

ASSESSMENT OF FACTORS INFLUENCING REVENUE GROWTH OF INSURANCE COMPANIES IN NAKURU TOWN, KENYA

P.K. Muriira 

School of Human Resource Development,
Jomo Kenyatta University of Agriculture and Technology, Kenya
fhinnieh@gmail.com

N. Bosire

School of Human Resource Development,
Jomo Kenyatta University of Agriculture and Technology, Kenya
nemwebo@yahoo.com

Abstract

Insurance industry is an important part of financial sector of a country which offers services such as security to the insured against risks to encourage individuals and corporations to engage in risky ventures but with good returns. Kenyan insurance companies lack sufficient underwriting capacity to insure major projects in the country such as standard gauge railway. This necessitated the study on factors affecting revenue growth of insurance companies focusing on premiums ratemaking, investment earnings trends, financial leverage and interest rates. The study was guided by agency theory and portfolio management theory which helped to understand the growth concept more. Past studies relating to study variables were also reviewed. The study adopted descriptive research design targeting the 40 finance/accounts officers working with insurance companies in Nakuru town. Due to small number of respondents, census technique was used hence all finance/accounts officers participated in the study. The data collected was analyzed by both descriptive and inferential methods with aid of statistical packages for social sciences (SPSS) version 20. Descriptive analysis indicated that all independent variables affected revenue growth. Through correlation analysis, premiums ratemaking, investments earning trends and financial leverage showed strong, positive association while interest rates illustrated little effect implying insufficient evidence to stamp its

importance concerning the revenue growth. Regression analysis indicated that all study independent variables jointly had strong relationship with revenue growth portraying greater influence on same matter. The study recommends insurance companies to maintain adequate rating systems which puts into account the affordability, quality, convenience and value for client's money. They should also establish and maintain separate management specifically in charge of investments. Further studies are hereby suggested on determinants of sufficient surplus capital and factors influencing revenue growth of microfinance institutions.

Keywords: Insurance Companies, Revenue Growth, Underwriting Capacity, Finance/Accounts Officers, Ratemaking, Investments Earning Trends

INTRODUCTION

Insurance companies contribute significantly to the economies of countries across the world by reducing the fear in individuals and companies from undertaking risky investments but with huge returns. They are however required to achieve sufficient revenue growth to attain financial strength that can enable them carry out all their operations effectively (Ang et al., 2000). These organizations particularly in developing countries have faced enormous financial difficulties that have curtailed their level of income as they struggle to expand amount of premiums and investments returns to promote underwriting capacity (Ezirim, 2002).

Kenya insurance industry revenues are growing according to insurance regulatory authority report of the year 2015. Premiums increased from Kshs. 135.38 billion in 2013 to Kshs. 157.73 billion in 2014, representing a 16.5% year-on-year growth. However, the industry operating profit for the year 2014 dropped by 14.8% to stand at Kshs. 17.23 billion compared to 2013 when it was at Kshs. 20.24 billion. The industry's asset base grew from Kshs. 366.25 billion in 2013 to Kshs. 430.54 billion in 2014. Out of the total industry assets, 82.5% that was Kshs. 355.01 billion was generated from various investments. Shareholders' funds amounted to Kshs. 114.14 billion, a growth of 13.1%, signaling improving capital position in the insurance industry thus showing increasing industry resilience as evidenced by increasing capital resources available for loss absorption.

Despite being considered an important pillar in Kenyan financial sector, insurance industry has faced various constraints which have made their operations difficult. As a result, they strain in settling claims, competing favorably in the market and honouring their budgets (Koller et al, 2005). Furthermore, they have not been able to meet the needs of all potential customers particularly, the low income earners. They may have reduced policy prices but they have not fully relaxed terms and conditions which make their products remain complicated.

Moreover, it is a difficult task to convince most of them struggling to make ends meet that they need insurance cover (Kaguma, 2011). They are concerned with basic needs to ensure their survival and may lack interest in insurance services. Insurance always want to attract more clients as well as maintaining the existing ones in order to contribute to the nation building. On contrary to this, penetration stood at 3.4% in the year 2013 but decreased to 2.9% in 2014. The implication is that insurance companies may have missed revenues that they could have received had the number been maintained or increased.

Insurance companies' revenue growth in the country is insufficient in the sense that they lack adequate underwriting capacity to insure major developments such as Standard Gauge Railway and LAPSET projects according to IRA report, 2015. Being a developing country, many people are not well versed with the diversity of insurance making it difficult to get all insured to pay premiums as stated and agreed by both parties. This has made insurance companies sometimes to strain financially in a bid to achieve the goal of revenue growth hindering them from fulfilling their potential (Mudaki, 2011).

However, the emergence of bancassurance is one of the ways forward to minimize financial difficulties. Commercial banks have well advanced branch networks over the country therefore increased adoption of bancassurance can improve product popularity of insurance industry thus enhancing their revenue growth (Waweru, 2014). Despite the goodies inherent, conflicts have come up between insurance brokers and banks. They assume that they will lose placements and commissions to banking institutions thus opposition to bancassurance is hindering the industry's progress and slowing revenue growth.

