# THE RELATIONSHIP BETWEEN FINANCIAL INNOVATION AND GROWTH OF INSURANCE COMPANIES IN KENYA


**BY**

**KARANJA R. W.**

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**SUPERVISOR: MIRIE MWANGI**


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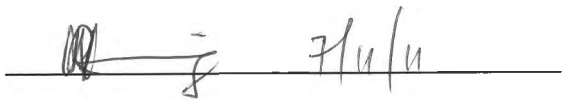
## DECLARATION

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

**Karanja Robert Wachira**

**REG. NO: D61/76045/2009**



This project has been submitted with my approval as University Supervisors.

**Mr. Mirie Mwangi,**

**Lecturer, School of business,**

**University of Nairobi**

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## DEDICATION

I dedicate this project to my lovely wife and our unborn child.

## ABSTRACT

The objective of this study was to evaluate the relationship between financial innovation and growth of the insurance companies in Kenya. A descriptive survey design was used to achieve this objective. The target population was senior managers in marketing, underwriting, ICT, and finance from the 44 licensed insurance companies as at end of December 2009 (AKI report, 2009). From the 44 licensed insurance companies, one manager from each insurance company was selected purposively. A sample of 44 respondents consisting of one respondent from each insurance company was used for this study. A semi-structured questionnaire was used to collect data. Data was analyzed using descriptive statistics and regression analysis. Most insurance companies were found to review their products as and when need arises. Their products are both tailor made and new. New products were found to contribute to growth to a great extent. Information systems contribute to the growth of the company to a great extent also. New development in the market was found to influence a change in the company's operation system to a great extent and current system failure to a moderate extent. Insurance companies were found to favor affiliations with other financial institutions to increase sales, market share and for countrywide presence. The regression analysis showed that there is no significant relationship between financial innovation and growth in premium of the insurance companies in Kenya. New products and banc assurance were found to predict premium growth by a very small factor of .086 and .083 respectively. The statistical significance for the two variables were .687 (new products) and .696 (banc assurance). Innovations cannot be gauged by the kind of an operation system an insurance company has but the innovation of new products and banc assurance. The growth of the insurance companies can be enhanced by promotion of these partnerships. This study concluded that there may be other factors affecting growth in insurance companies to a great extent other than financial innovation. However there is need for a proactive approach in financial innovation to enhance growth. The study recommended that insurance companies in Kenya should take a proactive role in coming up with new products. The Association of Kenya Insurers should encourage innovation in the industry by carrying out studies to predict market situation. The government and other policy makers should make regulatory environment for banc assurance and strategic partnerships attractive. Further study should be conducted to establish how policy environment has affected insurance growth.

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| ACH | Automated Clearing House |
| AKI | Association of Kenya Insurers |
| ATM | Automatic Teller Machines |
| BIS | Bank for International Settlement |
| CBK | Central Bank of Kenya |
| GOK | Government of Kenya |
| ICT | Information and Communication Technologies |
| NSE | Nairobi Stoke Exchange |
| OECD | Organization for Economic Cooperation and Development |
| OID | Original Issue Deep-discount |
| R&D | Research and development |
| UK | United Kingdom |
| USA | United States of America |

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# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

Growth is something for which most companies strive, regardless of their size. Small firms want to get big, big firms want to get bigger. Indeed, companies have to grow at least a bit every year in order to accommodate the increased expenses that develop over time. With the passage of time, salaries increase and the costs of employment benefits rise as well. Even if no other company expenses rise, these two cost areas almost always increase over time. It is not always possible to pass along these increased costs to customers and clients in the form of higher prices. Consequently, growth must occur if the business wishes to keep up (Robert, 2004).

The growth of insurance companies has the potential to provide large, medium, and small companies with a myriad of benefits, including things like greater efficiencies from economies of scale, increased power, a greater ability to withstand market imperfections, an increased survival rate, greater profits, and increased prestige for all stakeholders. Many companies desire growth because it is seen generally as a sign of success and progress. Growth is, in fact, used as one indicator of effectiveness for most companies and is a fundamental concern of many practicing managers (Lipton, 2003).

Growth, however, means different things to different companies. There are many parameters a company may use to measure its growth. Since the ultimate goal of most companies is profitability, most companies will measure their growth in terms of net profit, revenue, and other financial data. Other business owners may use one of the following criteria for assessing their growth: sales, number of employees, physical expansion, success of a product line, or increased market share (Lipton, 2003).

Many academic models have been created that depict possible growth stages/directions of a company. Some of the most commonly used methods for creating organizational growth within a company include: joint venture, new markets, and most importantly, financial innovations. Financial innovation is defined as the act of creating and then popularizing new financial instruments as well as new financial technologies, institutions, and markets. It refers both to technological advances which facilitate access to information, trading and means of payments,

and means of payment, and to the emergence of new financial instruments and services, new forms of organizations, and more developed and complete financial markets. The primary function of the financial systems is to facilitate the allocation and deployment of economic resources both spatially and across time, in an uncertain environment (Merton, 1992). This function encompasses a payment system with a medium of exchange; transfer of resources, the gathering of savings for the purposes of pure time transformation and reduction of risks through insurance and diversification. The possibility of new financial products and services/ instruments that can better satisfy financial system participants' demands is always present. Financial innovation represents something new that reduces risks or provides an improved product, service or instrument that better satisfies participant demand.

Financial innovation can be grouped as new products (e.g. Terrorism & political violence cover); new services (e.g. internet banking); new 'production' processes (e.g. electronic record keeping for securities, credit scoring); or new organizational forms (e.g. a new type of electronic exchange for trading securities. All these reduce the transactions costs and financial risks involved thereon. Innovation includes the acts of invention and diffusion/adoption of new products, services or ideas (Rogers, 1983). Financial innovation raises the efficiency of financial intermediation by increasing the variety of financial products and services, resulting in improved matching of needs of individual savers with those of firms raising funds for expanding future products. The resulting capital accumulation leads to economic growth (Chiu, 2007)

Innovation is clearly an important phenomenon in any sector of the modern economy. Although standard microeconomic theory focuses much of the attention on the issues of static resources allocation and economic efficiency, there is general appreciation that performance overtime is driven by a variety of dynamic factors including innovation. The centrality of finance in an economy and its importance for economic growth (King and Levine 1993a, 1993b; Levine 1996, 1997, 1998, 1999; Levine and Zervos 1998; La Porta et al., 1997, 1998; Rajan and Zingales 1998) naturally raises the importance of financial innovation. The aim of financial innovation is to make different services (loans, deposits, fund units, debt instruments, shares, derivatives for risk management, currency exchange payments, e.t.c) offered by financial systems cheaper and more available for clients and to increase their quality, which is an assumption for a long-run sustainable growth of emerging market economies.

### 1.1.1 Importance of Financial Innovation

Schumpeter (1912) highlighted the crucial role of financial intermediaries in innovation and economic development. The interaction of innovations in both the financial and real sectors provides a driving force for dynamic economic growth (Mishra, 2008b). Financial innovation is truly welfare enhancing if it brings about a reduction in the cost of capital and improvement in the financial intermediation process without a commensurate increase in financial risk. The benefits of emerging market economies can be measured in terms of factors such as lower pricing, reduced cost of capital, mitigated risk exposures, broader access to capital and increased liquidity. Financial innovation ought to make the movement of capital more efficient, risk management more targeted, hedging better matched and trading less costly. Financial innovation also ought to contribute to better management and transfer of credit risk, the unbundling and tranching of risk, improved liquidity, more optimal portfolio diversification, and broadened credit risk dispersion.

At the micro-economic level, the development of new financial instrument improves the capacity of financial intermediaries and end-users of financial markets to manage risks. Better management of risk, in turn leads to the improved allocation of resources, in particular capital (Mishra, 2008b). At the macro-economic level, financial innovation enlarges the menu/ list of assets available to savers and borrowers. By designing savings vehicles/ instruments in more attractive way and extending the reach of financial intermediation, saving is encouraged and the utility of a given volume of savings to the holders of financial assets enhanced. Similarly on the borrowing side, the introduction of new borrowing instruments facilitates capital formation and perhaps even more important, helps improve its quality. If secure and liquid financial assets are readily available, yielding competitive real rates of interest, savings are less likely to be retained by firms for low productivity investments, or diverted into inflation hedges (Mishra, 2008a).

Financial innovation also enables the integration of capital markets across borders making it easier for savings arising in developed economies to be used to finance higher-yielding investment opportunities in economies with higher growth potential. This promotes economic growth by improving the efficiency of investment and by strengthening the discipline on governments and central banks to pursue sound policies (Mishra, 2008a).

### 1.1.2 The Insurance Industry

Insurance is defined as risk transfer mechanism whereby one party called the insured transfer risks to another party called the insurer. Insurance companies are legal entities that cover the financial impact or part of it that derives from occurrence of certain unexpected insured events affecting the insured. They offer this benefit in exchange of payment of a predetermined amount of money called the premium (Macedo, 2009). Insurance industry plays an important role in the financial system by indemnifying financial risk in the economy. The sector players also serve as institutional investors for both capital and money market instruments (Naibo, 2006). The market contributed US$ 4 trillion in insurance premium in 2009. Africa produced only 1.94% of the global premium volume in 2009. Life insurance premium fell by 15% to US$ 33 billion. South Africa is the dominant market accounting for 90% of the total volume. Growth in non-life premium was sluggish at 0.4%. Non life premium was US$ 17 billion. South Africa accounted for 50% of the premium (Swiss Re, 2009).

