

**RELATIONSHIP BETWEEN FIRM CHARACTERISTICS AND
FINANCIAL PERFORMANCE OF LIFE INSURANCE COMPANIES IN
KENYA**

BY

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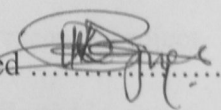
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE AWARD OF DEGREE IN
MASTER OF SCIENCE IN FINANCE, UNIVERSITY OF NAIROBI**

OCTOBER 2013

DECLARATION

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

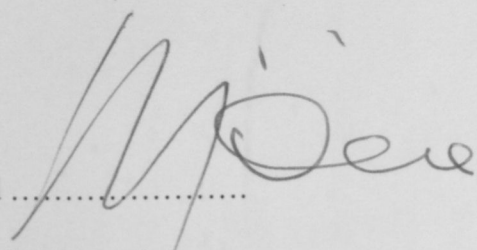
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This research project has been submitted for examination with my approval as the candidate's university supervisor.

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DEDICATION

I would like to dedicate this research project to my parents, my sisters and my 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.

The study findings indicate that the variables are statistically significant in influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implies that premium growth is relied upon to make conclusions about the financial performance of life insurance companies as shown by its strong and positive correlation coefficients. Based on the findings, the study recommends that insurers must work towards improving the premiums earned to increase profits. Further studies should be undertaken to analyze the different sectors in the economy to determine any significant differences in the relationship between firm characteristics and financial performance in the different sectors incorporating more independent variables.

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Organizational performance has attracted scholarly attention in corporate finance literature over several decades. However, in the context of insurance sector, it has received a little attention in developing economies. The objective of this study is to determine the relationship between firm characteristics (size, diversification, leverage, liquidity, age, premium growth and claim experience) and financial performance of life insurance companies in Kenya. In order to carry out the study, secondary data of 17 life insurance companies over the period of 2008-2012 was obtained on the financial performance from the annual reports and audited financial statements. Data collected was analyzed using SPSS (Statistical Package for Social Scientists). Regression analysis was used to analyze the data.

The study findings indicate that the variables are statistically significant to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implies that premium growth is relied upon to make conclusions about the financial performance of life insurance companies' as shown by its strong and positive correlation coefficients. Based on the findings, the study recommends that insurers must work towards improving the premiums earned to increase profits. Further studies should be undertaken to analyze the different sectors in the economy to determine any significant differences in the relationship between firm characteristics and financial performance in the different sectors incorporating more independent variables.

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ABBREVIATIONS

AKI: Association of Kenya Insurers

ANOVA: Analysis of Variance

OLS: Ordinary Least Squares

ROA: Return on Assets

ROE: Return on Equity

SPSS: Statistical Package for Social Scientists

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The performance of any firm not only plays the role to increase the market value of that specific firm but also leads towards the growth of the whole industry which ultimately leads towards the overall prosperity of the economy. Assessing the determinants of performance of insurers has gained the importance in the corporate finance literature because as intermediaries, these companies not only provide the mechanism of risk transfer, but also helps to channelize the funds in an appropriate way to support the business activities in the economy. However, it has received little attention particularly in developing economies (Ahmed et al, 2011).

The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large (Naser, and Mokhtar, 2004).

Performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation. Researchers in the strategic management field

have offered a variety of models for analyzing financial performance. Researchers have suggested that studies on financial performance should include multiple criteria analysis. This multidimensional view of performance implies that different models or patterns of relationship between corporate performance and its determinants will emerge to demonstrate the various sets of relationships between dependent and independent variables in the estimated models (Ostroff and Schmitt, 1993).

Life insurance companies have importance both for business and individuals as they provide economic and social benefits in the society i.e. increasing employment and reduction in anxiousness and fear. The challenge thus facing the local industry is the need for diversification of insurance products, better tailored products suited to meet the needs and development of the country. The concept of total customer satisfaction should lead to higher retention rates, increased market share and higher profitability in the life insurance industry.

1.1.1 Firm Characteristics Affecting Financial Performance

Empirical literature examines how financial and non-financial characteristics, such as leverage, liquidity, size; age and diversification have an influence on the firms' financial performance and growth. These characteristics can be easily measured by using available data on life insurance companies.

Firm size is one of the most influential characteristics in organizational studies. Chen and Hambrick (1995), and Mintzberg (1979) provide a summary and overview of the importance of firm size. Firm size has also been shown to be related to industry- sunk costs, concentration, vertical integration and overall industry profitability (Dean et al., 1998). Larger life insurance

companies are more likely to have more layers of management, greater number of departments, increased specialization of skills and functions, greater centralization and greater bureaucracy than smaller life insurance companies (Daft, 1995).

Recent research has found an association between firm size and inertia defined as slow adaptation to change or resistance to fundamental changes in conducting business (Miller and Chen, 1994). Inertia can be caused by constraints on action associated with firm age and size (Miller and Chen, 1994; Hannan and Freeman, 1984; Aldrich and Austen, 1986; Meyer and Zucker, 1989). Starbuck (1985) argues that inertia can make change more costly and harder to achieve and maintain. Larger life insurance companies may also find it more difficult to maintain an atmosphere of continuous change than smaller life insurance companies (Starbuck, 1985).

Firm diversification is a corporate strategy to increase sales volume from new products and new markets. Many researchers have studied the relationship between firm diversification and performance. Datta et al. (1991), Hoskisson and Hitt (1990), and Ramanujam and Varadarajan (1990), provide excellent surveys, analyses, and critiques of previous findings. The observation is that there does not seem to be any consistent or conclusive findings between firm diversification and performance. Stimpert and Duhaine (1997), argue that the inconsistencies are due to the fact the diversification impacts other variables, which in turn determines firm performance. Since firm size and diversification are positively correlated (Daft, 1995), the arguments about inertia and constraints on action related to firm size could also apply to diversification.

Firm leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity. With a high degree of financial leverage come high interest payments. The trade-off between agency costs of debt and equity (Jensen and Meckling, 1976); the limited liability effect of debt (Brander and Lewis, 1986); and the disciplining effect of debt (Grossman and Hart, 1983; Jensen, 1986) all suggest a positive effect of leverage on performance. Bolton and Scharfstein, 1990; Chevalier and Scharfstein, 1996; Dasgupta and Titman, 1998; suggest that leverage opens up opportunities for rivalry predation in concentrated product markets, thus conditioning the performance effect of leverage on the degree of competition in the life insurance industry.

Life Insurance Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. Leverage is not always bad, however; it can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing.

Firm liquidity measures the company's ability to meet its short-term obligations using its most liquid assets. It is usually measured by the current assets to current liabilities (current ratio).

It shows the ability to convert an asset to cash quickly and reflects the ability of the firm to manage working capital when kept at normal levels. According to Subrahmanyam and Titman (2001), liquidity improves firm operating financial performance. Life insurance companies with more liquid assets are less likely to fail because they can realize cash at the time of need thus outperforming those with less liquid assets. Browne et al., (2001) found evidence supporting that performance is positively related to the proportion of liquid assets in the in the asset mix of a life

insurance company. Higher liquidity allows a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings (Liargovas, and Skandalis, 2008).

Aging is a process associated with a general decline in the physical functioning of the human body, such as the ability to remember, react, move and hear. By analogy, firms should weaken over time and lose their ability to compete. If performance declines as firms grow older, it could explain why most of them are eventually taken over (Loderer, Neusser, and Waelchli, 2009). Age could actually help life insurance companies become more efficient. Over time, firms discover what they are good at and learn how to do things better (Arrow, 1962; Jovanoic, 1982; Ericson and Pakes, 1995). Firms specialize and find ways to standardize, coordinate and speed up their production process, as well as to reduce costs and improve quality. Older firms may also benefit from reputation effects, which allow them to earn a higher margin on sales.

