

# **THE MODERATING EFFECT OF OWNERSHIP STRUCTURE ON THE RELATIONSHIP BETWEEN THE GROWTH STRATEGIES AND THE PERFORMANCE OF FIRMS WITHIN THE INSURANCE INDUSTRY IN KENYA**

**Philip Musembi Mwau** 

PhD Student, Jomo Kenyatta University of Agriculture and Technology, Kenya  
pmwau150@gmail.com

**Margaret Oloko**

Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya

**Willy Muturi**

Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya

## **Abstract**

*Extensive research exists on the strategies applied by insurance firms to improve their performances. Very few of these studies focus on the growth strategies applied by these firms within the insurance industry. The general objective of this study was to investigate the influence of the growth strategies on the performance of firms in insurance industry in Kenya. The study investigated how the Diversification strategy, Market penetration strategy, Market development strategy, Product development strategy and the moderating effect of ownership structure have contributed to the performance of firms within the insurance industry. The target population of the study were all the 5,188 insurance players in Kenya as on 2013. The study adopted a descriptive research design. A random stratified sampling was used to select 125 respondents. Data was collected using self-administered structured questionnaire as well as from the secondary sources. The response rate was 83%. Data was analyzed using both descriptive and inferential statistics. Study found that the growth strategies have positive influence on the performance of the insurance firms within the insurance industry in Kenya except the market*

*development strategy. The moderating effect of the ownership structure was also noted to have a positive effect in the performance of the firm. The study recommends that as number of firms in the insurance industry increases, it is only those who choose to pursue the growth strategies will have better performances. Firms are strongly warned against expanding and opening branches (Market development) because in the long run these branches do not create value to the shareholders.*

*Keywords: Insurance industry, Performance of firms, Ownership structure, Growth strategies*

## **INTRODUCTION**

Performance of firms in any industry is very essential to management since it portrays the outcome which has been achieved by an individual or a group of individuals in an organization. Managers in different organizations always aim to achieve a competitive advantage of their firms in different industries where they operate. To achieve a set of organizational goals and objectives, companies conceptualize, design, and implement various strategies. These strategies can be corporate, business, or functional (Grant, 2005).

There exist fourteen (14) types of strategies at the corporate level that take into account different directions and types of corporate development. Among them, they are further classified into four (4) broad categories, namely:- stability strategies, survival strategies, growth strategies and combination strategies (Yabs, 2010). Growth strategies are designed to expand an organization's performance. In fact they are often used to mitigate a firm's business risks and enhance its performance (Fahy, 2000).

An effective performance measurement system ought to cover all indicators of performance that are relevant for the existence of an organization and the means by which it achieves success and growth (Kaplan & Norton, 2008). Most studies on organizational performance use a variety of financial and non-financial success measures. Financial measures include issues such as profit, Return On Investment (ROI), Return On Capital Employed (ROCE), and inventory turnover. Non-financial measures include innovativeness, customer loyalty and market standing as highlighted by (Kaplan & Norton, 2008). Loewe (2006) noted that there exists different ways by which individuals can use to minimize the social risks such as:- credit provision, asset creation programmes, safety nets, household saving, accumulation, risk-coping and risk-management strategies and of course insurance.

Globally the insurance industry premium stood at USD 4,640,941 representing a 6.28% penetration level (Swiss Re, 2013). This growth is attributed to various continents whose contribution was as follows:- North & Latin America penetration level stood at 10.6%, Europe

had a penetration level at 6.82%, Asia had penetration level at 5.37%, Africa had penetration level at 3.5% and Oceanic/Australia had penetration level at 5.19%. Locally, the insurance industry in Kenya recorded Gross Written Premium(GWP) of Kshs. 130.65 billion in 2013 compared to Kshs.108.54 Billion In 2012, representing a growth of 20.4%. The firms within the industry have grown for the last five(5) years from a number of 3,770 to 5,188 as at the end of 2013, a 37.6 percent(%) increase.

Despite the increase in the firms within the industry their performance has not been impressive. The trend means that on a relative scale, insurance as an industry has been experiencing mild shrinkage.The Kenyan insurance industry is governed by the Insurance Act, (2007) which states that the fundamental purpose of insurance regulatory law is to protect the public as insurance consumers and policyholders (The Insurance Act, 2007).It's enforced and supervised through the Insurance Regulatory Authority (IRA). Since insurance is deemed to be a financial service, other closely related entities which work hand in hand with IRA are the Central Bank of Kenya (CBK), Sacco Societies Regulatory Authority (SASRA) and Capital Market Authority (CMA). Hence for the larger companies all the three (3) regulators usually play a key role in guiding and regulating their operations.

### **The growth of insurance Industry**

The performance of insurance firms is deemed to be low in the whole world thus also reducing the penetration level. Swiss Re, (2014) adds that the global insurance industry penetration recorded a 6.28 percent (%) rise in revenue in premiums (sales) in 2013. The insurance market in Africa is under-developed, largely because most Africans simply cannot yet afford it. Access to insurance products only starts to increase quickly in the upper middle income groupings with most Africans still just struggling to meet their basic food and other day-to-day needs; it is still a long way off for the majority of Africans (KPMG, 2010).

In Kenya, there were 5,188 insurance firms (players) as at the end of 2013(AKI, 2013) as depicted in Appendix III with contribution of 3.5% of the Gross Domestic Product (GDP).Compared to South Africa, Namibia and Mauritius which rated at 15.4%, 7.7% and 5.8% respectively (AKI, 2013).The industry has witnessed massive changes in the recent past characterised by mergers and acquisitions as well as fall of certain insurance companies (Kuloba & Mosee, 2013). Policy Holders Compensation Fund Report (2013) notes with discontent that for the last fifteen(15) years, ten(10) insurance companies have gone 'under' and have been placed under statutory management(Appendix IV).

## **Problem Statement**

Insurance industry is known to be one of the key engines of economic development in the whole world by the fact that it facilitates trade and foreign exchange beside giving people a piece of mind to carry out their day to day operations (Marco, 2006). Its performance and growth therefore cannot be under estimated. The key players in the Kenyan industry have grown for the last five (5) years at a rate of 37% though performance has not increased at the same proportionate (Appendixes III & V). In view of this, the industry players need to devise products which cuts across all segments in order to ensure majority of the population are insured and can access the insurance products without leaving a very huge gap (AKI, 2010).

Various studies carried out by different scholars have tended to lean more on the areas of insurer's profitability, for example (Kozak, 2011; Ahmed & Ahmed, 2010), competitive strategies (Ilovi, 2013), financial distress (Cheluget, Gekara, Orwa, & Keraro, 2014) and risk management issues (Njuguna, 2013) thus leaving the growth strategies unattended. A closely related study to performance of insurance firm was carried out by Elango, Ma, & Pope (2008) on performance of Nigerian Insurance firms, where they established that the relationship between product diversification and insurance firm performance was significantly affected by the level of geographical diversification.

In view of these, though studies on insurance industry have been done, there is limited literature on studies carried on or related to the influence of the growth strategies on the performance of firms within the insurance industry. This study therefore aimed to bridge this existing gap in the literature as it embarked to study: The influence of growth strategies on performance of firms within the insurance industry in Kenya.

## **Significance of the Study**

This study will contribute to the knowledge on strategies on how to improve performances within the insurance firms. It will attempt to analyze strategists' thoughts in regard to insurance industry and enrich them through the power of the growth strategies. The following groups of people will find the study useful:-

Stakeholders in the industry by guiding different players in the industry on the dos and don'ts. It will also contribute to the source of knowledge particularly to the potential investors in this sector.

The policymakers will find the study valuable since as the country gears on how to achieve the Vision 2030 objectives, insurance industry which falls within the greater financial services sector will be one of the key drivers of this noble objective hence it will be a desire for all Kenyan's to know how best they can tap on this industry. Finally to the scholars,

academicians and insurance practitioners, the study will contribute to the source of knowledge by attempting to fill the gaps left by other scholars in arriving at how the adoption of growth strategies can improve the performance in certain sectors. The practitioners' will use the study as a guide in the operations within the industry as they attempt to improve performance in their respective areas.

### **General Research Objective**

To carry out a research on the Influence of the growth strategies on the performance of firms within the insurance industry in Kenya.

### **Specific Research Objectives**

1. To establish the relationship between diversification strategy and performance of firms within the insurance industry in Kenya.
2. To investigate the relationship between market penetration strategy and performance of firms within the insurance industry in Kenya.
3. To explore the relationship between product development strategy and performance of firms within the insurance industry in Kenya.
4. To determine the relationship between market development strategy and performance of firms within the insurance industry in Kenya.
5. To determine the moderating effect of ownership structure on the relationship between the growth strategies (independent variables ) and the performance of firms (dependent variable) within the insurance industry in Kenya.

### **Hypotheses**

1. There is no significant effect for the Diversification Strategy on Performance of firms within the insurance industry in Kenya.
2. There is no significant effect for the Market Penetration Strategy on Performance of firms within the insurance industry in Kenya.
3. There is no significant effect for the Product Development Strategy on Performance of firms within the insurance industry in Kenya.
4. There is no significant effect for the Market Development Strategy on Performance of firms within the insurance industry in Kenya.
5. Ownership structure has no significant effect on the Relationship between the independent variables (Growth strategies) and the dependent variable (Performance of firms) within the insurance industry in Kenya.

## LITERATURE REVIEW

### The Agency Theory

Agency theory was originated by Berle and Means (1932). They further proceeded to define Agency relationship as “a contract under which one or more persons (the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. It is a dominant paradigm to explain the firm’s efficiency problem. Generally, agency problem or principal-agent relationship arises when parties’ behaviors are constrained through contract, in which one or more persons (the principals engage another person (the agent) to perform some service on their behalf.

Agency theory views organization as a nexus of contracts between principals and agents, and argues that because of goal congruence and close relationships between family owners and family managers, principal-agent conflict is reduced in family firms and leads to higher performance. Demsetz & Villalonga (2001) argue that the agency cost arises from two types of conflicts namely:- principal-agent (Agency Problem I) and principal-principal (Agency Problem II). Despite the above problems Jensen & Meckling (1976), on their part predict that higher levels of managerial ownership structure increase firm performance due to an incentive effect. In addressing the Agency problem, it is noted that a major source of cost to shareholders is the separation of ownership and control in the modern corporation.

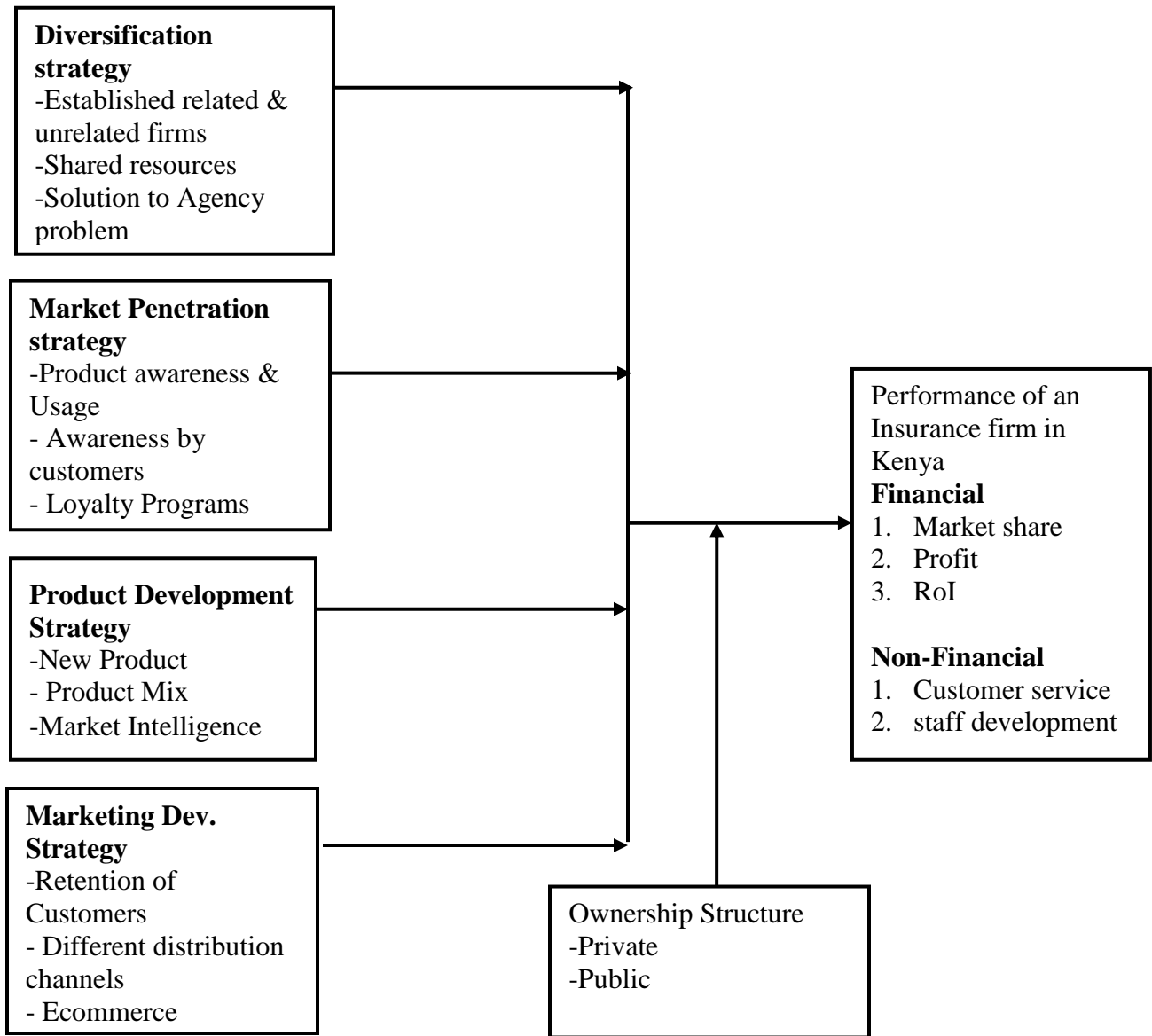
Even in developed countries, these agency problems continue to be sources of large costs to shareholders. Demstez and Villalonga (2001) argued both that the optimal corporate ownership structure was firm specific, and that market competition would derive firms toward that optimum. The relationship between ownership structure and firm performance can also be evaluated by examining firm performance with change in ownership structure over the years. The corporate governance framework according to Imam and Malik (2007) as cited in Kumar (2013) is the widest control mechanism (both internal and external) since it encourages the efficient use of corporate resources and ensures accountability for the stewardship of those resources utilized. Lins (2002) further contend that corporate governance could help to align the interests of individuals, corporations and society through a fundamental ethical basis and it will fulfil the long-term strategic goal of the owners, building shareholder value and establishing a dominant market share

### Conceptual Framework

The conceptual framework for this study was based on the assumption that there existed a relationship between the influence of growth strategies such as diversification strategy market penetration strategy, product development strategy, market development strategy and the

performance of firms within the insurance Industry in Kenya. Ownership structure remained to have the moderating effects as portrayed in figure below. In this study, independent variables were assumed to have a direct relationship with dependent variable.