According to AKI report (2009), there were 44 licensed insurance companies at the end of 2009. Twenty companies wrote no-life business only, nine wrote life insurance business only while fifteen were composite (both life and non life). There were 137 licensed insurance brokers, 21 medical insurance providers (MPIs) and 3,076 insurance agents. Other licensed players included 106 investigators, 57 motor assessors, 18 loss adjusters, 2 claims settling agents, 5 risk managers and 26 insurance surveyors (AKI report, 2009). The gross written premium by the industry was Kshs 64.47 billion in 2009 compared to Kshs 55.19 billion in 2008, representing a growth of 16.8%. The gross written premium in non-life insurance was Kshs 43.11 billion (2008: Kshs 36.89 billion) while that from life insurance business was Kshs 21.36 billion (2008: Kshs 18.30) (AKI report, 2009). Non life insurance premium grew by 16.8% while life insurance premium and contribution from deposit administration business grew by 16.7%. The industry has consistently recorded growth over 5-year period of 2005 to 2009.

## 1.2 Statement of the Problem

The fast-changing competitive environment, globalization, economic changes, regulation, privatization and the like demands that insurance companies are run efficiently and effectively by continuously engaging in financial innovations. Emergence of new technologies, products, markets and competitors places demand on any organization to apply any skills necessary to

remain competitive and achieve competitive advantage. Every well managed insurance company needs to undertake financial innovations which will enable it to have a competitive edge over the others. These innovations are intended to facilitate a firm's sustainability in the face of growing competition and external threats. The insurance market in Kenya like other developing countries is characterized by very low penetration rate. The low penetration which indicate vast untapped potential when contrasted with low growth indicate a need for a paradigm shift in order to stem the sector's slow growth and creation of value for the sector's stakeholder's (Ogutu, 2004).

Some of the issues which are seen as stifling growth in the industry include, shallow competitive framework characterized by price undercutting with destructive consequences. Another issue was the adventure of Health Management Organization which lacked identity and proper operating framework which led to failure of many, more recently Strategis Health in 2005. The collapse of the once largest insurance in Kenya, Kenya National Assurance, was associated with political patronage, mismanagement and claims of corruption. These issues mainly lies on lack of effective corporate governance structures and practices (Wandera, 2004).

AKI, the sector's self regulating organization has not been successful in creating a competitive environment based on ethical standards. The sector's competitive environment is based on price undercutting. Industry players have been complaining, through the media, about corruption and favoritism in the award for provision of insurance services to government and public sector institutions. Ogutu (2004) suggested that 34 underwriters are not viable in the long term since their earnings were below the cost of capital of 18% and therefore destroying shareholders value.

This research intended to find out the relationship between financial innovation and growth insurance companies operating in Kenya. Previous related studies have not focused on financial innovation and insurance growth in Kenya. Mwangi (2007), for instance, did a study on factors influencing financial innovation in Kenya's securities market: A case study of firms listed at the NSE. Wambui (2010) did an analysis of financial innovations in the Kenya banking sector while Omwenga (2010) did a study on the relationship between financial innovation and financial performance of commercial banks in Kenya. This study was motivated by this knowledge gap and sought to answer the following research questions. What are the forms of financial innovations employed by insurance companies in Kenya? What is the relationship between financial innovation and the growth of the insurance companies in Kenya? What are the factors

influencing the rate of financial innovations by insurance companies in Kenya? What is the relationship between insurance company size and innovativeness?

### 1.3 Research Objective

The objective of this study was to evaluate the relationship between financial innovation and growth of the insurance companies in Kenya.

### 1.4 Importance of the Study

To the policy makers, the findings of this study will inform not only policy making but also implementation and evaluation. The findings might provide insightful information on regulatory as well as policy environment that could enhance financial innovation in the insurance industry. This will not only be an incentive to the industry but will also have an impact on economic growth of the country.

To the insurance companies, this study will recommend financial innovations that can enhance growth of the industry. The study will act as a gauge to measure their level of financial innovation and identify areas that need improvement. On acting upon the recommendations, the insurance companies will benefit both as individual organizations and as an industry. This will not only benefit the investors but also the customers who will be in a position to enjoy more innovative products and services.

To the government and government agencies, this study will give insights on the situation of the industry. This will enhance government support to policy and regulatory environment in an effort to ensure smooth running of the industry and insurance services for the citizenry. The government might be interested to support the industry to enhance its growth and penetration of insurance products and services. Given the relative success experienced in the access of financial services, the government might be interested to see the same repeated in the insurance industry.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter provides theoretical and empirical information from publications on topics related to the research problem and a summary of the literature review. It also examines what various scholars and authors have written about financial innovation and growth.

## 2.2 Theory of Financial Innovation

This study will be guided by Joseph Schumpeter's theory of profits and growth and profits through innovation. Schumpeter (1943) explains the activities that lead to economic growth in capitalist economies. His theory centers on entrepreneurial innovations and their role as the key driver of economic growth. Schumpeter argues that competition among market participants leads to a desire to seek out new ways to improve technology, new ways to do business and other types of advantages that would increase profit margins and directly impact the entrepreneur's standard of living leading to growth of firms.

The theory asserts that innovation has relied on the creation of technological or social capability, through problem-solving or learning activities principally within and between firms. The development of new products and processes is the outcome of a path-dependent building upon established capabilities and achievements, by the critical revision of emergent new products or methods and the search for relevant novelty. This insight into the form of innovation is an amalgam of the conclusions of the work of Usher (1954) and Rosenberg (1976, 1982, 1994) on the history of technology, Nelson and Winter (1982) on the evolutionary theory of economic change, as well as Penrose's (1959) theory of the growth of the firm. Thus, innovation depends upon the generation of feasible new capabilities, the operation of which adds new value to the existing circular stream of income, and thereby creates new profits and higher income.

By contrast, the standard interpretation of Schumpeter's theory of profits through innovation focuses upon the quasi-monopoly positions developed in markets by entrepreneurial firms that enjoy first mover advantages. This common approach to Schumpeter's theory renders it understandable within the conventional framework of market-based analysis, in which institutions are discussed only with regard to their role in the process of economic exchange,

primarily through markets (or with reference to a hypothetical alternative market in the case of transactions within firms). Since the leading innovators establish a temporary monopoly within some output (product) or input (process) markets they obtain 'super' profits from innovation, typically associated with higher output prices and lower input prices or costs. But this brings us back to issues of the distribution of the circular flow of income, a flow that is sustained through markets, rather than the question of how that flow can be increased over time as new value-generating activities are added into the stream. In other words the standard treatment reduces the means by which profits can be earned through innovation to a matter of the capacity for static appropriability through the exercise of market power, and hence analytically no different to any other kind of 'normal' profits. The relevant markets may be new, but their newness is significant only for its relationship to the scope for temporary monopolies. The distinctiveness of Schumpeter's notion of adding to the existing circular flow of income is lost.

Penrose (1959) relied on the approach to profits, growth, and innovation in the firm that implicitly embodies the most important elements of Schumpeter's theory. She explicitly incorporated the role of in-house research and development and endogenous innovation in large firms. As such, she helps us to link together these two aspects and from that vantage point to expand upon Schumpeter's theory of innovation, profits and growth for a modern institutional setting. She anticipated the recent approach to technological change and the firm with her resource-based perspective on corporate growth. Thus, Penrose's foundations of the approach can be traced here and connect Schumpeter's theory of innovation, profits and growth to the changing institutional reality of innovation since the start of the twentieth century.

Evidence of recent studies on the changing institutional form of innovation over the last hundred years has largely relied on Schumpeter's theory. By understanding how profits are created from innovation in an alternative evolutionary way through corporate learning and search processes, it can be appreciated how innovative profits are of steadily rising significance relative to the more traditional kind of profits derived from market power, given the way in which capitalist institutions have evolved during the twentieth century through to today. In the first phase or paradigm in about the first three-quarters of the twentieth century, science-based innovation in large scale production facilities (Chandler, 1990) depended upon the capabilities that were associated with the rise of in-house corporate R&D in large industrial firms. Large firms became the key actors in combining the processes of invention and innovation, each individual firm

being technologically specialized in a way that reflected the specific profile of corporate technological competence that it accumulated through cumulative path-dependent learning processes. An inter-company variety of capabilities gradually extended the reservoir of social capability for innovation, and hence broadened the foundations for the creation of profits through innovation.

In the most recent phase or paradigm from the latter part of the twentieth century onwards, science-based innovation has been combined with information and communication technologies in computerized and flexible production facilities. Large firms have remained the key actors in the accumulation of technological capabilities, but in an institutional context that now emphasizes the economies of scope to be obtained from the fusion of interrelated capabilities, and a new role for the internationalization of economic activity. These recent changes have further reinforced the growing relative importance of innovative profits of the original Schumpeterian or Penrosian kind, when the conceptualization of innovative profits is suitably reinterpreted to fit the current institutional conditions for innovation.

**2.3 Financial Innovation Initiators**

Ben-Horim and Silber (1977) tested the proposition that regulatory constraints (environmental conditions) induce innovation. They constructed a linear programming model to estimate the opportunity costs of deposits, debentures, and capital for large banks from 1952-1972. They found that the rising shadow prices of these items, as they approached regulatory constraints, were associated with some of the major innovations of the 1960s. Lerner (2002) examines financial patents covering the years 1971-2000. He examines (among other things) the patenting activity of investment banks and finds that patenting was positively related to the size of the investment banks and to the extent of their indirect academic ties. He also finds, however, that the direct involvement of academic institutions or of academics themselves in financial patenting was not related to finance-related research productivity of the institutions or the individuals.