On the other hand, older firms are prone to inertia, and the bureaucratic ossification that goes along with age; they might have developed routines, which are out of touch with changes in market conditions, in which case an inverse relationship between age and profitability or growth could be observed (Liargovas, and Skandalis, 2008). Newer and smaller firms, as a result, take away market share in spite of disadvantages like lack of capital, brand names and corporate reputation with older firms (Kakani, Saha, and Reddy, 2001).

Growth is employed in this model as a measure of change in demand. One would therefore expect that high growth should be associated with higher profitability. However, it has been argued that extreme profitability in one period may contribute to reductions in profitability in the

following period. Growth may also be achieved via pricing strategies which sacrifice current profitability (Gaskins, 1970). The proxy measure for growth rate is the annual percentage change in life insurance companies' related sales revenue over a time period. Prior studies have used this measure, or one based on the growth of physical output (Hall & Weiss, 1967; Shepherd, 1972).

This is the matching of all losses occurring during a given 12-month period of time with all premium earned during the same period of time. The smaller life insurance companies have less profitability as a result of very high claims as compared to the premiums earned unlike with the larger life insurance companies with larger reserves for claims payment. The costs incurred in processing claims; court costs, interest upon awards and judgments, the company's allocated expenses for investigation and legal expenses are also too high for smaller life insurance companies.

1.1.2 Financial Performance

This refers to the measurement of the results of a firm's strategies, policies and operations in monetary terms. These results are reflected in the firm's return on assets and return on investments. Financial performance provides a subjective measure of how well a life insurance company can use assets from its primary mode of business and generate revenues. Financial performance is measured by revenues from operations, operating income or cash flow from operations or total unit sales. The analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt (Leah, 2008).

Financial performance indicators in the form of ratios include profitability, liquidity, utilization financial structure and investment – shareholder ratio (Philip, 2004). Measure of profitability is by gross profit margin; the amount of money made after direct costs of sales have been taken into account, operating margin; lies between the gross and net measures of profitability and net profit margin; takes all costs into account. Liquidity ratios indicate the ability to meet short-term obligations, efficiency ratios indicate how well the business assets are in use and financial leverage/gearing ratios indicate the sustainability to the exposure of long-term debt (Leah, 2008). These ratios can be combined to determine the rate of return for a company and its owners and the rate at which the company can grow the sustainable rate of growth. By adding data about the company's stock market performance, the analyst can gain insight into how financial markets view the company's performance (Hamilton, 1989). Financial performance of life insurance companies could also be as a result of financial planning, financial control and decision making by the management.

The performance of the life insurance companies will be measured by return on assets (ROA). The ROA, defined as net income divided by total assets, reflects how well a company management is using the company real investment resources to generate profits. ROA is widely used to compare the efficiency and operational performance of company as it looks at the returns generated from the assets financed by the company. Another measure of profitability is the return on equity (ROE). It indicates how effectively the management of the enterprise is able to turn shareholders' funds into net profit. It is the rate of return flowing to the company's shareholder. The higher ROA and ROE reflects higher managerial efficiency of the company's and vice versa.

1.1.3 Relationship between Firm Characteristics and Financial Performance

Firm size is one of the most acknowledged determinants of a financial performance (Beard & Dess, 1981). The causal relationships between size and financial performance have been widely tested with ambiguous results. Several studies suggest that a positive relationship exists between company size and financial performance. Bigger firms are presumed to be more efficient than smaller ones. The market power and access to capital markets of large firms may give them access to investment opportunities that are not available to smaller ones (Amato and Wilder, 1985). Firm size helps in achieving economies of scale.

Firm age (measured as the number of years a company is operating in the market since it was founded) is an important determinant of financial performance. Past research shows that the probability of firm growth, firm failure, and the variability of firm growth decreases as firm's age (Evans, 1987; Yasuda, 2005). According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies (Evans, 1987). Maturity brings stability in growth as firms learn more precisely their market positioning, cost structures and efficiency levels.

1.1.4 Life Insurance Companies in Kenya

Life insurance is a contract between an insurance policy holder and an insurer, where the insurer promises to pay a designated beneficiary a sum of money upon the occurrence of an insured event. Depending on the contract, other events such as terminal illness or critical illness may also trigger payment. The core benefit of life insurance is that the financial interests of one's family remain protected from circumstances such as loss of income due to critical illness or death of the policy holder. The value for the policy owner is the 'peace of mind' in knowing that the death of

the assured person will not result in financial hardship. Kunreuther and Pauly (2012) argue that there is a tendency to view insurance as a bad investment when you have not collected on the premium you paid the insurer. It is difficult to convince people that the best return on an insurance policy is no return at all.

Kenya's life insurance sector is quite unusual. In terms of absolute premiums written, it is tiny. Density (i.e.: premiums per capita) is low by all standards other than those of Africa (except South Africa). Transparently, a sizeable percentage of all households are too poor to be able to consider saving for their long-term futures via life insurance. Nevertheless, the rapid growth in density, and the fact that the segment accounts for a significant portion (approximately a third) of all activity in the insurance sector, there will be growth in the life insurance sector (AKI Annual Reports, 2011).

The life insurance industry acts as a big stimulus to all types and sizes of business ventures as a source of funds for investment. The numerous premium streams accumulate into a vast fund that would otherwise be impossible to stimulate. From this pool organizations as well as individuals can borrow to finance business undertakings. The government also results to this pool to finance public expenditure. The industry also is a source of revenue to the government as the tax paid by the industry contributes towards funding the Ex-chequer (Francis, 1996).

The life insurance industry in Kenya recorded gross written premium of Kshs. 91.60 billion compared to Kshs. 79.06 billion in 2010, representing an increase of 15.9%. Gross earned premium increased by 17.9% to stand at Kshs.74.84 billion in 2011 compared to Kshs. 63.5

billion in 2010. The industry's annual performance exceeded the overall economic growth of 4.4% recorded in 2011. The insurance penetration is estimated at 3.02%, which compares well with the emerging markets average of 2.7% (AKI Annual Reports, 2011).

Life insurance companies underwrite only long-term business that is: life insurance, pensions and annuities. In Kenya, these companies include: Old Mutual Life Assurance Company Limited, CFC Life Assurance Company Limited and Metropolitan Life Assurance Company Limited. However, majority of the life insurance companies are composite companies i.e. they underwrite both life insurance and general insurance business. At present, out of the 47 insurance companies in Kenya, 24 provide general insurance business, 11 long-term insurance business and 12 are composite insurers. This study will be conducted by using all the life insurance companies (Alice, and Lucy, 2011).

Life insurance premiums in Africa are estimated to have increased by 1.3% to USD 46 billion in 2011, having declined by 11% in 2010. South Africa, the region's dominant market, accounts for around 90% of regional premium volume. Premium income in South Africa is estimated to have grown by 1.5% in 2011, against a decline of 12% in 2010. Growth was supported by an increase in recurring premiums for individual in-force policies in 2011 (AKI Annual Reports, 2011).

1.2 Research Problem

Theoretical basis for arguing that firm characteristics are related to financial performance can be found in the traditional neoclassical view of the firm and the concept of economies of scale. Economies of scale may occur for various reasons such as financial; better interest rates and

better discount rate to larger firms, organizational; specialization and division of labour, and technical; division of high fixed costs across large number of units. Thus, a positive relationship between firm size and profitability is expected. A negative relationship between firm size and profitability is noted in the alternative theories of the firm, which suggest that large firms come under the control of managers pursuing self-interested goals and therefore profit maximization as the firm's objective function may be replaced by managerial utility maximization function.

Studies on the effect of firm characteristics on firm performance have generated mixed results ranging from those supporting a positive relationship to those opposing it. A positive relationship between firm size and performance was found by Vijayakumar and Tamizhselvan (2010). In their study, they used different measures of size (sales and total assets) and performance (profit margin and profit on total assets). Majumdar (1997) investigated the impact that firm size has on profitability and productivity of a firm. While controlling for other variables that can influence firm performance, he found evidence that larger firms are less productive but more profitable. 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.

