic Product (GDP) expanded by 4.7% in the year 2013 compared to 4.6% in 2012. The Kenyan insurance industry continues to experience growth in premiums. In 2013, gross direct premium grew by 21.3% from Shs 110.09 billion in 2012 to Shs 133.49 billion. Non-life insurance business contributed 66.2% while life business contributed 33.8% of the total Gross Direct Premium. The asset base for the industry increased by 17.7% from Shs 311.22 billion recorded as at the end of December 2012 to Shs 366.25 billion as at the end of December 2013. Investments as well increased to stand at Shs 296.34 billion in 2013 constituting 80.9% of the total industry assets.

1.2 Research Problem

Profitability is one of the most important objectives of financial management which leads to maximization of owners' wealth Nguyen (2006). During the period of 2009-2013 the annual reports of insurance companies in Kenya show large fluctuations in profits. This variation of profits suggests that firm-specific factors influence companies' profitability. It is therefore crucial to identify these factors and how to help insurance companies to take actions that increased their profitability and investors to forecast the profitability of insurance companies in Kenya.

Kenyans' uptake of insurance cover, both at corporate and personal level, remains predominantly in the motor, fire industrial and personal accident (mainly group medical

cover) classes. This illustrates a poor attitude towards personal insurance cover in general (Mbogo, 2010). The 48 insurance firms shared a net profit of Shs 20.7B, which is slightly more than Shs 13.3B Equity Bank profit after tax posted in the year 2013(Equity Bank, 2013). Insurance companies in Kenya need to identity the factors contributing to greater profitability company size being a factor to be considered if they are to match the profitability of banks. The profit before tax for the banking sector in Kenya was Shs 124.5B for the year 2013.

Kaen & Baumann (2003) found that profitability bears no relation to size measured by the number of employees. They also found that firms of a given size as measured by sales and assets, the fewer the employees, the more profitable the firm. Ongore & Kusa (2013) examined the determinants of financial performance of Commercial Banks in Kenya using the data for the period 2001 to 2012. Mehrjardi (2012) carried a study on size and profitability of Banks in Kenya for the period 2008 to 2010 and found a positive relationship between size and profitability of Banks in Kenya. Pottier (2007), examine the determinants of private debt holdings in the life insurance industry. The results suggest that larger insurers, insurers with higher financial quality, mutual insurers, publicly traded insurers, and insurers with greater cash holdings are more prevalent lenders in the private debt market.

Much of the extensive literature on the determinants of profitability focus on the banking industry (Williams, 2003; Vejzagic & Zarafat, 2014), few studies relating to Insurance Companies have been conducted in Kenya. Kaguri (2012) did a study on the Relationship between firm characteristics and financial performance of life insurance companies in

Kenya. Study concluded that there is a positive relationship between the size of premium and profitability of an insurance company.

Opanga (2013) identified the effect corporate governance on the profitability of insurance corporations in Kenya. The study concluded that there is a positive relationship between corporate governance and profitability in Kenya. Other studies have been carried out on life insurance in Kenya by Khamallah (1984), Angima (1987) and Wairegi (2004) on life insurance in Kenya. There is no known study which has been carried out on the effect of size on the profitability of insurance companies in Kenya; hence there was a research gap which this study addressed. This study attempted to address the question, "what is effect of firm size on the profitability of insurance companies in Kenya?"

1.3 Research Objective

To establish the effect of size on the profitability of Insurance Companies in Kenya.

1.4 Value of the Study

The study provides corporate managers with insight on major factors influencing profitability and provides them with reference information that they can use in policy formulation in relation to expansion of the firms they are managing. The study helps employees in understanding the importance of key factors driving profitability in order to improve their firm image thus translate into increase in firm financial performance and the effect of firm size on their salary and rewards. Most of the firms engage at activities which are aimed at improving the corporate image of the firm and the best people to

champion these are employees of the firms as long as they are motivated both by monetary and non-monetary means.

It also helps financial managers and policy makers in analysis of other factors influencing profitability. Profitability is a very critical issue in both the private and public sector and this continue to be an issue of great importance to firms in both short and long run survival of firms determined by what they engage in whether questionable or unquestionable thus enhancing transparency.

The study also benefits the scholars who wish to undertake further studies aimed at improving profitability in Kenyan firms. Thus, a major responsibility lies on the shoulders of academicians who are considered as intellectuals in imparting the elements of corporate governance in the minds of young professionals especially exploring other elements of profitability on firm's profitability in other industry players.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature available on the firm size and their relationship with profitability. The chapter is broken down into existing theories, determinants of profitability and the various empirical studies on relationship between size and profitability.

2.2 Theoretical Review

Different theories of the firm try to explain why firms exist, what forms firm and market boundaries and why there are differences in their organization and performance. This paper aims to determine connection between firm size and its profitability in the insurance industry in Kenya. The effect of firm size on profitability can be viewed from three categories of theories namely principal agent theory, institutional theory and strategic theories explained below.

2.2.1 Principal Agent Theory

Agency theory is concerned with the conflicting interests of principals and agents. Jensen & Meckling (1976) modeled that there is a conflict of interest between the managers and the owners of companies. The theory suggests that the separation of corporate ownership and control potentially leads to self-interested actions by managers. The owners contract the managers to perform the controlling tasks of a firm, and as both seek to maximize

their own utility and are self-interested a conflict of interest arises. As the managers have the effective control of the firm, they have the incentive and the ability to consume benefits at the expense of the owners. The management may direct firm resources for their own selfish interest instead of using the resources to acquire assets or increase firm market share. The management may also borrow more hence increasing the leverage of a firm.

2.2.2 Institutional Theory

Institutional theory suggests that organizations seek to behave in ways that will not cause them to be noticed as different and consequently singled out for criticism (Meyer & Rowan, 1977). The organization will ultimately become more similar in behavior over time and adopt approaches to businesses that have been legitimized (Powell & Dimaggio, 1991)). As organizations compete for resources, customers, political power, and economic and social fitness, institutional theories speculate that organizations face pressures to conform to these shared notions of appropriate forms and behaviors, since violating them may affect ability to secure resources and social support (Dimaggio & Powell, 1983). The notion of business growth and that larger is better than smaller is embedded in the institutional environment of organizations. Today's business education usually celebrates growth with the focus on larger firms, thus creating pressure from professional managers on firms to grow and become larger. Larger organizations within each industry are normally perceived as the most successful ones. Organization may enter into more debt in order to acquire more assets or for financing activities meant to increase

their market share, all in the hope of being like other large firms. The firms with little resources may fall into liquidation since their might not be able to repay the debt.