The characteristics of customers for and users of financial innovations is another factor that induces financial innovations. There have been two studies of commercial banks that have focused on their decisions to adopt Internet banking. Furst, et al. (2000) analyzes survey data on Internet banking, as of the third quarter of 1999. Using logit models, they find that a bank's choice of adopting Internet banking is related to holding company affiliation, location in an

urban area, higher fixed expenses, and higher non-interest income. Among banks that offer Internet-related services, a greater number of service offerings were positively related to bank size and the length of time offering Internet banking. Gowrisankaran and Stavins (2001), finds that a bank's adoption of an automated clearinghouse (ACH) retail payments system is positively related to the use of ACH by other local banks and also to market concentration; both results are consistent with the presence of network externalities.. Laderman (1990) examines the use of automatic teller machines (ATMs). She finds that the number of ATM cards in use per state, as of 1987, was positively related to population and per capita income and negatively related to the number of branches, to the presence of unit banking restrictions, to limits on ATM placement in states with large numbers of banks, and to mandatory sharing requirements in states with large numbers of banks.

Diffusion, the rapidity with which an innovation is adopted across an industry also initiates financial innovations. First, Hannan and McDowell (1984), using a failure time estimation procedure, find that larger banks and those operating in more concentrated local banking markets registered a higher conditional probability of ATM adoption. Second, Hannan and McDowell (1987) find that the conditional probability of ATM adoption is positively related to a rival's adoption and that firms in less concentrated markets react more strongly to rival precedence than do their counterparts in concentrated markets. Finally, Saloner and Shepherd (1995) find that the expected time to adoption of ATMs declines in both the number of users and locations, indicating the presence of network externalities. More recently, Akhavein, et al. (2001) examine the diffusion of small business credit scoring (SBCS) by large banking organizations in the mid-1990s. Estimates from a hazard model indicate that larger banking organizations and those located in the New York Federal Reserve district adopted this technology sooner. A logic model confirms these results and also finds that organizations with fewer separately chartered banks, but more branches, introduced innovation earlier, which is consistent with theories stressing the importance of bank organizational form on lending style.

Consequences in terms of profitability and social welfare are another factor that initiates financial innovations to some extend. Varma and Chambers (1990) study the wealth effects associated with the issuance announcement of original issue deep discount (OID) bonds. They find that OID issues announced between March 1981 and June 1982 were associated with

positive stock-price responses, while subsequent issues that were not tax-advantaged had no wealth effects. This result contrasts with the negative effect often found for debt-financing announcements. Tufano (1989) examines a cross-section of new securities to examine whether financial product innovators enjoy first mover advantages. Specifically, he uses a sample of 58 innovations (representing 1,944 public offerings) to test whether investment banks that create new securities benefit by charging higher prices (underwriting spreads) than imitators or by capturing larger quantities. He finds that, over the 1974-1986 periods, investment banks that created new products did not charge higher prices in the period before imitative products appear and in the long-run charge lower prices than rivals. However, these innovators underwrote more public offerings of products that they innovated, than did imitating rivals. Overall, Tufano's results are not consistent with monopoly pricing of new securities issues by innovators, but rather with the presence of cost advantages that allow these institutions to capture market share.

**2.4 Significance of Financial Innovations**

If the world were free of all "imperfections" (such as taxes, regulation, information asymmetries, transaction costs, and moral hazard) and if markets were complete in the sense that existing securities spanned all states of nature, we could arrive at an M&M-like corollary regarding financial innovation. Financial innovations would benefit neither private parties nor society and would simply be neutral mutations (Miller, 1977). Merton's (1992) functional decomposition identifies six functions delivered by financial systems: moving funds across time and space; the pooling of funds; managing risk; extracting information to support decision-making; addressing moral hazard and asymmetric information problems; and facilitating the sale of purchase of goods and services through a payment system. Finnerty (1992) identifies a set of functions, two of which correspond closely to Merton's functions (reallocating risk and reducing agency costs), and a third ("increasing liquidity") which is an amalgam of Merton's movement of funds and pooling functions.

The significance of financial innovation has widely touted. Many leading scholars, including Miller (1986) and Merton (1992), highlight the importance of new products and services in the financial arena, and characterized these innovations as an engine of economic growth. At several levels, these arguments are plausible. Financial innovations can be seen as playing a role akin to that of the general purpose technologies delineated by Helpman (1998), that not only do these breakthroughs generate returns for the innovators, but they have the potential to affect the entire

economic system and can lead to far-reaching changes. For instance, financial innovations enable firms to raise capital in larger amounts and at a lower cost than they could otherwise and in some cases (for instance, biotechnology start-ups) to obtaining financing that otherwise they would be unable to raise. Similarly, these innovations may have broad implications for households, enabling new choices for investment and consumption, and reducing the costs of raising and deploying funds. Moreover, it appears that financial innovation is ubiquitous. Tufano (1995, 2003) shows that far from being confined to the last few decades, financial innovation has been part of the economic landscape for centuries. On a more systematic basis, Tufano (1989) shows that of all public offerings in 1987, 18% (on a dollar-weighted basis) consisted of securities that had not been in existence in 1974.

### 2.5 Identities of and Returns to Financial Innovators

As Allen (2001) points out, much of financial economics acts as if financial institutions do not exist. While this tendency has also characterized some of the literature on financial innovation, given the fairly applied nature of the field, writers have more explicitly dealt with the role of private parties and financial intermediaries as innovators. Duffie and Jackson (1990) consider the incentives of exchanges which lead them to offer one new contract rather than another. Ross (1988) explicitly incorporates a role for investment banks that maximize their own profits by coming up with innovative bundles of securities to lower marketing or search costs.

Boot and Thakor (1997) model how different institutional structures might lead to different levels of innovation. They find that innovation would be lower in a universal banking system—especially one with substantial market concentration—than in one in which commercial and investment banking were functionally separated. Essentially, greater competition among these private parties leads to increased innovation. Bhattacharyya and Nanda (2000) model the incentives for innovation within the investment banking industry. They find that banks with larger market shares will tend to innovate, as will banks whose clients are stickier. Heinonen (1992) studies game-theoretic models of innovation, focusing on benefits on the costs of production (economies of scope) or on the costs of distribution (marketing).

There has been relatively little empirical work on the benefits accruing to financial innovators. Tufano (1989) and Carrow (1999) study the incentives of investment banks to innovate, focusing on the market shares they capture and the underwriting spreads they charge on new types of

securities. Both studies find that innovators earn higher market shares than followers, even though imitation is rapid. The studies reach different conclusions about whether innovating investment banks charge higher underwriting spreads than do follower banks. Tufano found that underwriting spreads on the first offerings of innovations were not materially larger than those on later offerings, casting doubt on the notion that the primary profit from innovation comes from increased spreads. Carrow re-examined this question a decade later with a slightly different sample, incorporating additional variables into this analysis (underwriter prestige rankings and 14 dummy variables indicating specific features of the security). With this new specification, he finds that as the number of rivals increases, spreads do indeed decline. Neither of these studies looks at the many ways in which innovative bankers might profit by earning trading profits on aftermarket activities, increasing the likelihood of receiving subsequent business through enhanced reputation, increasing the quality of their own personnel leading to a higher quality staff, or more personally for the individuals involved, increasing their bonuses and career progression. All of these mechanisms for rewarding innovation are open questions for future research.

In some academic models, parties most constrained or inconvenienced by imperfections would be the most likely to innovate, as the shadow costs of releasing these constraints would be greatest for these firms. Silber (1975, 1983) articulates this constraint-based notion of innovation. This might suggest that the smallest, weakest firms, who face the most constraints, would be the most likely to innovate. In the broad field of innovation, this seems to be the case, with smaller firms thought to be more innovative. There is some anecdotal evidence that supports this conclusion in financial services. Two upstart financial service firms—Vanguard and Drexel Burnham Lambert—substantially developed their businesses using a platform of innovative products (index funds and junk bonds), and a variety of e-Businesses attempted to create competitive advantage through innovation. At least for securities innovations, larger, more financially secure investment banks have consistently been the leading innovators (Tufano, 1989). Matthews (1994) adapts industrial organization models to show why there might be a self-reinforcing cycle between innovation and market share, with larger firms innovating and thereby increasing their size at the expense of their rivals.

Among issuers, it is difficult to argue that the most constrained firms are the most innovative. Rather, a great deal of innovation is directed at larger, well-established firms, as described by

one banker: The only way to reach large investment-grade companies is innovation. Such companies have ready access to every segment of the capital markets on attractive terms; we have to offer the better mousetrap. This inevitably leads to an array of products, often customized for individual issues (Jones, 2000). Perhaps, smaller and weaker firms face a great number of constraints, and their efforts are focused on addressing these constraints directly (e.g., communicating their story to potential investors) rather than optimizing the form of capital. Larger firms may have addressed these first-order imperfections and turn their attention to more nuanced capital structuring issues and innovations. Among issuers, the question of which firms innovate and why remains an open one. Innovation includes not only invention, but also the processes of the diffusion or adoption of the adoption. The diffusion of innovations has long been studied in the industrial organization field (Molyneux and Shamroukh (1999) summarize the industrial organizational literature on the adoption of innovations.). As a business proposition, innovation surely has the potential to enable businesses to create value.