Figure 1: Conceptual Framework



**The ownership structure**

Companies with a dispersed ownership structure, meaning the largest owner holds less than 20% of total votes, are associated with worse performance regarding stock return, ROA and ROE, (Andersson, Nordwall & Salomonsson, 2004). It is found that owner manager firms are

less efficient in generating net income than firms managed by a professional (non-owner) manager, and that family firms run by their owners perform (relatively) the worst. This evidence suggests that the modern form of business organization, namely the open corporation with disperse ownership and non-owner managers, promotes firm performance (Andersson, et al, 2004). Insurers tend to use two forms of ownership which are either stock or mutual and in each of the case Agency costs tend to vary. McConnell & Servaes (1995) posits that modern corporations are typically run by professional executives who own only a small fraction of the shares.

Similarly, Kachaner, Stalk & Bloch (2012) on their part do note that during good economic times, family-run companies (private) don't earn as much money as companies with a more dispersed ownership structure. This is because family businesses focus on resilience more than performance. They forgo the excess returns available during good times in order to increase their odds of survival during bad times. High-performance insurers cultivate organic growth by identifying their most valuable customers and investing to increase sales to them; by recruiting new clients through referrals; and by lifting retention rates. Most interestingly, Demsetz and Villolanga (2001) conclude that the structure of ownership varies in ways that are consistent with value maximization. To be successful as both the firm and the family grows, a family owned business need to meet two intertwined challenges which include-: achieving strong business performance and keeping the family committed to and capable of carrying on as the owner. This was found to be the case in that majority of the interviewed companies which were noted to be privately owned companies.

### **Private owned firms**

Chiara (2011) posits that most firms are good at maximizing shareholder value over time. In this view employees and customers do create long-term commitment more than the shareholders do. Tradition, ethics, and professional standards often do more to constrain behaviour than incentives do. Shareholders value in any organisation is said to be for provision of information, addition of more funds and oversee the management. The lack of homogeneity in the results of previous studies suggests that the relationships between family business and corporate performance are complex and very probably moderated or mediated by factors Chiara (2011). Further they posit that affiliated directors have a positive impact on firm performance in family firms. The presence of independents on the board has a positive effect on performance when the firm is run by the first generation (Blanca, et al.2010). Agency theory to tend to state the effects of family (and founder) ownership versus management are usually quite different with the former is expected to contribute positively to performance, the latter is argued to erode



performance. As family businesses expand from their entrepreneurial beginnings, they face unique performance and governance challenges.

The generations that follow the founder, for example, may insist on running the company even though they are not suited for the job. And as the number of family shareholders increases exponentially generation by generation, with few actually working in the business, the commitment to carry on as owners can't be taken for granted. Indeed, less than 30% percent of family businesses survive into the third generation of family ownership (Christian, et al. 2010),

### **Corporate governance**

This can be defined as a “process through which shareholders induce management to act in their interests, providing a degree of investor confidence that is necessary for the capital markets to function effectively”. Evidence in relation to company performance and board leadership structure is mixed. Rechner and Dalton (1991) on the other side found that firms with separate leadership structures outperformed joint structures when measured on return on equity, Return on Investment and profit margins, whereas Dalton et al. (1998) found no evidence of a relationship between leadership structure and financial performance.

### **Public owned firms**

There exists two conditions must for an effective governance mechanism. Firstly, does the device serve to narrow the gap between managers' and shareholders' interests? Also does the mechanism then have a significant impact on corporate performance and value. While there is intensive debate about the particular values of corporate governance, there is unilateral agreement that it creates better companies through improved access to and lowers cost of capital as well as better risk management. In this case, points are of particular relevance for the emerging markets to become winners of tomorrow even faster. Over the last ten years many fast growing countries have increasingly employed corporate governance to improve the quality of their companies and thereby the wealth of all their people.

### **Solution to Agency problem**

Among financial researchers, the dominant approach to the study of executive compensation views managers' pay arrangements as a (partial) remedy to the agency Problem. Under this approach, the firm's boards are assumed to design compensation schemes to provide managers with efficient incentives to maximize shareholder value.

To some researchers working within the optimal contracting model, the main flaw with existing practices seems to be that, due to political limitations on how generously executives can be treated, compensation schemes are not sufficiently high-powered (Jensen and Meckling, 1990).

### **Performance of firms**

Performance is an essential concept in management research. Managers are judged on their firm's performance. Good performance influences the continuation of the firm, For instance, Porter (1980) defines good performance as the above-average rate of return sustained over a period of years. For an empirical study, it is necessary to specify how a firm's performance will exactly be measured. Venkatraman and Ramanujam (1986) have pointed out that firm performance is a multidimensional construct. They proposed three general levels of performance as:- Financial performance: one at the core of the organizational effectiveness domain. Such performance measures are considered necessary and include issues such as; Accounting-based standards such as return on assets (ROA), return on sales (ROS) and return on equity (ROE) which measures financial success. These indicators are usually geared towards profitability.

Performance can only be effective where the firm has a clear corporate strategy and has identified the elements of its overall performance which it believes are necessary to competitive advantage (Hamel & Prahalad, 1994).The Balance Score Card approach measures performance from four different perspectives that together encourage managers to look beyond traditional financial measures. The four perspectives of performance are: Learning and growth which is concerned with actions to improve and create value for employees; internal processes which concerns itself with what the firm must excel at. Customer on the other hand considers how the firm looks to its customers; and financial (considers how the firm looks at the shareholders (Norton and Kaplan, 2008).

### **The Empirical Review**

A study conducted in the developed economies on the performance of insurance companies by Hrechaniuk, Lutz, and Talavera (2007), which examined the financial performance of insurance companies in Spain, Lithuania and Ukraine showed a strong correlation between insurers' financial performance and the growth of the written insurance premiums. This study only focused on the insurance firms while excluding other players within the insurance industry. It also re-examined performance from a financial aspect only.

Similarly on the growth strategies of a firm, a study using the Ansoff's Matrix as a framework as conducted by Perry (1987) in regard to growth of the SMEs identified that organizational size was an important factor in determining growth strategies being pursued. It suggested that SMEs should adopt strategies of product development and market penetration for growth. This involved either making use of R&D to increase sales through modification/improvement of products or marketing efforts in present markets to increase market share for existing products. This view was supported by North and Smallbone (2000) and Pena (2002), whose studies showed that small firms achieving high growth are those that have been adopting a product development.

Further, Hussain, Khattak, Rizwan, & Latif, (2014) in their study to investigate the impact of various Ansoff growth strategies on firm's growth and moderating effect of market environment between these linkages in fast food sector of Pakistan revealed that all the growth strategies of Ansoff matrix significantly contributed in firm's growth except diversification. Further, notwithstanding the above, the firm's capabilities and resources also influence the types of growth strategies that can be adopted. In addition a study carried out by Enrico & Hien (2011) on diversification strategies and firm Performance in Turkish firms through a sample selection approach confirmed that firm's profitability was determined by its degree of diversification which in turn is strongly related to the antecedent decision to carry out diversification activities.

On the establishment of firms performance and operational efficiency, a study done in the emerging economies by Srivastava (2013), was able to establish that the insurance sector throughout the world was under going through a dynamic environment where efficiency and competitiveness hold the key to survival. Other factors which lead to greater performance were established by Chen and Wong (2004) who confirmed that size, investment and liquidity are significant determinants of the profitability of insurers. Similarly On the product development and innovation, a study by Murat, Nilgun, and Fulya (2013) on the relationship between innovation and firm performance, An empirical evidence from Turkish automotive supplier industry did demonstrate that technological innovation (product and process innovation) has a significant and positive impact on firm performance, but no evidence was found for a significant and positive relationship between non technological innovation (organizational and marketing innovation) and firm performance.

On the ownership structure and performance, Blanca, et al. (2010) on their study between the behaviour of family and non-family firms, studied the first generation firms and how ownership can be greatly concentrated in solving the Agency problems. They established that there is a greater concentration of firm ownership in the first generation may bring the

monitoring and expropriation hypotheses into play, whereas firms in which subsequent generations have joined may show a greater spread of ownership. Similarly, still on the ownership structure of firms, Ke, et al (1999) as cited in Kwon (2013) investigated the relationship between CEO compensation and accounting performance measures as a function of ownership structure in the publicly-held property-liability insurers in USA. They found a significant positive association between Return on Assets (ROA) and the level of compensation for publicly-held insurers but, consistent with optimal contracting theory, no such relationship for privately-held insurers was found.

Finally, on the establishment the diversification strategy and performance, a study by Zhang (2011) on the group-affiliated firms during institutional transitions: The case of the Chinese textile industry established a positive relationship between the listed textile firms' unrelated diversification and their firm value during the period 2001- 2005. Further, Adams and Buckle (2003) on their study on whether the size of insurer influences performance, were able to posit that Life insurance companies in Ghana 291 insurers' size and scope of business do not have significant influence on financial performance.

Further, Tami et al. (1982) conducted a research on diversification and corporate performance in Japanese firms for the period 1963 to 1973 and concluded that related diversified firms perform better than those that are unrelated.

Similarly in Kenya, studies by different scholars in the insurance industry have led to different conclusion. For example, on the low usage and consequently low performance Kamau (2013,) on his study on the factors that lead to low penetration of insurance in Kenya found out that poor perception by the public on the insurance products and services affected the penetration and consumption of the same.

Kerubo (2011) in her study on Competition law and Regulation of insurance sector in Kenya revealed that the regulation of the insurance industry in Kenya is inherently weak thus failing to stimulate competition in the industry. Whereas Kinyua (2013) on customer satisfaction studied the factors affecting the performance of insurance companies in Meru County and found out that there was widespread customer dissatisfaction in the insurance industry, stemming from the collapse of PSV insurance companies.

The various reviewed journals indicate that there is very little or limited studies which have been carried out on:- The influence of the growth strategies such as diversification, market penetration, market development and product development and how they affect the performance of firms in the insurance industry in Kenya hence leading to a major gap in literature. It is due to this existing gap in the literature that the study becomes essential.

## **METHODOLOGY**

### **Research Philosophy**

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analysed and used. The term epistemology (what is known to be true) as opposed to doxology (what is believed to be true) encompasses the various philosophies of research approaches (Galliers,1991). In view of this, then this study adopted the positivism approach since it is a more scientific in arriving at its conclusions. The same research philosophy approach was applied by Ngumi (2013) in his study of effects of bank innovation on financial performance of commercial banks in Kenya.

### **Research Design**

It is the blueprint for conducting the study that maximises control over factors that could interfere with the validity of the findings (Burns & Grove, 2011). Burns & Grove (2011) further notes that the design provides the glue that holds the research project together. Similarly Orodho (2003) defines a research design as a framework for the collection and analysis of data that is suited to the research question. He adds that it is a scheme, outline or plan that is used to generate answers to the research problem.

The research adopted an exploratory approach using a descriptive survey design. The researcher aimed to get data from all the sampled players in the industry which included insurance companies, brokers, agents, investigators and service providers. A self administered structured questionnaires were used to collect primary data whereas secondary data was collected from companies' publications and websites. An interview guide was also used to guide the researcher on which areas to conduct the discussion especially when following up on the return rate of the questionnaires.

Mugenda & Mugenda (2012) notes that the usage of interview guide helps the researcher in getting to unearth some of the information which the respondents may not freely release. The same approach was applied by Karanja (2013) in his study on the influence of intellectual capital on the growth of small and medium enterprises in Kenya. This proposed research design has been noted to be ideal when data are collected to describe persons, organizations, settings or phenomena (Creswell, 1994). Kothari (2008) notes on his part that this form of design protects against bias and offers maximum reliability. Descriptive design uses a pre-planned design for analysis (Mugenda and Mugenda, 2012). In this study, both descriptive and inferential statistics were applied to arrive at conclusions.

## Population of the study

Population of the study refers to an aggregate or totality of all the objects, subjects. The group you wish to generalize is often called the population in your study (Polit & Hungler, 1999). This is the group you would like to sample from because this is the group you are interested in generalizing to (Polit, & Hungler, 1999). Data available from the AKI (2013) indicated that there are 5,188 registered insurance players in the country. Target population on the other hand is the entire set of units for which the survey data is to be used to make inferences.

For the purposes of this study, the researcher restricted himself to all the insurance firms which have registered offices in Nairobi. Only the head offices of the companies, all within Nairobi were considered in this research due to distance and financial constraints. For the insurance companies, the researcher increased frequency to three(3) respondents comprising of one (1) departmental manager and either the Chief Executive Officer-CEOs or Chief Operating Officers-COOs. This is because they are deemed to be the key people in formulating and to some extent execution of the strategies concerned with performance and growth of their firms. For all the other players, the frequency was chosen to be one (1) respondent except for the investigators where the researchers choose two (2) respondents.

## Sample and Sampling frame

According to Mugenda & Mugenda (2003) sampling is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. A sample is a subset of a population selected to participate in the study, it is a fraction of the whole, selected to participate in a research project. It describes the list of all population units from which the sample is selected (Cooper & Schindler, 2003). It is a representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2008).

A sample size of 10% of the target population is large enough so long as it allows for reliable data analysis and allows testing for significance of differences between estimates (Mugenda & Mugenda 2012). In this study, 10% of each stratum was chosen to arrive at the anticipated frequency save for the independent Agents where the researcher narrowed down only to those with established offices and have employed at least ten(10) employees and choose 1% (Percent) to arrive at the anticipated frequency. Polit & Hungler (1999) adds that sampling helps because it is more economical to choose a sample. The process of selecting a portion of the population to represent the entire population is known as sampling (Creswell, 1994).

In this specific study, 125 respondents were selected as specified in table 1 below. This comprised of insurance companies, brokers, agents, investigators and other service providers that conformed to a set of specifications. As a remedy, we sought a sampling frame which had the properties that we could identify every single element and include it in our sample. It formed a representative of the population. The study used a random stratified sampling technique.

The researcher stratified the players in the industry. In stratified sampling, the chosen sample is forced to contain units from each of the segments, or strata, of the population – equalizing "important" aspects. Stratified random sampling in this case means independent simple random samples (SRS's) taken within each stratum. The sample population was to be purposively selected from all the sectors in the industry. A study of five strata of firms was used, in the industry which was deemed to be a good representative. The frame was organized into separate "strata." each stratum was then sampled as an independent sub-population, out of which individual elements could be randomly selected. Every unit in a stratum had the same chance of being selected. With stratified sampling, the best survey results usually occur when elements within strata are internally homogeneous. The same approach had been applied by Ngumi (2013) in his study of the innovative strategies applied by the banking industry in Kenya.

Table 1. Population and respondents sector

Stratum	Insurance Player	Target population,(N)	Percentage %
A	Insurance co	48	0.93%
B	Insurance broker	187	3.60%
C	Insurance agents	4,628	89.21%
D	Investigators	134	2.58%
E	Other service providers	191	3.68%
		<b>5,188</b>	<b>100%</b>

Source: AKI Industry Reports, (2013)

Therefore, in this intended study, a sample size of 125 respondents was selected using a stratified random sampling technique from the as shown in table 1.