Other studies have been carried out on life insurance in Kenya by Khamallah (1984), Angima (1987) and Wairegi (2004) on life insurance in Kenya, the adequacy of life insurance and strategic responses by life insurance companies in Kenya. Despite the current life insurance

companies' development, no studies were conducted to determine the performance of life insurance companies in Kenya.

The determinants of performance have been studied in corporate finance literature from the last several decades but none has been done on life insurance companies. The study relating to the relationship of firm characteristics and financial performance of life insurance industries provides an important data for comparing determinants of performance of life insurance companies between developed and developing economies. Thus, the significance of this study is to fill the gap in understanding the determinants of financial performance for life insurance companies in Kenya.

1.3 Research Objective

To determine the relationship between firm characteristics and financial performance of life insurance companies in Kenya.

1.4 Value of the Study

The study aims at equipping financial managers with applied knowledge for determining characteristics that affect life insurance performance as a result of their financial control, planning and decision making. The study will also add to the body of knowledge in the finance discipline and form a foundation for developing the findings further and may act as a source of reference in the future for academicians and scholars.

The study can also be used by people willing to take up insurance policies and investors willing to invest in deciding on what company to settle for among the many competitors in the life insurance industry. The financial advisors can use the findings of the study to advise their clients on which companies to invest in order to meet their expectation. If the larger life insurance companies pay higher dividends then the clients or investors would be appropriately advised.

This chapter presents the literature review on the firm characteristics based on the information from other researchers who have carried out their research in the same field of study. This chapter also presents a theoretical review on firm characteristics.

2.2 Theoretical Review

2.2.1 Traditional Theory

This theory holds that there exists an optimal level of leverage. The justification is that minimizing the cost of capital when the optimal level of debt capital is employed maximizes the value of the firm (Myer and Myers 1984). It's based on the argument that as the levels of debt increased leverage, doesn't increase the cost of debt, hence the replacement of an expensive source of capital (equity) with a cheaper source (debt) typically results in an increase in the value of the firm. It's this theory of financing incentives by Frank Modigliani and Merton Miller (1960) through the argument holds because investors who hold debt are not concerned of the financial risk of "generate" debt levels and will continue demanding the same return on debt. They argue that it's only at "excessive" debt levels that they demand a higher return. Alexander (1992) further explains the fact that debt funds are cheaper than equity funds carries the debt. He states that the cost of debt plus the cost of equity together as weighted by its yield be less than the cost of equity, which existed on equity before debt financing. That's the weighted average cost of capital will decrease with the use of debt.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review on the firm characteristics based on the information from other researchers who have carried out their research in the same field of study. The chapter also presents a theoretical review on firm characteristics.

2.2 Theoretical Review

2.2.1 Traditional Theory

This theory holds that there exists an optimal level of leverage. The implication is that minimizing the cost of capital when the optimal level of debt capital is employed maximizes the value of the firm (Brealey and Myer 1998). It's based on the argument that at low levels of debt, increased leverage doesn't increase the cost of debt hence the replacement of an expensive source of capital (equity) with a cheaper source (debt) translates to an increase in the value of the firm. It's this that creates borrowing incentives to firms. Brealey and Myers (1998) observe that this argument holds because investors who hold debt are informed of the increased risk at 'moderate' debt levels and will continue demanding the same return on debt. They argue that it's only at 'excessive' debt levels that they demand a higher return. Alexander (1963) better explains the fact that debt funds are cheaper than equity funds carries the clear implication that the cost of debt plus the cost of equity together on weighted basis will be less than the cost of equity, which existed on equity before debt financing; that's the weighted average costs of capital will decrease with the use of debt.

The validity of the traditional view is questioned on the ground that the market value of the firm depends upon its net operating income and risk attached to it. The form of financing doesn't change net operating income nor the risk attached to it but simply the way in which the income is distributed between equity holders and debt holders (Brealey & Myers 1998). Modigliani & Miller (1958), criticize the traditional view on the ground that the assumption that the cost of equity remains unaffected leverage up to some reasonable limit does not provide sufficient justification for such an assumption. They do not really add very much to the riskiness of the share.

2.2.2 Resource Based Theory

This theory addresses performance differences between firms using asymmetries in knowledge (Chen, 1996). At the corporate strategy level, theoretical interest in economies of scope and transaction costs focus on the role of corporate resources in determining the industrial and geographical boundaries of the firms' activities. At the business strategy level, explorations of the relationships between resources, competition and profitability include the analysis of competitive imitation, the appropriability of returns to innovations, and the role of imperfect information in creating profitability differences between competing firms.

A firm's ability to earn a rate of profit in excess of its cost of capital depends upon the attractiveness of the industry in which it is located and its establishment of competitive advantage over rivals. Industrial organization economics emphasizes industry attractiveness as the primary basis for superior profitability, the implication being that strategic management is concerned primarily with seeking favorable industry environments, locating attractive segments and strategic groups within industries and moderating competitive pressures by influencing

industry structure and competitors behavior. Thus, a resource based theory of the firm entails a knowledge based perspective.

2.2.3 Pecking Order Theory

This theory explains why internal finance is much more popular than external finance and why debt is classified as the most attractive external finance option. Pecking order refers to a hierarchy of financing beginning with retained earnings followed by debt financing and finally external equity financing. The theory basically suggests that companies with high profitability may use less debt than other companies because they have less need to raise funds externally and because debt is the 'cheapest' and most 'attractive' external option when compared to other methods of capital raising. Donaldson followed by Myers suggests that management follows a preference ordering when it comes to financing.

First, internal financing of investment opportunities is preferred because it avoids the outside scrutiny of suppliers of capital and also there no floatation costs associated with the use of retained earnings. Secondly, straight debt is preferred. Not only does debt result in less intrusion in management by suppliers of capital, but floatation costs are less than with other types of external financing. Also asymmetric information and financial signaling considerations come into play. The third in order of preference is preferred stock, which carries some features of debt. This is followed by various hybrid securities such as convertible bonds. Finally the least desirable security to issue is straight equity. The investors are the most intrusive, floatation costs are highest and there's likelihood to be an adverse signaling effect.

However, Pecking order hypothesis suggests that corporations don't have a well throughout capital structure. Rather a company finances overtime with the method providing the least resistance to management and there's little capital market discipline on management's behavior. The capital structure that results is a by- product and changes whenever there's an imbalance between cash flows and capital investments.

2.2.4 Agency Theory

According to the Agency theory developed by Jensen and Meckling, agency costs arise from conflicts of interest between shareholders and managers of the company. Agency costs are defined as the sum of monitoring costs incurred by the principal, bonding costs incurred by the agent, and residual loss. Lower agency costs are associated with better performances and thus higher firm values, all other things being equal. Agency theory states that management and owners have different interests (Jensen and Meckling, 1976). Companies that separate the functions of management and ownership will be susceptible to agency conflicts (Lambert, 2001). They show that regardless of who makes the monitoring expenditures, the cost is borne by stake holders. Debt holders, anticipating monitoring costs, charge higher interest. The higher the probable monitoring costs, the higher the interest rate and the lower the value of the firm to its shareholders all other things being the same. There are three types of agency costs which can help explain the relevance of capital structure.

Asset substitute effect: as debt to equity increases, management has an increased incentive to undertake risky projects. This is because if the project is successful, shareholders get all the upside, where as if it is unsuccessful, debt holders get all the downside. If the projects are

undertaken, there's a chance of firm value decreasing and a wealth transfer from debt holders to shareholders. Underinvestment problem: if debt is risky, the gain from the project will accrue to debt holders rather than shareholders. Thus, management has an incentive to reject positive net present value projects, even though they have the potential to increase firm value. Free cash flow: unless free cash flow is given back to investors, management has an incentive to destroy firm value through empire building and perks etc. Increasing leverage imposes financial discipline on management.