**2.6 Empirical Studies**

Tufano (1989) did a research on financial innovation and first mover advantages. The objective of the study was to determine whether financial products innovators enjoy first mover advantages. The data was collected from 1,944 publicly traded securities, where he specifically used a sample of 56 innovation to test whether investment banks that create new securities benefits by charging higher prices (underwriting charges ) than imitators or by capturing large quantities. The study was conducted overt the period 1974-1986. Tufano concluded that investment banks that created new financial products did not charge higher prices in the period before imitative products appear and in the long run charges lower than rivals. However, these innovations did underwrite more public offerings than they innovated, than they did the imitating rivals. Overall, Tufano's results were inconsistent with the monopoly pricing of new securities issues by innovators, but rather with the presence of cost advantages that allow these institutions to capture market shares.

Bringing new securities to market requires the voluntary cooperation of both issuers and investors. As a business proposition, innovation surely has the potential to enable businesses to create value. Geanaracos and Millar (1991) highlights this theme in their study of 75 firms around the globe, showing how the world's best-managed companies are putting the latest instruments to effective use. While it's surely the case that some businesses will use no

innovation to profit, there is little systematic evidence on the benefits enjoyed by investors and issuers, and how they share any benefits of innovation. Studies of commercial banks' adoption of internet banking include among them Furst, Lang and Nolle (2002) who analyzed survey data on internet banking as at the third quarter of 1999. Using logit models, they found that a bank's choice of adopting internet banking is related to holding company affiliation, location in an urban area, higher fixed expenses, and higher non-interest income. Among banks that offer internet-related services, a greater number of service offerings were positively related to the bank's size and the length of time offering internet banking. Sullivan (2000) compares banks in the 10$^{th}$ Federal Reserve District that had transactional internet websites as of the first quarter of 2000 to those that did not have such web-sites. He finds the former to be significantly larger and located in areas with a more educated population and a higher population fraction in the 18 to 64 age group. Banks offering transactional websites are also found to have higher non-interest expenses and higher non-interest income.

A number of scholars have researched on financial innovations in organizations and companies in Kenya. Kamotho (2009) carried out a study on mobile phone banking (usage experiences in Kenya). The study covered the two dominant mobile banking service providers then: Safaricom and Zain during the three year period 2006-2008. From the inception of this service, there were a total of 8000 outlets. This number tripled compared to 876 branches and 1,424 ATMs for commercial banks (CBK, 2008). The study was informed by a quantitative survey on M-banking services and demand. Data on the usage and exploitation patterns was gathered through reliable cluster sampling techniques using a comprehensive questionnaire. Kamotho observed that competition triggers innovation and creativity. Contrary to the popular wisdom that mobile phone money services are meant for funds transfer and remittances, his findings concluded that 96% of the respondents used M-banking services as a form of funds storage.

Mwangi (2007) carried out a study on factors influencing financial innovation of companies listed at the Nairobi Stoke Exchange (NSE). The objective of the study was to explain the macro-environmental and micro-environmental factors affecting financial innovation in Kenya's securities market. The findings concluded that Kenyan laws protecting investors was the major factor influencing financial innovation. This result is similar to the findings by Frame and White (2002). Mwangi also observed that the absence of automated trading systems as a technological factor was found to influence financial innovations regularly. Finally, he argued that global

financial competition and integrations had an influence on financial innovation with increased financial competition amongst financial institutions influencing financial innovation the most.

### 2.7 A summary of Literature Review

From the literature review discussed above, a majority of the companies experience growth from innovations. Many of the studies have dwelt on the question as to whether financial innovations lead to success of the organizations and the causes of financial innovations. It is therefore clear from all the studies that financial innovation is of great importance for any economic growth to be realized.

There has been no known study that has focused on the relationship between financial innovations and growth of insurance companies in Kenya. This is despite the fact the insurance companies in Kenya have been engaged in numerous financial innovations in the past. This research will therefore seek to fill the gap of knowledge by establishing the relationship between financial innovations and the growth of insurance companies in Kenya.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter describes the research methodology of the study. It describes the research design, sampling design, target population, data collection procedures, analysis management and the ethical considerations in the study.

## 3.2 Research Design

Research design refers to the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in the procedure (Babbie, 2002). In addition Kothari (2004) observed that research design is a blue print which facilitates the smooth sailing of the various research operations, thereby making research as efficient as possible hence yielding maximum information with minimal expenditure of effort, time and money. The author noted that, research design deals with the decision regarding: What techniques were used to gather data? What kind of sampling strategies and tools were used? How time and cost constraints were dealt with? The function of research design therefore is to provide for the collection of relevant evidence with minimal expenditure of effort, time and money.

This study used a descriptive survey design. This design refers to a set of methods and procedures that describe variables. It involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data. Descriptive studies portray the variables by answering who, what, and how questions (Babbie, 2002).

## 3.3 Population

A population is a group of individual persons, objects or items from which samples are taken for measurements, it is the group the investigator wishes to make inferences from (Babbie, 2005). The target population was senior managers in marketing, underwriting, ICT, and finance from the 44 licensed insurance companies (Appendix III) as at end of December 2009 (AKI report, 2009). In addition, this study was carried in Nairobi since all the insurance companies have their headquarters in Nairobi and this facilitated collection of adequate information of the research subject area.

### 3.4 Sampling Design

A sample is a sub-set or part of the target population; sampling is a process of selecting subjects or cases to be included in the study of the representative of the target population (Mugenda and Mugenda, 1999). The respondents for this study consisted of senior managers in: marketing, underwriting, ICT or finance. Purposive sampling technique was used to obtain the study sample. Purposive sampling was used owing to the information that they have by virtue of their positions in their insurance companies in regard to this study. From the 44 licensed insurance companies, the researcher selected one manager from each insurance company. Therefore, a sample of 44 respondents consisting of one respondent from each insurance company was used for this study.

### 3.5 Data Collection

The research instrument in this study was a questionnaire. Both open and closed ended questions were applied to collect primary data. Creswell (1994) noted that, data collection methods for primary data include: structured and semi-structure questionnaires, mailed questionnaires, structured and semi-structured interviews (personal and telephone interviews), observation and focus group discussions. Questionnaires are the most commonly used methods when respondents can be reached and are willing to co-operate. These methods can reach a large number of subjects who are able to read and write independently.

The questionnaire consisted of sections geared to obtain the respondent's opinion in financial innovation and growth. Respondents interviewed held at least the position of an underwriting manager at the respective insurance companies and were actively involved in financial innovation processes. The respondents were expected to give an insight into the financial innovation in their respective insurance companies. Growth was measured using average annual gross written premium while financial innovations was measured in terms of new products, operation systems, and banc assurance.

### 3.6 Reliability and Validity

Mugenda and Mugenda (2003) asserted that, the accuracy of data to be collected largely depended on the data collection instruments in terms of validity and reliability. Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Validity was ensured by having objective questions included in the questionnaire. Reliability on the other hand refers to a measure of the degree to

which research instruments yield consistent results (Mugenda & Mugenda, 2003). In this study, reliability was ensured by pre-testing the questionnaire with a selected sample of three middle level managers from three insurance companies. The managers involved in the pilot study were excluded from the main study to avoid possibility of bias in the study.

### 3.7 Data Analysis

In order to analyze collected data Miller (1991) observed that, a researcher needs to have the following information about the statistical data analysis tools namely: descriptive, inferential and test statistics. The author observed that, descriptive statistics are used to describe data collected from a sample. The mean, median, percentages and standard deviation are the most commonly used descriptive statistics. The author further observed that, inferential statistics are used to make inferences from sample statistics to population parameters. These tools help the researcher to generalize the findings from the sample to the target population.

The data was analyzed by use of a linear regression model $Y= B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3$ where Y is annual gross written premium, $B_0$ is constant, and X is financial innovation. Financial innovation will be measured using three data points; X1 is new products, $X_2$ is operation system, and $X_3$ is bank assurance. Dummy variables 1 and 0 were used to denote presence or absence respectively of each of the three data points. Statistical Package for Social Sciences (SPSSv17) was used to aid in quantitative data analysis in this study. The results will be presented in charts, graphs and tables.

# CHAPTER FOUR

# DATA ANALYSIS, RESULTS AND DISCUSSION

## 4.1 Introduction

This chapter covers the data analysis, results and discussion of the study findings. The study sought to evaluate the relationship between financial innovation and growth of the insurance companies in Kenya. The presentation of the data analysis, results and discussion is based on the sequence of questions in the questionnaire used to collect data. The chapter starts with background information, then move to present data on products, operation system, bancassurance, and finally the regression analysis.