Orodho (2003) opines that stratified sampling do apply when the population from which a sample is drawn does not constitute a homogeneous group. Finally Table 2 below, shows the target population of the five strata which include insurance companies, insurance brokers, insurance independent agents, investigators and other service providers.

Table 2. Sampling Frame and Technique

Stratum	Target population	Percentage	Sample	Freq	Respondents
Ins. Co.	48	10	5	3	15
Ins. Broker	187	10	19	1	19
Ins. Ind. Agents	4628	1**	46	1	46
Investigators	134	10	13	2	26
Other serv. providers	191	10	19	1	19
	<b>5,188</b>	<b>518</b>	<b>102</b>		<b>125</b>

The study targeted only the COO or CEO and for all the stratum save for insurance companies where the researcher interviewed at least three (3) respondents with one been at middle level. The choice of the middle level management was to control the response of the COO or CEO because of the assumed biasness in responding to the questions since they are perceived to be part of the owners.

Similarly, for investigators two (2) respondents were chosen in an attempt to avoid biasness of the CEO or the key shareholder. Bryman (2012) do attest that the results from a proportionate stratified sample are associated with less sampling error because a sample is selected from a fairly homogeneous sub- group.

### Data collection

Creswell (1994) defines data collection as a means by which information is obtained from the selected subjects of an investigation. The primary research data was collected from the senior managers of various insurance players in Nairobi using a questionnaire and supported by interview guide. Interviews were conducted as a follow up in determining the authenticity of the information as filled in the questionnaire. In this study, data was collected by using structured interview questionnaire. This was used in order to capture data relevant to the study's objectives and research questions.

They also allow the researcher to clarify ambiguous answers and when appropriate, seek follow-up information. Disadvantages include impractical when large samples are involved time consuming and expensive (Ormrod., Leedy & Ellis, 2010). Similarly, in addition, the secondary data was collected to ascertain the extent into which the primary data provided in the questionnaires agreed with the set objectives. Here the researcher centred mostly on the companies website and the published information of the company. Further, the company's association bodies to which most of the sampled firms belonged such as Association of Kenya



Insurers-AKI, Motor Assessors Association-(MAA) Association of Insurance Brokers of Kenya-AIBK, Association of Independent insurance Agents of Kenya-AIIAK as well as Insurance Regulatory Authority-IRA were deemed to be crucial in provision of the much sought secondary data.

### **Pilot study**

It refers to a small scale preliminary study conducted in order to evaluate feasibility, time, cost, adverse events, and affect size (statistical variability) in an attempt to predict an appropriate sample size and improve upon the study design prior to performance of a full-scale research project. Hulley, (2007) indicated that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample.

It is a potentially valuable insight and should anything be missing in the pilot study it can be added to the full-scale (and more expensive) experiment to improve the chances of a clear outcome as highlighted by Ormrod et al, (2010).It helps in identifying whether the data collection instruments have any flaws and limitations. Cooper & Schilder (2007) highlight that as a rule the pilot study should constitute at least 5% of the entire sample. That is, six (6) out of possible 125 respondents. For this study the researcher carried out the pilot study before proceeding to full scale research and found out that the data collection tool was ideal for engaging into a full scale of research.

### **Reliability and Validity of research instrument**

Reliability is the degree of consistency with which the instrument measures an attribute (Polit & Hungler, 1999). It further refers to the extent to which independent administration of the same instrument yields the same results under comparable condition. The tendency toward consistency found in repeated measurements is referred to as reliability (Creswell, 1994). In this study, the researcher carried out the undernoted test:- Cronbach's Alpha test, for reliability tests of the variables, Factor analysis for exploring the content as well as transforming and making inferences and Kaiser-Meyer-Olkin (KMO) was used to measure the sampling adequacy. In addition, Multicollinearity was used to check on the association of independent variables and dependent variables. This is also explained in details in table 4.3 below.

Validity is the extent to which an instrument measures what it is supposed to measure. It's a measure of truth or falsity of the data obtained through using the research (Burns & Grove, 2011).In this study validity refers to the measure of truth or falsity of the influence of growth strategies on performance of firms in the insurance industry in Kenya. Cronbach (1951) notes that reliability is not measured, it is estimated and doesn't mean validity because while a scale

may be measuring something consistently, it may not necessarily be what it is supposed to be measuring.

### Operationalization of the variables

All the under noted variables were operationalized as follows:

Variable	Definition	Operationalization	Measurement
Performance of the firm (Dependent Variables )	How the firm performs in terms of sales, market share and ROI(Profits)	1. Sales and or fees-in kshs. Billions 2. Market share-In % 3. Profit- in kshs. Million 4. Customer service 5. Operational efficiency 6. Staff development	Dummy Variables
1. Diversification Strategy (Independent Variable)	The entering of a firm into new markets with new products	1.No.of both related and unrelated firms established 2.Shared resources 3.Solution to agency problem 4.Any market power gained	Dummy Variables 1=present 0= otherwise
2. Market penetration strategy (Independent Variable)	The number of products which a firms has sold in new markets by converting more users	1.increase in product usage 2.Availability of promotional activities 3.Presence of product discounts 4.Awarding loyalty programs to customers 5.Acquisition/merger of your competitor	Dummy Variables 1=present 0= otherwise
4.Product Development (Independent Variable)	Existing product sold in existing Market	1.modification of existing product 2.New technology 3.Research development 4.Do you carry out Market intelligence 5.No. of dominant products which you sell	Dummy Variables 1=present 0= otherwise
5.Market development strategy (Independent Variable)	New market with existing products.	1.What is your dominant market, SME, Public, Private 2. Market demographic issues 2.Key distribution channels 3.Establishment of branches 4.Location of your markets	Dummy Variables 1=present 0= otherwise

5.Ownership structure (Moderating Variable)	1. Public quoted	1) Corporate governance	Dummy Variables 1= Present 0 = Otherwise
	2. Private owned	2) Separation of ownership and Management	
		3) Number of professional in your firm	
		4) Management structure with clear succession planning	
		5) Family related business	

### Data Processing and Analysis

Data analysis was guided by the objectives of the study. The researcher used SPSS Version 20. Questionnaires were collected from the data and follow up with the respondents to ensure maximum return rate. Mugenda (2003) notes that any response rate of up to 70% is quite well and should be able to yield that anticipated results. Before processing the responses, from the questionnaire, a data clean-up was carried out on the completed questionnaires by editing, coding, entering and ensuring that the data is ready for usage. Data collected was analysed using descriptive statistics as a way to determine the level into which the respondents agree with the research objectives. Inferential statistics followed thereafter in order to fully understand the extent to which independent variables explained the dependent variable.

### Multiple Regression Analysis

The dependent variable which is the performance of firms in the insurance industry was linked with the four independent variables (Diversification, Market penetration, Product development and Market development). A moderating variable of ownership structure was also linked to resultant effect of the independent variables in order to establish the effects it has on the dependent variables.

The said models are as highlighted below:

$$Y_s = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_i \dots \text{Equation 1 (Direct relationship with Variables)}$$

Where

$Y_s$  = Dependent Variable (Performance of insurance firm)

$\beta_0$  = constant (coefficient of  $\beta$  intercept)

$X_1$  = Diversification Strategy

$X_2$  = Market Penetration Strategy

$X_3$  = Product Development strategy

$X_4$  = Market Development Strategy

$\beta_1$ -  $\beta_4$  = Regression coefficients of the 4 independent Variables.

For the equation one (1) the researcher applied both descriptive and inferential statistics and non-parametric test such as analysis of variance (ANOVA) to test the significance of the overall model at 95% confidence level. Other statistic applied included Chi Square, T-statistic and F-Test to determine the association of the independent variable with the dependent variable.

For the equation two(2), with the moderating variable. Tests on the continuous moderator variable effects were performed by computing a variable Independent variable intersection the moderating variable from the data, and subjecting it to a regression model as a predictor. Tests were carried on the overall effect of independent variables to the to determine the moderating effect for them.

$$Y_s = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + Z(\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4) \dots \dots \dots \text{(Equation 2)}$$

Where:-

$Y_s$  = Dependent Variable (Performance of insurance firm)

$\beta_0$  = constant (coefficient of  $\beta$  intercept)

$X_i$  = The independent variable.

$Z$  = The Moderating variable (Ownership structure)

$Z(\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4)$  = Independent variable intersection the moderating variable (computed variable)

## EMPIRICAL FINDINGS AND DISCUSSION

### Response Rate

This research was conducted between the periods of May 2015 to December 2015. A sample of 125 respondents from the various insurance players were selected using stratified random sampling technique. Out of the sample covered, 103 were responsive. This gave a percentage response rate of 82% (Table 3). This percentage is rated as very good and adequate for analysis. A response rate of 50% is adequate, 60% is good and 70% and above is very good (Mugenda & Mugenda 2003). The recorded high response rate was attributed to the data collection procedures applied, where the researcher utilized an interviewer administered questionnaire. This method usually has a higher response rate than a self-administered questionnaire (Bechhofer & Paterson, 2008).

On completing the questionnaire, the researcher picked them shortly thereafter and made follow up calls to clarify queries as well as prompt those respondents who had not completed the questionnaire to do so. Secondary data from the firm's website was also assessed to ascertain certain features as highlighted in the interview guideline and also to authenticate what was filled in the questionnaires.

Table 3. Response Rate

Stratum	Sampled	Responded	Response rate
Ins. Co.	15	12	80.0%
Ins. Broker	19	15	78.9%
Ins. Ind. Agents	46	38	86.2%
Investigators	26	22	83.9%
Other service providers	19	16	84.2%
<b>Total</b>	<b>125</b>	<b>103</b>	<b>82%</b>

### Diagnostic Tests

The researcher conducted some requisite tests on the data before proceeding to full scale research in order to ensure that the data was reliable and could draw to the objectives outlined above as well as test the hypotheses specified. The tests included-: Cronbach's Alpha test for the reliability tests of variables, Factor analysis for exploring the content as well as transforming and making inferences and Kaiser-Meyer-Olkin (KMO) was used to measure the sampling adequacy. Finally Multicollinearity was used to check on the association of independent variables and dependent variables.

### Cronbach's Alpha Test

An alpha coefficient of 0.80 or higher indicates that the gathered data are reliable and have relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005). All constructs depicted that the value of Cronbach's Alpha are above the suggested value of 0.8. Reliability of the constructs is as shown in table 4.

Table 4. Reliability test of Constructs

Variable	N of Items	Cronbach's Alpha	Comment
<b>Diversification Strategy</b>	7	0.904	Accepted
<b>Market Penetration</b>	8	0.898	Accepted
<b>Product Development</b>	12	0.868	Accepted
<b>Market Development</b>	8	0.903	Accepted
<b>Performance of the firm</b>	5	0.821	Accepted
<b>Ownership structure</b>	7	0.951	Accepted

### ***Factor Analysis***

Factors are a smaller set of underlying composite dimensions of all the variables in the data set while loadings are the correlation coefficients between the variables and the factors (Mugenda & Mugenda, 2012). Factor analysis can be applied in order to explore a content area, structure a domain, map unknown concepts, classify or reduce data, illuminate causal nexuses, screen or transform data, define relationships, test hypotheses, formulate theories, control variables, or make inferences. Factor loading assume values between (0-1) zero and one of which loadings of below 0.30 are considered weak and unacceptable (Nachmias & Nachmias, 2008).

The pilot study assumed factor loadings of 0.4 as acceptable. For the independent variable, all the indicators in the study at least had a factor loading greater than 0.4 for one of the components and hence were a representative of the variables analysed. No indicator had loadings below 0.4 for all components of the independent variables and therefore none of the independent variables indicators was expunged. The dependent variable however had one indicator with factor loadings below 0.4. The indicator of performance market share had loadings less than 0.4 and was therefore expunged.

The results are indicated in details in factor loading matrix (see Appendix IX). The idea in factor analysis is to find out a set of latent variables that essentially contain the same information which manifests the variables (Joreskog & Moustaki, 2006). The researcher thus reorganized the items under investigation into a more precise group of variables and build confidence on retention of possible items.

### ***Sampling Adequacy***

To measure the sampling adequacy of the data, the researcher used Kaiser-Meyer-Olkin test (KMO) and Bartlett's test of sphericity. The KMO is a statistic that indicates the proportion of variance in your variables that might be caused by underlying factors. A value of zero (0) indicates that the sum of partial correlation is large relative to the sum of correlations indicating diffusions in the patterns of correlations, and hence, factor analysis is likely to be inappropriate (Costello & Osborne, 2005). A value close to one (1) indicates that the patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors (Cooper & Schindler, 2011). The Kaiser-Meyer-Olkin measure of sampling adequacy shows the value of test statistic as  $0.914 > 0.5$  implying that factor analysis should yield distinct and reliable factors.

Bartlett's test of sphericity on the other hand tests whether the relationship among the indicators is significant or not. It tests the hypothesis that our correlation matrix is an identity matrix, which would indicate that our variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor

analysis may be useful with our data. Bartlett's test of sphericity is used to test whether the data is statistically significant or not. With the value of test statistic and the associated significance level, it shows that there exists a relationship among variables. This is as depicted in table 5.

Table 5. KMO and Bartlett's Test

Test	Value	
<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		0.914
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	3389.042
	Df	595
	Sig.	.000

### ***Test for Multi-collinearity***

A situation in which there is a high degree of association between independent variables is said to be a problem of multi-collinearity which results into large standard errors of the coefficients associated with the affected variables. According to Mugenda and Mugenda (2012), multi-collinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves. In a regression model that best fits the data, independent variables correlate highly with dependent variables but correlate, at most, minimally with each other. Multi-collinearity can also be solved by deleting one of the highly correlated variables and re-computing the regression equation. The pilot data was tested for multi-collinearity of the accepted variables.

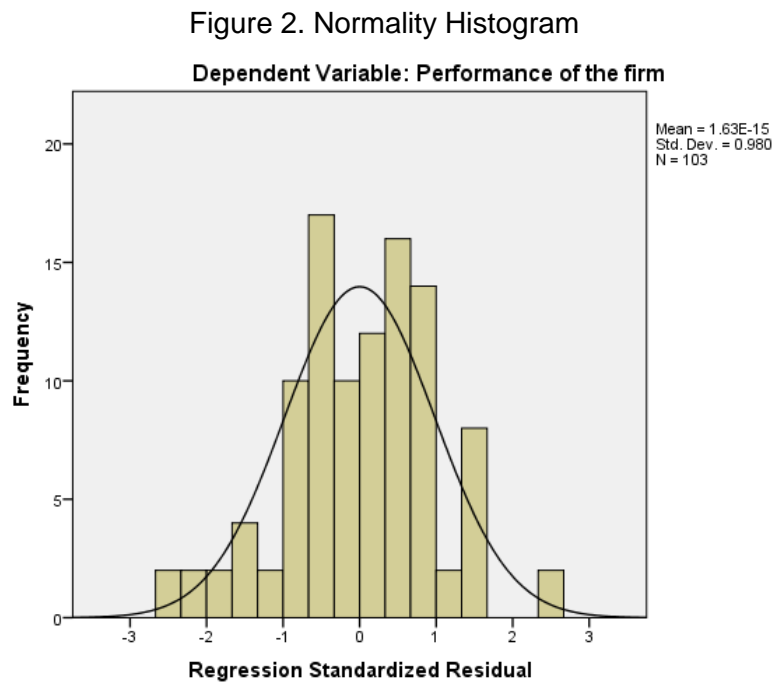
From the table 6 the tolerances are all above 0.2. If a variable has collinearity tolerance below 0.2 implies that 80% of its variance is shared with some other independent variables. The Variance Inflation Factors (VIFs) are all below 5. The VIF is generally the inverse of the tolerance. Multi-collinearity is associated with VIF above 5 and tolerance below 0.2. The accepted variables were therefore determined not to exhibit multi-collinearity and acceptable for collection and analysis.