Complete protection would require the specification of extremely detailed protective covenants and extra ordinary enforcement costs. As residual owners of the firm, the stock holders have an incentive to see that monitoring costs are minimized up to a point. Monitoring costs may limit the amount of debt that's optimal for a firm to issue. It's likely that beyond a point the amount of monitoring required by debt holders increases with the amount of debt outstanding. When there's little or no debt, lenders may engage in only limited monitoring. Costs associated with protective covenants are substantial and rise with the amount of debt financing. Shareholders incur monitoring costs to ensure manager's actions are based on maximizing the firm's value. Jensen and Meckling (1976) noted that with increasing costs associated with higher levels of debt and equity an optimal combination of debt and equity might exist that minimizes total agency costs.

2.3 Empirical Review

There have been many studies on the relationship between firm characteristics and financial performance on banks and none on the life insurance industry in Kenya. Anghazo (1997) examined the impact of firm level characteristics on US bank net interest margin. The results

showed that bank interest margin positively related with leverage, opportunity cost, default risk and management efficiency. Neeley and Wheelock (1997) explored the determinants of profitability of commercial banks and found that profitability positively related with changes in per capita income. Asimakopoulos, Samitas and Papadogonas (2009), illustrated that firms profitability is positively affected by size, sales growth and investment while leverage and current assets negatively related with profitability.

Several studies have been conducted to measure the performance of the life insurance companies. For instance; Sloan and Conover (1998) deduced the functional status of insurers does not affect the profitability of being insured but public coverage have significant impact on profitability of insurance companies. Chen and Wong (2004) examined that size, investment, liquidity are the important determinants of financial health of insurance companies. Chen et al., (2009) examined the determinants of profitability and the results showed that profitability of insurance companies decreased with the increase in equity ratio. The life insurance companies must diversify their investment and use effective hedging techniques which help them to create better financial revenues.

Loo (2007) did a survey of liquidity management approaches and their effect on profitability of commercial banks in Kenya. The objective was to identify liquidity management strategies employed by such banks and to study the relationship between banks liquidity management and profitability. He found out that, commercial banks in their lending activities extend credit only for short period and for purposes which resulted in self-liquidation of credit. Banks with relatively tight liquidity were more profitable.

Kamau (2010) in his study on the relationship between capital structure and financial performance of insurance companies in Kenya found out that there was a positive but weak relationship between capital structure and financial performance. He also found out that capital structure decision was found to be critical for any business organization due to the need of maximizing returns to various organizational components, and also because of the impact such a decision has on a firm's ability to deal with its competitive and volatile environment effectively. The findings indicated that, debt to equity ratio accounted for a smaller percentage of financial performance of all three types of insurance companies under study. There was a positive but a weak relationship between capital structures and financial position of the insurance companies.

In many literatures, it has been suggested that company size is positively related to financial performance. This is because large life insurance companies have greater capacity for dealing with adverse market fluctuations than smaller life insurance companies, large life insurance companies can easily recruit able employees with professional knowledge compared to smaller life insurance companies and they also have economies of scale in terms of the labor cost, which is the most significant production factor for delivering insurance services. Browne et.al, (2001) has shown empirically that company size is positively related to the financial performance of US life insurance companies. However, company size is not found to be an important determinant of operational performance in the Bermuda insurance market during the period 1993-1997(Adams and Buckle, 2000).

Life insurance companies could prosper by taking reasonable leverage risk or could become insolvent if the risk is out of control. Adams and Buckle (2000) provide evidence that life insurance companies with high leverage have better operational performance than life insurance companies with low leverage. However, more empirical evidence supports the view that leverage risk reduces company performance. Carson and Hoyt (1995) found that leverage is significantly positively related to the probability of insolvency. Moreover, a negative relationship between leverage and performance has also been found in Browne et al., (2001).

Life insurance companies with more liquid assets are less likely to fail because they can realize cash in very difficult situations. It is expected that life insurance companies with more liquid assets will outperform those with less liquid assets. Brown et al., (2001) found evidence supporting that performance is positively related to the proportion of liquid assets in the asset mix of a life insurance company. More empirical findings have confirmed that there is a positive relationship between liquidity and financial performance of insurers (Ambrose and Carroll, 1994 and Carson and Hoyt, 1995). However, according to the theory of agency costs, high liquidity of assets could increase agency costs for owners because managers might take advantage of the benefits of liquid assets (Adams and Buckle, 2000). Liquid assets imply high investment risk since the proceeds from liquid assets would have to be reinvested after a relatively short period of time thus reinvestment risk would put a strain on the performance of a company. In this case, it is likely that life insurance companies with less liquid assets outperform those with more liquid assets.

Like the firm size-profitability relationship, the association between firm age and financial performance has been widely studied. On the one hand, Sidhu and Bhatia (1993) argue that younger firms will be outperformed by older ones. Older firms have the early mover advantage and may possess specific competencies and skills which younger firms may not have developed as yet. In doing so, they are able to grow faster to achieve higher profitability. However, Hannan and Freeman (1989) suggest that older firms are more resistant to changes in a competitive environment and newer technologies which may, as a result of the need to operate in an age-old standardized manner, leave older firms progressively outdated and lead to organization failure.

Life insurance premium growth measures the rate of market penetration. Empirical results showed that the rapid growth of premium volume is one of the causal factors of insurers' insolvency (Kim et al. 1995). This is because if too much attention is only given to growth, it can lead to self-destruction as other important objectives may be neglected such as reinvestment projects, minimizing expenses for the company and ensuring customer satisfaction.

Ahmed et al., (2011) also investigated the impact of firm level characteristics on the performance of the life insurance sector of Pakistan over the period of seven years from 2001 to 2007. The results of the OLS regression analysis revealed that leverage is negatively and significantly related to the performance of life insurance companies. Growth of written premium and age of a firm has also negative relation to performance of life insurance companies but they are statistically insignificant. The study also showed that firm size is positively and significantly related to the performance of life insurance companies. This indicates that performance of the large size life insurance companies is better than the small size life insurance companies.

According to this study, tangibility of assets and liquidity also has a positive relation to performance of life insurance companies but they are statistically insignificant.

Another study by Malik (2011) examined the determinants of Pakistan's insurance companies' profitability proxied by return on total assets. The variables tested were age of company, size of the company, the volume of capital, leverage ratio and loss ratio. 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. On the other hand, the analysis suggests that leverage ratio and loss ratio have a negative impact on profitability of insurance companies in Pakistan.

A study by Lee (2008) examined the effect of equity ownership structure on firm financial performance in South Korea. It focused on the role of two main dimensions of the ownership structure: Ownership concentration (i.e., the distribution of shares owned by majority shareholders) and identity of owners (especially, foreign investors and institutional investors).

The study found that firm performance measured by the accounting rate of return on assets (ROA) generally improved as ownership concentration increases, but the effects of foreign ownership and institutional ownership are insignificant. The study also found that there is a hump-shaped relationship between ownership concentration and firm performance, in which firm performance peaks at intermediate levels of ownership concentration. The study provided some empirical support for the hypothesis that as ownership concentration increases; the positive monitoring effect of concentrated ownership first dominates but later is outweighed by the negative effects, such as the expropriation of minority shareholders.

2.1 Summary of Literature Review

A study by Liargovas & Skandalis (2008) examined the impact of key determinants of firms' financial performance. The study distinguished between financial and non-financial drivers of firm performance. The study results showed that leverage, export activity, location, size and the index for management competence significantly affect firm performance in Greece. The results indicated that profitable firms in Greece are large, young, exporting firms with a competitive management team, which have an optimal debt-equity ratio and use their liquidity to finance their investments.

A study by Antoniou et al (2007) investigated how firms operating in capital market oriented economies (the United Kingdom and the United States) and bank oriented economies (France, Germany and Japan) determine their capital structure. The study found that the leverage ratio is positively affected by the tangibility of assets and the size of the firm, but declines with an increase in firm profitability, growth opportunities and share price performance in both types of economies. The leverage ratio is also affected by the market conditions in which the firm operates. The degree and effectiveness of these determinants are dependent on the country's legal and financial traditions. The results also confirm that firms have target leverage ratios, with French firms being the quickest in adjusting their capital structure towards their target level, and the Japanese are the slowest. Overall, the capital structure of a firm is heavily influenced by the economic environment and its institutions, corporate governance practices, tax systems, the borrower-lender relationship, exposure to capital markets, and the level of investor protection in the country in which the firm operates.