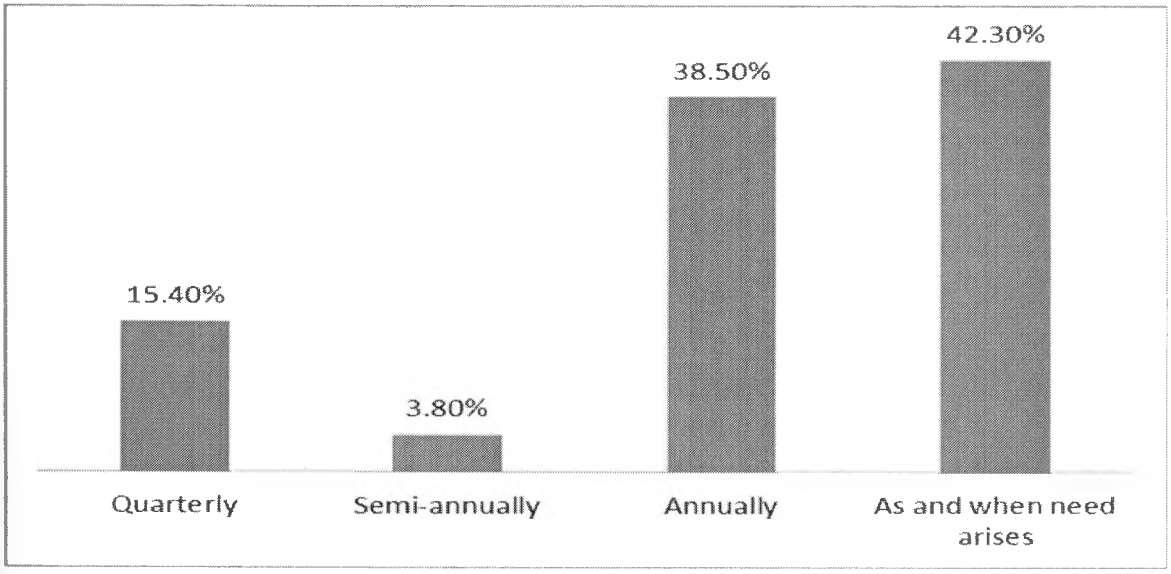
## 4.2 Background Information

The researcher targeted one senior manager from each insurance company in Kenya. There are 44 insurance companies hence the target respondents were 44. The researcher managed to administer the questionnaires to all the senior managers in the 44 insurance companies but only 26 returned filled questionnaires. This translates into 59.1% return rate which is satisfactory according to Babbie (2002) who argues that any response of 50% and above is adequate for analysis.

## 4.3 New Products

In an effort to understand the situation in insurance companies in terms of new products and innovation, the respondents were asked to indicate how often they reviewed their products. The majority of the respondents 42.3% (11) indicated they review their products as and when need arises, 38.5% (10) indicated annually while 15.4% (4) and 3.8% (1) indicated semi-annually and quarterly respectively. These findings show that most insurance companies mainly rely on the external environment to review their products. The external environment factors could be competition, customers' needs, government regulations, industry growth and changes in technology among others. These results are presented in figure 4.1.

**Figure 4. 1: Review of products**



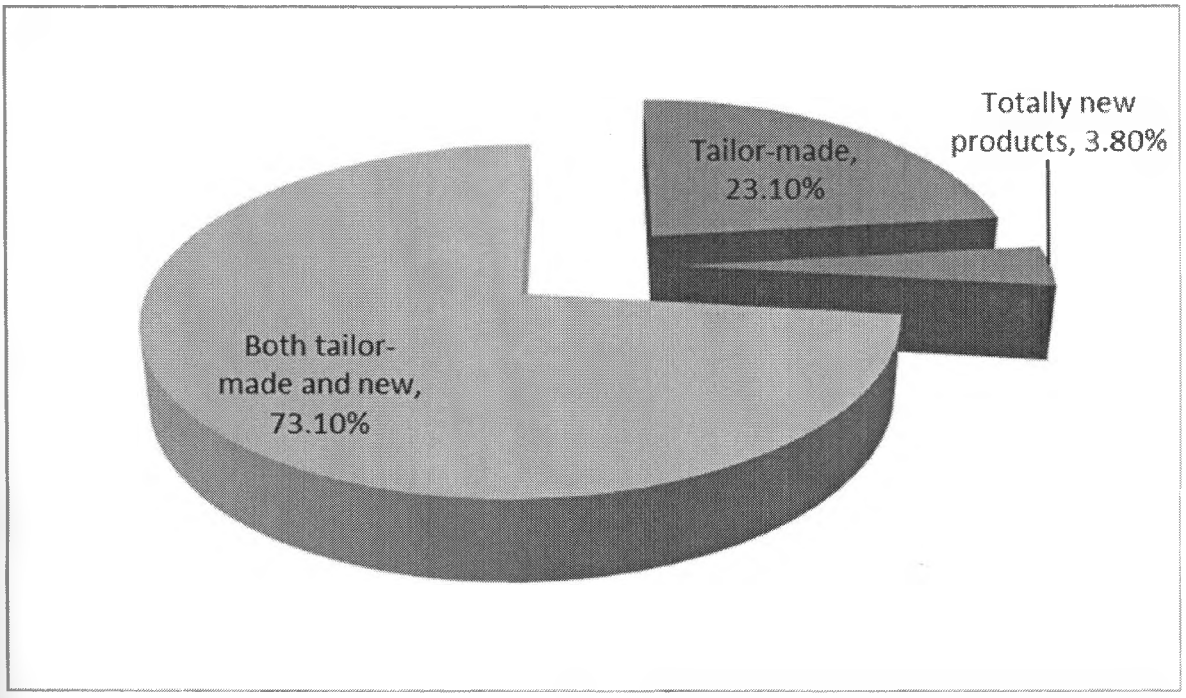

The researcher further wanted to know the reasons for innovating new products. The respondents were asked to indicate their level of agreements, in a scale of 1-5 where 1 was strongly disagree and 5 was strongly agree, with a number of listed reasons. The listed reasons were to suit customer's needs, to increase market share, to increase profitability, to remain competitive, to comply with the regulation, and due to technological advancement. The respondents agreed with four reasons to a great extent. These reasons include to suit customer's needs at a mean score of 4.5385, to remain competitive at a mean score of 4.4231, to increase market share at a mean score of 4.2308, and to increase profitability at a mean score of 4.1538. The respondents agreed to a moderate extent that they innovate new products due to technological advancement at a mean score of 3.2308. The respondents disagreed to some extent that they innovate new products to comply with regulation. This finding was represented by a mean score of 2.8077. The results are summarized in table 4.1.

**Table 4. 1: Reasons for Innovating new products**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| To suit customers' needs | 26 | 1.00 | 5.00 | 4.5385 | .90469 |
| To increase market share | 26 | 1.00 | 5.00 | 4.2308 | .86291 |
| To increase profitability | 26 | 1.00 | 5.00 | 4.1538 | .96715 |
| To remain competitive | 26 | 2.00 | 5.00 | 4.4231 | .75753 |
| To comply with the regulation | 26 | 1.00 | 5.00 | 2.8077 | 1.26552 |
| Due to technological advancement | 26 | 1.00 | 5.00 | 3.2308 | 1.47804 |

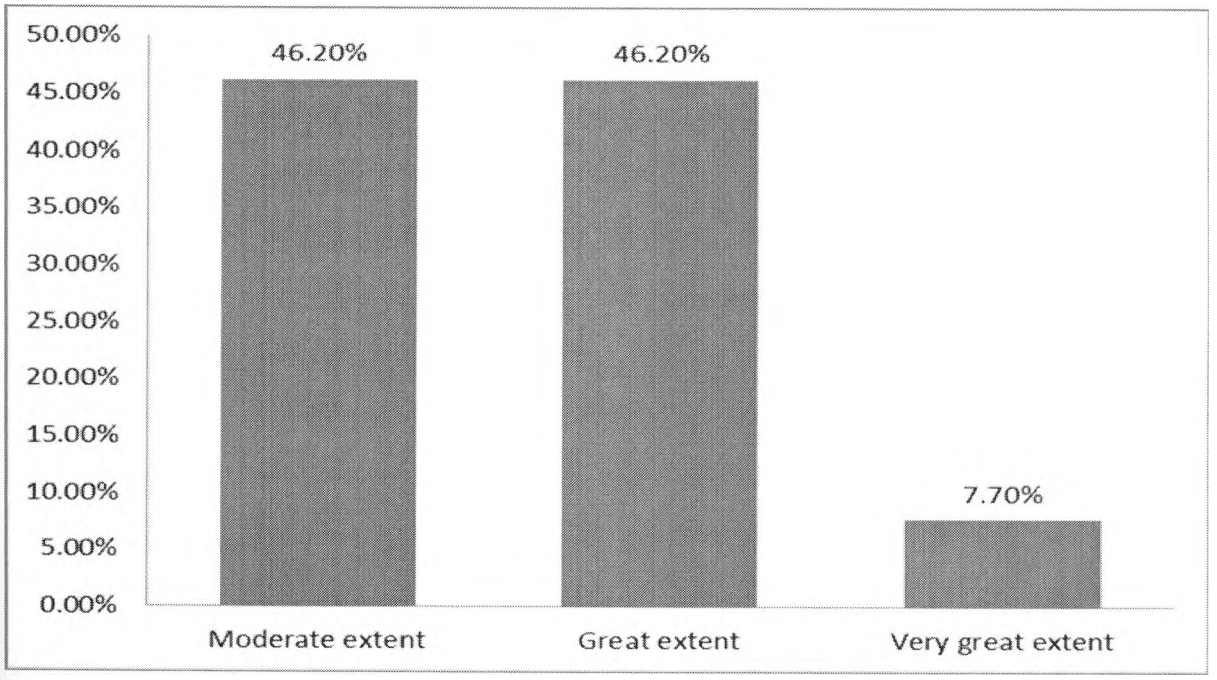
In an attempt to establish the nature of insurance company's products, the respondents were asked to indicate whether their products were tailor made, totally new or both. The majority of the respondents 73.1% (19) indicated their products were both tailor made and new while 23.1% (6) and 3.8% (1) of the respondents indicated tailor made and totally new respectively. These findings are presented in figure 4.2. Based on these results, totally new products are few perhaps indicating lack of innovativeness. Tailor made and new products are many perhaps responding to customer tastes and preferences.

