RELATIONSHIP BETWEEN FINANCIAL INNOVATIONS AND FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

BY

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DECLARATION

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

Signed …… Date ……..

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This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

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ABSTRACT

This study sought to investigate the relationship between financial innovations and financial performance of insurance companies in Kenya. A descriptive survey was carried out on all the 47 insurance companies registered in Kenya. The researcher used primary and secondary data covering a period of five years from 2007 to 2011. The data collected was analyzed using descriptive statistics and regression analysis. The researcher found out that insurance companies in Kenya have introduced product innovations including micro-insurance products, agri- insurance products and process innovations such as office automation, telemarketing, virtual marketing and worksite marketing. Institutional innovation adopted were mobile branches, partnership with NGO's, partnership with CBO's, new branch networks, and strategic alliances with banks. The researcher established that product innovations, process innovations and institutional innovations are positively related with return on assets as shown by a correlation coefficient of .522, .597 and .239 respectively. The regression analysis showed that there is no significant relationship between financial innovation and financial performance of the insurance companies in Kenya. The statistical significance for the three variables were .684 (product innovations) and .604 (process innovations) and .789 (institutional innovations).

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ABBREVIATIONS

AKI	Association of Kenya Insurers
ATM	Automated Teller Machine
APA	American Photographic Artist insurance
CEO	Chief Executive Officer
CMA	Capital Market Authority
EAC	East African Community
ICEA	Insurance Company of East Africa
ICT	Information Communication Technology
IRA	Insurance Regulatory Authority
NGO	Non-Governmental Organization
NSE	Nairobi Securities Exchange
OECD	Organization for Economic Co-operation and Development
PKF	Pannell Kerr Forster
R &D	Research and Development
ROA	Return on Assets
ROE	Return on Equity
SPSS	Statistical package for social scientists
USA	United States of America
WEF	Women Enterprise Fund

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Allan and Gale (1994) defined financial innovation as the introduction of new financial instruments or service or practice, introduction of new uses for funds, finding out new sources of funds, introduction of new processes or techniques to handle day-to-day operations, or establishing a new organization within an existing financial institution. White and Frame (2004) categorized financial innovations into three groups based on what they impact they impact; process, institution and product. Product innovation involves creation of new products or service to enable the company respond better to changes in market demand and to improve the efficiency of the institution. Process innovations refer to the creation of new production processes to increase efficiency and market penetration. Institutional innovations relate to changes in business structures or setting up a new service structure. Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. It is the extent to which the organization performs in relative sales value, sales growth and gross profit /profitability, (Li, 2000). Financial performance indicates the results of a firm's policies and operations in monetary terms as reflected in the firm's return on investment, return on assets, value added, etc. Langerak et al (2004) and Ledwth and O'Dwyer, (2008) confirms a strong relationship between financial innovations and financial performance.

Merton and Miller (1986),Cohen et al (1989), Tuffano (1993), Allan and Gale (1994) and Frame and White (2004) contend that the stimulus for financial innovation is strong, arising from the interaction of changing regulatory environment, expanding technology, volatile markets and growing competition among financial institutions. Competition among financial institutions brings forth and fosters the development of new products and markets. Regulations that impede the free flow of capital and competition among financial institutions

motivate the development of financial products and trading strategies to get around these restrictions. Finally, the global pattern of financial wealth transforms financial markets from local markets into globally internationalized financial markets. Although insurance is a mature industry, driving profitable top-line growth is difficult owing to increased competition from global players and companies from other industries that produce either same or substitute products and services. While profitable growth is the key to success in a mature industry like insurance, it can be prohibitively difficult to achieve through conventional strategies simply because the industry is mature (Deloitte, 2008). It is vital that insurance executives take a fresh look at the industry and seek fundamental change at all levels of the organization, from its people strategy to its client and product strategy to its processes and infrastructure achieving these will be difficult is appropriate innovation strategy is not put in place (Carrie, 2008).