Table 6. Multicollinearity

	Tolerance	VIF
Diversification Strategy	0.559	1.789
Market Penetration	0.489	2.045
Product Development	0.532	1.88
Market Development	0.563	1.776

### Test for Normality

The regression model is fit based on the assumptions that the residuals follow a normal distribution. The figure 2 clearly shows a normal distribution curve. The curve is not skewed to either side of the plot implying a normal distribution with a mean of 0.000 and a standard deviation of 0.960. Other tests which the researcher conducted to ensure normal distribution is adhered to included, autocorrelation using the Durbin Watson Test and finally Heteroscedasticity using scatter plot.



For further normality test, table 7 represents key statistics for this test. The Shapiro-Wilk normality test for the standardized residuals is significant with a significance of 0.960 which is greater than 0.05. This implies that the residuals follow a normal distribution as required for a linear regression.

Table 7. Normality Test

	Shapiro-Wilk Statistic	Df	Sig.
Standardized Residual	.986	103	.347
Standardized Residual	.985	103	.306



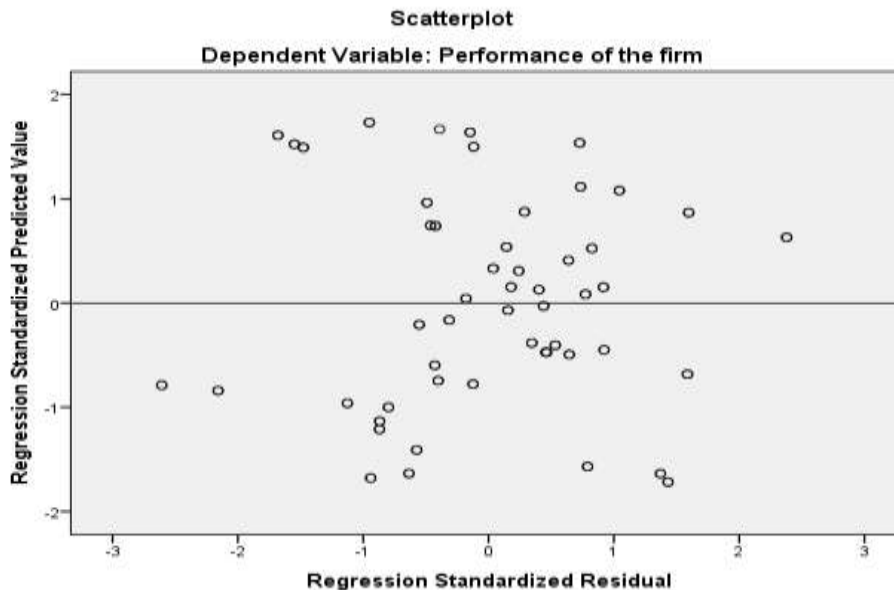
### ***Test for Autocorrelation***

It is also required that the residuals should not be auto correlated. Autocorrelation implies that adjacent observations are correlated. If the regression model violates the assumption of no autocorrelation then the predictors may be significant even though the model will have underestimated the standard errors of the predictors.

The Durbin Watson value is 2.469, the upper limit for 4 predictors excluding the intercept for is 1.679 as depicted in (see Appendix XI) and the lower limit is 1.571. 2.469 is higher than the upper limit so we conclude that the residuals are not auto correlated.

### ***Test for heteroscedasticity***

Figure 3. Standardized residual scatter plot



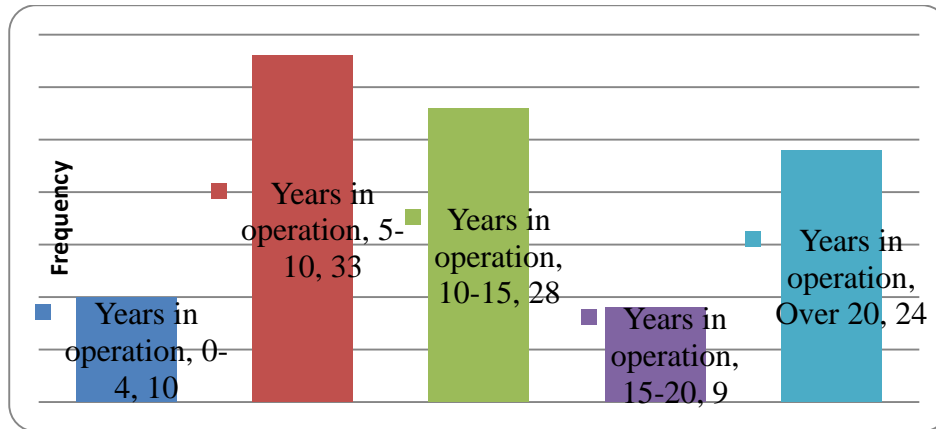
### **Descriptive Analysis**

#### ***Period of operation***

From the research its only ten (10) firms which were noted to have been in operation for less than 4 years, thirty three (33) firms on the other side were noted to have been in operation for a period of 5 years to 10 years, twenty eight (28) firms were noted to have been in the insurance industry for a period of 10 years to 15 years, nine (9) firms on the other side were noted to have been in operation for a period of 15 years to 20 years and lastly twenty(24) firms were noted to have been in operation for a period of over 20 years. The number of years in operation

was an essential fact in the research in order to determine performance and avoid windfall effects for our conclusion.

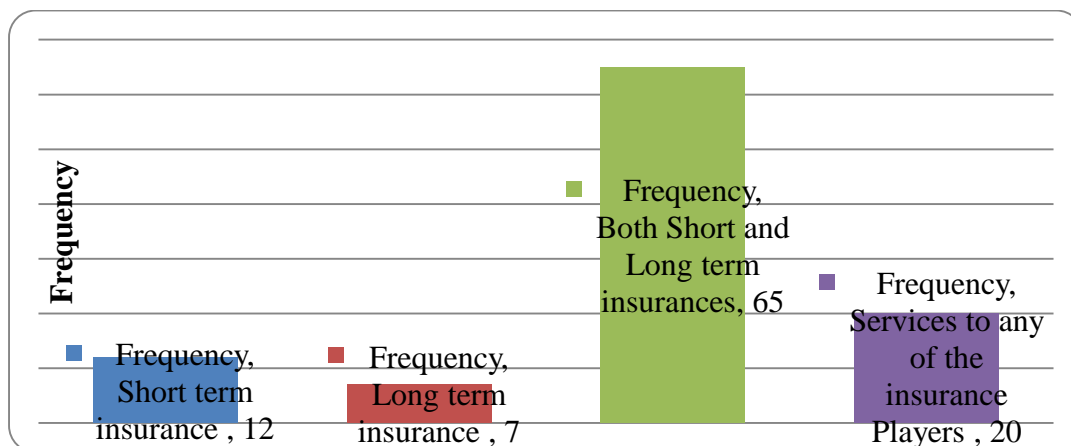
Figure 4. Period of operation



**Products sold to the public**

The researcher sought to establish the products and services sold to the public by firms considered. Out of the sampled firms, twelve (12) of them dealt with short term insurance, seven (7) firms dealt with long term insurance, Sixty five (65) firms which were the majority dealt with both short term and long term while twenty (20) firms dealt with other services, that is, provision of other services to the insurance firms other than short term insurance and long term insurance. In essence then, majority of firms were noted to offer both long term and short terms products. This is in line with firms’ strategic plans and IRA (2013) of making insurance firms to become a one stop shop for all the services which they provide to the public.

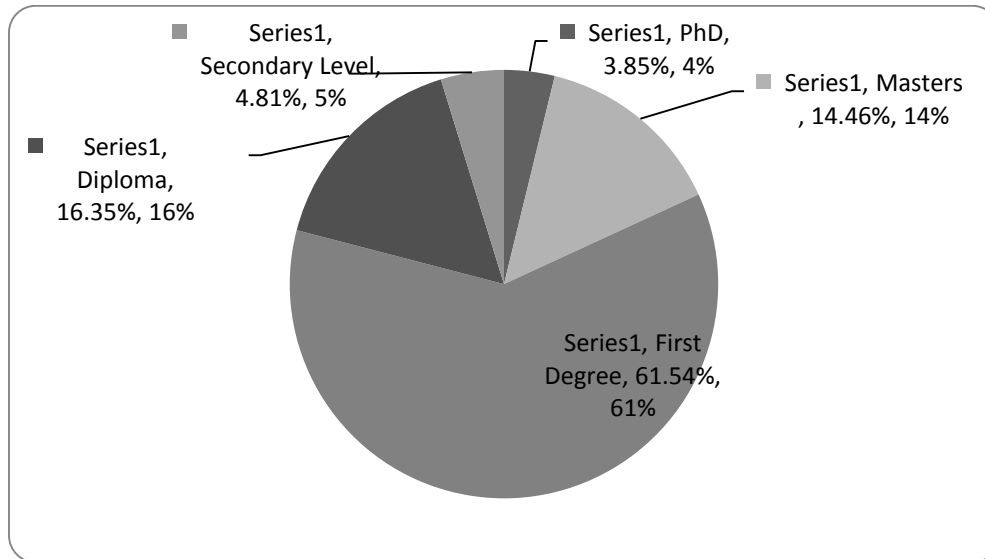
Figure 5. Products sold



### ***The qualification of the respondents***

The researcher sought to find out both the academic and professional qualifications of the respondents. In particular the management. Only 3.85% of the respondents had PhDs, while 4.81 % had secondary school level of education, 13.46% had completed post graduate qualifications and had a master's degree, 16.35% had acquired diploma level in the insurance sector and 61.54% of the respondents had a first degree level of education.

Figure 6. Academic qualification of the respondents



Firms believe in the key resource of people together with setting structures and rules hence the need of having various professionals in their respective firms. As a matter of fact IRA (2010) stipulated the fit and proper guideline for persons who intent to occupy management and directorship within the insurance firms (Appendix V). Institutional logic holds that staffs are not only looking for salaries who want to do the bare minimum, nor are they machines that can be ordered to produce high performance. For a firm to boast of high performance it must engage key performing people in its management in order to lead the organization.

### **Inferential Analysis**

#### ***Moderating effect of ownership structure on the relationship between the independent variables and the dependent variable***

The variable ownership structure was considered a moderating variable. A moderating variable is one that influences the relationship between other variables. The moderating effect was explored by a regression including the moderating variable. The regression model for the

moderating effect included computation of interaction variables between the independent variables and the moderating variable. The regression was then done including the computed interaction variables resulting into the model equation below.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + Z(\beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4)$$

Where;

Y – Dependent variable (Performance of the firm)

$\beta_1$  to  $\beta_4$  -Regression coefficients of the predictors in the model

$X_1$  – Diversification strategy

$X_2$ – Market penetration

$X_3$  – Product development

$X_4$  – Market development

Z – Moderating variable (Ownership structure)

This is  $R^2$  for Model 1 which represents the amount of variance in the dependent variable that is explained by the model 1 which is equivalent to the multiple regression model. It shows that the model without moderation explains 84.7% of the variation in the independent variable. The  $R^2$  for Model 2 which represents the amount of variance in the dependent variable that is explained by the model relative to how much variance to explain. The  $R^2$  for model 2 is 0.86 which implies that the model including the moderating variable explains 86% of the variation in the dependent variable. This is higher than the  $R^2$  for the first model. The change in statistics shows us that the addition of the interaction term in Model 2 significantly improved the model fit. Since the F Change has a p-value of 0.004 which is less than 0.05, it means that there has been a significant improvement in model fit by introducing the interaction of the independent variables with the moderating variable. This implies that, more variance in the outcome variable has been explained by Model 2 which has the interaction than Model 1 without considering the moderating variable.

Table 8. Model Summary Moderating effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.897	0.847	0.847	0.117	0.847	82.803	4	99	0.000
2	0.897	0.860	0.876	0.484	0.012	1.551	4	95	0.004

The ANOVA in regression is used to determine whether the model gives a significantly good degree of prediction of the outcome variable. The ANOVA statistics of model (1) one shows

that the F statistic is significant implying that the Model without the interaction variables has an overall significantly good degree of prediction of the outcome variable.

The ANOVA statistics for model two (2) also shows that the Model with the interaction of the moderating variable and independent variables also has an overall significantly good degree of prediction of the outcome variable. Both models results into significantly good degrees of predictions of the dependent variable. However ANOVA does not give details about the predictions of individual variables.

Table 9. ANOVA table; Moderating effect

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	79.2979	4	19.8245	82.8032	.000 <sup>b</sup>
	Residual	23.7023	99	0.23942		
	Total	103	103			
2	Regression	80.7506	8	10.0938	43.0981	.000 <sup>c</sup>
	Residual	22.2496	95	0.23421		
	<b>Total</b>	<b>103</b>	<b>103</b>			

Table 9 is an analysis of predictions of individual variables on the multiple regressions for both models. The outcomes of Model one (1) as earlier discussed implies that, three of the variables significantly influences the outcome variable. The independent variable  $X_4$  (Market Development) however results into an insignificant influence on performance of the firm. From the results of the Model, it is shown that even on the inclusion of the interaction with moderating variable to the model, the variable market development still has no significant influence on the model. When the interaction variables between the moderating variable and the independent variables are included in the model as in the model, the resulting equation is.  $Y = 1.372 + 0.786X_1 + 2.311X_2 + 1.875X_3 + 0.721X_4 + Z(0.562X_1 + 0.457 X_2 + 0.673 X_3 - 0.618 X_4)$ .

The coefficients of  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_1Z$ ,  $X_2Z$  and  $X_3Z$  in Model 2 are all significant as they have T statistics with p-values of 0.000, 0.000, 0.000, 0.026, 0.046 and 0.038 which are all less than 0.05. The coefficients of  $X_4$  are not significant as they have T statistics with p-values that are greater than 0.05. Since the coefficients of Z is all significant joint interaction with  $X_1$ ,  $X_2$  and  $X_3$ , this implies that the variable ownership structure has moderating influences on the joint relationship between independent variables, that is Diversification strategy, Market Penetration Strategy, Product Development Strategy and the dependent variable, the Performance of the firm.