Companies' decisions are made by the top management whereby the crucial departments such as finance are highly involved (Richard et al, 2012). Their actions affects financial performances of the company thus have strong linkage to the revenue growth. It is also influenced by operating environmental factors such as government regulation as well as county government licensing. Insurance companies in Nakuru town have been resilient and trying to capture and increase market share. Since selling their policies has proved to be difficult, they have alternatively engaged agents and brokers among other intermediaries to carry out these functions on their behalf to at least have a positive impact in the markets and facilitate their revenue growth (Orsina & Gene, 2012).

Statement of the Problem

Sufficient revenue growth of insurance companies has not been fully achieved in Kenya as they have struggled to increase the level of premiums and investment earnings. This has constrained their key function of underwriting risks which mainly depends on the financial condition of the

company as well the type and size of losses associated with the business to be insured. Insurance penetration stood at 3.4% in the year 2013 and decreased to 2.9% in 2014 thus implying that insurance companies may have missed revenues that they could have received had the number been maintained or increased. According to Insurance regulatory authority, the industry has recently missed huge business opportunities. In their annual report of the year 2015, they indicated that Kenyan insurance companies lack adequate underwriting capacity to insure major developments in the country such as Standard Gauge Railway (SGR) and LAPSET projects. Previous studies in the field of insurance have not fully tackled this issue. Therefore, this study sought to address the problem by assessing the factors influencing revenue growth of insurance companies particularly in Nakuru town, Kenya.

Objectives of the Study

- i. To find out the effects of premiums ratemaking on the revenue growth of insurance companies
- ii. To identify the implications of earning trends of investments on revenue growth of insurance companies
- iii. To analyze the impacts of financial leverage on revenue growth of insurance companies
- iv. To determine the influence of level of interest rates on revenue growth of insurance companies

Research Hypotheses

H₀₁: The relationship between premiums ratemaking and revenue growth of insurance companies is not statistically significant.

H₀₂: The association between earning trends of investments and revenue growth of insurance companies is not statistically significant.

H₀₃: The relationship between financial leverage and revenue growth of insurance companies is not statistically significant

H₀₄: The association between the level of interest rates and revenue growth is not statistically significant.

THEORETICAL REVIEW

Agency Theory

Agency theory was developed and introduced by Jensen and Meckling (1976). It has been widely adopted by various corporations worldwide. This theory is applied in most insurance companies particularly in Kenya where the owners or shareholders appoint managers to run

their organizations. Managers make financial decisions on behalf of the shareholders which emphasizes the costs that are incurred in the production and distribution of insurance products and the benefits which are associated with returns particularly from premiums and investments which facilitates revenue growth as well as maximizing shareholders' wealth (Chen, 2002). According to this theory, managers are obliged to act in best interests of the shareholders, that is, their actions and financial decisions should lead to shareholders wealth maximization which partly depends on increased earnings from premiums and investments in the context of insurance (Pandey, 2010). However, in practice, managers may not necessarily act in best interests of shareholders. For example, they may manipulate short term earnings at the expense of long-term performance in order to receive a bonus. They can also give themselves higher salaries and perks at the cost of the shareholders. Management sometimes avoids pursuing viable investments that could earn the company more revenues with excuses of financial risks associated with them (Gill & Mathur, 2011). Such behaviors of managers will always frustrate the efforts towards the revenue growth of insurance Companies.

Agency theory application in financial management of insurance companies gives them greater insights to them since there are investors in the capital markets. To operate effectively in such markets, the principal agent relationship should be mutually beneficial; both parties' goals are addressed within a climate of compromise, but with the understanding that meeting the owners' interests is the primary function. It is therefore vital to share information openly so that the agents can be clear on the owners' priorities and principals are aware of the agents' decisions in insurance companies (Donaldson, 1984). This can result in formulation and adoption of financial policies guiding the avenues of revenues such as premiums, investments and loan interest rates whereby revenue growth is enhanced in an insurance company.

Portfolio Management Theory

Portfolio management theory is the most important theory that has been considered by corporations when dealing with finance and investments. Like any other company, insurance seeks to optimize the returns based on level of market risks by constructing portfolio of their investments (Sortino & Satchell, 2001). Financial securities of insurance companies, such as bonds have inherent risks that can be grouped into a class of risks in regard to a range of investments. In this case, each individual security will be less risky than when held alone since returns of securities in a portfolio are correlated. In order to safeguard the affairs of insurance stakeholders in Kenya, insurance regulatory authority sometimes requires the insurance companies to hold their financial securities in diversified portfolios.