**Figure 4. 2: Nature of products**



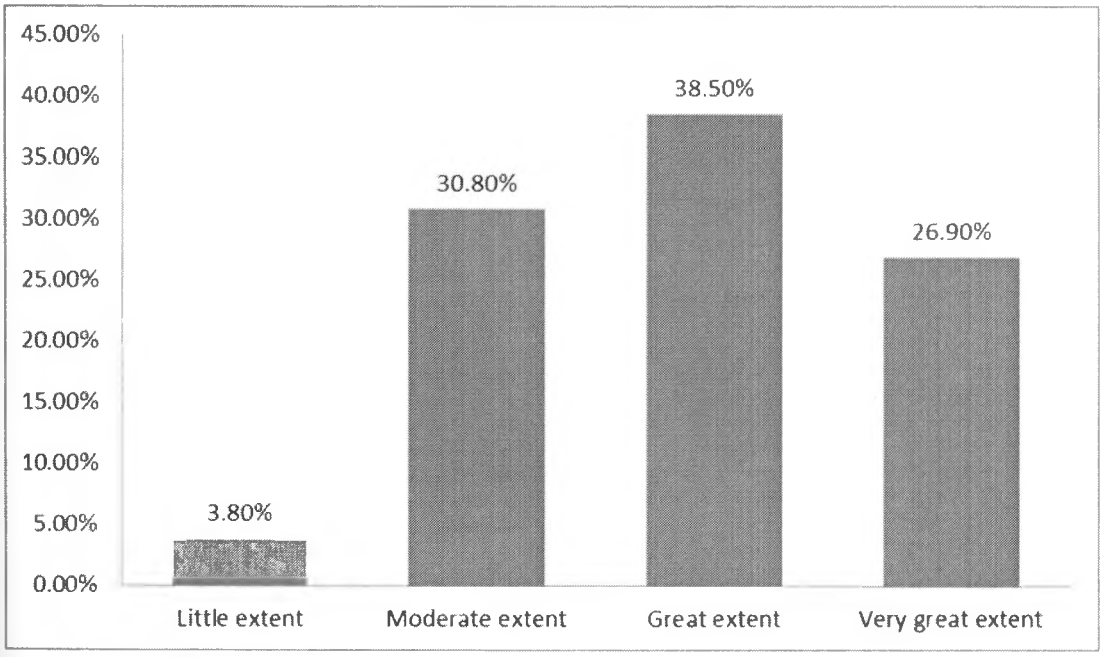

Having established the nature of insurance companies' products, the researcher wanted to know the extent to which these products have been successful. The respondents were asked to rate success of their products in a scale of 1-5 where 1 was not at all and 5 was very great extent. The respondents indicted that their products have been successful to a moderate extent and great extent equally at 46.2% (12) each while only 7.7% (2) felt their products were successful to a very great extent. The findings are summarized in figure 4.3. These findings indicate above average success of products offered by the insurance companies in Kenya. This performance could be attributed to the passive nature of developing the products as opposed to a proactive approach driven by innovation.

**Figure 4. 3: Success of Insurance Products**




The researcher asked the respondents to indicate whether their company's new products have contributed to its growth and they unanimously said yes. When asked to what extent these new products had contributed to growth, the majority of the respondents 38.5% (10) said to a great extent, 30.8% (8) indicated to a moderate extent, 26.9% (7) indicated to a very great extent while only 3.8% (1) said to a little extent. These findings are summarized in figure 4.4. From the findings, new products are important to the growth of the insurance companies. It is therefore imperative that creativity and innovation is critical in developing them.

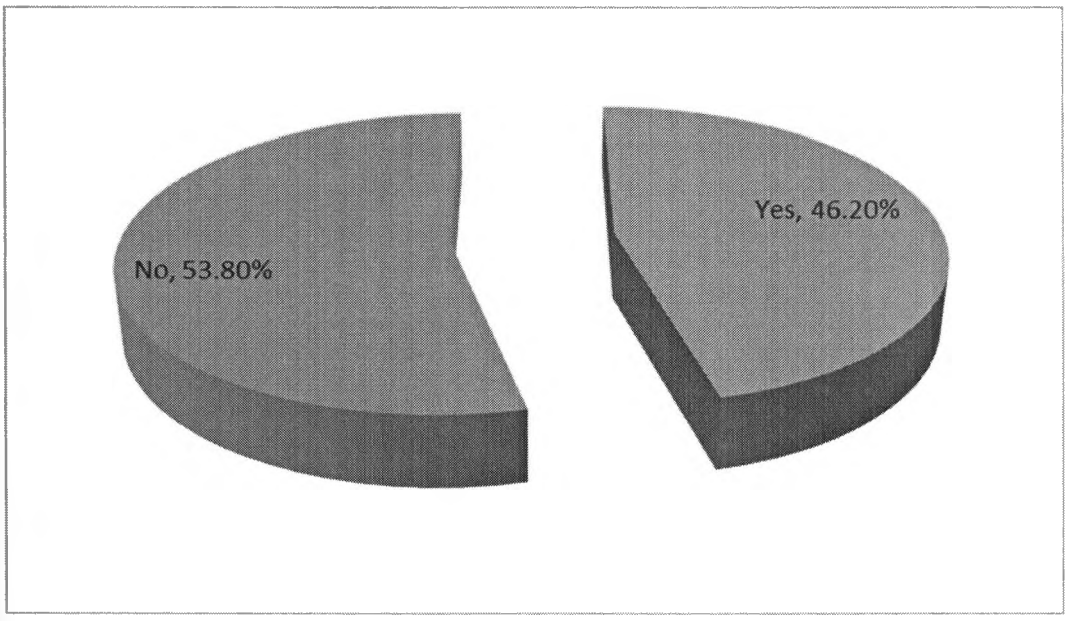
**Figure 4. 4: The extent new products had contributed to growth**




## 4.4 Operation System

To understand the operation systems of insurance company, the researcher sought to know whether all their operations are automated. The majority of the respondents 53.8% (14) said no while 46.2% (12) said yes. These findings are presented in figure 4.5. The results show that although insurance companies have embraced technology, they have not been able to automate most of their operations functions.

**Figure 4. 5: Whether all operations are automated**




The researcher further sought to know whether the automation has led to company growth. Although all the respondents 38.5% (10) who answered this question said yes, majority of the respondents 61.5% (16) did not respond. This underscores the fact that despite adopting technology, most of the insurance companies have not utilized it to make their operation systems effective.

On whether the companies have branches, all the respondents said yes. The researcher sought to know whether these branches are inter-connected by an information system. The majority of the respondents 96.2% (25) indicated yes while only 3.8% (1) said no. Asked whether their companies have other information sub-systems, the majority of the respondents 52% (13) said yes while 48% (12) said no. These results are presented in table 4.2. These findings show that most of the insurance companies have embraced information technology but it is yet to yield better operation systems as most of it is manual.

**Table 4. 2: Information System**

| **Branches are inter-connected by an information system** | **Frequency** | **Percent** |
|---|---|---|
| Yes | 25 | 96.2 |
| No | 1 | 3.8 |
| **Have other information sub-systems** | **Frequency** | **Percent** |
| Yes | 52 | 13 |
| No | 48 | 12 |

The researcher wanted to know the extent to which information system has contributed to the growth in the insurance companies. The majority of the respondents 53.8% (14) indicated to a great extent while 30.8% (8) said to a moderate extent. Only 15.4% (4) said information system contributed to the growth of the company to a very great extent. These findings are presented in table 4.3. The findings show that despite most of the operation functions being manual, information systems that are already operational in the insurance companies have contributed significantly to growth. The higher the up take of technology therefore the higher the growth of the insurance companies until all the functions that need to be automated are done so.

**Table 4. 3: Extent to which information system has contributed to growth**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Moderate extent | 8 | 30.8 | 30.8 | 30.8 |
| Great extent | 14 | 53.8 | 53.8 | 84.6 |
| Very great extent | 4 | 15.4 | 15.4 | 100.0 |
| Total | 26 | 100.0 | 100.0 | |

The respondents were asked to indicate how often their company reviews its operation system. The majority of the respondents 44% (11) indicated annually, 28% (7) indicated after 5 years,

20% (5) indicated bi-annually while 4% (1) each indicated semi-annually and as need arises. The findings are summarized in table 4.4. These results show that operation systems in most insurance companies have a fixed time in which they are reviewed (mostly annually) as opposed to when need arises. This means that most insurance companies are not flexible to change their operations when need arises.

**Table 4. 4: Review of Operation System**

| | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Semi-annually | 1 | 4.0 | 4.0 |
| Annually | 11 | 44.0 | 48.0 |
| Bi-annually | 5 | 20.0 | 68.0 |
| After every 5 years | 7 | 28.0 | 96.0 |
| As need arises | 1 | 4.0 | 100.0 |
| Total | 26 | | |

The respondents were asked to rate in a scale of 1-5, where 1=Not at all and 5=to a great extent, to what extent a number of factors influence a change in operations system in their company. These factors included current system failure, new development in the market, and technological advancement. New development in the market was found to influence a change in the company's operation system to a great extent as indicated by a mean score of 4.56. Current system failure was found to influence a change in the company's operation system to a moderate extent as indicated by a mean score of 3.65 while technological advancement influence a change in the company's operation system to a little extent as presented by a mean score of 2.88. These findings are presented in table 4.5. These results underscore the over reliance of insurance companies on external environment in shaping their operation system.