2.2.3 Strategic Theories

According to Porter (1980) there are three generic strategies that firms can use. Firms can attempt to attain overall cost leadership, product differentiation, or focus-based domination. When using product differentiation strategy (also referred to as benefit leadership), the firm's products are capable of commanding price premium relative to competitors, due to the perceived extra benefits of the products. The strategic logic is either to match the price of the rival firms and sell more than they do or to charge a price premium and attain higher price-cost margin than they are able to.

When pursuing focus or niche strategy, the company configures its value chain so as to create superior economic value within a narrow set of industry segments. Within these segments, the firm may have lower cost per unit than the broader-scope rivals or it may be capable of commanding a price premium relative to them or both. In order to pursue an overall cost leadership strategy, the firm must be able to produce its products at lower per unit cost than the rivals and either undercut their prices and sell more or match their prices and attain higher price-cost margin than they can (Besanko et al., 2004). Although the logic behind Porter's ideas of generic strategies has been criticised, and the empirical evidence casts some doubt as to its value (Hendry, 1990), Porter's ideas represent a useful starting point when considering strategic options.

There are several ways for firms to produce its products at lower cost than its rivals; the most important ones are based on economies of scale and scope, or scale economies. Informally, they can be referred to as "bigger is better." The more formal definition of economies of scale is that over a range of output the average unit cost declines. If average cost increase however, the production exhibits diseconomies of scale (the average cost curve starts to rise and becomes U shaped). Economies of scope on the other hand exist if extra cost savings are available as a result of a production process where separate products share some production facilities, usually by increasing the variety of goods and service produced.

There are five major sources of scale economies (Besanko et al., 2004), indivisibility and the spreading of fixed cost. When more units are produced, the fixed costs (that cannot be scaled down) are spread thinner on each unit, increased productivity of variable inputs, mainly having to do with specialization, or division of labour, as Adam Smith pointed out as early as 1776 in his famous book the Wealth of Nations, inventories, but higher volume usually decreases the per-unit cost of inventory, the cube-square rule1, which implies that as capacity increases, the average cost of producing at full capacity decreases, in areas other than production, such as purchasing, advertising and R&D, cost savings are possible. For example, the bargaining power is stronger when more volume is purchased resulting in cheaper purchasing.

It is evident that if a manager decides to use a cost leadership strategy, the firm must have some possibilities of utilizing economies of scale or scope. Usually it is necessary that the firm is comparatively large for this to be a possibility, preferably larger than its

rivals. One of the drawbacks of becoming larger is a diseconomy of scale, that is, administrative cost or bureaucratic cost increases proportionally with increased size. Larger firm may also be less flexible. (Besanko et al., 2004). If a firm adopts a product differentiation strategy and fail to match the price of rival firms, consumers may shy away from purchasing its product, hence it's market share will reduce.

2.3 Determinants of Profitability of Insurance Companies

Profitability is the unique measure of corporate success and an essential indicator of economic performance. In estimating insurance company profitability in Kenya, the profitability (ROA) variable is considered as dependent variable. In this study size, leverage and market share are used as independent variables to provide comparative results.

2.3.1 Size

Malik (2011) examined the determinants of Pakistan's insurance companies' profitability proxied by return on total assets. The result shows that there is no relationship between profitability and age of the company and there is a significant and positive relationship between profitability and size. Therefore size of assets of a company can affect the profitability of insurance companies.

Haron and Azmi (2004) investigated the determinants of firms profitability and concluded that liquidity, deposit, asset structure, total expenditures, consumer price index and money supply have significant impact on profitability while capital structure, market share and bank size have no impact to the profitability.

2.3.2 Leverage

Leverage refers to the extent to which firms make use of their money borrowings (debts financing) to increase profitability and is measured by total liabilities to equity. Firms that borrow large sums of money during a business recession are more likely to default to pay off their debts as they mature; they will end up with high leverage and are more likely end up with a potential risk of bankruptcy. On the contrary, the lower the firm's borrowings, the lower the leverage, and the risk of bankruptcy will eventually be lower which signifies that business will continue operating (Alkhatib, 2012).

Malik (2011) investigated the determinants of profitability in insurance companies of Pakistan. . The multiple regression model was used to identify the relationship between profitability and the determinants. In his study he found out that leverage ratio and loss ratio have a negative impact on profitability of insurance companies in Pakistan.

According to Bobakova, (2003) capital base is the money contributed by the shareholders who first purchased shares in the company plus retained earnings. Capital base is important because it provides a benchmark when measuring returns. The relationship between capital structure and return on equity is of considerable importance to all firms. Industries are sensitive to changes in financial leverage due to their low level of equity capital to total assets. The capital structure of firms is highly regulated.

A firm capital is widely used to analyze the status of its financial strength (Bobakova, 2003). Better capitalized firm seem to be more profitable. In addition, an above-average loan volume growth affects firm profitability positively.

Akhtar et al., (2012), conducted a study on the relationship between financial leverage and financial performance of companies in the Fuel & Energy Sector of Pakistan. The study found out that there was a positive relationship between the financial leverage and the financial performance of the companies. The results of the study confirm that the firms having higher profitability may improve their financial performance by having high levels of financial leverage. It means that the firms can improve at their financial performance by employing the financial leverage and can arrive at a sustainable future growth by making vital decisions about the choice of their optimal capital structure.

2.3.3 Market Share

Market share is the percentage of an industry or market's total sales that is earned by a particular company over a specified time period. Companies are always looking to expand their share of the market, in addition to trying to grow the size of the total market by appealing to larger demographics, lowering prices, or through advertising. Heggested (1977) and Mullineaux (1978), however, found that market share had an adverse relationship with profitability.

2.4 Empirical Review

Jonsson (2007) examined the relationship between size and profitability of 250 Icelandic firms over a period of 5 years, particularly looking at fish and fish processing firms, banks and civil engineer consulting firms. The size of firms is measured as turnover and total assets and ranges from the largest in each industry to very small ones. Profitability is measured as return on assets (ROA), return on capital invested (ROC) and return on

equity (ROE). Regression analysis was used to study the relationship between size and profitability. The analysis showed that size has no statistically significant effect on profitability, irrespective of how profitability or size is measured.