Table 10. Coefficients table; Moderating effect

Model		Coefficients	Std. Error	T	Sig.
1	(Constant)	1.368	0.126	10.885	0.000
	X <sub>1</sub>	0.852	0.175	4.872	0.000
	X <sub>2</sub>	2.325	0.230	10.115	0.000
	X <sub>3</sub>	0.947	0.374	2.533	0.013
	X <sub>4</sub>	0.392	0.241	1.624	0.108
2	(Constant)	1.372	0.130	10.578	0.000
	X <sub>1</sub>	0.786	0.183	4.299	0.000
	X <sub>2</sub>	2.311	0.234	-9.864	0.000
	X <sub>3</sub>	1.875	0.347	5.398	0.000
	X <sub>4</sub>	0.721	0.415	1.735	0.086
	X <sub>1</sub> Z	0.562	0.249	-2.263	0.026
	X <sub>2</sub> Z	0.457	0.226	2.024	0.046
	X <sub>3</sub> Z	0.673	0.364	1.848	0.011
	X <sub>4</sub> Z	-0.618	0.330	-1.876	0.064

From the coefficients table, the study proceeds to test the final hypothesis H<sub>05</sub>.

**H<sub>05</sub>** Ownership structure has no significant effect on the Relationship between the independent variables (Growth strategies) and the dependent variable (Performance of firms) within the insurance industry in Kenya.

Since the p value for the T statistic of the interaction variable between strategies and growth strategies are 0.026, 0.046 and 0.038 which are all less than 0.05, we reject the null hypothesis for diversification strategy and conclude with an alternative that Ownership structure has a significant moderating effect on the Relationship between the independent variables (growth strategies) and the dependent variable (Performance of firm).

### ***Optimal model***

Because the two multiple regression models rejected the variable, market development, a regression analysis that only includes the three (3) significant independent variables and their interactions with the moderating variable was done. The R<sup>2</sup> for the optimal model is 0.857 which implies that the optimal model explains 85.7% of the variation in the dependent variable. Only 14.3% of the variation in the outcome variable is unexplained by the factors in the model. The adjusted R<sup>2</sup> is also equal to the R<sup>2</sup> implying a perfect fit of the optimal model.

Table 11. Model Summary; Optimal model

R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>0.831</b>	0.857	0.857	0.573

The ANOVA table shows an F statistics with a P-value of 0.000 which is less than 0.05. The implication of this is that the overall optimal model results in a significantly good degree of prediction.

Table 12. ANOVA table; Optimal model

	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	71.132	6	11.855	36.085	0.000
<b>Residual</b>	31.868	97	0.329		
<b>Total</b>	103.000	103			

The coefficients in table 12 shows the degrees of predictions of individual independent variables. From the table all the independent variables have T statistics with p-values that are less than 0.05. This implies that all the three (3) independent variables that is Diversification strategy, Market penetration and product development strategy in the optimal model have significant influence on the outcome variable. The interaction variable  $X_iZ$  between the independent variables and the moderating variables also has p-values that are less than 0.05. This implies that the moderating variable ownership structure have significant moderating influence on the relationship between the independent variables on the optimal model and the dependent variable. When the interaction variables between the moderating variable and only the significant independent variables are included in the model, the resulting equation is -:

$$Y = 1.208 + 0.125X_1 + 1.575X_2 + 2.418X_3 + Z(0.650X_1 + 0.431 X_2 + 0.040 X_3).$$

Table 13. Coefficients table; Optimal model

	Coefficients	Std. Error	T	Sig.
<b>(Constant)</b>	1.208	0.149	8.109	0.000
<b>X<sub>1</sub></b>	0.125	0.161	0.774	0.004
<b>X<sub>2</sub></b>	1.575	0.241	-6.523	0.000
<b>X<sub>3</sub></b>	2.418	0.273	8.845	0.000
<b>X<sub>1</sub>Z</b>	0.650	0.255	-2.553	0.012
<b>X<sub>2</sub>Z</b>	0.431	0.236	1.830	0.027
<b>X<sub>3</sub>Z</b>	0.040	0.127	-0.315	0.038

The graphical presentation in figure below has two curves on the joint effect of the significant growth strategies on performance of the firm and the effect of the moderating variable on the relationship between growth strategies and performance. One line shows the effect of the growth strategies on performance at public nature of ownership structure and the second line shows the same relationship at private nature of ownership structure. The implication of the presentation shows that, with public nature of ownership structure, the growth strategies have a joint low effect on performance while with private nature of ownership structure, the growth strategies have a high joint effect on performance of the firm; the curve has a steeper slope.

Figure 7. Moderating effect of ownership structure on diversification strategy and performance

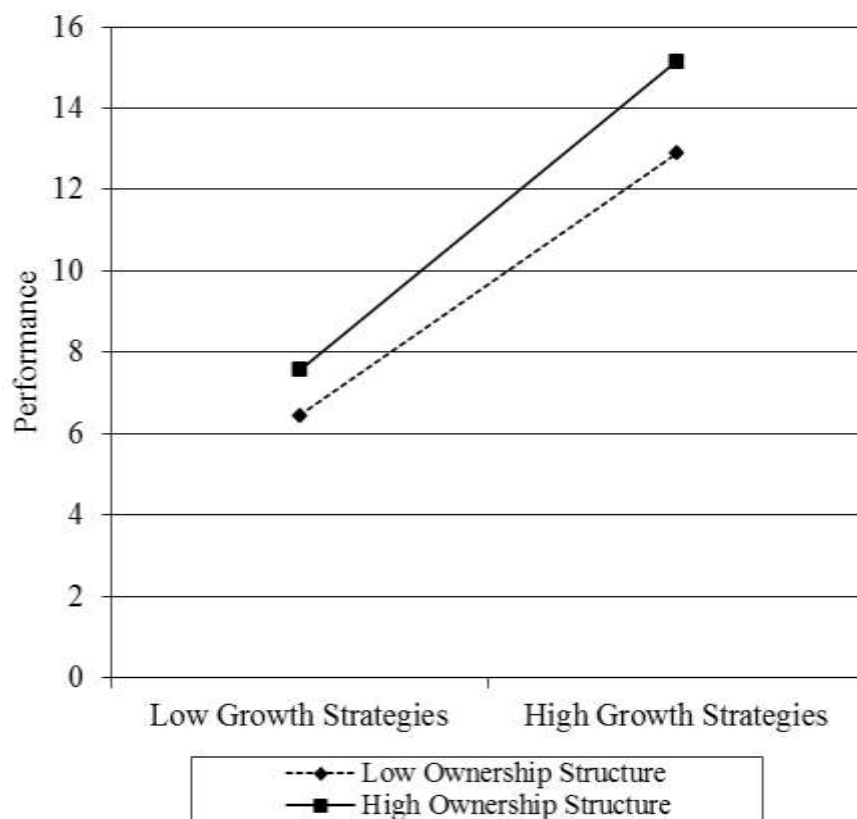
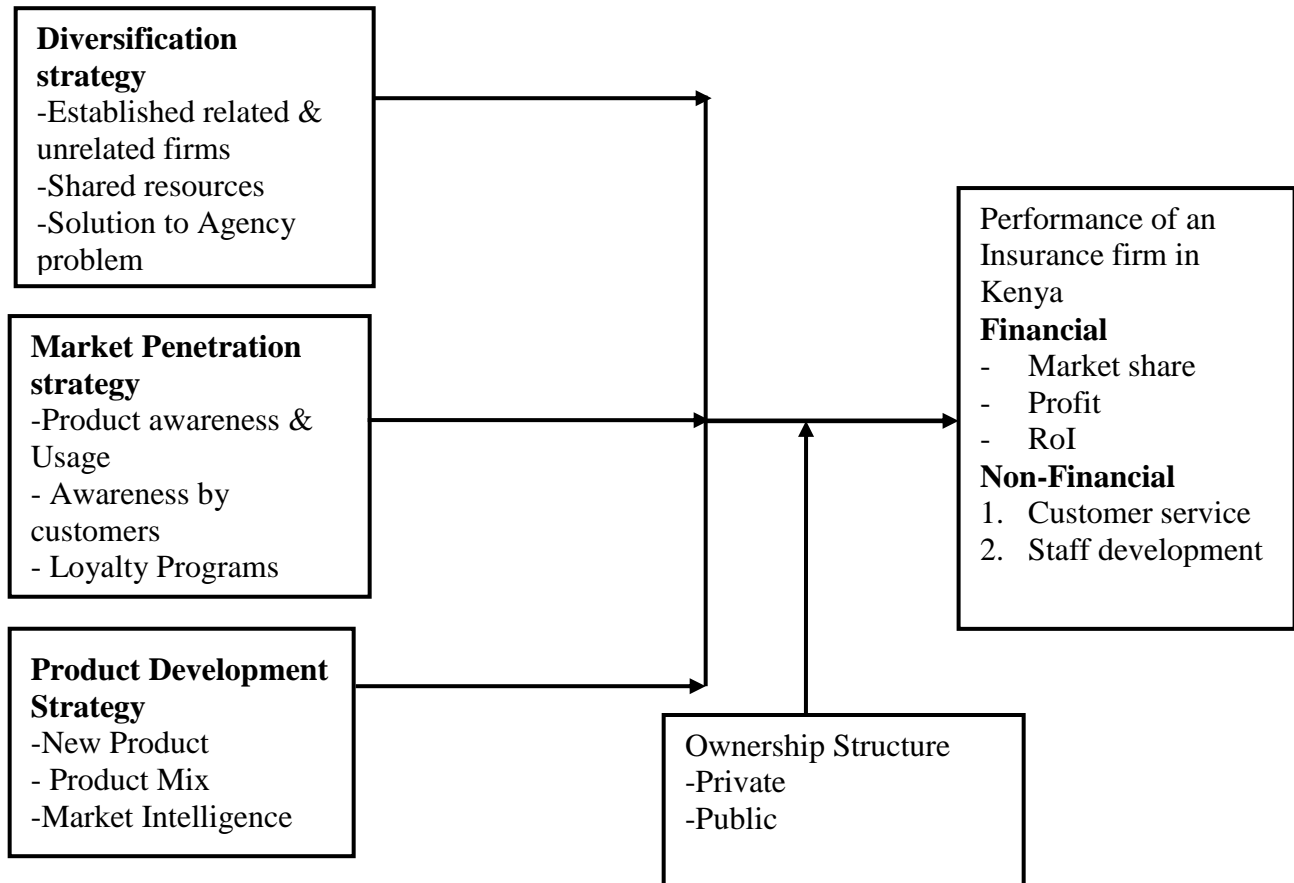




Figure 8. Final Accepted Model



**SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

**Summary of the findings**

The study sought to investigate the influence of the growth strategies on performance of firms within the insurance industry in Kenya. Specifically, the study investigated the relationship between the Diversification strategy, Market Development Strategy, Product Development Strategy, Market Penetration Strategy and Performance of firms within the insurance industry. The Moderating effect of the ownership structure on each of the independent variables to the dependent variable was also analyzed.

The study was able to establish that ownership structure whether private or public in nature was ideal to influence the performance of insurance firms in Kenya. This equally agrees with Basu and et al., (2012) who established that the private sector is usually more efficient, accountable and effective than the public sector. This implies that most firms within the industry were capable of performing better whether quoted (public or not) but key to note is their growth

strategy which they pursue. Additionally as highlighted by Chiara Gratton-Lavoie (2000). The regression analysis determined that privatization did not have a significant impact on average company's profitability, and similar results hold for the two sub-samples of regulated and unregulated firms. This then leads to the conclusion that performance of firms in insurance industry in Kenya was more on the private owned firms but with very little impact on those which are publicly owned.

## **Conclusions**

The main gist of the study was to find out the influence of growth strategies on performance of firms within the insurance industry. Based on this concluded study on performance of insurance firms, growth strategies were noted to have a positive relation on the performance of insurance firms in Kenya. The finding from the study indicates that there is a significant positive relationship between the pursuit of the Diversification strategy and performance of insurance firm. It also notes that Market Penetration strategy influences performance of insurance firms in a positive manner. Equally Product Development strategy was noted to have a positive influence on the performance of insurance. The pursuit of Market Development strategy was found to have a negative influence on the performance of the insurance firm. Finally the moderating effect of the ownership structure on the growth strategies and the performance of insurance firms in Kenya was noted to be unaffected implying the type of ownership whether private or public did not affect the performance in any way.

## **Recommendations**

On the ownership structure, most of the firms within the insurance industry were noted to be private-owned, that is only six (6) out of 5,188 players. This is an indication that the firms within the industry have not yet attracted high returns to turn them to be public or become listed. At the time of study various firms were in the process of going public. A similar study on the ownership structure should be carried on other industries such as commercial and service or banking sectors which have a high number of listed firms. This will help in arriving at informed conclusion on the effect of ownership structure.

## **Suggestion for further research**

This study is a milestone for future research in this area, particularly in Kenya. The findings emphasize the importance of the growth strategies which include diversification, market penetration, market development, product development and the moderating influence of the ownership structure. Available literature indicates that as a future avenue of research there is

need to carry out similar research on growth strategies in other industries such as banking which falls within the financial sector as well as in other regions in order to establish whether this link of growth strategies and performance can be generalized.

Further at the time of research, there were a lot of mergers and acquisitions which were happening in the insurance industry hence it could be ideal to carry out a study on them to gauge the level on which they will influence the performance within the insurance industry. In addition the legislative issues within the insurance industry had also be introduced hence the need to study them independently and find out whether they will influence performance of firms positively or negatively.

## REFERENCES

- Aaker, D. (1995). *Building Strong Brands*, New York: The Free Press.
- Adams, M. & Buckle, M. (2003). 'The Determinants of Corporate Financial Performance in the Bermuda Insurance Market'. *Applied Financial Economics*. Vol. 1 (2) 2, 144-143.
- Ade, O. (2012), Effects of Product – Market Diversification Strategy on Corporate Financial; Performance and Growth: An Empirical Study of Some Companies in Nigeria. *American International Journal of Contemporary Research*, Vol. 2 No. 3.
- Ahmed, N. Ahmed, Z. & Ahmed, I. (2010), "Determinants of Capital Structure: A Case of Life Insurance Sector of Pakistan", *European Journal of Economics, Finance and Administrative Sciences*, Issue 24,
- AKI, (2010). Association of Kenya Insurers Report, Measures of achieving Strategic Plan 2011-2016. Retrieved 12th October 2014. Nairobi.
- AKI, (2013). Association of Kenya Insurers Report. Retrieved 12th October 2014. Nairobi.
- Andersson, J.; Nordwall, J. & Salomonsson, D. (2004) "The link between ownership structure and firm performance, Evidence from Sweden's listed companies, *Industrial and Financial Economics Journal* No. 2004:37
- Ansoff, I. & McDonnell, J. (1990). *Implanting Strategic Management*, 2nd Ed. Prentice-Hall.
- Ansoff, I. (1957). "Strategies for Diversification", *Harvard Business Review*, Vol. 35 Issue 5, pp. 113-124.
- Bagozzi, P. (1995), 'Advanced Methods of Marketing Research', *Journal of Marketing Research*, Vol. 32, No. 3, pp. 375-378
- Barney, B. (1991) "Firm Resources and sustained competitive advantage". *Journal of Management* Vol. 17, 99-120.
- Barney, B. (1997), "Gaining and Sustaining Competitive Advantage", Addison-Wesley, Mass
- Basu, S. Andrews, J. Kishore, S. Panjabi, R. Stuckler, D. (2012) Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review. *PLoS Med* 9(6): e1001244.
- Bebchuk, A. & Fried, J. ( 2003), Executive compensation as an Agency Problem, *Journal of Economic perspective*, Vol.17, Pg71-92
- Berle, A. & Means, C. (1932). *The Modern Corporation and Private Property*. Larcourt, Brace & World Inc., New York (Republished: 1968).
- Bhuiyan, N. (2011). A framework for successful new product development. *Journal of Industrial Engineering and Management*, 4(4), 746-770.