2.4 Summary of Literature Review

There is no universal theory on the firm characteristics. There are several useful conditional theories that attempt to approach the determination of financial performance, each from different aspect. The pecking order theory suggest that firms will initially use internally generated funds, i.e. undistributed earnings, where there is no existence of information asymmetry, then they will draw debt capital if additional funds are needed and finally they will turn to new equity issue to cover any remaining capital requirements. Thus, highly profitable firms that generate high earnings are expected to use less debt capital than those that are not very profitable. Jensen and Meckling (1976) identify the existence of the agency problem which arises due to the conflicts between managers and shareholders. Managers of firms act as agents of the owners. However managers are mainly interested in accomplishing their own targets which may differ from the maximization of the firm value which is the maximization of the owners' benefit.

The cash flows of a firm which value is most likely to remain stable in the future are predictable and its capital requirements can be financed with debt more easily than these of a firm with growth potential. Myers (1977) argues that firms with growth potential will tend to have lower leverage. It has been suggested that company size is positively related to financial performance since large insurance companies have greater capacity for dealing with adverse market fluctuations than the small ones and also because large insurance companies can easily recruit able employees with professional knowledge compared with small insurance companies. In this paper, I wish to examine some specific firm characteristics that determine the financial performance of life insurance companies in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with the research design, population and also outlines the steps that were followed in data collection and analysis.

3.2 Research Design

A research design is the general plan of how one goes about answering the research questions Saunders, Lewis and Thornhill (2007). According to Cooper and Schindler (2001), research design constitutes the blueprint for data collection, measurement and analysis. There are several research designs ranging from exploratory studies, descriptive studies and explanatory studies. This is a descriptive study in which a survey was conducted to establish the relationship between firm characteristics and financial performance.

3.3 Population

A population is the total collection of elements about which the researcher wishes to make some inferences; Cooper and Schindler (2001). The population of this study consisted of all the life insurance companies incorporated under the Companies' Act and licensed under the Insurance Act. A total of 17 companies were studied (See Appendix 1)

3.4 Data Collection

Data on the financial performance of the companies as well as on leverage, diversification, liquidity, age, size and premium growth was obtained from secondary sources such as annual reports of the quoted companies for the years 2008-2012.

3.5 Data Analysis

Data obtained from secondary data was analyzed using statistical package for social sciences (SPSS). The study used regression analysis as the data analysis technique to investigate the impact of independent variables on dependent variable. ANOVA was used to establish the significance of the model. The results obtained from the model are represented in tables to aid in analysis and ease with which the inferential statistics was drawn. The regression model used is as shown below;

Regression Equation

$$ROA = \beta_0 + \beta_1(LG) + \beta_2(DV) + \beta_3(SZ) + \beta_4(LQ) + \beta_5(AG) + \beta_6(CC) + \beta_7(PG) + \varepsilon$$

Where:

ROA = Return on total assets; Net Profit before Tax/ Total Assets

LG = Leverage; Total Liabilities/ Total Assets

DV = Diversification; No.of branches across the region

SZ=Size of companies; Natural log of Total Assets

LQ=Liquidity; Current Assets/ Current Liabilities

AG=Age of companies; No. of years since establishment

CE=Claim Experience; Net Claims Incurred/ Net Earned Premiums

PG=Premium growth; $PG(t) - PG(t-1) / PG(t-1)$

ε = error term

β_0 =Constant

$\beta_1, 2, 3 \dots 7$ =Parameters to be estimated

The following explain the method used for calculating dependent and independent variables:

A measure was used to evaluate the financial performance that is the Return on assets (ROA).

ROA is one of the most widely used financial models for performance measurements and it was developed by Dupont in 1919. ROA determines a firm's ability to make use of its assets

(Tangen, 2003).

Leverage was measured by the ratio of total liabilities to total assets, liquidity ratio was measured by the ratio of current assets to current liabilities, size was measured by the total assets, age was measured by the number of years since establishment, premium growth was measured by percent increase in gross written premiums, claim experience was measured as the ratio of incurred claims to earned premiums, diversification was measured as a ratio of the squared fraction of sales in a segment to total sales and financial performance was measured by ROA

The analysis of the data collected from the life insurance companies financial statement followed a number of basic statistical techniques in order to identify and interpret the ratings of respondents such as means, standard deviations, T – test for independent variable. The degree of criticality of each factor was analyzed by using a content analysis approach.

To answer the study questions and hypothesis the following statistical methods were used: For subject of response description means and standard deviation were used and for hypothesis testing regression analysis was used.

3.5.1 Data Reliability and Validity

The term 'Reliability' is a concept used for testing or evaluating quantitative research, through the idea is often used in all kinds of research. The most important test of any qualitative study is its quality. Reliability is a concept to evaluate quality in quantitative study with a "purpose of explaining" while quality concept in qualitative study has the purpose of "generating understanding" (Stenbacka, 2001). The concept of validity is described by a wide range of terms in qualitative studies. This concept is not a single, fixed or universal concept, but "rather a contingent construct, inescapably grounded in the process and intentions of particular research methodologies and projects" (Winter, 2000). For the purpose of this study, data reliability and validity was ensured by collecting information and data from official sources such as annual audited accounts and corporate websites.

3.6 Tests of Significance

The study used the Statistical Package for Social Science (SPSS) to determine the relationship between Firm Characteristics and Financial Performance of Life Insurance Companies. The Tests of Significance are Regression Analysis expected to yield Coefficient of Determination (R^2), Analysis of Variance 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 is a presentation of results and findings obtained from field data, both descriptive and inferential statistics have been employed specifically using regression and ANOVA to establish the significance of the model and also to establish the relationship between firm characteristics and financial performance of life insurance companies in Kenya.

4.2 Descriptive Statistics of the Population

This summarizes the population characteristics of the relationship between firm characteristics and financial performance of life insurance in Kenya as indicated below. A population of 17 life insurance companies was studied. The results of tests on the differences in means of all variables of the model were considered i.e. Size, Leverage, Liquidity, Age, Diversification, Claim Experience and Premium Growth. The findings were as indicated in Table 4.1.

Table 4.1 Descriptive Statistics of the relationship between firm characteristics and financial performance of life insurance companies in Kenya

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Assets	85	.0000	.1800	.045412	.0395075
Leverage	85	.1200	1.0000	.740824	.1610399
Diversification	85	2	22	8.94	5.951

Firm Size	85	13.0177	17.3387	15.3006 34	1.2316324
Liquidity	85	.4900	3.9800	2.06317 6	.3303433
Firm Age	85	2	92	33.29	25.739
Claims Experience	85	.0987	2.0649	.729083	.3223284
Premium Growth	85	.0000	.7600	.166588	.1736825
Valid N (list wise)	85				

Source: Researcher.

The results in Table 4.1 shows tests on the differences in means of all variables of the financial performance model considered i.e. leverage showed an average percentage mean of 74.08 and standard deviation of 0.1610, diversification showed a mean of 8.94 percent and standard deviation of 5.951 , size showed a percentage mean of 15.3 and standard deviation of 1.23, liquidity showed a percentage mean of 20.6with standard deviation of 0.33 and claim experience showed a percentage mean of 16.6 with a standard deviation of 0.17. The positive values imply that the variables under the model are significant in determining the financial performance of life insurance companies in Kenya.