Amaton & Burson (2007) tested the relationship between size and profit for the firms in the financial sector using data that covered a broad range of firm sizes. They tested both linear and cubic form of the relationship. Even though a negative influence of firm size on profitability was revealed with the linear specification in firm size, evidence of a cubic relationship was detected between return on assets and firm size.

Velnampy & Nimalathashan (2010) carried out a study to find out the effects of the firm size on profitability of Bank of Ceylon and Commercial Bank of Cyelon Ltd over the period of 10 years from 1997 to 2006. Secondary data were used to measure the variables which are related to profitability and Firms size. The indicators of profitability such as, Net Profit (NP), Operating profit (OP), Return on Investment (ROI), Return on Equity (ROE), Return on Average Assets (RAA), and Return on Average Share holders (RAS) were taken into account. Correlation analysis showed that there was a positive relationship between firm size and profitability in Commercial Bank, but there was no relationship between firm size and profitability in Bank of Ceylon.

Malik (2011) investigated the determinants of profitability in insurance companies of Pakistan. He specifically examined the effects of firm specific factors (age of company, size of company, volume of capital leverage ratio and loss ratio) on profitability. The multiple regression model was used to identify the relationship between profitability and the determinants. The sample in the study was 35 listed life and non-life insurance

companies which covered the period of 2005 to 2009. He found out that there was no relationship between profitability and age of the company and there was a significant positive association between size of the company and profitability.

Ching & Gerab (2012) studied the indicators that most affect profitability of Brazilian cyclical consumer goods industry. Sixteen companies with current asset greater than 50% of total asset, for the period 2005-2009, were selected for the study. Regression Model was used in the study. The concluded in their study that firm size can be an important determinant for firm performance and having larger size affects positively financial performance.

Akbas & Karaduman (2012) studied the effect of size on the profitability of manufacturing companies listed in the Istanbul Stock Exchange. They analyses the effect by using a panel data set over the period 2005-2011. Profitability was measured by using Return on Assets, while both total assets and total sales were used as the proxies of firm size. According to the results of the study, firm size, both in terms of total assets and in terms of total sales, had a positive impact on the profitability of Turkish manufacturing companies. The recommended that comparison could be made with firms of other countries which have similar economic conditions with Turkey.

Kaguri (2012) did a study on the Relationship between firm characteristics and financial performance of life insurance companies in Kenya. Data of 17 life insurance companies in Kenya for the period 2008-2012 were used. ROA was used a dependent variable whereas size, diversification, leverage, liquidity, age, premium growth and claim

experience were the independent variable. Study concluded that there is a positive relationship between the size of premium and profitability of an insurance company.

Mehrjardi (2012) studied the relationship between size and profitability of Banks in Kenya. Data of 43 licensed Banks in Kenya for the period 2008-2010 were used in the study. ROA was the dependent variable whereas customer base, number of branches, deposit liabilities and market share were the independent variables. The study found that there is strong positive relationship between profitability of banks and customer base, number of branches, deposit liabilities and market share.

Akinyomi & Olagunju (2013) examined the effect of size on the profitability of Nigerian Manufacturing sector. Panel data set over the period of 2005-2012 was obtained from the audited annual reports of the selected manufacturing firms listed in the Stock Exchange. Return on assets (ROA) was used as a proxy for profitability while log of total assets and log of turnover were used as proxies for firm size. Regression Model was used to examine the relationship between size and profitability of the manufacturing firms. The results of the study revealed that firm size, both in terms of total assets and in terms of total sales, has a positive effect on the profitability of Nigerian manufacturing companies.

Ongore & Kusa (2013) examined the determinants of financial performance of Commercial Banks in Kenya using the data for the period 2001 to 2012. They sampled 37 commercial banks, 13 foreign owned and 24 locally owned. Their study showed that capital adequacy, asset quality and management efficiency significantly affect the performance of commercial banks in Kenya. However, the effect of liquidity on the performance of commercial banks was not strong. The relationship between bank

performance and capital adequacy and management efficiency was found to be positive and for asset quality the relationship was negative. A multiple linear regression model and t-statistic were used to determine the relative importance of each explanatory variable in affecting the performance of banks.

Niresh & Velnampy (2014) explored the effects of size on profitability of quoted manufacturing firms in Sri Lanka. Data of 15 companies active in Colombo Stock Exchange (CSE) between 2008 and 2012 were used. They used Return on Assets and Net Profit as indicators of firm profitability whereas Total Assets and Total Sales were used as indicators of firm size. Correlation and regression methods were used in the empirical analysis. The result showed that there was no relationship between size and profitability of listed firms. The results also showed that size had no profound impact on the profitability of the listed manufacturing firms in Sri Lanka.

2.5 Summary of Literature Review

Based on the above literature, we can say that various studies have been done on this area, but a detailed and comprehensive study has not yet been conducted in Kenyan context, especially in insurance sector. Kaguri (2012) studied the relationship between firm characteristics and financial performance of life insurance companies in Kenya, in the study market share was not a variable used to determine profitability. Merjardi (2012) did a study on relationship between size and profitability of Banks in Kenya and found out that customer base, number of branches, deposit liabilities and market share affect profitability.

The findings of the study will also have a bearing on the Institutional Theory which suggests that larger organizations within each industry are normally perceived as the most successful ones (Meyer & Rowan, 1977). There is no research which has been done on the effect of size and profitability of insurance companies in Kenya; therefore this study attempts to address the existing gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology involved details in approaches and procedures used in carrying out studies (Kothari, 2003). It includes the techniques, methods and procedures adopted in the research. This chapter therefore discusses the research design, population of interest, data collection procedure, data analysis, analytical model and the test of significance technique that the study employed.

3.2 Research Design

Research design outlines a plan that was used to generate answers to research problems (Dooley, 2007). It involved the selection of the research approach. The study employed descriptive research design. Descriptive research describes data and characteristics about the population or phenomena being studied. Since the secondary data was quantitative in nature descriptive research design was chosen since it answers the questions who, what, where, when and how (Muganda & Mugenda, 2003).