- Blanca, A.; Iturralde, T. & Maseda, A. (2010), Outsiders on the board of directors and firm performance: Evidence from Spanish non-listed family firms, Volume 1, Issue 4, Pages 236-245
- Brealey, A. & Meyers, C. (2008). Fundamentals of corporate finance (5th ed.). New York, NY: McGraw Hill.
- Burns, N. & Grove, K. (2011). Understanding Nursing Research 5th Edition. Texas: Elsevier.
- Carneiro, A. (2007). "What is required for growth?" Business Strategy Series vol. 8 No.1 pp. 51-57.
- Chakrabarti, A.; Singh K. & Mahmood, I. (2007). Diversification and Performance : Evidence from East Asian firms. Strategic Manage. J.,28: 101-120
- Chandler, D. (1962). Strategy and Structure: Chapters in the History of the American Industries
- Cheluget, J.; Gekara, M.; Orwa, G. & Keraro, V. (2014). "Liquidity as a determinant of financial distress in insurance companies in Kenya". Prime. Journal of Bus. Admin. Manage. 4(1): 1319-1328
- Chen, J. & Tsou, T. (2007) Information technology adoption for service innovation practices and competitive advantage: The case of financial firms; information Research, Vol. 12 No. 3,
- Chen, R. & Wong, K. (2004). "The determinants of financial health of Asian Insurance companies". The Journal of Risk and Insurance, 71, (3), pp.469- 499,
- Chiara, M. (2011), Family business and financial performance: Current state of knowledge and future research challenges Volume 2, Issue ,3 Pages 166-181
- Christian, C.; Karina, D. & Elstrodt, H.(2010), 'The five attributes of enduring family businesses. The keys to long-term success are professional management and keeping the family committed to and capable of carrying on as the owner' Strategic Management. J.,29: 611-720
- Christian, C; Loch, C.; Niederkofler, M. (1996) When Product Development Performance Makes a Difference: A Statistical Analysis in the Electronics Industry INSEAD McKinsey & Company, Fontainebleau, France
- Cooper, R. & Kleinschmidt, E. (1995). "Benchmarking the firm's critical success factors in new product development." Journal of Product Innovation Management, 12, 374-391.
- Cooper, S. & Schindler, T. (2007). Business Research Methods, 8th Ed. Irwin/McGraw-Hill
- Copper, D. & Schindler, P. (2011). Business Research Methods, 10th edition. McGraw-Hill Publishing, co. Ltd. New Delhi.
- Costello, A., & Osborne, W. (2005). Best practices in exploratory factor analysis: Four recommendations, for getting the most from your analysis. Practical Assessment, Research & Evaluation, 10(7). Retrieved from <http://pareonline.net/>
- Cravens, D. (2000). Strategic Marketing', Sixth Edition, McGraw-Hill.
- Creswell, S. (1994). Research Design: Qualitative and Quantitative. London: Sage.
- Cummins,.J., & Doherty,.A. (2006). The economics of insurance intermediaries. The Journal of Risk and Insurance, 73(3), 359-396.
- Dalton, R. Daily M.Ellestrand E, & Johnson L.(1998),Meta-analytic review of Board composition, leadership structure and Financial performance, Strategic Management journal, 19,pp 269-290
- Day, G. & Wensley, R. (2005). "A Critical Review of Research in Marketing British". Journal of Management Volume 6, Issue Supplement s1, pp. 63–82,
- Day, G. S. (1990). Market-driven strategy. New York: The Free Press
- Deeds, L.; DeCarolis, D. & Coombs, J. (1999). Dynamic capabilities and new product
- Demsetz, H. & Villalonga, B. (2001), "Ownership Structure and Corporate Performance", Journal of Corporate Finance, Vol. 7, No. 3, pp. 209-233.
- Diacon, S. & Carter, L. (2003). Success in Insurance, 3rd Ed. London: Murray Publishers.

- Eisenhardt, M. & Martin, K.(2000),Agency theory, An Assessment and review, Academy management Review,14.57-74
- Elango, B.; Ma, Y. & Pope, N. (2008), “An investigation into the diversification-performance in the US property-liability insurance industry”, Journal of Risks and Insurance, Vol. 75 No. 3, pp. 567-91.
- Ernst H.; Hoyer, W. & Rübstaamen, C. (2010), Sales, Marketing, and Research-and Development Cooperation Across, New Product Development Stages: Journal of Marketing, Vol. 74 pp, 80–92,
- Fahy, J. (2000). “The Resource-based view of the Firm: Some Stumbling-blocks on the Road to Understanding Sustainable Competitive Advantage”, Journal of European Industrial Training, 24(2/3/4), pp. 94-104.
- Galliers, D. (1991).Choosing Appropriate Information Systems Research Approaches: A Revised Taxonomy. Contemporary Approaches and Emergent Traditions, pp. 327–345. Elsevier Science Publishers, North Holland.
- Gary, A. Knight, I. & Tamar, S. Cavusgil,L.(2004) Innovation, organizational capabilities, and the born-global firms’. Journal of International Business Studies (2004) 35, 124–141.
- Geringer, S. Tallman, M. Olsen.(2000), Product and International Diversification among Japanese Multinational Firms ,Strategic Management Journal, No 21. pp. 51-80
- Graham, A. (2006), Developing Thinking in Statistics, The Open University in association with Paul Chapman Publishing, A SAGE Publications Company
- Gujarati, D. (2003), Basic Econometrics, New York, McGraw, Hill Publishers
- Hamel, G. & Prahalad, K. (1994).Competing for the future. Harvard Business School press.
- Hitt, I. & Hokisson, S. (2009). The management of strategic Concepts, 9th edition. Michagan: South western Cengage learning.
- Hrechaniuk, B.; Lutz, S. & Talavera, O. (2007), The Determinants of Insurers’ Performance in “Old” EU and the “New” EU and Outside? Accessed 12 November, 2014
- Huck, S. (2011). Reading Statistics and Research. Chicago: Pearson.
- Hulley, S. (2007) Designing clinical Research, 4th, edition Lippincott Williams & Wilkins
- Hussain, S.; Khattak, J.; Rizwan, A. & Latif, A. (2014). “Interactive Effects of Ansoff Growth Strategies And Market Environment on Firm’s Growth,” British Journal of Business and Management Research Vol.1, No.2, pp.68-78
- Ilovi, M. (2013). “Sustainable Competitive Advantage in Insurance Industry in Kenya”. Management Journal Vol. 4. Nairobi.
- Iqbal, A.; Hameed, I. & Qadeer, M. (2012). Impact Of Diversification On Firms’ Performance. American Journal of Scientific Research, 80, 42-53
- IRA, (2009). Insurance Regulatory Authority Report. Retrieved, December 10th, 2014. Nairobi.
- IRA, (2011). Insurance Regulatory Authority Report. Retrieved January 4th, 2014.
- IRA, (2015). Insurance Regulatory Authority Report. Retrieved September 21st , 2015
- Jensen, M. & Meckling, W. (1976). “Theory of the firm: Managerial behaviour, agency costs, and ownership structure”. Journal of Financial Economics 3, 305-360
- Johnson, P. & Scholes, T. (2008). Exploring Corporate Strategy, 12th Edition. Prentice Hall.
- Kaplan, C. & Norton, R. (2008). The Balanced Scorecard. Boston MA: Harvard Business School Press.
- Kartinah, A. (2009); How do new ventures grow? Firm capabilities, growth strategies and performance; Intern. J. of Research in Marketing 26 (2009) 294–303
- Khanna, T. & Yafeh, Y. (2005), “Business Groups and Risk Sharing around the World”, Journal of Business, Vol. 78, No. 1, pp. 301-340.

- Kinyua, N. (2013). 'Factors Affecting Performance of Insurance Company in Meru County'. Management Journal Vol. 6 Nairobi.
- Kiragu, S. (2014). "Assessment of challenges facing insurance companies in building competitive advantage in Kenya: A survey of insurance firms." International Journal of Social Sciences and Entrepreneurship, 1 (11), 467-490
- Klein, S. & Robert, P. (2008). An overview of Insurance Industry and its Regulation, centre for Risk Management & insurance Regulation. Georgia State University.
- Kothari, C. (2004). Research Methodology, methods and techniques. New Delhi: New Age international publishers.
- Kotler, P. & Armstrong, G. (2002). Principles of marketing, 3rd Edition. Prentice Hall.
- Kotler, P. (2007) Marketing: An Introduction. 8th ed. Upper Saddle River, N.J.: Prentice Hall
- Kotler, P. 1999. Kotler on Marketing: How to Create, Win and Dominate Markets', New York, Press Free.
- KPMG, (2010). Cutting through Complexity. Retrieved June 4th, 2014. Nairobi.
- Kumar V. & Petersen A. (2005), Using a Customer-Level Marketing Strategy to Enhance Firm Performance: A Review of Theoretical and Empirical Evidence, Journal of the Academy of Marketing Science. Volume 33, No. 4, pp 504-519
- Kwon, J. (2013). "The significance of Regulatory supervision and price adequacy in insurance markets." The Journal of Risk Finance Vol. 14 No. 4, 320-343.
- Li, L. (2007). "Multinationality and performance: A synthetic review and research agenda," International Journal of Management Reviews, vol. 9, pp. 117-139,
- Lins, S (2002), "Is Corporate Diversification Beneficial, in Emerging Markets?", Financial Management, Vol. 31, No. 1, pp. 5-31
- Liu Y. & Yang R. (2009), Competing Loyalty Programs: Impact of Market Saturation, Market Share and Category Expandability, Journal of Marketing Vol. 73, 93-108
- Loewe, M. (2006). Protecting the poor through Insurance Vol.4. Geneva Papers, (pp. 201-312). Geneva.
- Lusch, R.F & J.R. Brown (1996). Interdependency, Contracting and Relational Behaviour in Marketing Channels, Journal of Marketing, 60, pp. 19 – 38.
- Marco A. (2006) Does Insurance Market Activity Promote Economic Growth? A Cross- Country Study for Industrialized and Developing Countries. World Bank Policy Research Working Paper 4098
- Mashiri, E. & Sebele F. (2014), Diversification as a Corporate Strategy and Its Effect on Firm Performance: A Study of Zimbabwean Listed Conglomerates in the Food and Beverages Sector; International Journal of Economics and Finance; Vol. 6, No. 5;
- Mayer, T.; Marc, J.; Melitz, ; Gianmarco, P. & Ottaviano; L. (2014) Market Size, Competition, and the Product Mix of Exporters; American Economic Review 104(2): pp. 495-536
- Meyer, S.; Klaus, E. & Tran, Yen, T. (2006): Market Penetration and Acquisition Strategies for Emerging Economies, Long Range Planning, 39, no. 2, 177-197.
- Moller, K. & Anttila, M. (1987), Marketing capability a key success factor in small business?," Journal of Marketing Management, Vol. 3 No. 2, pp. 185-203
- Montgomery, A. (1985), "Product-market Diversification and Market power" Academy of Management Journal, 28, 4, December, 789-298.
- Mosee, V. & Kuloba, R. (2013). Kenya Insurance Industry Outlook. Retrieved 13th December 2014, Nairobi.
- Mugenda A. & Mugenda O. (2012). Research Methods Dictionary. Nairobi: Applied Research & Training Services, Nairobi, Kenya.

- Mugenda, A. & Mugenda, O. (2003). *Research Methods; Qualitative and Quantitative Approaches*. Nairobi: Acts.
- Murat, A.; Nilgun, A. & Fulya, S.;(2013) The Relationship between innovation and firm performance: 2nd International Conference on Leadership, Technology and Innovation Management, Procedia - Social & Behavioral Sciences 75 226 – 235
- Nachmias, D. & Nachmias, C. (1996), *Research methods in the social sciences*, 5th, Edward Arnold, New York
- Naman, L. & Slevin,P. (1993). *Entrepreneurship and the Concept of Fit: A Model and Empirical Test*. *Strategic Management Journal* 14 (1993), pp. 137 – 153.
- Ngugi, J. (2013) Influence of intellectual capital on the growth of small and medium enterprises in Kenya; *International Journal of Arts and Entrepreneurship Special Issue*, ISSN 2307-6305
- Ngumi, K. (2013). "A Study of Innovative Strategies Applied by Banking Industry in Kenya." *International Journal of Arts and entrepreneurship*,pp.70-92.
- Njuguna, A. (2013) "Risk Management Practices, A Survey of Micro-Insurance Service Providers in Kenya," *International Journal of Financial Research* Vol. 4, No. 1
- Ntoiti, J. (2013,). "Determinants of Financial Distress facing Local Authorities in Service Delivery in Kenya." *International Journal of Scientific Research*, 60-97.
- Olowokudejo, F. & Adeleke, A. (2011) The relationship between customer focused service and customer satisfaction in the Nigerian insurance industry, *African Journal of Marketing Management* Vol. 3(11), pp. 287-294,
- Ormrod, T.; Paul, D.; Leedy, S. & Jeanne E. (2010). *Practical Research: Planning and Design*, 9th Edition. Pearson Education, Inc.: Merrill.
- Orodho, A.J. (2003) *Essentials of Educational and Social Science Research methods*.
- Oso, L. & Semiu B, (2012),*The Concept and Practice of Corporate Governance in Nigeria:The Need for Public Relations and Effective*, *Journal of Communication*, 3(1): 1-16
- Palepu, K. (1985), "Diversification strategy, profit performance, and the entropy measure," *Strategic Management Journal*, 6, 2, July-September, 239–255.
- Parvatiyar, A. & Jagdish, S. (2002),*Customer Relationship Management: Emerging Practice, Process, and Discipline*, *Journal of Economic and Social Research* 3(2) 2001, 2002 Preliminary Issue, 1-34
- Pearce, J. & Robinson, D. (2007). *Strategic Management Formulation, Implementation and Control*. McGraw-Hill.
- Perry, C. (1987). *Growth strategies: principles and case studies*. *International Small Business Journal*, Vol. 5, p. 17-25.
- Peteraf, A. (1993). "The cornerstones of competitive advantage: A resource-based view", *Strategic Management Journal*, 2, 2, Nov-Jan, 239–255
- Polit, F. & Hungler, P. (1999). *Nursuing Research, Principles and Method*. Philadelphia: J.P Lippincoll.
- Porter, M. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.
- Prescott, J. (1986). *Environment as moderators of relationship between Strategy and performance*. *Journal of Academy of Management* Vol. 29, 329-341.
- Ratcheva,V.(2013) *Strategies for market evaluation and Development. The relationship between innovation and firm performance: An empirical evidence from Turkish automotive supplier industry*
- Reinartz, W., Krafft, M. and Hoyer, W.D. (2004), "The customer relationship management process: its measurement and impact on performance", *Journal of Marketing Research*, Vol. 41 No. 3, pp. 293-305.
- Rumelt, R. (1974).*Strategy, Structure, and Economic Performance* "Cambridge, Mass., Harvard University Press