The history of financial innovations in the Kenyan insurance industry is closely related to the historical emancipation of Kenya as a nation (Throup, 1988). With the conquest of Kenya as a British colony complete, settlers initiated various economic activities, particularly farming, and extraction of agricultural products (Huxley, 1990). These substantial investments needed some form of protection against various risk exposures. British insurers saw an opportunity in this and established agency offices to service the colony's insurance needs. Prosperity in the colony soon justified expansion of these agencies to branch networks with more autonomy, and expertise to service the growing insurance needs. By independence in 1963, most branches had been transformed to fully-fledged insurance companies (Maxon, 1993).In the fifty years since independence, Kenya's insurance industry has flourished, and as at December 2012 it had 47 registered insurers, 20 transacting general insurance business, 2 transacting life business, while 25 are composite insurers – transacting both life and general insurances. The term insurance can be defined as the payment of little money or fees for the

purpose of protection against unpredicted expenses which are known as claims or losses. After paying the insurance premiums the insurer pledged to pay compensation for any losses incurred as long as it lies within the terms and conditions agreed upon in the letter of contract signed with that particular insurance company.

1.1.1 Financial Innovation

Drucker (1985) defined financial innovation as the process of equipping financial institutions in new, improved capabilities or increased utility. Frame and White (2002) contend that there are three types of financial innovations; institutional, product and process. Institutional innovation is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations. Institutional innovations can affect the financial sector as a whole and involve the establishment of new types of financial intermediaries or changes in the legal and supervisory framework. Institutional innovations increase firm performance by reducing administrative and transaction costs, improving labor productivity, gaining access to non-tradable assets or reducing costs of services. Important examples include, formalizing informal finance systems, reducing barriers for rural people accessing finance products, the initiation of a client development program, creation of new strategic alliances and introduction of new branches or setting up a completely new service structure. Institutional innovations are strongly related with all the administrative efforts of renewing the organizational routines, procedures, mechanisms and systems to promote teamwork, information sharing, coordination, collaboration and learning.

A product innovation is the introduction of a good or service that is new or significantly improved regarding its characteristics or intended uses (OECD Oslo Manual, 2005). Product innovations can utilize new knowledge or technologies, or can be based on new uses or combinations of existing knowledge or technologies. Product innovation is a difficult process

driven by advancing technologies, changing customer needs, shortening product life cycles, and increasing global competition. For success, it must involve strong interaction within the firm and further between the firm and its customers and suppliers (Akova et al., 1998). Product innovations are introduced to respond better to changes in market demand. A process innovation is the implementation of a new or significantly improved production or delivery method. Process innovations cover the introduction of new business processes leading to increased efficiency, market expansion, decrease in unit costs of production and delivery and deliver new or significantly improved products. Examples include office automation and use of alternate distribution channels other than direct selling(OECD Oslo Manual, 2005).

Although insurance is a mature industry, driving profitable top-line growth is difficult owing to increased competition from global players and companies from other industries that produce either same or substitute products and services. While profitable growth is the key to success in a mature industry like insurance, it can be prohibitively difficult to achieve through conventional strategies simply because the industry is mature (Deloitte, 2008). It is vital that insurance executives take a fresh look at the industry and seek fundamental change at all levels of the organization, from its people strategy to its client and product strategy to its processes and infrastructure achieving these will be difficult is appropriate innovation strategy is not put in place (Carrie, 2008).

Financial innovations in an organization can be measured by the investment in new processes, new products or new institutions put in place by the organization. A new product, process or institution created is observed as an innovation on its own. For example banc assurance, crop insurance and micro-insurance are counted as distinct product innovations while virtual marketing, telemarketing and worksite marketing will equally be counted as three separate process innovations. In the case of institutional innovations each structural

change will equally be counted as separate institutional innovations (The insurer, December 2012).

1.1.2 Financial Innovations and Financial Performance

Financial performance is the outcome of all of the organization's operations and strategies in relation to increases in sales, profits, and return on equity (Wheel and Hunger, 2002).Financial performance measurement systems provide the foundation to develop strategic plans, assess an organization's completion of objectives, and remunerate managers (Ittner and Larcker, 1998). It is also essential for the survival of firms in the competitive and uncertain environment and therefore managers are eager to learn how the adopted innovations are related to the organization's performance (Sousa and Voss, 2002).