Insurance companies analyze the association of return and risk of an individual investment since it impacts on the risk and return of a portfolio (Balzer, 1994). Insurance investment managers always wish to put financial securities in a perfect negative correlation in order to eliminate all risks, however, this has not been achievable as most securities are positively correlated in reality. Market risks cannot be diversified completely but can be minimized by putting various investments in a portfolio (Wang, 2002). The aggregate risk of an individual investment is usually determined by its nature; whether it can be eliminated through diversification or not. Some of risks that the insurance investments are prone to cannot be controlled since they are mostly caused by universal market uncertainty and price fluctuations. Others can be eliminated through diversification since they can be controlled by the industry and are caused by variables such as inflation and changes in interest rates.

Insurance companies trades in different types of policies that are held in a portfolio. Therefore, the returns from underwriting this portfolio would be weighted average of underwriting return on each insurance policy, and the systematic risk would be the weighted average of the individual policies (Lindahl, 2001). Market and financial risks affects the returns on investments hence revenue growth of insurance companies are estimated based on the riskiness in operations where debt has been or not utilized.

EMPIRICAL REVIEW

Premiums Ratemaking

Insurance ratemaking is the process of determining the price to charge on a policy. According to Rejda, (2014), insurance companies are obliged to make adequate ratings on their products due to the requirement that it should cover the losses, expenses and profits. Policy rates are set by actuaries and determines how much will be sold successfully and whether premiums will be paid fully as enshrined in the insurance contract (Flitner & Jerome, 2008). Sometimes, the rates may be influenced by the actions of the insurance regulatory authority. This intervention may be unfair to insurance companies since the authority may lack enough information on the factors that guides rating in those institutions. Furthermore, they operate in the environment which is uncertain as the actual loss and expenses are not known when premiums are being collected (Wairegi, 2011).

Actuaries have to consider the concept of customer satisfaction in the ratemaking process to promote price fairness and enhance clients' willingness to pay premiums as required. Rapid change of rates could lead to customer dissatisfaction resulting into business failure which is absolutely contrary to the expectations of both shareholders and the managers (Odemba, 2013). Insurance company management encourages loss control activities to insured

to make insurance affordable when they adjust the rates. Research and development has improved value of products offered by insurance companies and this has to be taken into consideration when the rates are being attached to these different products (Bull, 2009). The value of premiums received is determined by the charge put on each product. High charges in premiums results in higher revenues of an insurance company. Therefore, the companies design their products in a way that they are accepted by the customers even at higher charges since they can offer value for money.

Earning Trends of Investments

Insurance companies invest their premiums into various ventures in expectations for returns (Powell & Sommer, 2007). They invest in shares of other companies, real estates, bonds among other financial securities. The earning trends of those investments are very important as they determine the level of revenue of insurance company since its growth depends partly on their performance. Insurance financial managers watches the general trends of markets to understand them as well as technologies and anticipate competitive pressures subjected to their organizations. Decisions are therefore made on how much capital to invest and which projects should it be committed to considering the inherent costs and benefits (Lee, 2008). Insurance company investments are subject to risks which should be managed well in order to be profitable. If the organization issues bonds to get capital to finance a new investment, they will only benefit if the interest rates remain the same and will be unprofitable if they rise up (Suheyli, 2015). To hedge against rising interest rates, the company could purchase a put option on treasury bonds. The interest goes up then the company would lose because its bonds would carry high interest rates, but would have an offsetting gain on its put options (Alexander et al., 2001).

Insurance financial managers comes up with right investment portfolio mix that helps them earn more and reduce risks by using the net income at the end of the year to invest in fixed assets rather than keeping it as cash. They should therefore be able to manage fixed assets and short-term financial assets appropriately (Chen et al, 2002). For example, they may use proceeds from existing investments to buy a new IT infrastructure that will improve efficiency and effectiveness of the organization activities. May be production cost can be reduced and output can be increased due to this new IT infrastructure thus enhancing revenue growth of insurance institutions. Cash goes down initially but this facilitates generation of more cash to company later due to reduced costs and increased output (Ongore, 2011). Insurance management may also decide to sell existing fixed assets whose performance has decreased to channel those funds to other viable investments.

Financial Leverage

Financial leverage is the degree to which a company uses fixed income securities such as debt and preferred equity to finance operations. Insurance company's return on equity increases at an ideal level of financial leverage since its utilization increases stock volatility (Klein et al, 2002). This moves up the level of risk, expanding chances of higher returns thus increasing the company's amount of revenue. However, the return on equity may decrease if the firm is financially overleveraged. The company incurs a huge debt by borrowing funds at lower rates of interests resulting into excess money which are invested in high risk investments. These risks may likely outweigh the expected returns thus decreasing the value of company's equity since the shareholders believe it to be too risky to continue pumping their funds (Mwangi & Murigu, 2015).

Debt financing affects the ratio of assets to liabilities of an insurance company thus impacting on its revenue growth (Wang, 2002). In Kenya, insurance regulatory authority is concerned with the solvency of insurance companies in order to safeguard the benefits of the policyholders and claimants. Potential shareholders and creditors are also interested in the solvency levels of insurance companies thus use them to make decisions on whether to buy shares or grant loans to them. They therefore, determine the riskiness of the company through analyzing the solvency position (Zivney, 2000).