3.3 Population

Population refers to an entire group of individuals, events or objects having a common observable characteristic. Target population was the population which the researcher wanted to generalize the results of the study (Muganda & Mugenda, 2003). According to Cooper & Schindler (2000), a population is the total collection of elements about which we wish to make inferences. The target population in the study was the 48 licensed

insurance companies in Kenya regulated by IRA. See (Appendix 1). A census study was carried for the licensed Insurance companies in Kenya.

3.4 Data Collection

The secondary data was obtained from annual reports of insurance companies. The data included cross-sectional data and time series data broken down year by year for statistical analysis to explore the relationships between the size and profitability. The data analyzed was for the period 2009-2013.

3.5 Data Analysis

The study intended to establish the relationship between firm size and profitability and therefore regression analysis model was used to determine the nature of this relationship.

3.5.1 Analytical Model

The quantitative research approach was applied to investigate the findings of the research study. Multiple regression and correlation methods were used in the empirical analysis. Analysis was done separately for General Insurance and Life Insurance Companies in Kenya.

Model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y= Profitability as measured by ROA.

X_1= Size as measured by Natural Logarithm of Total Assets.

X_2= Leverage as measured by Debt/Equity.

X_3= Market Share as measured by Gross Premium of a Company/Gross Industry Premium.

β_0= Constant.

β_1 - β_3 = Co-efficient parameters

ε= Error term.

3.5.2 Test of Significance

The study used the Statistical Package for Social Science (SPSS) to determine the effect of size on profitability of insurance companies in Kenya. The Tests of Significance are Regression Analysis expected to yield Coefficient of Determination (R^2), Multiple R, and Analysis of Variance (ANOVA) along with relevant t-tests, f-tests and P values. Inferential Statistical techniques were done at 95% Confidence Level. ($\alpha = 0.05$).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings to establish the effect of size on the profitability of Insurance Companies in Kenya. The study used the secondary data which was collected from all the 48 licensed insurance companies in Kenya regulated by IRA and registered as at 31st December 2013. The secondary data was obtained from annual reports of the insurance companies. In inferential statistics, multiple linear regressions were used to determine the relationship between profitability of insurance companies in Kenya and total assets, leverage and market share for the period 2009-2013

4.2 Regression Analysis

A regression model was applied to establish the form of relationship between the dependent variable (profitability as measure by ROA) and the independent variables (size as measure by natural logarithm of assets, leverage and market share).

4.2.1 Regression Analysis of General Insurance Companies

Table 4. 1 Model Summary for 2009

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.700[a]	.490	.434	.06010

(Source: Research Findings)

Adjusted $R^{2\ is}$ called the coefficient of determination and profitability of general insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.434. This implies that, there was a variation of 43.4% of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 2 Coefficient Analysis for Year 2009

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.089	.330		.270	.789
	ASSET	-.002	.025	-.018	-.080	.937
	DE	-.012	.016	-.111	-.741	.465
	MS	.027	.008	.746	3.316	.003

(Source: Research Findings)

The established regression equation was for years 2009

$Y= 0.089 -0.002X_1 – 0.012X_2 + 0.027X_3$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of general insurance companies would be 0.089. It established that a unit increase in asset would cause a decrease in profitability of general insurance companies by a factor of 0.002, a unit increase in leverage would cause a decrease in profitability of general insurance companies by 0.013 and a unit increase in market share would cause an increase in profitability by 0.027. This clearly shows that there is a negative relationship between profitability of general insurance companies with total

assets and leverage. There is a positive relationship between profitability and market share. The P- value for asset and leverage was greater than 0.05 which shows that they were statistically insignificant in affecting the profitability of general insurance companies in 2009. The study revealed that the P- value for market share was less than 0.05 which shows that the variable was statistically significant in affecting the profitability of general insurance companies in 2009.

Table 4. 3 Model Summary for 2010

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678[a]	.460	.402	.03761

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of general insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.402. This implies that, there was a variation of 40.2% of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 4 Coefficient Analysis for Year 2010

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.031	.217		-.143	.887
	ASSET	.008	.016	.126	.516	.610
	DE	-.018	.008	-.337	-2.372	.025
	MS	.011	.005	.553	2.264	.032

(Source: Research Findings)

The established regression equation was for years 2010

$$\mathbf{Y= -0.031 + 0.008X_1 – 0.018X_2 + 0.011X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of general insurance companies would be -0.031. It established that a unit increase in asset would cause an increase in profitability of general insurance companies by a factor of 0.008, a unit increase in leverage would cause a decrease in profitability of general insurance companies by 0.018 and a unit increase in market share would cause an increase in profitability by 0.011. This clearly shows that there is an insignificant positive relationship between profitability of general insurance companies with total assets and there is an insignificant negative relationship between profitability and leverage. There is a positive relationship between profitability and market share. The study revealed that the P- values were more than 0.05 for asset and leverage hence the variables are statistically insignificant in affecting the profitability of general insurance companies in 2010. The P-value for market share was less than 0.05 which indicates that market share statistically affect profitability of general insurance companies in Kenya.

Table 4. 5 Model Summary for 2011

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715[a]	.511	.462	.05977

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of general insurance companies varied with total assets, leverage and market share. From the data,

the value of adjusted R^2 is 0.462. This implies that, there was a variation of 46.2% of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 6 Coefficient Analysis for Year 2011

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.270	.331		-.817	.420
	ASSET	.025	.024	.248	1.027	.312
	DE	-.024	.013	-.292	-1.905	.066
	MS	.019	.007	.600	2.645	.013

(Source: Research Findings)

The established regression equation was for years 2011

$$\mathbf{Y= -0.27 + 0.025X_1 – 0.020X_2 +0.019X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of general insurance companies would be -0.27. It established that a unit increase in asset would cause an increase in profitability of general insurance companies by a factor of 0.025, a unit increase in leverage would cause a decrease in profitability of general insurance companies by 0.020 and a unit increase in market share would cause an increase in profitability by 0.019. This clearly shows that there is an insignificant positive relationship between profitability of general insurance companies with total assets and there is an insignificant negative relationship between profitability and leverage. There is a positive relationship between profitability and market share. The study revealed that the P- value were more 0.05 for asset and leverage which shows that

they are statistically insignificant in affecting the profitability of general insurance companies in 2011. The P- value for market share is less than 0.05 which shows market share is statistically significant in affecting profitability of general insurance companies in Kenya in 2011.