**Table 4. 5: Influence a change in operation system**

| | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| a) The extent to which current system failure influence a change in the company's operation system(s). | 26 | 1.00 | 5.00 | 3.6538 | .12933 |
| b) The extent to which new development in the market influence a change in the company's operation system(s). | 25 | 2.00 | 5.00 | 4.5600 | .98665 |
| c) The extent to which technological advancement influence a change in the company's operation system(s). | 26 | 1.00 | 4.00 | 2.8846 | .07059 |

### 4.5 Bancassurance

The researcher wanted to know whether the company is affiliated to other financial institutions. The majority of the respondents 73.1% (19) said yes while 26.9% (7) said no. These findings are presented in table 4.6. These results show that most of insurance companies have sought affiliation with other financial institutions.

**Table 4. 6: Affiliated to other financial institutions**

| | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 19 | 73.1 | 73.1 |
| No | 7 | 26.9 | 100.0 |
| Total | 26 | 100.0 | |

When asked to indicate the reasons for affiliation, the majority of the respondents 47.4% (9) indicated that the reason was to increase sales. This can only be achieved through countrywide

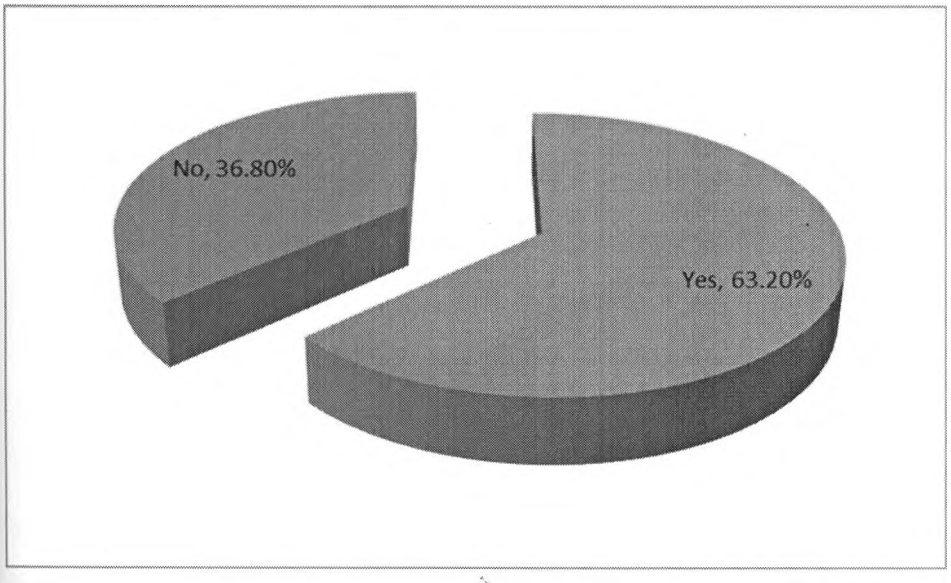
presence and increasing market share. These two were also significant reasons for affiliation as indicated by 36.8% (7) for market share and 15.8% (3) for countrywide presence.

**Table 4. 7: Reasons for affiliation**

| | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| To have countrywide presence | 3 | 15.8 | 15.8 |
| To increase market share | 7 | 36.8 | 52.6 |
| To increase sales | 9 | 47.4 | 100.0 |
| Total | 26 | | |

The respondents were also asked whether their company offers joint products with their affiliates. The majority of the respondents 63.2% (12) indicated yes while 36.8% (7) said no. These findings are presented in figure 4.7. These results show that insurance companies partner with other organizations to increase their sales.

**Figure 4. 6: Company offers joint products**



The researcher wanted to know the extent to which this partnership has contributed to growth. The majority of the respondents 57.9% (11) said the partnership has contributed to growth to a moderate extent while 36.8% (7) and 5.3% (1) indicated to a great extent and very great extent respectively. These results are presented in table 4.8. The results show that most insurance companies on average have increased their business through partnerships.

**Table 4. 8: Extent partnership has contributed to growth**

| | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Moderate extent | 11 | 57.9 | 57.9 |
| Great extent | 7 | 36.8 | 94.7 |
| Very great extent | 1 | 5.3 | 100.0 |
| Total | | | |

### 4.6 Regression Analysis

The regression analysis indicated that there is no significant relationship between new products and premium growth. It also indicated a very weak positive relationship between banc assurance and premium growth. New products can only predict premium growth by a factor of .086 while banc assurance can predict premium growth by a factor of .083. The statistical significance for the two predictor's namely new products and banc assurance however is weak as indicated by .687 and .696 for new products and banc assurance respectively. Operations system does not affect premium growth at all hence it was excluded from the model. The regression output is presented in the following tables and a chart.

**Coefficients[a]**

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| (Constant) | 20.299 | 14.142 | | 1.435 | .165 | -8.957 | 49.554 |
| VAR1products | 6.743 | 16.528 | .086 | .408 | .687 | -27.448 | 40.934 |
| VAR3bancassurance | 6.233 | 15.773 | .083 | .395 | .696 | -26.396 | 38.862 |

**Coefficients[a]**

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
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| VAR1products | 6.743 | 16.528 | .086 | .408 | .687 | -27.448 | 40.934 |
| VAR3bancassurance | 6.233 | 15.773 | .083 | .395 | .696 | -26.396 | 38.862 |

a. Dependent Variable: VAR4premiumgrowth

**Excluded Variables[b]**

| Model | | Beta In | t | Sig. | Partial Correlation | Collinearity Statistics |
|---|---|---|---|---|---|---|
| | | | | | | Tolerance |
| 1 | VAR2operations | .[a] | . | . | . | .000 |

a. Predictors in the Model: (Constant), VAR3bancassurance, VAR1products

b. Dependent Variable: VAR4premiumgrowth

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

This chapter covers summary of the study, conclusion and recommendations. The summary of the study entails and outline of how the study was conducted and findings. The conclusions and recommendations of the study are based on the study findings.

## 5.2 Summary of the Study

This research intended to find out the relationship between financial innovation and growth insurance companies operating in Kenya. The objective of this study was to evaluate the relationship between financial innovation and growth of the insurance companies in Kenya. This study used a descriptive survey design. The target population was senior managers in marketing, underwriting, ICT, and finance from the 44 licensed insurance companies as at end of December 2009 (AKI report, 2009). This study was carried in Nairobi since all the insurance companies have their headquarters in Nairobi. From the 44 licensed insurance companies, the researcher selected one manager from each insurance company. Therefore, a sample of 44 respondents consisting of one respondent from each insurance company was used for this study. A semi-structured questionnaire was used for this study. Data was analyzed using descriptive statistics and regression analysis.

The majority of the respondents 42.3% (11) indicated they review their products as and when need arises, 38.5% (10) indicated annually while 15.4% (4) and 3.8% (1) indicated semi-annually and quarterly respectively. The majority of the respondents 73.1% (19) indicated their products were both tailor made and new while 23.1% (6) and 3.8% (1) of the respondents indicated tailor made and totally new respectively. When asked to what extent these new products had contributed to growth, the majority of the respondents 38.5% (10) said to a great extent, 30.8% (8) indicated to a moderate extent, 26.9% (7) indicated to a very great extent while only 3.8% (1) said to a little extent. The majority of the respondents 53.8% (14) indicated that information system contributed to the growth of the company to a great extent while 30.8% (8) said to a moderate extent. Only 15.4% (4) said information system contributed to the growth of the company to a very great extent. New development in the market was found to influence a

change in the company's operation system to a great extent as indicated by a mean score of 4.56. Current system failure was found to influence a change in the company's operation system to a moderate extent as indicated by a mean score of 3.65 while technological advancement influence a change in the company's operation system to a little extent as presented by a mean score of 2.88. When asked whether the company is affiliated to other financial institutions, the majority of the respondents 73.1% (19) said yes while 26.9% (7) said no. When asked to indicate the reasons for affiliation, the majority of the respondents 47.4% (9) indicated that the reason was to increase sales. The other two were also significant reasons for affiliation as indicated by 36.8% (7) for market share and 15.8% (3) for countrywide presence. On the extent to which this partnership has contributed to growth, the majority of the respondents 57.9% (11) said the partnership has contributed to growth to a moderate extent while 36.8% (7) and 5.3% (1) indicated to a great extent and very great extent respectively. The regression analysis showed an insignificant positive relationship between new products and banc assurance on one hand and premium growth on the other. New products and banc assurance were found to predict premium growth by a factor of .086 and .083 respectively. The statistical significance for the two variables were .687 (new products) and .696 (banc assurance). This shows a weak statistical significance as it approaches value of 1.

### 5.3 Conclusions

Insurance companies in Kenya review their products annually and when need arise. Most of these products are both tailor made and new. The approach taken by the insurance companies seem to be more reactive than proactive. They respond to customer demands and market environment. Growth was found to be positively related to new products to a small extent. There is need for a proactive approach in innovations of new products and repackaging of the old ones to enhance growth.

Most insurance companies have part of their operations automated. Others have plans to automate their operations function. Information systems were was found to contribute to growth of the insurance companies. New development in the market and current system failure were found to influence change in the operation system. Operation system however has no relationship with premium growth. It may therefore help in customer satisfaction and internal efficiency but it is now a predictor of premium growth. This therefore means innovations cannot be gauged by

the kind of an operation system an insurance company has but the number of new products and banc assurance.