Leverage influences the liquidity which is very important for every insurance institution since it is healthy to be able to settle its short-term operating and financial expenses. Liquidity has high positive effect over the return on assets of the insurance sector (Ahmed et al, 2010). If financial leverage of a firm is managed well, liquidity rate is increased thus return on asset will be improved with greater effect.

Level of Interest Rates

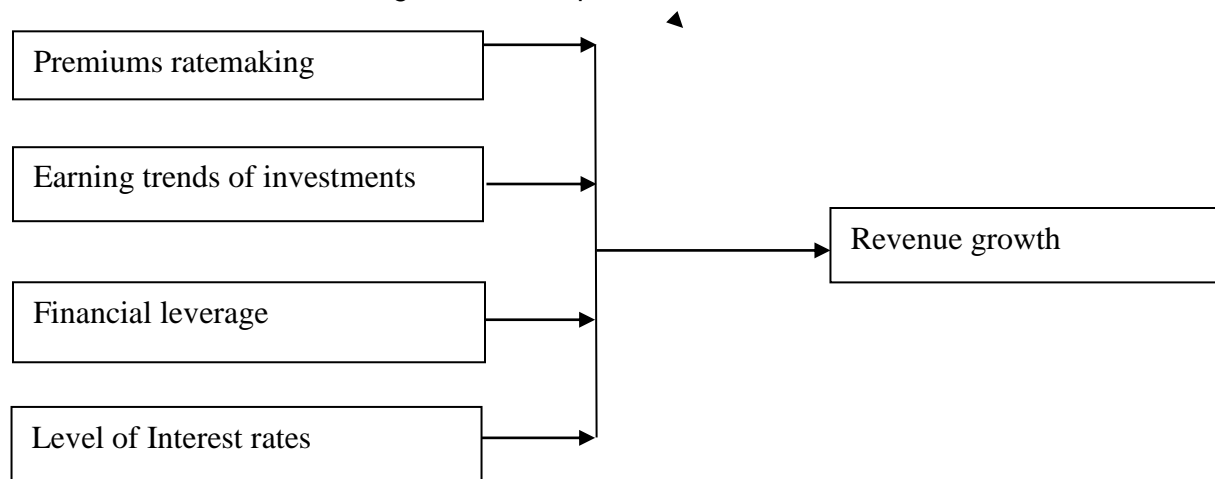
The level of interest rates is a major concern for insurance companies especially in the life sector. Their cash flows are enhanced by moving up the interest rates and carefully monitoring the environment in which they operate hence improving earnings of the organization (Ana & Ghiorghe, 2014). Insurance companies in Kenya offer life insurance loans to policyholders acquire bonds from other corporations and the government. They therefore earn revenue from corporate bonds through receiving periodic coupons and treasury bonds which are said to be secure financial debt instruments (Lawrence & Zutter, 2012). Before acquiring financial debt securities, insurance company consider their capability to afford granting such loans to avoid weakening their financial stability and determine whether those interest rates will benefit the company substantially.

Financial management of an insurance company makes decisions on acquisition of debt instruments by monitoring the company's long term financial structure. They examine the relationship between the interest rates and repayment period since money is subject to inflation and can lose value (Kidwell & David, 2006). By doing so, they are able to formulate strategies that can assist in offsetting the inflation as an economic risk and the interests earned will have a positive impact on the revenue growth of the company. Insurance furthermore, scrutinizes the government and corporations in regard to coupons/interest rates payment as stated in the agreement and even the principal amount at the maturity of the bond to minimize default risks (Eugene & Houston, 2014).

Conceptual Framework

The conceptual framework outlines the presumed association between the independent variables and dependent variables. As illustrated in figure 1 below, there are four independent variables which are; premiums ratemaking, earning trends of investments, financial leverage and level of interest rates. On the other hand is one dependent variable which is the revenue growth.

Figure 1: Conceptual framework



METHODOLOGY

Research Design

Kothari, (2008) defines research design as the arrangement of conditions for collection and analysis of data in a manner that it aims to combine relevance to research purpose with economy in procedure. This research employed descriptive survey design to give in depth information on the factors influencing revenue growth of insurance companies. According to

Mugenda & Mugenda, (2009), survey studies are usually evaluated against strengths and weaknesses of statistical, quantitative research methods and analysis which tally with present study. Therefore, this design helped to explain the revenue growth as it exists and facilitated critical evaluation of the insurance companies in Nakuru town.

Target Population

Population is the aggregate number of people or individuals with similar features or characteristics. Therefore, target population is the population from which respondents are drawn, data collected from them and study findings are generalized. In this study, the target population was the 40 finance/accounts officers working with 25 registered insurance companies in Nakuru town which were accessible. These people are involved in revenue issues either directly or indirectly thus can better understand the factors influencing revenue growth.

Census Design

Census technique was applied whereby all finance/accounts officers participated in the study. Since they were 40, this number seemed too small to be sampled. Furthermore, census approach enables the researcher to effectively generalize the findings (Mark, 2009). It also eliminates the sampling error and sampling bias.