Table 4. 7 Model Summary for 2012

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774[a]	.599	.559	.04665

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of general insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.559. This implies that, there was a variation of 55.9 % of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 8 Coefficient Analysis for Year 2012

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.316	.269		-1.172	.250
	ASSET	.028	.020	.330	1.425	.164
	DE	-.018	.010	-.268	-1.827	.078
	MS	.016	.006	.599	2.819	.008

(Source: Research Findings)

The established regression equation was for years 2012

$Y= -0.316 + 0.028X_1 – 0.018X_2 + 0.016X_3$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of general insurance companies would be -0.316. It established that a unit increase in asset would cause an increase in profitability of general insurance companies by a factor of 0.028, a unit increase in leverage would cause a decrease in profitability of general insurance companies by 0.018 and a unit increase in market share would cause an increase in profitability by 0.016. This clearly shows that there is an insignificant positive relationship between profitability of general insurance companies with total assets and there is an insignificant negative relationship between profitability with leverage. There is a positive relationship between profitability and market share. The study revealed that the P- value were more than 0.05 for asset and leverage while the P- value for market share was less than 0.005, which shows that asset and leverage are statistically insignificant in affecting the profitability of general insurance companies in 2012 while market share statistically is significant in affecting profitability of general insurance companies in Kenya.

Table 4. 9 Model Summary for 2013

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879[a]	.772	.750	.03663

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of general insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.750. This implies that, there was a variation of 75 % of

profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 10 Coefficient Analysis for Year 2013

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.137	.235		-.580	.566
	ASSET	.013	.017	.135	.751	.458
	DE	-.009	.005	-.152	-1.725	.094
	MS	.022	.005	.779	4.389	.000

(Source: Research Findings)

The established regression equation was for years 2013

$$\mathbf{Y= -0.137+ 0.013X_1 – 0.009X_2 + 0.022X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of general insurance companies would be –0.137. It established that a unit increase in asset would cause an increase in profitability of general insurance companies by a factor of 0.058, a unit increase in leverage would cause a decrease in profitability of general insurance companies by 0.009 and a unit increase in market share would cause an increase in profitability by 0.022. This clearly shows that there is an insignificant positive relationship between profitability of general insurance companies with total assets. There is an insignificant negative relationship between profitability and leverage. There is a positive relationship between profitability and market share. The study revealed that the P- value were more than 0.05 for assets and leverage which shows that they were statistically insignificant in affecting the

profitability of general insurance companies in 2013. The P- value for market share was less than 0.05 which shows that market share was statistically significant in affecting profitability of general insurance companies in Kenya.

4.2.2 Regression Analysis of Long Term Insurance Companies

Table 4. 11 Model Summary for 2009

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.689[a]	.475	.382	.06447

(Source: Research Findings)

Adjusted $R^{2\ is}$ called the coefficient of determination and profitability of long term insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted $R^{2\ is}$ 0.382. This implies that, there was a variation of 38.2 % of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 12 Coefficient Analysis for year 2009

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.659	.227		2.902	.010
	ASSET	-.043	.017	-.813	-2.500	.023
	DE	.002	.007	.043	.245	.810
	MS	.018	.005	1.212	3.739	.002

(Source: Research Findings)

The established regression equation was for years 2009

$$Y = 0.659 - 0.043X_1 + 0.002X_2 + 0.018X_3$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of long term insurance companies would be 0.659. It established that a unit increase in asset would cause a decrease in profitability of long term insurance companies by a factor of 0.043, a unit increase in leverage would cause an increase in profitability of long term insurance companies by 0.002 and a unit increase in market share would cause an increase in profitability by 0.018. This clearly shows that there is a significant negative relationship between profitability of long term insurance companies with total assets as shown by P-value which was less than 0.05 and there is an insignificant positive relationship between profitability and leverage. There was a significant positive relationship between profitability and market share as shown by P value which is less than 0.05.

Table 4. 13 Model Summary for 2010

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747[a]	.558	.485	.06164

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of long term insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.485. This implies that, there was a variation of 48.5 % of profitability of long term insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 14 Coefficient Analysis for year 2009

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.490	.313		1.563	.135
	ASSET	-.033	.023	-.540	-1.398	.179
	DE	.001	.016	.018	.081	.936
	MS	.019	.007	1.219	2.842	.011

(Source: Research Findings)

The established regression equation was for years 2010

$$\mathbf{Y= 0.49- 0.033X_1 + 0.001X_2 + 0.019X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of long term insurance companies would be 0.49. It established that a unit increase in asset would cause a decrease in profitability of long term insurance companies by a factor of 0.033; a unit increase in leverage would cause an increase in profitability of long term insurance companies by a factor of 0.001, and a unit increase in market share would cause an increase in profitability by 0.019. This clearly shows that there is an insignificant negative relationship between profitability of long term insurance companies with total assets as shown by P-value which was less than 0.05 and there is an insignificant positive relationship between profitability and leverage. There is a significant positive relationship between profitability and market share of long term insurance companies. The study revealed that the P- values for asset and leverage were more than 0.05, which shows that they were statistically insignificant in affecting the profitability of long term insurance companies in 2010.

Table 4. 15 Model Summary for 2011

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873[a]	.761	.722	.04504

(Source: Research Findings)

Adjusted R^2 is called the coefficient of determination and profitability of long insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.722. This implies that, there was a variation of 72.2 % of profitability of long term insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 16 Coefficient Analysis for year 2011

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.571	.189		3.018	.007
	ASSET	-.038	.014	-.652	-2.751	.013
	DE	-.003	.005	-.071	-.596	.559
	MS	.021	.004	1.361	5.662	.000

(Source: Research Findings)

The established regression equation was for years 2011

$$\mathbf{Y= 0.571 - 0.038X_1 - 0.003X_2 + 0.021X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of long term insurance companies would be 0.571. It established that a unit increase in asset would cause a decrease in profitability of long term insurance companies by a factor of 0.038, a unit increase in leverage would cause a

decrease in profitability of long term companies by 0.003 and a unit increase in market share would cause an increase in profitability by 0.021. This clearly shows that there is a significant negative relationship between profitability of long term insurance companies with total assets as shown by P-value which was less than 0.05 and there is an insignificant negative relationship between profitability and leverage as shown by P – value which was more than 0.05. There was a significant positive relationship between profitability and market share (P<0.05).