Traditionally, the financial performance of financial institutions has been measured using a combination of conventional accounting measures of profitability and risk return. The two main items used to measure financial performance are the firm's market share within the industry and its profitability as indicated by the return on investment, net profit margin and return on assets. Return on investment considers the annual return per unit of investment while net profit margin indicates the company’s ability to generate profits from the sales revenue. Return on assets however measures the company’s ability to generate profits by utilizing the total assets owned by the company. For the purpose of this study return on assets shall be used to measure performance because it indicates the efficiency level of management in utilizing the available assets to generate profits (Abdul and Kazemi, 2009).

Langerak et al (2004) found a strong relationship between financial innovations and performance while Kotler (1991) mentioned that corporate revenue return hit more than 50% on account of innovations. Financial innovations lead to increase in competitive advantage. When the level of innovations is high financial institutions will attempt to develop products

in a short time and respond quickly to the new product introduced by their competitor in order to overcome the competitive threat (OECD, 2005).Financial innovations thus lead to increase competitive advantage.

The indirect effects of financial innovations can lead to improvements in production and market performances through the ability to respond quickly to market forces, develop and launch new products with a lower lead time. Customer loyalty, market share and sales volume is also positively impacted by the effectiveness of new product developments and the ability to successfully launch the new product. New and improved products, new processes, and new organization structures enable an organization reduce their costs of production, better satisfy their customer's needs and yield higher profit margins. The impact of financial innovations can be measured by analyzing the extent to which the new product, new process or new institution created enhances efficiency through reduction in costs, improves customer satisfaction or market share, and improves return on assets and the general profitability of the firm.

1.1.3The Insurance Industry in Kenya

The Kenya's insurance industry is dynamic and resilient. Insurance penetration remains dismally low in Kenya by international standards in spite of a wealth of insurance packages and agents a situation that leads to both health and financial problems for the uninsured in the event of accident or emergency. Premiums in both life and non-life segment were about 20 percent higher in 2012 than in 2011. This is in sharp contrast to countries like South Africa, with a 9 percent penetration or Malaysia, which has an estimated 41 percent of the population covered by some form of life insurance.

Despite the country's various economic and political problems, the industry has shown it can survive and thrive on the backdrop of adoption of ICT, growth in financial literacy,

innovation in product offering, improving operation efficiencies and reducing loss ratio. Particularly encouraging is the development of a local life insurance industry, which accounts for about a third of total premiums. The non-life segment has moved beyond motor insurance while the micro-insurance products are developing and are ready for the regulatory and economic environment to improve their selling potential. The industry is banking on the goodwill of EAC member states to reciprocate the opening up of insurance companies' ownership to Kenyans as stipulated in the common market treaty of 2010 to enable its expand the market for locals even though it is not clear when Tanzania, Uganda, Rwanda and Burundi will also remove restriction on foreign ownership of insurance brokers. In the Insurance Amendment Bill 2013, Treasury has proposed removal of restriction on ownership of insurance brokers to Kenyans by allowing EAC citizens to also own these firms if they meet the regulator's requirements.

There are 47 insurance companies in Kenya–two are under receivership and 4,576 registered insurance agents, yet a paltry 3 percent of Kenyans have insurance cover. Companies that have collapsed in recent years include Concord, Kenya National Assurance, Invesco, United Insurance, Stallion, Lakestar, Access Insurance and Blue Shield among others. Out of all these, only Invesco has been revived so far. Concord and Blue Shield are at various stages of statutory management while the others like United and Standard Assurance are embroiled in court cases after disagreements over the report and recommendations of the statutory managers. The insurance companies facilitate efficient allocation of risk bearing by providing risk pooling and risk sharing opportunities for both the households and companies and also hedge against loss in value of human life, physical property and financial assets.

The top ten (10) insurance companies in Kenya based on market share, gross premium, customer satisfaction, innovativeness, network distribution, asset base, profitability,

expeditious settlement of claims and product portfolio are; Jubilee Insurance Company, Kenindia Assurance Company, APA Insurance Company, Britam, UAP Insurance, Insurance Company of East Africa, Co-operative Insurance Company, Chartis Kenya Insurance, Heritage Insurance Company and CFC Life. During insurance awards 2013, UAP insurance emerged the overall winner at the awards ceremony, clinching the General Insurer of the year for the second year running. The company also won the consumer satisfaction award and the socially responsible corporate award. Jubilee Insurance clinched seven awards and led in five categories including, ICT, risk management, fraud detection, prevention initiatives, medical insurance underwriter and composite insurer of the year awards. Other winners were Kenindia Assurance, feted for having the greatest absolute profit jump, Corporate Insurance, Madison Insurance, CFC Life Assurance and Chancery Wright Insurance brokers, being feted with the lifetime achievement award. The awards are held annually by research firm in partnership with Standard Media Group and auditing firm PKF to recognize best practice in the country's insurance industry.