Data Collection Instruments

Data was collected by use of structured questionnaires. They were addressed to the finance/accounts officers of insurance companies based on the research objectives. Questions were administered on a 5-point likert scale.

Pilot Study

A preliminary study was carried out before the main study to determine the suitability of the data collection instrument. The researcher took 7 finance/account officers from insurance companies with more than one branch in Nakuru town to participate in the pilot study. However, these participants were not included in the final study. The objective was to test the validity and reliability of the questionnaires.

Reliability of the Instrument

Reliability describes the consistency of the instrument considering the results it gives out after different tests (Kothari, 2008). Cronbach alpha (α) with coefficients ranging from 0.00 to 1.00 was used to indicate the reliability of the questionnaire concerning all variables: premiums

ratemaking, investment earnings trends, financial leverage, level of interest rates and revenue growth. According to Kimberlain and Winterstein (2008), Chronbach alpha is the most recommended method to test reliability. The research tested the questionnaire regarding the five variables and the results are shown in table 1 below.

Table 1: Reliability Test Results

Variables	Number of items tested	Alpha values
i. Premiums ratemaking	6	0.73
ii. Investment earnings trends	6	0.78
iii. Financial leverage	7	0.82
iv. Level of interest rates	6	0.75
v. Revenue growth	5	0.71

From the table above, it is indicated that all the variables returned alpha values more than 0.7 ($\alpha > 0.7$) thus the instrument was reliable and suitable for data collection.

Validity of the Research Instrument

Validity of a tool means that it measures what it is intended to measure (Mugenda & Mugenda, 2009). Since validity cannot be statistically measured, the researcher sought expert opinion from the University supervisor who gave the appropriate guidance.

Data Collection Procedure

Before commencing the study, the researcher obtained a letter to authorize data collection from Jomo Kenyatta University of Agriculture and Technology. Permission from insurance companies' management was also sought to get information from finance/accounts officers. The questionnaires were dropped and picked after the time agreed with the respondents to fill them had elapsed.

Data Processing and Analysis

The data collected from the finance/accounts officers was compiled, sorted, edited and coded. Analysis was done using both descriptive and inferential statistics with aid of Statistical packages for social sciences (SPSS) version 20. Descriptive analysis employed measures of central tendency (means), and measures of variation (standard deviations). On the other hand, inferential analysis applied Pearson's correlation and Multiple regressions with aim of determining the relationship/association between each independent variable (ratemaking,

earning trends of investments, financial leverage and level of interest rates) and the dependent variable (revenue growth). The study findings were presented using statistical tables.

FINDINGS AND DISCUSSIONS

Response Rate

The target population was 40 finance/accounts officers of insurance companies in Nakuru town. There were 25 accessible companies and all the respondents participated in the study. Therefore, the researcher issued 40 questionnaires whereby 35 were fully filled translating to 87.5% percent which was sufficient for the study.

Descriptive Analysis

Descriptive Analysis for Premiums Ratemaking

This section has outlined the views of the finance/accounts officers regarding the premiums ratemaking in their organizations. Table 2 shows the findings from their opinions.

Table 2: Descriptive Analysis For Premiums Ratemaking

	N	Min	Max	Mean	Std. Dev
i. Insurance products' prices are guided by ratemaking.	35	3	5	4.51	.562
ii. Premiums ratemaking covers losses, expenses and generates adequate profits for the organization.	35	4	5	4.20	.406
iii. Our rating system is easy to understand since premiums are quoted with minimal time and expense.	35	3	5	4.14	.494
iv. Our policy rates are consistent with changing market conditions and consumer needs.	35	3	5	4.06	.416
v. There are competent actuaries for setting policy rates in our company.	35	4	5	4.37	.490
vi. Product innovation leads to review of policy rates in insurance companies.	35	4	5	4.17	.382

The finance/accounts officers strongly agreed (mean=4.51; std. dev=0.562) that insurance products' priced are guided by process of ratemaking and also concurred that this process is intended to cover losses, expenses and generate adequate profits. The respondents also admitted (mean=4.14; std. dev=0.494) that their rating systems are easy to understand since premiums are quoted efficiently. The study moreover found that policy rates are consistent with changing market conditions and consumer needs. It was observed that policy rates of most insurance companies are consistent with changing economic conditions and consumer needs since they have competent actuaries who set such rates. It was furthermore agreed

(mean=4.37; std. dev=0.490) that almost all insurance companies have competent actuaries who set and review policy rates.

Descriptive Analysis for Investment Earnings Trends

The researcher described the respondents' opinions on Investments earning trends on revenue growth and table 3 shows the findings.