4.3 Correlation Coefficients of the Relationship between Firm Characteristics and Financial Performance of Life Insurance Companies in Kenya

The study further determined the correlation between the independent variables used in the study i.e. Size, Liquidity, Leverage, Age, Claim Experience, Diversification and Premium Growth. For this analysis Pearson correlation was used to determine the degree of association within the

independent variables and also between independent variables and the dependent variable. The analysis of these correlations seems to support the hypothesis that each independent variable in the model has its own particular informative value in the ability to explain financial performance of life insurance companies in Kenya (Table 4.2)

Table 4.2 Correlation coefficients of the relationship between firm characteristics and financial performance of life insurance companies in Kenya

	Return on Assets	Leverage	Diversification	Firm Size
Return on Assets	1	-.242*	-.004	-.008
Leverage	.026	1	.072	.557**
Diversification	-.004	.072	1	.116
Firm Size	.945	.000	.292	1
Liquidity	.177	-.082	.166	.154
	.104	.458	.129	.159

Firm Age					
Claims Experience					
Premium Growth					

Correlations

		Liquidity	Firm Age	Claims Experience	Premium Growth
	Pearson Correlation	.177	-.024*	-.255	.118
Return on Assets	Sig. (2-tailed)	.104	.825	.019	.283
	N	85	85	85	85
	Pearson Correlation	-.082*	.104	.483	-.078**
Leverage	Sig. (2-tailed)	.458	.345	.000	.477
	N	85	85	85	85
	Pearson Correlation	.166	-.026	-.017	.133
Diversification	Sig. (2-tailed)	.129	.817	.874	.225
	N	85	85	85	85
	Pearson Correlation	.154	.234**	.348	.010
Firm Size	Sig. (2-tailed)	.159	.031	.001	.926

Liquidity	N	85	85	85	85
	Pearson Correlation	1	.065	-.145	.200
	Sig. (2-tailed)		.556	.186	.066
Firm Age	N	85	85	85	85
	Pearson Correlation	.065	1	-.086	.151*
	Sig. (2-tailed)	.556		.432	.167
Claims Experience	N	85	85	85	85
	Pearson Correlation	-.145*	-.086**	1	-.084**
	Sig. (2-tailed)	.186	.432		.443
Premium Growth	N	85	85	85	85
	Pearson Correlation	.200	.151	-.084	1
	Sig. (2-tailed)	.066	.167	.443	
	N	85	85	85	85

Source, Research Findings

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 shows the correlations between the independent variables considered in the regressions: size, liquidity, age, claim experience, premium growth, leverage and diversification as independent variables in the model and ROA as a measure of financial performance of life insurance companies in Kenya. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that the variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implies that the premium growth is relied upon to make

conclusions about the financial performance of life insurance companies as shown by its strong and positive correlation coefficients, see table 4.3 below.

Table 4.3: Premium growth Versus Financial performance of life insurance companies in Kenya

		Financial performance of commercial banks in Kenya
Premium growth variables	Pearson Correlation	0.20
	Sig. (2-tailed)	0.000
	N	85

Source, Research Findings

A Pearson coefficient of 0.20 and p-value of 0.000 shows a strong, significant, positive relationship between premium growth variables and financial performance of life insurance companies in Kenya. Therefore basing on these findings the study rejects the null hypothesis that there is no relationship between premium growth variables and financial performance of life insurance companies in Kenya and accepts the alternative hypothesis that there exists a relationship between premium growth variables and financial performance of life insurance companies in Kenya.

All variables considered affect life insurance companies' financial performance positively, see table 4.4 below.

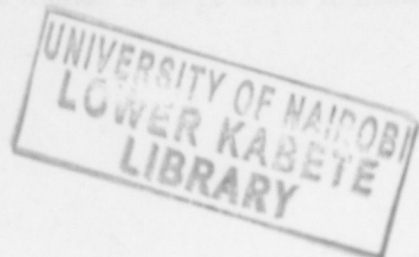


Table 4.4: Regression Coefficients of the relationship between firm characteristics and financial performance of life insurance companies in Kenya

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.012	.057		-.220	.0827
Leverage	-.057	.034	-.230	-1.653	.0102
Diversification	.000	.001	-.042	-.387	.0700
Firm Size	.006	.004	.200	1.457	.0149
Liquidity	.011	.014	.095	.838	.0405
Firm Age	.000	.000	-.084	-.743	.0460
Claims Experience	-.025	.015	-.201	-1.596	.0115
Premium Growth	.018	.025	.080	.724	.0471

Source, Research Findings

Dependent Variable: Return on Assets

As per the R generated table above, the equation $Y = a + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7$

Becomes:

$$Y = -0.012 + -0.057x_1 + 0.00x_2 + 0.006x_3 + 0.011x_4 + 0.00x_5 + -0.025x_6 + 0.018x_7$$

According to the regression equation established, taking all firm characteristics into account, financial performance measured by ROA will be -0.012. The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a

unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

4.4 Analysis of Variance (ANOVA)

Table 4.5: Analysis of Variance (ANOVA) results of the relationship between firm characteristics and financial performance of life insurance companies in Kenya

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.018	7	.003	1.699	.122 ^b
Residual	.114	77	.001		
Total	.131	84			

Source, Research Findings

Dependent Variable: Return on Assets

Predictors: (Constant), Premium Growth, Firm Size, Diversification, Liquidity,

Firm Age, Claims Experience, Leverage

The value of the F statistic, 1.699 indicates that the overall regression model is significant hence it has some explanatory value i.e. there is a significant relationship between the predictor variables Size, Liquidity, Leverage, Premium Growth, Diversification, Age, Claim Experience and financial performance of life insurance companies in Kenya.

4.5 Discussions of Findings

The results of tests on the differences in means of all variables of the model were considered. The study carried out descriptive statistics on the variables in a model. The findings presents the descriptive statistics of the variables used in the analysis: Size, Liquidity, Leverage, Age, Diversification, Claim Experience and Premium Growth and financial performance measure (ROA). The findings show that life insurance companies characteristics considered are significantly associated with financial performance as indicated by the positive mean values and their respective standard deviations.

According to the regression equation established, taking all firm characteristics into account; size, liquidity, leverage, age, diversification, claim experience and premium growth financial performance measured by ROA will be -0.012. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in the size of the company will lead to a 0.06 increase in the return on asset; a unit increase in the premium growth will lead to a 0.018 increase in the return on asset in financial performance; a unit increase in the claim experience will lead to a 0.025 decrease in the return on asset in financial performance.

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This chapter summarizes the study and makes conclusions based on the results. The implications from the findings and areas for further research are also presented. This section presents the findings from the study- objective and research methodology.

5.2 Summary of Findings

In data analysis and presentation of results both descriptive and inferential statistics were employed specifically using correlation, regression and ANOVA to establish the significance of the model and also to establish the relationship between financial performance with premium growth. The results of tests on the differences in means of all variables of the financial variables were considered i.e. size, leverage, liquidity, diversification, age, claim experience and premium growth.

The results showed tests on the differences in means of all variables of the financial performance model considered i.e. leverage showed an average percentage mean of 74.08 and standard deviation of 9.1610, diversification showed a mean of 2.94 percent and standard deviation of 3.951, age showed a percentage mean of 15.3 and standard deviation of 1.23, liquidity showed a percentage mean of 20.5 with standard deviation of 4.51 and claim experience showed a percentage mean of 16.0 with a standard deviation of 3.17. The positive values imply that the variables under the model are significant in determining the financial performance of life insurance companies in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study and makes conclusion based on the results. The implications from the findings and areas for further research are also presented. This section presents the findings from the study objective and research methodology.

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In data analysis and presentation of results both descriptive and inferential statistics were employed specifically using correlation, regression and ANOVA to establish the significance of the model and also to establish the relationship between financial performance with premium growth. The results of tests on the differences in means of all variables of the financial variables were considered i.e. size, leverage, liquidity, diversification, age, claim experience and premium growth.

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The study further determined the correlation between the independent variables used in the study i.e. financial performance and premium growth. For this analysis Pearson correlation was used to determine the degree of association within the independent variables and also between independent variables and the dependent variable. The analysis of these correlations seems to support the hypothesis that each independent variable in premium growth has its own particular informative value in the ability to explain the financial performance of life insurance companies in Kenya.