- Servaes, H. & Tamayo, A. (2013) The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness, *Management journal science*, Vol. 59, No. 5, pp. 1045–106
- Shen H, Wang D, Su Z;(2011) Diversification and firm performance in China, *African Journal of Business Management* Vol. 5(27), pp. 10999-11004,
- Sink, D. (2011) *Handbook of Human Performance Technology*, 6th edition, NY, Berrett Koehler,
- Srivastava, S. (2013) 'Benchmarking Indian General insurance,' *An International journal* Vol.20 No.1
- Swiss Re, (2013). *Wold Insurance Performances*. Geneva: Vol. 22 No. 2,pp.128-143,
- Teece. (1997). *Dynamic Capabilities and Strategic Management*. *Strategic Management*, 509–533.
- The Insurance Act. (2007). Chapter 487.Retrieved 12 November 2013, Nairobi:
- Thompson, E. & Strickland, J. (2008). *Crafting & Executing Strategy: Text and Readings 12th Edition*. New York: Mc Graw-Hill.
- Tulin, U. & Songul, A.(2006), *The Effects of Firm's Strategic Factors on Export and Firm, Problems and Perspectives in Management / Volume 4, Issue 4*,
- Varadarajan, P. & V. Ramanujam, (1987), *Diversification and performance: A re-examination using a new two-dimensional conceptualization of diversity in firms*, *Academy of Management Journal*, 30, 2, June, 380–397.
- Vaughan, L. & Vaughan, S. (1999). *Fundamentals of Risk and Insurance 8th Ed*. New York: John Wiley & Sons.
- Venkatraman, N. & Ramanujam,V.(1986). *Measurement of business performance in strategy research: A comparison of approaches*," *The Academy of Management Review*, vol. 11, pp. 801-814,
- Villalonga B. & Amit (2006), "Diversification Discount or Premium? New Evidence from BITS Establishment Level Data",*Journal of Finance*, Vol. 59, No. 2,pp. 479-502.
- Waal, A. (2002). "The Power of world class Management." *Measuring Business Excellence* Vol.6 ISS.3, 9-19.
- Wang, Y. & Lo, H. (2003). "Customer-focused Performance and the Dynamic Model for Competence Building and Leveraging: A Resource-based View", *Journal of Management Development*, 22(6), pp. 483-526
- Wernerfelt, B. (1984). "Resource Based View of a Firm." *Strategic Management Journal* Vol.5, 171-180.
- Yabs, J.(2010).*Strategic management practices in Kenya, A Kenyan perspective*, 2nd .Lelax Global, Nairobi
- Zhang, Q. (2011). *Diversification and performance of group-affiliated firms during institutional transitions: The case of the Chinese textile industry*. *Am. J. Econ. Bus. Admin.*,3:234-246.
- Zinbarg, M. (2005), *Research methods*.(1st Edition).New Jersey: Pearson

## APPENDICES

### APPENDIX I: QUESTIONNAIRE

#### SECTION A: GENERAL INFORMATION: DEMOGRAPHIC INFORMATION

##### 1. Company (*Please tick as appropriate*)

- i) Insurer  Broker  Agent  Investigator
- ii) Others: Please specify.....

##### 2. Years in operation(*Please tick as appropriate*)

- 0-4  5-10  10-15  15-20  Over 20

##### 3. Ownership structure(*Please tick as appropriate*)

- i) Private Limited



- ii) Public limited
- iii) Foreign Owned

**4. Products and services you sell to the public (Please tick(✓) as Appropriate)**

- i) Short term insurance
- ii) Long term insurance
- iii) Both Short and Long term insurances
- iv) Services to any of the insurance Players
- v) Others

Please specify.....

**5. What position do you hold in the company?(Please tick as Appropriate)**

- i) Owner/ Main Shareholder  or Co-owner /Normal Shareholder
- ii) Partner  or Manager
- iii) Senior Manager  or CEO

Other (specify).....

**6. Academic/Professional Qualifications(Please tick as Appropriate)**

PhD Level , Masters Level , First Degree , Diploma,   
 Professional qualification: ACII , AIK , CPA(K) , CIM ,  
 Others specify.....

**SECTION B: THE PERFORMANCE OF YOUR FIRM.**

Performance	2010	2011	2012	2013	2014
1.Sales volume or fees-in kshs. Billions					
2.Market share-In %					
3.Profit- Before Tax					
4.Profit-After Tax					
5.No. of Staff					
6.No. of Players in your sector					

**SECTION C: DIVERSIFICATION STRATEGY**

1. Do you have any Diversification strategies in your firm.

- a) Yes  No

Which one of the following strategies have you adopted over the years? (Tick the ones adopted)

Strategy	Yes	No	Rank ( from most common to the least)	Name which areas starting from most profitable
Establishment of related firms				
Establishment of non related firms				
Any Mkt Power assumed due to diversification				
Shared resources				
Solution to Agency problem				

**SECTION D: THE MARKET PENETRATION STRATEGIES AND PERFORMANCE OF YOUR FIRM.**

State the trend in retaining your key accounts in percentage-(Renewal Rate)-Please Tick

	Below 50%	50-60%	61-80%	81-90%
Key accounts				
Non Key accounts				

Strategies attributed to market penetration (Tick the applicable ones)

Strategies	Yes	No	Rank ( from most common applied to the least)
Presence of product discounts			
Awarding loyalty programs to customers			
Acquisition/merger of your competitor			
Conversion of nonuser into users			
Conversion through referrals			

#### SECTION E: THE PRODUCT DEVELOPMENT STRATEGY.

Have you developed any new products in the market for the last 3 years?

a) YES  b) NO

Products developed over period

	2011	2012	2013	2014
New products developed				

Strategies attributed to product development ( Tick the ones you have adopted)

Strategies	Yes	No	Rank ( from most common used form to the least)
Adoption of technology			
Modification of existing products			
Setting of the price-:Market force or regulated			
No. of dominant products which you sell			
Research & business development. dept.			
Substitutes available			

#### SECTION F: THE MARKET DEVELOPMENT STRATEGY

1. Have you entered into any new markets for the last 3 years?

Yes  No

If yes proceed to answer the following section-:

Markets entered over period (please tick appropriately)

	None	1-3	4-6	7-9	Over 10
Local branches( in Kenya)					
Branches in the region-East Africa					
Branches or affiliates in the world					

Strategy	Yes	No	Rank ( from most common to the least)
Dominant Market			
Distribution channels used			
Any demographic market developed			
Local markets( branches)			
Foreign markets developed( regional)			

**SECTION G: THE OWNERSHIP STRUCTURE?**

1. Describe the nature of ownership of your firm (Please tick)

Public

Private

Strategies adopted over the years.( Tick as appropriate)

Strategies	Yes	No	Rank (from most common to the least)
Adherence to corporate governance and other related Governance Acts			
Separation of ownership and management			
Number of professionals in your firm			
Family related-Relatives			
Management structure with clear succession planning			

**APPENDIX II: INTERVIEW SCHEDULE GUIDE**

**a) THE PERFORMANCE OF YOUR FIRM**

1. What is your market share?
2. What Profit have you enjoyed in the last 3 years
3. Has the usage or utilization of your products increased
4. Have you paid dividends for the last 2 years?

**b) THE DIVERSIFICATION STRATEGY**

5. What are some of the areas in which your firm has diversified to?
6. Are they related to the core business which you pursue?
7. Do they encourage or inhibit growth?

**c) THE MARKET PENETRATION STRATEGY**

8. Boost the advertising & Branding efforts to make more people aware of the products existence.
9. New pricing structure with discounts available.
10. Acquisition of competitor.

**d) THE PRODUCT DEVELOPMENT STRATEGY**

11. What new product features have you devised
12. Do you intent to carry out Franchising, Joint ventures.
- 'Factoring' new products (buying in new products and selling them on under your own brand)
13. Licensing your technologies and intellectual property.

**e) THE MARKET DEVELOPMENT**

14. Expanding into new home markets and export.
15. Target different demographic groups.
16. Utilise different sales channels such as sales agents, export agents, Franchising, joint ventures, etc.
17. Using different promotional media.

**f) THE ROLE OF THE OWNERSHIP**

18. What important aspect do you think the ownership has played or not played to enable business thrive in your sector?
19. What can be done to reverse the above trend?

**APPENDIX III: THE GROWTH OF INSURANCE PLAYERS FOR THE LAST SIX (6) YEARS**

Adopted: From AKI 2013 Industry Report

Year	Ins. Cos	Ins. Broker	Ins. Agents	Invest'	MIPs	Ins. Surveyors	Risk Manager	Loss Adjuster	Motor Assessors	Total players
2009	42	154	3320	112	25	29	6	20	60	3770
2010	46	159	3847	121	26	28	10	22	74	4305
2011	45	168	4578	128	28	26	8	21	89	5093
2012	46	170	4,862	140	24	27	10	21	92	5,392
2013	48	187	4,628	134	29	27	8	22	105	5,188

**APPENDIX IV: HISTORY OF COMPANIES PLACED UNDER STATUTORY MANAGEMENT**

	Insurer	Nature of Business	Year
-	Kenya National Assurance Co. Ltd.	Composite (Life & General)	1996
-	United Insurance Co. Ltd	composite	2005
-	Access Insurance Co. Ltd.	General	1998
-	Liberty Insurance Co. Ltd	General	2003
-	Stallion Insurance Co. Ltd	General	2002
-	Invesco Assurance Co. Ltd	General	Operational
-	Standard Assurance Co.	General	Statutory Management
-	Lake Star Insurance Co. Ltd	General	2002
-	Blue Shield Insurance Co.	General	Statutory Management
-	Concord Insurance Co. Ltd	General	Statutory Management

Source: Policy holders compensation fund Report (2013)

**APPENDIX V: FIT AND PROPER FORM**

Specific tests to assess fitness and propriety for Board Members, Senior Management, Key Persons in Control Functions or Significant Owners.

Please answer all the „YES”/”NO” questions by placing a tick (✓) in the appropriate column, sign the form and send it to the Authority. All “YES” answers must be explained.

<p>1. Have you been licensed or registered under any law which requires licensing or registration in relation to any regulated financial business;</p>	<p>Yes</p>	<p>No</p>
<p>Please provide details</p>		
<p>2. Have you been refused the right or restricted in your right to carry on any trade, business or profession for which a specific license, registration or other authorization is required by law in any jurisdiction;</p>	<p>Yes</p>	<p>No</p>
<p>Please provide details</p>		
<p>3. Have you been issued a prohibition order under any law or has been prohibited from operating in other jurisdiction by any financial services regulatory authority;</p>	<p>Yes</p>	<p>No</p>
<p>Please provide details</p>		
<p>4. Have you been censured, disciplined, suspended or refused membership or registration by the Authority or any other regulatory authority, in Kenya or elsewhere;</p>	<p>Yes</p>	<p>No</p>
<p>Please provide details</p>		
<p>5. Have you been the subject of any complaint made reasonably and in good faith relating to activities regulated by the Authority or under any law in any jurisdiction;</p>	<p>Yes</p>	<p>No</p>
<p>Please provide details</p>		
<p>6. Have you been the subject of any proceedings of a disciplinary or criminal nature or have been notified of any potential proceedings or of any investigation which might lead to those proceedings, under any law in any jurisdiction; of misfeasance</p>	<p>Yes</p>	<p>No</p>

<i>or serious misconduct?</i>		
<i>Please provide details</i>		
<i>7. Have you been convicted of any offence, or been subject to any pending proceedings which may lead to such a conviction, under any law in any jurisdiction;</i>	Yes	No
<i>Please provide details</i>		
<i>8. Have you had any judgment (including a finding of fraud, misrepresentation, or dishonesty) entered against you in any civil proceedings or are you a party to any pending proceedings which may lead to such a judgment, under any law in any jurisdiction;</i>	Yes	No
<i>Please provide details</i>		
<i>9. Have you had any civil penalty enforcement action taken against you by the Authority or any other regulatory authority under any law in any jurisdiction;</i>	Yes	No
<i>Please provide details</i>		
<i>10. Have you ever contravened or abetted another person in breach of any laws or regulations, business rules or codes of conduct, in Kenya or elsewhere;</i>	Yes	No
<i>Please provide details</i>		
<i>11. Have you ever been the subject of any investigations or disciplinary proceedings or been issued a warning or reprimand by any regulatory authority, an operator of a market or clearing facility, professional body or government agency, in Kenya or elsewhere</i>	Yes	No

<i>Please provide details</i>		
12. Have you ever been refused a fidelity or surety bond, in Kenya or elsewhere?	Yes	No
<i>Please provide details</i>		
13. Have you ever been a director, partner or concerned in the management of a business that has been censured, disciplined, suspended or refused membership or registration by any regulatory authority, professional body or government agency, in Kenya or elsewhere;?	Yes	No
<i>Please provide details</i>		
14. Have you been a director, partner or concerned in the management of a business that has gone into insolvency, liquidation or administration during the period when, or within a period of one year after, you were a director, partner or concerned in the management of the business, in Kenya or elsewhere?	Yes	No
<i>Please provide details</i>		
15. Have you ever been dismissed or asked to resign, from office, employment, a position of trust, or a fiduciary appointment or similar position, in Kenya or elsewhere;	Yes	No
<i>Please provide details</i>		
16. Have you ever been subject to disciplinary proceedings by your current or former employer(s), in Kenya or elsewhere	Yes	No
<i>Please provide details</i>		
17. Have you ever been disqualified from acting as a director or disqualified from acting in any managerial capacity, in Kenya or elsewhere	Yes	No
<i>Please provide details</i>		

18. Have you ever been an officer found liable for an offence committed by a body corporate as a result of the offence having proved to have been committed with the consent or connivance of, or neglect attributable to, the officer, in Kenya or elsewhere;	Yes	No
<i>Please provide details</i>		
19. Are you unable to fulfill any financial obligations, in Kenya or elsewhere	Yes	No
<i>Please provide details</i>		
20. Are you subject to a judgment debt which is unsatisfied, either in whole or in part, in Kenya or elsewhere?	Yes	No
<i>Please provide details</i>		

**STATUTORY DECLARATION**

*I do solemnly declare as follows:*

1. I am aware that it is an offence to knowingly or recklessly provide any information, which is false or misleading in connection with an application for an approval to be a Board Member, Manager, Key Person in Control Functions or Significant Owner in an insurer.
2. I am also aware that provision of false information in this regard may result in rejection of this application by the Authority.
3. I certify that the information given above is complete and accurate to the best of my knowledge, and that there are no other facts relevant to this application of which the Authority should be aware.
4. I undertake to inform the Authority of any changes material to the applications which arise while the application is under consideration.
5. I make this declaration conscientiously believing the same to be true and in accordance with the Oaths and Statutory Declarations Act.