Table 3: Descriptive analysis for Investments earning trends

	N	Min	Max	Mean	Std. Dev
i. Our company's income is linked to general direction of coupons, rent earnings and dividends.	35	3	5	3.46	.561
ii. Our organization studies trends in the capital markets to make investment decisions on financial securities.	35	3	5	4.06	.482
iii. Maximum limits on investments by insurance regulatory authority hinders companies from creating more revenue avenues.	35	2	4	2.83	.514
iv. Our investments in financial securities are in portfolios.	35	3	5	4.11	.676
v. Our investments are subject to market risks.	35	3	5	3.57	.558
vi. Our organization has adopted adequate diversification to mitigate market risks on investments.	35	3	5	4.17	.785

The findings indicated (mean=3.46; std. dev=0.561) that it was not clear whether or not that insurance companies' income is linked to trend of coupons, rental earnings and dividends. However, the respondents admitted (mean≈4.00; std. dev<1.000) that their organizations carry out studies on trends on capital markets to decide on investing on financial securities. The respondents disagreed (mean=2.83; std. dev=0.514) on the assertions that maximum limits on investments by insurance regulatory authority limits establishments of revenue avenues. It was agreed (mean≈4.00; std. dev<1.000) by the finance/accounts officers that their financial securities are in portfolios and they mitigate risks through diversification.

Descriptive Analysis for Financial Leverage

The study has described the opinions of the finance/accounting staff members on financial leverage's impact on revenue growth. Table 4 illustrates the results.

Table 4: Descriptive analysis for financial leverage

	N	Min	Max	Mean	Std. Dev
i. Insurance companies raise capital through issuance of bonds.	35	2	5	3.03	.891
ii. Our company maintains sufficient surplus capital in relation to our scale of business.	35	2	5	3.83	.664
iii. Balance between debt and equity in insurance companies influence their financial strength.	35	3	4	3.49	.507
iv Insurance companies are faced by operating and financial risks.	35	3	5	4.14	.648
v. Overleveraged insurance companies are always prone to solvency problems.	35	3	5	4.09	.658
vi. Financial leverage alters the liquidity level of an insurance company.	35	3	5	4.03	.568

There were differing opinions (mean≈3.00; std. dev<1.000) that insurance companies raise capital through issuance of bonds. However, they agreed (mean≈4.00; std. dev<1.000) that they maintain sufficient surplus capital in relation to their line of business and there was diverging views (mean=3.49; std. dev=0.507) over whether balance between debt and equity influence financial strength of insurance companies. They also agreed (mean≈4.00; std. dev<1.000) that insurance companies face operational and financial risks. It was concurred that overleveraged companies are prone to solvency problems and financial leverage alters liquidity of the organization.

Descriptive Analysis for Level Of Interest Rates

This study sought to find out the effects of level of interest rates on revenue growth of insurance companies in Nakuru town. The resulting views from the respondents are shown in table 5.

Table 5: Descriptive analysis for level of interest rates

	N	Min	Max	Mean	Std. Dev
i. Insurance companies offer life insurance loans and acquire bonds from government agencies and other corporations.	35	3	5	4.26	.741
ii. Our organization has formulated guidelines for setting interest rates.	35	3	5	4.20	.677
iii. Insurance companies face interest rates risks.	35	3	5	4.09	.702
iv. Insurance regulatory authority influences rates of interests on policy loans.	35	1	4	3.00	.804
v. Level of interest rates is influenced by repayment period.	35	3	5	4.34	.591

The study findings shows that respondents agreed (mean=4.26; std. dev=0.741) that insurance companies officer loans to policyholders and also acquire bonds from government agencies and other corporations. The finance/accounts officers further admitted (mean=4.20; std. dev=0.677) that their institutions have formulated guidelines upon which interest rates are set. However, they had differing opinions (mean=3.00; std. dev=0.804) on whether or not that insurance company's interest rates are influenced by insurance regulatory authority. It was also agreed (mean=4.34; std. dev=0.591) that level of interest rates is affected by repayment period.

Descriptive Statistics for Revenue Growth

The study sought to find out the opinions of finance/accounts officers pertaining revenue growth in their companies and the results are indicated in table 6.

Table 6: Descriptive analysis for revenue growth

	N	Min	Max	Mean	Std. Dev
i. Our company's revenue growth from one period to another is adequate.	35	4	5	4.83	.382
ii. Our organization's underwriting capacity is in line with our surplus capital.	35	3	5	4.71	.519
iii. Our organization's revenue growth is on upward trend.	35	4	5	4.69	.471
iv. Bancassurance improves revenue growth due to effective distribution networks of commercial banks.	35	4	5	4.66	.482
v. Sufficient revenue growth of an insurance company strengthens its capital base and financial stability.	35	3	5	4.29	.622
vi. Investors consider the revenue trend of insurance company to decide on offering paid-in-capital.	35	3	5	3.94	.639

The findings indicate that the respondents strongly agreed (mean≈5.00; std. dev<1.000) that their revenue growth from one period to another is adequate and strongly admitted (mean≈5.00; std. dev<1.000) that their underwriting capacity is in line with their surplus capital. They furthermore strongly agreed that; their revenue growth is on upward trend, bancassurance improves income and sufficient revenue growth is key to financial stability. They also concurred (mean≈4.00; std. dev<1.000) that investors are concerned with revenue trend while deciding to offer paid-in- capital.