A Pearson coefficient of 0.20 and p-value of 0.000 shows a strong, significant, positive relationship between premium growth variables and financial performance of life insurance companies in Kenya. Therefore basing on these findings the study rejects the null hypothesis that there is no relationship between premium growth variables and financial performance of life insurance companies in Kenya and accepts the alternative hypothesis that there exists a relationship between premium growth variables and financial performance of life insurance companies in Kenya.

The Standardized Beta Coefficients gave a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

According to the regression equation established, taking all firm characteristics into account, financial performance measured by ROA will be -0.012. The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. The value of the F statistic, 1.699 indicates that the overall regression model is significant hence it has some explanatory value i.e. there is a significant relationship between the predictor variables Size, Liquidity, Leverage, Premium Growth, Diversification, Age, Claim Experience and financial performance of life insurance companies in Kenya.

The findings showed the correlations between the independent variables considered in the regressions: size, leverage, liquidity, diversification, age, premium growth and claim experience as independent variables in the model and ROA as a measure of financial performance of life insurance companies in Kenya. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that the variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implies that premium grow this relied upon to make conclusions about the financial performance of life insurance companies' as shown by its strong and positive correlation coefficients.

5.3 Conclusions

The results showed tests on the differences in means of all variables of the financial performance model considered. The positive values implied that the variables under the model are significant in determining the financial performance of life insurance companies in Kenya. The findings showed the correlations between the independent variables considered in the regressions: size, liquidity, leverage, age, premium growth, diversification and claim experience as independent variables in the model and ROA as a measure of financial performance of life insurance companies in Kenya. The significance of the coefficients was calculated at the level of 95%.

5.4 Recommendations

The study findings indicate that the variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implies that premium growth is relied upon to make conclusions about the financial performance of life insurance companies' as shown by its strong and positive correlation coefficients. According to the regression equation established, taking all firm characteristics into account, financial performance measured by ROA will be -0.012.

The Standardized Beta Coefficients gave a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

A Pearson coefficient of 0.20 and p-value of 0.000 shows a strong, significant, positive relationship between premium growth variables and financial performance of life insurance companies in Kenya. Therefore basing on these findings the study rejects the null hypothesis that there is no relationship between premium growth variables and financial performance of life insurance companies in Kenya and accepts the alternative hypothesis that there exists a relationship between premium growth variables and financial performance of life insurance companies in Kenya.

5.4 Recommendations

The study found that premium growth is the most significant factor influencing financial performance of life insurance companies in Kenya. The study therefore recommends that insurers must work towards improving the premiums earned to increase their profits. Higher profits would mean better reserves which would assist the insurer to operate in times of large unexpected claims and also help them maintain liquidity at all times. The study further recommends that insurance regulatory authority should increase the reserve requirement of the life insurance companies so as to put in place measures that oversee the performance of the companies in times of unexpected eventualities. This will increase the financial performance of the life insurance companies as they will have enough reserves as opposed to depending on premium growth.

The study also recommends a high consideration of increasing the company assets. This is because the size of the company is an important factor as it influences its competitive power. Small companies have less power than large ones; hence they may find it difficult to compete

with the large firms particularly in highly competitive markets. Great attention should be paid to leverage since companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. On the other hand, leverage can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing. There is a significant need to have highly qualified employees in the top managerial staff since the age of the company has no influence on its good financial performance.

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 life 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. The findings therefore may not reflect the true effect of these factors on financial performance of life insurance companies for a period considered.

5.6 Suggestions for Further Study

The current research was based on a descriptive research design on the life insurance industry. 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 financial performance may include additional explanatory variables as well as enlargement of used population in a way that it involves cross-country analysis.

Further research should be conducted on the same topic with different companies and extending the years of the population. Further research can also be undertaken which analyses the different sectors in the economy to determine any significant differences in the relationship between firm characteristics and financial performance in the different sectors incorporating more independent variables and also taking into account the prevailing macroeconomic situations.

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APPENDIX 1: LIST OF THE LIFE INSURANCE COMPANIES

1. Apollo Insurance Company Limited
2. British American Insurance Company Limited
3. Cannon Insurance Company Limited
4. CFC Insurance Company Limited
5. Cooperative Insurance Company Limited
6. Corporate Insurance Company Limited
7. ICEA Lion Insurance Company Limited
8. Jubilee Insurance Company Limited
9. Kenindia Insurance Company Limited
10. Kenya Alliance Insurance Company Limited
11. Madison Insurance Company Limited
12. Mercantile Insurance Company Limited
13. Metropolitan Life Insurance Company Limited
14. Old Mutual Insurance Company Limited
15. Pan Africa Life Insurance Company Limited
16. Pioneer Insurance Company Limited
17. UAP Insurance Company Limited

Source: Association of Kenya Insurers

APPENDIX 2: SUMMARY OF THE X AND Y VARIABLES

N	COMPANY	YEAR	YR INC	ROA	LG	DV	SZ	LQ	AG	CE	PG
1	APOLLO	2012	2004	0.04	0.85	2.00	14.34870375	2.06	8.00	1.168616627	0.06
2	APOLLO	2011	2004	0.03	0.83	2.00	14.29816261	2.62	7.00	1.19800513	0.15
3	APOLLO	2010	2004	0.06	0.72	2.00	14.28072963	2.47	6.00	1.492833167	0.17
4	APOLLO	2009	2004	0.15	0.12	2.00	13.57167183	2.10	5.00	0.498105193	0.09
5	APOLLO	2008	2004	0.09	0.56	2.00	14.34748379	2.23	4.00	0.941224616	0.05
6	BRITAM	2012	1965	0.05	0.70	18.00	17.07284015	3.49	47.00	0.486745523	0.41
7	BRITAM	2011	1965	0.06	0.79	18.00	16.84021068	3.98	46.00	0.451977106	0.29
8	BRITAM	2010	1965	0.05	0.65	18.00	16.87998351	2.12	45.00	1.043553601	0.15
9	BRITAM	2009	1965	0.03	0.71	18.00	16.48994062	2.04	44.00	0.602032486	0.19
10	BRITAM	2008	1965	0.03	0.63	18.00	16.33906829	2.00	43.00	0.707114989	0.26
11	CANNON	2012	1964	0.04	0.57	5.00	15.44448106	1.99	48.00	0.568417271	0.50
12	CANNON	2011	1964	0.04	0.62	5.00	15.22597105	2.01	47.00	0.724184998	0.64
13	CANNON	2010	1964	0.12	0.58	5.00	15.07469912	2.03	46.00	0.625017322	0.01
14	CANNON	2009	1964	0.13	0.64	5.00	14.89712927	2.18	45.00	0.705263289	0.36
15	CANNON	2008	1964	0.01	0.58	5.00	14.71376562	1.74	44.00	0.612116305	0.22
16	CFC	2012	2004	0.03	0.82	5.00	16.58672371	2.00	8.00	0.673639013	0.08
17	CFC	2011	2004	0.03	0.93	5.00	16.41100031	2.02	7.00	0.702102883	(0.29)
18	CFC	2010	2004	0.02	0.84	5.00	16.43434499	2.01	6.00	0.930204304	0.04
19	CFC	2009	2004	(0.04)	0.89	5.00	16.23665332	2.01	5.00	0.848865734	0.15
20	CFC	2008	2004	0.03	0.88	5.00	16.08761809	2.01	4.00	0.733382507	0.05
21	COOPERATIVE	2012	1978	0.08	0.60	14.00	15.06999604	2.07	34.00	0.650195145	(0.60)
22	COOPERATIVE	2011	1978	0.07	0.61	14.00	16.22364784	2.04	33.00	0.589384271	0.57
23	COOPERATIVE	2010	1978	0.09	0.60	14.00	15.69765126	2.01	32.00	0.580158889	0.42
24	COOPERATIVE	2009	1978	0.08	0.72	14.00	15.06555412	2.06	31.00	0.604517186	0.24
25	COOPERATIVE	2008	1978	0.07	0.75	14.00	14.9236272	2.00	30.00	0.616159715	0.13