Most of the insurance companies were found to be affiliated to other financial institutions like banks and microfinance institutions. The affiliation mainly targets to increase sales and the partnership was found to contribute to growth in the insurance companies to a small extent. These partnerships help insurance companies in outreach hence more sales. Since bancassurance is a fairly new phenomenon in distribution of insurance services in Kenya, the growth of the insurance companies can therefore be enhanced by promotion of these partnerships.

### 5.4 Recommendations

This study recommends that insurance companies in Kenya should take a proactive role in coming up with new products. This could be achieved by the ability to predict the market and innovate products to meet its needs. The insurance companies should also ensure they repackage old products to enhance growth. The insurance companies should have information systems that suit their mode of operation. Although not all operation systems can be automated, most of them need to be automated for internal efficiency.

The Association of Kenya Insurers should encourage innovation in the industry by carrying out studies to predict market situation. This will enable the members to respond appropriately to enhance growth of the industry.

The government and other policy makers should encourage strategic partnerships for banc assurance to thrive and hence increase the uptake of insurance. This is because banc assurance and other affiliations among financial institutions are paying off in terms of enhanced growth although to a small extent.

Further study should be conducted to establish how policy environment has affected insurance growth. Besides, further study is needed to establish other factors that can be used to measure innovations in the insurance industry as well as other factors influencing growth in the industry.

### 5.5 Study Limitations

This study encountered a number of limitations. One of the major limitations was access to information. Many of the target respondents were cautious not to give information they considered sensitive and could be used against them by their competitors. However, the researcher managed to overcome this limitation through convincing the respondents that the information sought was for academic purposes only. An introduction letter from the university was also helpful towards convincing these respondents. Another major limitation was the time allocated for this study. A number of respondents were left with the questionnaires since they could not respond to them on time. The busy schedule of the targeted respondents led to a low response rate. However, the study managed a response rate above the recommended 50% for analysis.

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## APPENDICES

## APPENDIX I: LETTER OF INTRODUCTION

The Respondent,

P.O. Box .....,

Dear Sir/Madam,

**Re: Request for Research Data**

I am a Postgraduate student at the University of Nairobi pursuing a Master of Business Administration (MBA) program. My research project topic is "Relationship between Financial Innovation and Growth in Insurance Companies in Kenya". The purpose of the research is to assess the growth insurance companies as a result of their financial innovations.

The attached questionnaires have been designed to help the researcher gather data from the respondent with respect to this purpose. You have been identified as one of the respondents. Kindly facilitate the data collection necessary by answering the questions precisely and accurately as possible. The information sought is purely for academic purposes.

Yours truly,

Student

**Mr. Robert Karanja. W.**

Email: rwachirak@gmail.com

Cell phone +254720 967 196

Supervisor

**Mr. Mirie Mwangi**

## APPENDIX II: QUESTIONNAIRE

### Section I: Company Information

1. Name of your insurance company (optional)

   .....

2. What is the average annual gross written premium of your company?

| Year | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Premium growth | | | | | |

### Section II: Products

3. How often do you review your products? (*Tick appropriate*)

   a) Quarterly ( )

   b) Semi- Annually ( )

   c) Annually ( )

   d) Bi-annually ( )

   e) Other (specify).....

4. Averagely, how many new products were launched by your company in the last 5 years?

| Year | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| No. Of Products | | | | | |

5. How many of the new products launched were successful?

| Year | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| No. Of Products | | | | | |

6. Kindly indicate your level of agreement with the following statements as reasons for innovating new products in your insurance company.

| Objectives of innovations | Strongly disagree | disagree to some extent | Neither agree nor disagree | Agree to some extent | Strongly agree |
|---|---|---|---|---|---|
| a) To suit customer's needs | 1 | 2 | 3 | 4 | 5 |
| b) To increase market share | 1 | 2 | 3 | 4 | 5 |
| c) To increase profitability | 1 | 2 | 3 | 4 | 5 |
| d) To remain competitive | 1 | 2 | 3 | 4 | 5 |
| e) To comply with the regulation | 1 | 2 | 3 | 4 | 5 |
| f) Due to technological advancement | 1 | 2 | 3 | 4 | 5 |

7. What is the nature of your products? (*Tick appropriate*)

   a) Tailor-made ( )

   b) Totally new products ( )

   c) Both tailor-made and new ( )

8. To what extents have your insurance products been successful? (*Tick appropriate*)

   i) Not at all ( )

   ii) Little extent ( )

   iii) Moderate extent ( )

   iv) Great extent ( )

   v) Very great extent ( )

9. a) Have the new products contributed to growth in your company? (*Tick appropriate*)

Yes ( ) No ( )

b) If yes, to what extent?

i) Not at all ( )

ii) Little extent ( )

iii) Moderate extent ( )

iv) Great extent ( )

v) Very great extent ( )

**Sectional III: Operation System**

10. a) Are all the operations automated? *(Tick appropriate)*

Yes ( ) No ( )

b) If yes, have the automation led to growth in your company?

Yes ( ) No ( )

c) If no, are there plans to automate tasks that are carried out manually?(*Tick appropriate*)

Yes ( ) No ( )

11. a) Does your insurance company have branches? (*Tick appropriate*)

Yes ( ) No ( )

b) If yes, are your branches inter-connected by an information system? (*Tick appropriate*)

Yes ( ) No ( )

c) Do you have other information sub-systems? (*Tick appropriate*)

Yes ( ) No ( )

d) To what extent has information systems contributed to growth in your company? (*Tick appropriate*)

i) Not at all ( )

ii) Little extent ( )

iii) Moderate extent ( )

iv) Great extent ( )

v) Very great extent ( )

e) If no in 11(b) above, to what extent has lack of integrated information system affected effectiveness on operation in your company?

i) Not at all ( )

ii) Little extent ( )

iii) Moderate extent ( )

iv) Great extent ( )

v) Very great extent ( )

12. How often do you review your operations system(s)? (*Tick appropriate*)

i) Semi- Annually ( )

ii) Annually ( )

iii) Bi-annually ( )

iv) After every 5 years ( )

13. In a scale of 1-5, where 1=Not at all and 5=to a great extent, to what extent do the following influence a change in operations system in your company?

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| i) Current system failure | ( ) | ( ) | ( ) | ( ) | ( ) |
| ii) New development in the market | ( ) | ( ) | ( ) | ( ) | ( ) |

iii) Technological advancement ( ) ( ) ( ) ( ) ( )

iv) Others (specify)..... ( ) ( ) ( ) ( ) ( )

**Section IV: Bank Assurance**

14. a) Is your company affiliated to other financial institution(s)? (*Tick appropriate*)

Yes ( ) No ( )

b) If yes, which of the following is your insurance company affiliated with?

i) Bank ( )

ii) Insurance company ( )

iii) Both bank and insurance company ( )

iv) Micro-finance institutions ( )

v) Other (specify).....

c) If yes in 14(a) above, what was the reason for affiliation? (*Tick appropriate*)

i) To have countrywide presence ( )

ii) To increase market share ( )

iii) To increase sales ( )

iv) Other (specify).....

15. a) Do you offer joint products with the affiliated institutions? (*Tick appropriate*)

Yes ( ) No ( )

b) Has the partnership in 14(a) contributed to growth in your company? (*Tick appropriate*)

Yes ( ) No ( )

c) If yes in 15(b) above, to what extent? (*Tick appropriate*)

i) Not at all ( )

ii) Little extent ( )

iii) Moderate extent ( )

iv) Great extent ( )

v) Very great extent ( )

## APPENDIX III: LIST OF INSURANCE COMPANIES

1. Africa Merchant Assurance Ltd
2. APA Insurance Company Ltd
3. Apollo Life Assurance Ltd
4. Blue Shield Insurance Company Ltd
5. British American Insurance Ltd
6. Cannon Assurance Ltd
7. Chartis Kenya Insurance Company Ltd
8. CFC Life Assurance Ltd
9. Concord Insurance Company Ltd
10. Co-operative Insurance Company Ltd
11. Corporate Insurance Company Ltd
12. Directline Assurance Company Ltd
13. Fidelity Shield Insurance Company Ltd
14. First Assurance Company Ltd
15. Gateway Insurance Company Ltd
16. Geminia Insurance Company Ltd
17. GA Insurance Company Ltd
18. Heritage Insurance Company Ltd
19. Insurance Company Of East Africa Ltd
20. Intra Africa Assurance Company Ltd
21. Invesco Assurance Company Ltd
22. Jubilee Insurance Company Ltd
23. Kenindia Assurance Company Ltd
24. Kenya Orient Insurance Company Ltd
25. Kenya Alliance Assurance Company Ltd

26. Lion of Kenya Insurance Company Ltd
27. Madison Insurance Company Ltd
28. Mayfair Insurance Company Ltd
29. Mercantile Insurance Company Ltd
30. Metropolitan Life Assurance Company Ltd
31. Monarch Insurance Company Ltd
32. Occidental Insurance Company Ltd
33. Old Mutual Life Assurance Company Ltd
34. Pacis Insurance Company Ltd
35. Pan Africa Life Assurance Ltd
36. Phoenix of E.A Assurance Company Ltd
37. Pioneer Life Assurance company Ltd
38. Real Insurance Company Ltd
39. Shield Assurance Company Ltd
40. Tausi Assurance Company Ltd
41. Trident Insurance Company Ltd
42. Trinity Life Assurance Company Ltd
43. UAP Life Assurance Ltd
44. UAP Insurance Company Ltd