Inferential Analysis

This section outlines the analysis of the influence of premiums ratemaking, investments earning trends, financial leverage and level of interest rates on revenue growth of insurance companies.

Correlation coefficient and multiple regressions have been applied to establish the association of each independent variable with the dependent variable.

Effect of Premiums ratemaking on revenue growth

The study sought to establish the effect of premiums ratemaking on revenue growth of insurance companies in Nakuru town and the findings through Pearson correlation analysis are shown in table 7 below.

Table 7: Correlation between premiums ratemaking and revenue growth

		Revenue growth
Premiums ratemaking	Pearson Correlation	.726**
	Sig. (2-tailed)	.000
	N	35

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

The association between premiums ratemaking was found to be positive, strong and statistically significant at 0.01 level of significance ($r=0.726$; $p<0.01$). The results therefore meant premiums ratemaking had greater impact on revenue growth of insurance companies in Nakuru town. Clients are price sensitive and the premiums rates go hand in hand with the quality of the products offered to them. Therefore, prices are required to show the value for the customers' money in an effective rating system.

Implications of investments earning trends on revenue growth

The study analyzed implications of investments earning trends on revenue growth. The findings by correlation analysis are illustrated on table 8.

Table 8: Correlation between Investments earning trends and revenue growth

		Revenue growth
Investment earnings trends	Pearson Correlation	.783**
	Sig. (2-tailed)	.000
	N	35

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

It was established that the relationship between investment earnings trends and revenue growth was positive, strong and statistically significant ($r=0.783$; $p<0.01$). This means that revenue growth expands with increased investments earnings. It is indicated that investments are crucial

for insurance companies as they can generate more income from them and increase their underwriting capacity.

Correlation between Financial leverage and revenue growth

The study analyzed how financial leverage affects revenue growth of insurance companies. Table 9 shows the findings.

Table 9: Correlation between Financial leverage and revenue growth

	Revenue growth	
Financial leverage	Pearson Correlation	.479**
	Sig. (2-tailed)	.004
	N	35

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

The findings indicates that there is positive, moderate strong association between financial leverage and growth of revenue in insurance companies ($r=0.479$; $p<0.01$). It is statistically significant at 0.01 level of significance. This implies that revenue growth is facilitated by sustainable level of company's financial leverage. Companies raise capital through issuance of bonds. When this debt is utilized well, it gives returns that are enough to settle the debt obligation and remain with others which can be committed elsewhere in the organization.

Correlation between level of interest rates and revenue growth

The study aimed at finding out the effect of level of interest rates on revenue growth and the results are illustrated in table 10.

Table 10: Correlation between level of interest rates and revenue growth

	Revenue growth	
Interest rates	Pearson Correlation	.267
	Sig. (2-tailed)	.121
	N	35

The study established that there exists positive, weak relationship between level of interest rates and revenue growth ($r=0.267$; $p>0.01$) which is statistically insignificant at 0.01 level of significance. This means that it has little effect translated by insufficient evidence to prove its importance as far as revenue growth is concerned. Increase in life insurance loans rates of interest will have very small impact on the company's level of income from one time to another due to weak association that exists between them.

Regression Analysis

This section has covered the results on the association/ that exists between independent variables; premiums ratemaking, investments earning trends, financial leverage and interest rates and the dependent variable; revenue growth of insurance companies in Nakuru town.

Table 11: Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 ^a	.790	.762	.10022

a. Predictors: (Constant), Premiums ratemaking, Investment earnings trends, financial leverage, interest rates

Table 11 indicates the findings of coefficient of determination (R^2) and correlation coefficient (R). The (R=0.889) and ($R^2=790$) shows the strong degree of association meaning that the all independent variables jointly have greater impact on revenue growth.

Table 12: Analysis of variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.130	4	.283	28.140	.000 ^b
	Residual	.301	30	.010		
	Total	1.432	34			

a. Dependent Variable: Revenue growth

b. Predictors: (Constant), Premiums ratemaking, investment earnings trends, financial leverage, interest rates

Table 12 illustrates the analysis of variance (ANOVA) for the study variables. The results showed that premiums ratemaking, investments earning trends, financial leverage and interest rates affects revenue growth significantly ($F=28.140$; $P<0.05$) at 0.05 level of significance. These results portray the importance of the four factors making it a necessity for insurance companies to lay more emphasis on them in regard to revenue growth of their organizations.

Table 13: Findings from regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Premiums ratemaking	.284	.097	.327	2.920	.007
	Investment earnings trends	.385	.072	.546	5.340	.000
	Financial leverage	.133	.064	.214	2.092	.045
	Interest rates	.041	.045	.084	.913	.368

a. Dependent Variable: Revenue growth

The results indicated in table 4.16 were discussed by the regression formula; $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$. Y stands for dependent variable which is revenue growth while X_1 , X_2 , X_3 and X_4 represents independent variables; Premiums ratemaking, Investment earnings trends, Financial leverage and Interests rates respectively hence the findings were interpreted as; $Y = 1.226 + 0.284X_1 + 0.385X_2 + 0.133X_3 + 0.041X_4$.