26	CORPORATE	2012	1982	0.03	0.45	10.00	14.39720369	2.20	30.00	0.429972891	0.24
27	CORPORATE	2011	1982	0.02	0.56	10.00	14.16755661	2.05	29.00	0.560089493	0.01
28	CORPORATE	2010	1982	0.18	0.52	10.00	14.06791384	2.07	28.00	0.60780372	0.02
29	CORPORATE	2009	1982	(0.03)	0.77	10.00	13.68579132	2.12	27.00	0.556293413	0.14
30	CORPORATE	2008	1982	0.08	0.73	10.00	13.66212858	2.00	26.00	0.629462389	0.08
31	ICEA LION	2012	1978	0.01	0.82	8.00	17.33865312	2.02	34.00	1.142346313	0.06
32	ICEA LION	2011	1978	0.02	0.88	8.00	17.19803338	2.01	33.00	1.128971073	0.10
33	ICEA LION	2010	1978	0.05	0.88	8.00	17.11738019	2.00	32.00	1.343039896	0.10
34	ICEA LION	2009	1978	0.02	0.90	8.00	16.97423286	2.01	31.00	1.395654635	0.25
35	ICEA LION	2008	1978	0.02	0.90	8.00	16.88455128	2.01	30.00	1.347571656	(0.32)
36	JUBILEE	2012	1937	0.04	0.88	3.00	17.27736528	2.02	75.00	0.913923546	0.05
37	JUBILEE	2011	1937	0.04	0.90	3.00	17.14692247	2.00	74.00	0.890364725	0.39
38	JUBILEE	2010	1937	-	0.84	3.00	16.94926234	2.04	73.00	1.155192883	(0.22)
39	JUBILEE	2009	1937	0.07	0.92	3.00	16.6500559	2.00	72.00	0.806072724	0.21
40	JUBILEE	2008	1937	0.04	0.84	3.00	16.82133295	2.00	71.00	0.772123738	0.38
41	KENINDIA	2012	1978	0.08	0.84	8.00	16.98043697	2.01	34.00	0.866664489	0.08
42	KENINDIA	2011	1978	0.08	0.92	8.00	16.81630037	2.03	33.00	0.862624568	0.14
43	KENINDIA	2010	1978	0.13	0.88	8.00	16.56843202	2.06	32.00	0.664060126	0.12
44	KENINDIA	2009	1978	0.13	0.89	8.00	16.36344021	2.08	31.00	0.628402207	(0.04)
45	KENINDIA KENYA	2008	1978	0.10	1.00	8.00	16.23780421	2.03	30.00	0.831991493	0.06
46	ALLIANCE KENYA	2012	1979	0.07	0.65	8.00	15.02234297	2.17	33.00	0.469041327	0.20
47	ALLIANCE KENYA	2011	1979	0.06	0.65	8.00	14.96775587	2.25	32.00	0.350940445	0.76
48	ALLIANCE KENYA	2010	1979	0.11	0.68	8.00	14.94689041	2.06	31.00	0.288740504	0.28
49	ALLIANCE KENYA	2009	1979	0.12	0.75	8.00	14.82494695	2.00	30.00	0.102561589	0.72
50	ALLIANCE	2008	1979	0.01	0.40	8.00	15.47234719	2.03	29.00	0.666019602	(0.52)
51	MADISON	2012	1988	0.02	0.84	22.00	15.49127464	2.09	24.00	0.878913226	0.02
52	MADISON	2011	1988	0.02	0.83	22.00	15.44941667	2.06	23.00	0.766939071	0.15
53	MADISON	2010	1988	0.04	0.82	22.00	15.28881805	2.06	22.00	0.777870279	0.26

54	MADISON	2009	1988	0.03	0.82	22.00	15.06973018	2.05	21.00	0.778423358	0.10
55	MADISON	2008	1988	0.01	0.82	22.00	14.87609694	2.05	20.00	0.628698709	(0.08)
56	MERCANTILE	2012	1993	0.07	0.59	4.00	14.21487442	2.03	19.00	0.526314099	0.01
57	MERCANTILE	2011	1993	0.07	0.62	4.00	14.13789908	2.06	18.00	0.514271874	0.16
58	MERCANTILE	2010	1993	0.05	0.58	4.00	14.05658047	2.06	17.00	0.540533156	0.12
59	MERCANTILE	2009	1993	0.06	0.65	4.00	13.814451	2.00	16.00	0.54683622	0.10
60	MERCANTILE	2008	1993	0.05	0.66	4.00	13.70395869	2.02	15.00	0.525992158	(0.03)
61	METROPOLITAN	2012	2006	(0.17)	0.40	2.00	13.26734472	1.97	6.00	0.320565629	0.08
62	METROPOLITAN	2011	2006	(0.22)	0.42	2.00	13.24880394	1.91	5.00	0.283322644	(0.08)
63	METROPOLITAN	2010	2006	(0.09)	0.51	2.00	13.073757	1.97	4.00	0.56686182	(0.13)
64	METROPOLITAN	2009	2006	(0.18)	0.84	2.00	13.01770928	1.94	3.00	0.489740729	0.12
65	METROPOLITAN	2008	2006	(0.12)	0.66	2.00	13.02935734	1.89	2.00	0.27648602	0.27
66	OLD MUTUAL	2012	1920	0.01	0.87	2.00	16.01287568	1.89	92.00	0.67633617	0.04
67	OLD MUTUAL	2011	1920	0.02	0.88	2.00	15.96579993	2.00	91.00	0.631177863	(0.08)
68	OLD MUTUAL	2010	1920	(0.07)	0.87	2.00	16.0666913	2.01	90.00	0.496430837	0.22
69	OLD MUTUAL	2009	1920	(0.06)	0.88	2.00	15.83917218	2.00	89.00	0.588648193	0.00
70	OLD MUTUAL	2008	1920	0.03	0.89	2.00	15.62006482	2.00	88.00	0.705007841	(0.05)
71	PAN AFRICAN	2012	2004	0.04	0.85	15.00	16.46155223	2.01	8.00	0.565765249	0.07
72	PAN AFRICAN	2011	2004	0.05	0.82	15.00	16.25779055	2.00	7.00	0.568619311	(0.05)
73	PAN AFRICAN	2010	2004	0.06	0.83	15.00	16.18309853	2.00	6.00	0.846441481	0.27
74	PAN AFRICAN	2009	2004	0.02	0.81	15.00	15.85419755	2.00	5.00	0.797616246	(0.14)
75	PAN AFRICAN	2008	2004	(0.00)	0.81	15.00	15.62283641	1.91	4.00	0.658201954	0.20
76	PIONEER	2012	1930	0.04	0.62	15.00	14.02800481	2.02	82.00	0.608581261	0.10
77	PIONEER	2011	1930	0.04	0.71	15.00	13.83645567	2.04	81.00	0.614916034	0.23
78	PIONEER	2010	1930	0.06	0.69	15.00	13.69514356	2.18	80.00	0.487273314	0.20
79	PIONEER	2009	1930	0.05	0.73	15.00	13.62112573	2.06	79.00	0.578801743	0.41
80	PIONEER	2008	1930	0.01	0.43	15.00	13.27058164	2.01	78.00	0.514364946	0.27
81	UAP	2012	1994	(0.01)	0.93	11.00	14.94967015	2.01	18.00	1.161540935	0.07

82	UAP	2011	1994	(0.11)	0.93	11.00	14.88961872	2.00	17.00	1.353656734	0.43
83	UAP	2010	1994	(0.02)	0.96	11.00	14.78917848	2.01	16.00	2.064854917	0.52
84	UAP	2009	1994	(0.05)	0.93	11.00	14.57313845	0.49	15.00	1.369578325	(0.08)
85	UAP	2008	1994	0.07	0.83	11.00	14.17606477	2.01	14.00	0.098741505	0.12