Table 4. 17 Model Summary for 2012

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716[a]	.512	.421	.06172

(Source: Research Findings)

Adjusted $R^{2\ is}$ called the coefficient of determination and profitability of long term insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.421. This implies that, there was a variation of 42.1 % of profitability of long term insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 18 Coefficient Analysis for year 2012

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.305	.248		1.230	.237
	ASSET	-.019	.018	-.380	-1.064	.303
	DE	.009	.007	.228	1.238	.234
	MS	.014	.005	1.037	2.857	.011

(Source: Research Findings)

The established regression equation was for years 2012

$$\mathbf{Y= 0.305 - 0.019X_1 + 0.009X_2 + 0.014X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of long term insurance companies would be 0.305. It established that a unit increase in asset would cause a decrease in profitability of long term insurance companies by a factor of 0.019, a unit increase in leverage would cause an increase in profitability of long term insurance companies by 0.019 and a unit increase in market share would cause an increase in profitability by 0.014. This clearly shows that there was an insignificant negative relationship between profitability of long term insurance companies with total assets as shown by P-value which was more than 0.05 and there is an insignificant positive relationship between profitability and leverage (P<0.05)and There was a significant positive relationship between profitability and market share (P<0.05).

Table 4. 19 Model Summary for 2013

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937[a]	.878	.855	.03397

(Source: Research Findings)

Adjusted $R^{2\ is}$ called the coefficient of determination and profitability of long term insurance companies varied with total assets, leverage and market share. From the data, the value of adjusted R^2 is 0.855. This implies that, there was a variation of 85.5 % of

profitability of long term insurance companies varied with total assets, leverage and market share at 95% confidence level.

Table 4. 20 Coefficient Analysis for year 2013

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.494	.133		3.715	.002
	ASSET	-.034	.010	-.623	-3.493	.003
	DE	.000	.006	.007	.074	.942
	MS	.022	.003	1.423	8.052	.000

(Source: Research Findings)

The established regression equation was for year 2013

$$\mathbf{Y = 0.494 - 0.034X_1 + 0.00X_2 + 0.022X_3}$$

From the above regression model, holding total asset, leverage and market share to a constant zero, profitability of long term insurance companies would be 0.494. It established that a unit increase in asset would cause a decrease in profitability of long term insurance companies by a factor of 0.034, a unit increase in leverage would not affect profitability of long term insurance companies and a unit increase in market share would cause an increase in profitability by 0.022. This clearly shows that there is a significant negative relationship between profitability of long term insurance companies with total assets as shown by P-value which was less than 0.05 and there is an insignificant positive relationship between profitability and leverage. There is a significant positive relationship between profitability and market share ($P < 0.05$).

4.3 Interpretation of the Findings

The R^2 for general insurance companies were 0.434, 0.402, 0.462, 0.559 and 0.75 for the year 2009, 2010, 2011, 2012 and 2013 level respectively. These meant that there were variations of 43.4%, 40.2%, 46.2%, 55.9% and 75.0% of profitability of general insurance companies varied with total assets, leverage and market share at 95% confidence level for the year 2009, 2010, 2011, 2012 and 2013 level respectively. The study found out that size as measured by market share significantly affected the profitability of general insurance companies in Kenya. The correlation coefficients were 0.027, 0.011, 0.019, 0.016, and 0.022 of profitability with market share with 95% confidence for the year 2009, 2010, 2011, 2012 and 2013 level respectively. Size as measured by total assets and leverage had no significant effect on profitability of general insurance companies for all the years as can be seen in the model summary tables and coefficient analysis tables for the respective years.

The R^2 for long term insurance companies were 0.382, 0.485, 0.722, 0.421 and 0.855 for the year 2009, 2010, 2011, 2012 and 2013 level respectively. These meant that there were variations of 38.2%, 48.5%, 72.2%, 42.1% and 85.5% of profitability of long term insurance companies varied with total assets, leverage and market share at 95% confidence level for the year 2009, 2010, 2011, 2012 and 2013 level respectively. The study found out that size as measured by market share significantly affected the profitability of long term insurance companies in Kenya. The correlation coefficients were 0.018, 0.019, 0.021, 0.014, and 0.022 of profitability with market share with 95% confidence for the year 2009, 2010, 2011, 2012 and 2013 level respectively. Size as

measured by total assets and leverage had no significant effect on profitability of long term insurance companies for all the years as can be seen in the model summary tables and coefficient analysis tables for the respective years.

The study shows that there was a positive and significant association between profitability of the insurance firms and size as measured market share. These findings are in line with those of Malik (2011) who conducted a study on the determinants of Pakistan's insurance companies' profitability and found out that there is a significant and positive relationship between profitability and size of insurance companies as measured by market share. The findings contradicted the findings by Malik (2011) that size as measured by total assets significantly and positively affect profitability of insurance companies.

The findings also established a positive and significant relationship market share and profitability of the insurance firms in Kenya. These findings are in agreement with those of Akinyomi and Olagunju (2013) found out that that firm size in terms of total sales has a positive effect on the profitability of Nigerian manufacturing companies.

Based on the research objective which sought to establish the effect of firm size on the profitability of insurance companies in Kenya; the study can reveal that firm size positively affects profitability of insurance companies in Kenya. These findings are in line with those of Malik (2011) who found out that there was a significant positive association between size of the company and profitability. Locally, Kaguri (2012) also found a positive relationship between the size of premium and profitability of an insurance company. These findings also agree with other studies conducted in other firms

in the financial sector such as commercial banks. For instance a study by Velnampy & Nimalathashan (2010) on the effects of the firm size on profitability of Bank of Ceylon found out that there was a positive relationship between firm size and profitability in Commercial Bank.

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 intended to determine the effect of size on profitability of insurance companies in Kenya.

5.2 Summary

From the findings on the regression analysis of general insurance companies, the study found that there was a strong positive relationship between profitability of general insurance companies in Kenya varied with market share as there was a high positive correlation coefficient. The study further revealed that there was greater variation of profitability of general insurance companies as a result of change in assets, leverage and market share as the value of adjusted R square was high. The findings showed that leverage has an insignificant negative effect on profitability of general insurance companies.