The above results led to rejection of first null hypothesis ($t=2.920$; $p<0.05$). The second ($t=5.340$; $p<0.5$) and third ($t=2.092$; $p<0.05$) null hypotheses were also rejected but fourth ($t=0.913$; $p>0.05$) was not rejected. Therefore, from regression analysis, premiums ratemaking, investments earning trends and financial leverage had strong influence but interest rates had little effect on revenue growth. Furthermore, all the four independent variables of the study taken together ($t=3.558$; $p<0.05$) had significant influence on revenue growth of insurance companies in Nakuru town.

SUMMARY

The findings indicated that revenue growth is influenced by premiums ratemaking, investments earnings, financial leverage and level of interest rates. The finance/accounts officers admitted that the insurance products prices are guided by process of ratemaking which main intention is to cover losses, expenses and generating adequate profits for the organization. The rates are subject to changes in economic conditions and product innovation and they agreed that they had competent actuaries to set and review them. The respondents concurred that their institutions carry out studies on the trends in the capital markets to make decisions on investments in financial securities. These securities are in portfolios and the risks against them are mitigated through diversification. It was found that insurance companies tend to have sufficient surplus capital which is in line with underwriting capacity of the organization. Financial leverage influences solvency and liquidity of the firm which affects revenue growth. The respondents admitted that insurance companies offer life insurance loans and acquire bonds from other corporations and have formulated guidelines to set interest rates. They had different views on interest rates risks and disagreed that rates are influenced by the actions of insurance regulatory authority. They however agreed that level of interest rates is affected by repayment period. The findings indicated that the respondents strongly agreed that their revenue growth from one period to another was adequate, bancassurance improves income and sufficient revenue growth is key to financial stability. There was a strong degree of association meaning that all independent variables jointly had a greater impact on revenue growth. This was further explained by analysis of variance which resulted to ($F=28.140$; $P<0.05$). Premiums ratemaking,

investments earning trends financial leverage taken together ($t=3.558$; $p<0.05$), influenced revenue growth significantly.

CONCLUSION

According to study findings, premiums ratemaking is applied by insurance companies to come up with product prices which are key determinant of revenue growth. The amount obtained from selling policies constitutes the income of the organization. It can be concluded that studies on trends in the capital markets enables insurance companies to make better investments decisions that assists in improving the revenue growth. In order to optimize the returns, these organizations put their financial securities in portfolios and mitigate market risks through diversification. Financial leverage affects liquidity and solvency levels of insurance companies which have impact on revenue growth of such organizations. As a result, insurance companies face operational and financial risks which should be contained since maintaining right leverage levels allows the company to engage in activities that help to improve underwriting capacity of the organization. Insurance companies receive interest rates from policy loans and periodic coupons from bonds. The level of such gains influences the revenue growth of an insurance company thus appropriate policy should be in place to guide them.

RECOMMENDATIONS

After discussion and interpretation of the key findings, the study makes the following recommendations:

- ❖ Insurance companies should maintain adequate rating systems but putting into consideration the affordability, quality, convenience and value for client's money. This will likely facilitate upward trend in insurance level of premiums and insurance penetration from one period to another which enhances revenue growth.
- ❖ Establishment and maintenance of separate management specifically in charge of investments should be emphasized by insurance companies. Viable investments in financial securities, real estates, bonds will generate returns that promotes capital adequacy which enhances the underwriting capacity of insurance institutions.
- ❖ Insurance companies should consider undertaking financial forecasting in regard to market conditions when deciding to raise capital through issuance of bonds. The risks and returns associated with activities and ventures where such funds are intended to be allocated should be analyzed appropriately; show that the debt can be serviced successfully and substantive gains can be retained by the organization.

- ❖ It is recommended that insurance companies formulate and implement appropriate policies guiding setting of policyholders' loans interest rates and acquisition of bonds from other corporations and government agencies.
- ❖ Commercial banks and insurance brokers/agents should work closely may be through intervention of insurance regulatory authority to minimize conflicts pertaining bancassurance and ensuring its mutual benefits to both parties.

LIMITATIONS AND FURTHER STUDIES

The researcher struggled to raise the required amount of money and accomplish the project within limited time considering the schedule for defense of findings. The study materials were not enough from the university library thus requiring extensive search from the internet and the integration of information from those sources into the study was a difficult task. The researcher had to convince the management of the insurance companies that the study was purely for academic purpose. It also took time to explain to the respondents what thesis was all about before they could agree to fill in the questionnaires. Despite all these limitations, the researcher managed to carry out the study successfully.

Other researchers and scholars should consider carrying out research on determinants of surplus capital of insurance companies and the factors affecting revenue growth of micro financial institutions.

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