Name of Deponent: \_\_\_\_\_

Signature of Deponent: \_\_\_\_\_

Declared by the Deponent at \_\_\_\_\_ (place) this \_\_\_\_\_ (date) day of \_\_\_\_\_ (month) (year)

Before me;  
Commissioner for Oaths/Notary Public



**APPENDIX VI: RECENTLY DEVELOPED/REPACKAGED INSURANCE PRODUCTS**

*During the quarter under review the following seven new/repackaged insurance products were filed with the Authority by various insurance companies:*

New/Repackaged product	Class of Business	Company
Shopkeepers policy	Fire Burglary Personal accident Workmen's compensation Liability	Kenindia Assurance Company
Smart trader	Motor commercial	Jubilee Insurance Company
Motor private and Motor commercial and SME policy and Domestic package	Motor private and motor commercial Fire domestic Fire industrial	Resolution Insurance Kenya
Education and investment product	Superannuation business	Old mutual Insurance Kenya
Guarantee fund.	Superannuation business	CIC Life Insurance
Mavuno Plan	Superannuation business	Pioneer Assurance Company

Insurance Industry Report for the Period, January – June 2015 , second Quarter Release

**APPENDIX VII: PERFORMANCE OF INSURANCE COMPANIES-2013/2014**

	COMPANY	LIFE	GENERAL	TOTAL	% MKT LEADER
1	JUBILEE	6,104,562.00	9,916,763.00	16,021,325.00	12.13
2	CIC	4,102,385.00	9,200,880.00	13,303,265.00	10.07
3	BRITAM	6,459,883.00	4,482,615.00	10,942,498.00	8.29
4	UAP	1,656,142.00	7,600,587.00	9,256,729.00	7.01
5	APA	628,786.00	7,321,738.00	7,950,524.00	6.02
6	ICEA LION	2,440,760.00	4,947,882.00	7,388,642.00	5.59
7	PAN AFRICA LIFE	5,246,528.00		5,246,528.00	3.97
8	AIG		3,951,752.00	3,951,752.00	2.99
9	HERITAGE		3,766,001.00	3,766,001.00	2.85
10	GA INSURANCE	17,704.00	3,657,152.00	3,674,856.00	2.78
11	KENINDIA	738,512.00	2,703,496.00	3,442,008.00	2.61

12	FIRST ASSURANCE	132,618.00	3,265,820.00	3,398,438.00	2.57
13	AAR		3,282,348.00	3,282,348.00	2.49
14	REAL		3,077,494.00	3,077,494.00	2.33
15	PIONEER LIFE	2,608,491.00		2,608,491.00	1.98
16	RESOLUTION		2,491,239.00	2,491,239.00	1.89
17	AMARCO		2,474,562.00	2,474,562.00	1.87
18	DIRECTLINE		2,266,339.00	2,266,339.00	1.72
19	MADISON	897,044.00	1,295,818.00	2,192,862.00	1.66
20	INVESCO		2,094,031.00	2,094,031.00	1.59
21	LIBERTY LIFE	2,027,605.00		2,027,605.00	1.54
22	KENYA ORIENT	202,317.00	1,787,448.00	1,989,765.00	1.51
23	OCCIDENTAL		1,792,679.00	1,792,679.00	1.36
24	MAYFAIR		8,960.00	1,778,960.00	1.35
25	KENYA ALLIANCE	225,814.00	1,293,807.00	1,519,621.00	1.15
26	GEMINIA	77,876.00	1,404,927.00	1,482,803.00	1.12
27	CANNON	280,698.00	1,152,708.00	1,433,406.00	1.09
28	FIDELITY SHIELD		1,384,413.00	1,384,413.00	1.05
29	XPLICCO		1,305,664.00	1,305,664.00	0.99
30	SAHAM	44,956.00	873,874.00	918,830.00	0.70
31	PACIS		915,702.00	915,702.00	0.69
32	INTRA AFRICA		870,469.00	870,469.00	0.66
33	TAUSI		841,632.00	841,632.00	0.64
34	TRIDENT		814,003.00	814,003.00	0.62
35	GATEWAY		702,694.00	702,694.00	0.53

36	OLD MUTUAL	668,659.00		668,659.00	0.51
37	TAKAFUL		608,474.00	608,474.00	0.46
38	THE MONARCH	45,585.00	561,253.00	606,838.00	0.46
39	CORPORATE	240,172.00	330,452.00	570,624.00	0.43
40	PHOENIX		460,573.00	460,573.00	0.35
41	METROPOLITAN CANNON LIFE	369,140.00		369,140.00	0.28
42	PRUDENTIAL LIFE	153,355.00		153,355.00	0.12
43	CAPEX LIFE	21,366.00		21,366.00	0.02
	TOTALS	35,390,958.00	96,676,249.00	132,067,207.00	100.00

**APPENDIX VIII: GROSS WRITTEN PREMIUM FOR INSURANCE INDUSTRY (FIGURES IN BILLION KENYA SHILLINGS)**

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Non Life Insurance	25.39	29.20	32.95	36.89	43.11	52.35	60.67	71.46	86.64
Life Insurance	11.03	12.48	15.14	18.30	21.36	26.71	30.93	37.08	44.01
<b>Total</b>	<b>36.42</b>	<b>41.68</b>	<b>48.09</b>	<b>55.19</b>	<b>64.47</b>	<b>79.06</b>	<b>91.60</b>	<b>108.54</b>	<b>130.65</b>
<b>Penetration</b>				<b>2.63</b>	<b>2.84</b>	<b>3.10</b>	<b>3.02</b>	<b>3.16</b>	<b>3.44</b>

Source: Adopted from AKI industry reports (2013)

**APPENDIX IX: FACTOR LOADINGS MATRIX**

Indicators	Components			
	1	2	3	4
Diversification strategies in your firm	-0.739	0.178	0.203	0.105
Diversification strategies used	0.867	0.297	0.367	0.358
Establish. Of related firms Rank	0.918	0.541	0.136	0.294
Establishment of non related firms Rank	0.935	-0.582	0.152	0.245
Any Mkt Power assumed due to diversification Rank	0.845	0.356	0.106	-0.366
Shared resources Rank	-0.959	-0.083	0.136	-0.187
Solution to Agency problem Rank	0.977	0.22	-0.178	0.502
Retention trend of Key accounts	-0.044	0.97	0.26901	-0.265
Retention trend of non Key accounts	-0.094	0.936	0.37466	-0.011
Penetration strategies used	0.447	0.953	-0.1021	0.043
Presence of product discounts Rank	0.345	0.948	0.48599	-0.175
Awarding loyalty programs to customers Rank	0.047	0.935	-0.2906	0.162
Acquisition/merger of your competitor Rank	0.325	0.926	0.3819	0.202
Conversion of non user into users Rank	0.046	0.962	-0.3683	0.089

Conversion Through referrals Rank	-0.22	0.973	-0.2747	-0.336
Have you developed New products	-0.778	-0.207	0.959	0.247
New products developed 2011	0.133	0.186	0.958	0.082
New products developed 2012	0.643	0.153	0.859	0.295
New products developed 2013	0.737	-0.101	0.867	-0.128
New products developed 2014	0.794	0.106	0.909	-0.249
Product development strategies used	0.84	0.169	0.973	0.087
Adoption of technology Rank	0.717	0.028	0.972	0.006
Modification of existing products Rank	0.42	0.127	0.945	0.567
Setting of the price-:Market force or regulated Rank	0.174	0.131	0.913	-0.382
No. of dominant products which you sell Rank	0.057	0.031	0.973	-0.243
Research & business development. dept. Rank	0.636	0.449	0.943	0.006
Substitutes available Rank	0.21	-0.281	0.944	0.118
Any New markets in the last 3 years	-0.203	0.434	-0.026	0.734
Markets entered	0.184	0.326	0.158	0.952
Market strategies used	0.403	-0.364	0.382	0.942
dominant market rank	0.496	-0.4	0.348	0.835
distribution channels rank	-0.422	0.374	-0.078	0.926
Demographic markets developed rank	0.228	-0.548	-0.204	0.922
Local Market branches rank	-0.045	0.018	-0.393	0.971
Foreign Markets rank	0.158	0.194	0.671	0.726

	Component			
	1	2	3	4
<b>Diversification strategies in your firm</b>	-0.063	0.057	0.072	0.039
Diversification strategies used	0.036	0.095	0.131	0.134
Establish. Of related firms Rank	-0.019	0.173	0.048	0.11
Establishment of non related firms Rank	0.02	-0.186	0.054	0.092
Any Mkt Power assumed due to diversification Rank	0.051	0.114	0.038	-0.137
Shared resources Rank	-0.049	-0.027	0.048	-0.07
Solution to Agency problem Rank	-0.01	0.07	-0.063	0.188
Retention trend of Key accounts	-0.008	0.068	0.26901	-0.099
Retention trend of non Key accounts	-0.017	0.066	0.37466	-0.004
<b>Penetration strategies used</b>	0.079	-0.109	-0.1021	0.016
Presence of product discounts Rank	0.061	-0.113	0.48599	-0.066
Awarding loyalty programs to customers Rank	0.008	-0.09	-0.2906	0.061
Acquisition/merger of your competitor Rank	0.057	0.046	0.3819	0.076
Conversion of non user into users Rank	0.008	0.14	-0.3683	0.033
Conversion Through referrals Rank	-0.039	-0.068	-0.2747	-0.126
Have you developed New products	-0.137	-0.066	0.027	0.093

New products developed 2011	0.023	0.059	-0.083	0.031
New products developed 2012	0.113	0.049	-0.079	0.111
New products developed 2013	0.13	-0.032	-0.029	-0.048
New products developed 2014	0.14	0.034	-0.06	-0.094
Product development strategies used	0.148	0.054	-0.094	0.032
Adoption of technology Rank	0.127	0.009	-0.134	0.002
Modification of existing products Rank	0.074	0.041	0.064	0.213
Setting of the price:-Market force or regulated Rank	0.031	0.042	-0.178	-0.143
No. of dominant products which you sell Rank	0.01	0.01	0.033	-0.091
Research & business development. dept. Rank	0.112	0.143	0.02	0.002
Substitutes available Rank	0.037	-0.09	-0.069	0.044
Any New markets in the last 3 years	-0.036	0.139	-0.009	-0.153
Markets entered	0.032	0.104	0.056	-0.066
Market strategies used	0.071	-0.116	0.136	0.161
dominant market rank	0.087	-0.128	0.124	-0.04
distribution channels rank	-0.074	0.119	-0.028	0.134
Demographic markets developed rank	0.04	-0.175	-0.072	-0.003
Local Market branches rank	-0.008	0.006	-0.14	0.224
Foreign Markets rank	0.028	0.062	0.239	-0.034

APPENDIX X: DURBIN WATSON TABLES

Models with an intercept (from Savin and White)

Durbin-Watson Statistic: 1 Per Cent Significance Points of dL and dU

d	k <sup>2</sup> =1		k <sup>2</sup> =2		k <sup>2</sup> =3		k <sup>2</sup> =4		k <sup>2</sup> =5		k <sup>2</sup> =6		k <sup>2</sup> =7		k <sup>2</sup> =8		k <sup>2</sup> =9		k <sup>2</sup> =10	
	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	
6	0.390	1.142	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	0.435	1.036	0.294	1.676	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	0.497	1.003	0.345	1.489	0.229	2.102	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	0.554	0.998	0.408	1.389	0.279	1.875	0.183	2.433	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	0.604	1.001	0.466	1.333	0.340	1.733	0.230	2.193	0.150	2.690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	0.653	1.010	0.519	1.297	0.396	1.640	0.286	2.030	0.193	2.453	0.124	2.892	.....	.....	.....	.....	.....	.....	.....	.....
12	0.697	1.023	0.569	1.274	0.449	1.575	0.335	1.913	0.244	2.280	0.164	2.665	0.105	3.053	.....	.....	.....	.....	.....	.....
13	0.738	1.038	0.616	1.261	0.499	1.526	0.391	1.826	0.294	2.150	0.211	2.490	0.140	2.838	0.090	3.182	.....	.....	.....	.....
14	0.776	1.054	0.660	1.254	0.547	1.490	0.441	1.757	0.343	2.049	0.257	2.354	0.183	2.667	0.122	2.981	0.078	3.287	.....	.....
15	0.811	1.070	0.700	1.252	0.591	1.465	0.487	1.705	0.390	1.967	0.303	2.244	0.226	2.530	0.161	2.817	0.107	3.101	0.068	3.374
16	0.844	1.086	0.738	1.253	0.633	1.447	0.532	1.664	0.437	1.901	0.349	2.153	0.269	2.416	0.200	2.681	0.142	2.944	0.094	3.201
17	0.873	1.102	0.773	1.255	0.672	1.432	0.574	1.631	0.481	1.847	0.393	2.078	0.313	2.319	0.241	2.566	0.179	2.811	0.127	3.053
18	0.902	1.118	0.805	1.259	0.708	1.422	0.614	1.604	0.522	1.803	0.435	2.015	0.355	2.238	0.282	2.467	0.216	2.697	0.160	2.925
19	0.928	1.133	0.835	1.264	0.742	1.416	0.650	1.583	0.561	1.767	0.476	1.963	0.396	2.169	0.322	2.381	0.255	2.597	0.196	2.813
20	0.952	1.147	0.862	1.270	0.774	1.410	0.684	1.567	0.598	1.736	0.515	1.918	0.436	2.110	0.362	2.308	0.294	2.510	0.232	2.174
21	0.975	1.161	0.889	1.276	0.803	1.408	0.718	1.554	0.634	1.712	0.552	1.881	0.474	2.059	0.400	2.244	0.331	2.434	0.268	2.625
22	0.997	1.174	0.915	1.284	0.832	1.407	0.748	1.543	0.666	1.691	0.587	1.849	0.510	2.015	0.437	2.188	0.368	2.367	0.304	2.548
23	1.017	1.186	0.938	1.290	0.858	1.407	0.777	1.535	0.699	1.674	0.620	1.821	0.545	1.977	0.473	2.140	0.404	2.308	0.340	2.479
24	1.037	1.199	0.959	1.298	0.881	1.407	0.805	1.527	0.728	1.659	0.652	1.797	0.578	1.944	0.507	2.097	0.439	2.255	0.375	2.417
25	1.055	1.210	0.981	1.305	0.906	1.408	0.832	1.521	0.756	1.645	0.682	1.776	0.610	1.915	0.540	2.059	0.473	2.209	0.409	2.362
26	1.072	1.222	1.000	1.311	0.928	1.410	0.855	1.517	0.782	1.635	0.711	1.759	0.640	1.889	0.572	2.026	0.505	2.168	0.441	2.313
27	1.088	1.232	1.019	1.318	0.948	1.413	0.878	1.514	0.808	1.625	0.738	1.743	0.669	1.867	0.602	1.997	0.536	2.131	0.473	2.269