From the findings on the regression analysis of long term insurance companies, the study found that there was a strong positive relationship between profitability of long term insurance companies in Kenya varied with market share as there was a high positive correlation coefficient. The study further revealed that there was greater variation of

profitability of long insurance companies as a result of change in assets, leverage and market share as the value of adjusted R square was high. The long term insurance companies' size as measured by total assets has a negative but insignificant effect on profitability (ROA). The negative relationship could be that as the long term insurance companies are becoming extremely large, the bureaucratic procedures have negatively affected their profitability.

5.3 Conclusion

The study found that there was a strong positive relation between profitability and size as measured by market share of both general and long term insurance companies in Kenya. The study further revealed that there was a greater variation of profitability of both general and long term insurance companies in Kenya as the value of adjusted R square was high an indication that market share was the main factor influencing profitability. The adjusted R square ranged between 43.4% and 85.5% which showed that the independent variables had great effect on profitability of insurance companies in Kenya. The study concludes that there is a positive relationship between profitability and size of insurance companies as measured by market share.

The study found out that there was insignificant positive relationship between profitability and size as measured by total assets for both general and long term insurance companies in Kenya. This shows that insurance companies in Kenya are not efficient in converting investment to net income. ROA gives an idea as to how efficient management is at using its assets to generate earnings. The owners of insurance companies need to stress for efficient and lean management.

5.4 Recommendations for Policy

From the findings and conclusions it was found that there was a strong positive relationship between profitability of both general and long term insurance companies, the study thus recommends that in order for insurance companies to increase their profitability there is need for insurance companies to increase their market share. Insurance companies should put more resources for marketing of their products as this will lead to increase in market share. Insurers need to channel more resources to research, development and innovation of new products which will lead to increase in market share. Insurers should reduce the amount of resources used in acquiring new assets since assets do not have a significant effect on profitability of insurance companies in Kenya. The ROA of all insurance companies in Kenya is very low signaling that the assets do not aid in generation of income for the insurance companies, the assets are not used optimally to generate income. Insurers should hold optimal level of asset which would lead to higher profitability. Insurers should consider investing in high return investment projects.

5.5 Limitations of the Study

This study relied on secondary data (reported accounting financial statements) and therefore the reliability and quality of the data used was not a hundred percent. The researcher also had no control over the quantity and form of data for the study and this contributed to shortage of data; some of the financial statements used by the researcher did not give enough information leaving the researcher to hunt for more facts and had to be familiar with other empirical studies that have used similar data set. The use of

regression analysis means that there is an assumption of linearity with the various models which may not be the case. The regression model is only applicable if all factors are held constant which may not be the case as the environment keep on changing.

The findings of this study may not also be generalized to all insurance companies across the globe but can be used as a reference to companies in developing countries since they face almost the same challenges due to the same prevailing economic situations as opposed to companies in developed countries. The factors considered keeps on changing from period to period depending on prevailing economic situations and market demand.

5.6 Suggestions for Further Research

The current research was based on a descriptive research design on the insurance industry in Kenya. Future studies should be undertaken through a case study for a longer time period which will help in finding in-depth investigation of a single group or event. Depending on available data, future studies on firm profitability may include additional explanatory variables as well as enlargement of used population in a way that it involves cross-country analysis.

Further research is needed on determinants of profitability of Kenyan insurance industry so that insurers will get ample supports to craft their future strategies of increasing profitability.

Again, it is suggested that the explanatory variables used in this study in addition to other variables should be regressed on Return on Equity to find their extent of relationship on profitability.

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APPENDIX I: INSURANCE COMPANIES IN KENYA AS AT 31ST DECEMBER 2013

NO.	COMPANY	LINE OF BUSINESS	ADDRESS
1	AAR Insurance Company Ltd	General	P.O Box 41766 Nairobi
2	A P A Insurance Limited	General	P.O Box 30065 – 00100, NAIROBI
3	Africa Merchant Assurance Company	General	P.O Box 61599 – 00200, NAIROBI
4	Apollo Life Assurance Limited	Life	P.O Box 30389 – 00100, NAIROBI
5	AIG Kenya Insurance Company	General	P.O. Box 49460 – 00100, NAIROBI
6	British-American Insurance Company (Kenya) Limited	Composite	P.O Box 30375 – 00100, NAIROBI
7	Cannon Assurance Limited	Composite	P. O. Box 30216-00100,NAIROBI
8	Capex Life Assurance Company Limited	Life	P. O. Box 12043 – 00400, NAIROBI
9	CFC Life Assurance Limited	Life	P.O. Box 30364 – 00100, NAIROBI
10	CIC General Insurance Limited	General	P.O. Box 59485 – 00200, NAIROBI
11	CIC Life Assurance Limited	Life	P.O. Box 59485 – 00200, NAIROBI
12	Corporate Insurance Company Limited	Composite	P.O. Box 34172 – 00100, NAIROBI
13	Directline Assurance Company Limited	General	P.O. Box 40863 – 00100, NAIROBI
14	Fidelity Shield Insurance Company Limited	General	P. O. Box 47435 – 00100, NAIROBI
15	First Assurance Company Limited	Composite	P.O. Box 30064 – 00100, NAIROBI
16	G A Insurance Limited	General	P.O. Box 42166 – 00100, NAIROBI
17	G A Life Assurance Limited	Life	P. O. Box 42166-00100,NAIROBI
18	Gateway Insurance Company Limited	General	P.O. Box 60656 – 00200, NAIROBI
19	Geminia Insurance Company Limited	Composite	P.O. Box 61316 – 00200, NAIROBI

20	ICEA LION General Insurance Company Limited	General	P.O. Box 30190 – 00100, NAIROBI
21	ICEA LION Life Assurance Company Limited	Life	P.O. Box 46143 – 00100, NAIROBI
22	Intra Africa Assurance Company Limited	General	P.O. Box 43241 – 00100, NAIROBI
23	Invesco Assurance Company Limited	General	P.O. Box 52964-00200, NAIROBI
24	Kenindia Assurance Company Limited	Composite	P.O. Box 44372 – 00100, NAIROBI
25	Kenya Orient Insurance Limited	General	P.O. Box 34530-00100, NAIROBI
26	Madison Insurance Company Kenya Limited	Composite	P.O. Box 47382 - 00100, NAIROBI
27	Mayfair Insurance Company Limited	General	P.O. Box 45161 – 00100, NAIROBI
28	Mercantile Insurance Company Limited	Composite	P.O. Box 20680 – 00200, NAIROBI
29	Metropolitan Life Insurance Kenya Limited	Life	P.O. Box 46783 – 00100, NAIROBI
30	Occidental Insurance Company Limited	General	P.O. Box 39459 – 00623, NAIROBI
31	Old Mutual Life Assurance Company Limited	Life	P.O. Box 30059 – 00100, NAIROBI
32	Pacis Insurance Company Limited	General	P.O. Box 1870 – 00200, NAIROBI
33	Pan Africa Life Assurance Limited	Life	P.O. Box 44041 – 00100, NAIROBI
34	Phoenix of East Africa Assurance Company Limited	General	P.O. Box 30129 – 00100, NAIROBI
35	Pioneer Assurance Company Limited	Life	P.O. Box 20333 - 00200, NAIROBI
36	Real Insurance Company Limited	General	P.O. Box 40001 - 00100, NAIROBI
37	Resolution Insurance Company Limited	General	P.O Box 4469 – 00100, NAIROBI
38	Shield Assurance Company Limited	Life	P.O. Box 25093 - 00100, NAIROBI
39	Takaful Insurance of Africa Limited	General	P.O Box 1811 – 00100, NAIROBI
40	Tausi Assurance Company Limited	General	P.O. Box 28889 - 00200, NAIROBI

41	The Heritage Insurance Company Limited	General	P. O. Box 30390 - 00100, NAIROBI.
42	The Jubilee Insurance Company of Kenya Limited	Composite	P.O. Box 30376 - 00100, NAIROBI
43	The Kenyan Alliance Insurance Company Limited	Composite	P.O Box 30170 – 00100, NAIROBI
44	The Monarch Insurance Company Limited	Composite	P.O. Box 44003 – 00100, NAIROBI
45	Trident Insurance Company Limited	General	P.O. Box 55651 – 00200, NAIROBI
46	UAP Insurance Company Limited	General	P.O. Box 43013 - 00100, NAIROBI
47	UAP Life Assurance Limited	Life	P.O. Box 23842 – 00100, NAIROBI
48	Xplico Insurance Company Limited	General	P.O Box 38106 – 00623, NAIROBI

(Source http://www.ira.go.ke/index.php/publications)

APPENDIX II: DATA COLLECTION FORM

The study aims at establishing whether there is significant relationship between firm size and profitability. In order to achieve this, the study will analyze the relationship between dependent variable ROA and the independent variables (natural logarithm of total assets, leverage and market share).

The form below was used to get data for the various insurance companies for the year 2009 to 2013.

NO.	COMPANY	INCOME BEFORE TAX	TOTAL ASSETS	EQUITY	DEBT	MARKET SHARE
1	AAR Insurance Company Ltd					
2	A P A Insurance Limited					
3	Africa Merchant Assurance Company					
4	Apollo Life Assurance Limited					
5	AIG Kenya Insurance Company					
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	Corporate Insurance Company Limited					
13	Directline Assurance Company Limited					
14	Fidelity Shield Insurance Company Limited					
15	First Assurance Company Limited					

16	G A Insurance Limited					
17	G A Life Assurance Limited					
18	Gateway Insurance Company Limited					
19	Geminia Insurance Company Limited					
20	ICEA LION General Insurance Company Limited					
21	ICEA LION Life Assurance Company Limited					
22	Intra Africa Assurance Company Limited					
23	Invesco Assurance Company Limited					
24	Kenindia Assurance Company Limited					
25	Kenya Orient Insurance Limited					
26	Madison Insurance Company Kenya Limited					
27	Mayfair Insurance Company Limited					
28	Mercantile Insurance Company Limited					
29	Metropolitan Life Insurance Kenya Limited					
30	Occidental Insurance Company Limited					
31	Old Mutual Life Assurance Company Limited					
32	Pacis Insurance Company Limited					
33	Pan Africa Life Assurance Limited					
34	Phoenix of East Africa Assurance Company Limited					
35	Pioneer Assurance Company Limited					
36	Real Insurance Company Limited					
37	Resolution Insurance Company Limited					
38	Shield Assurance Company Limited					
39	Takaful Insurance of Africa Limited					

40	Tausi Assurance Company Limited					
41	The Heritage Insurance Company Limited					
42	The Jubilee Insurance Company of Kenya Limited					
43	The Kenyan Alliance Insurance Company Limited					
44	The Monarch Insurance Company Limited					
45	Trident Insurance Company Limited					
46	UAP Insurance Company Limited					
47	UAP Life Assurance Limited					
48	Xplico Insurance Company Limited					

(Source: Researcher, 2014)

APPENDIX III: TREND OF KEY INSURANCE INDUSTRY INDICATORS

Appendix III shows the overall summary of key insurance industry performance indicators in Kenya for the year 2009-2013.

Item	YEARS						
	2009	**2010**	**2011**	**2012**	**2013**	**% Annual Growth**	**% Five Year Growth**
Gross Premium Income	65,012,837	76,908,988	91,806,433	111,911,370	135,384,923	21.0	108.2
Net Premium Written	45,592,656	64,123,285	75,068,663	87,475,983	105,013,409	20.0	130.3
Claims Incurred	19,768,322	21,628,871	25,168,942	29,465,751	34,170,145	16.0	72.9
Net commissions	8,714,712	10,269,674	6,329,153	6,760,078	7,204,448	6.6	-17.3
Expenses of Management	14,640,675	16,758,479	17,111,268	20,239,406	24,808,273	22.6	69.4
Underwriting Results	401,806	1,271,437	2,416,263	3,107,093	3,402,770	9.5	746.9
Investment Income(P&L)	12,112,000	23,369,307	5,456,812	11,119,938	9,429,214	-15.2	-22.1
Operating profit/loss after taxation	3,420,972	7,634,272	6,908,585	13,104,366	20,235,881	54.4	491.5
Investments	113,452,503	177,520,999	191,790,627	240,124,681	296,336,802	23.4	161.2
Assets	178,403,820	223,490,783	245,597,207	311,215,873	366,252,339	17.7	105.3
Shareholder's Funds	41,468,967	58,648,780	44,880,131	77,115,761	100,958,028	30.9	143.5

Amounts in '000' Shs

(Source http://www.ira.go.ke/index.php/publications)