The industry is regulated by the Insurance Regulatory Authority (IRA), a semi-autonomous regulator, set up in 2008. IRA is expected to improve regulation and stability of the industry. The Authority has continued to emphasize on innovation and embracing technology in the insurance industry as the most fundamental step to achieving increased penetration of insurance services and efficiency in operations. IRA facilitated amendment of the law to allow for online submission of returns to improve efficiency in the industry. Further the Authority has facilitated payment of licensing fees by agents via the use of mobile money transfer mechanisms. It also focused on the Micro-Insurance sector which provides insurance products to the untapped mass market of the country. The industry operates under an umbrella body, the Association of Kenya Insurers (AKI), which was established in 1987. Before then, it was called the Insurance Association of Eastern Africa. Membership is open to

any registered insurance company. Its main objective is to promote prudent business practices, create awareness among the public and accelerate the growth of insurance business in Kenya. At the apex of the insurance sector are two reinsurance companies, the quasi-public Kenya Reinsurance Corporation (Kenya Re) and East African Reinsurance Company.

Although insurance companies are small organizations by most standards, they are innovative and clearly understand the needs and challenges of their customers. Initiatives that have been announced in recent months include agricultural risk products that cover farmers against the impact of natural disaster, facilities to pay premiums via mobile phones and takaful. Another indicator of the potential for the non-life segment is that Kenya is one of only four countries in Africa (the others being South Africa, Egypt and Uganda) in which global property and casualty insurance giant AIG has an on-the-ground presence. Non-life penetration exceeds 2%, which is a high level for a country with Kenya's low per capita income. (The Kenyan insurer: December 2012).

1.2 Research Problem

As a result of intense international competition, fragmented and demanding markets and the rapidly changing technologies, innovations have become one of the most relevant factors for insurance companies. Financial innovations enable institutions to build capabilities, remain competitive and become a market leader. Financial innovations also provide new service delivery channels such as internet, mobile phones and third party agents that enable the industry to remain competitive and reduce operating costs. The results of innovation thus provide a transitory competitive advantage that allows firms to achieve higher sales and firm growth (Damanpour and Evan, 1984; Schulz and Jobe, 2001).

Until the late 1970's, the insurance industry in Kenya which dates back to the establishment of the colonial rule, operated in a rather stable environment. There was little demand for

services and the products offered were quite standardized, government supervision was minimal and competition was relatively low. However, over time the situation has changed. Increased cost of production has cut down the industry's profit thus increasing the need for insurance companies to introduce financial innovations that will cut down on the high costs. Competition have also increased necessitating companies to come up with new products to enable them differentiate themselves from the competitors. Another motivation for innovation is the advancement in technology, banking sector and internet distribution that has made it possible for insurance companies to engage other distribution channels for instance use of banks, mobile and internet. The amendments to the Banking Act Cap 488 in 2012 introduced new concepts like banc assurance and agency banking which created an opportunity for the insurance companies to introduce banc assurance in its product portfolio. Similarly, the government through its legislation has also motivated financial innovations in the industry as witnessed by the insurance bill 2012 which introduced micro-insurance as a new class of business for the insurance companies. This has necessitated the introduction of micro-insurance in the insurance product portfolio to cater for the vast low income market segment and also the development of new distribution channels like virtual marketing to penetrate the market.

In Paris, Geroski (2005) examined the effects of innovations and patents to various corporate performance measures such as accounting profitability, stock market rates of returns and corporate growth and found out that the direct effects of innovations on firm performance are relatively small and the benefits are more likely indirect. Wolff and Pett (2004) and Walker (2004) conducted comparative research on the effects of product and process innovations on firm performance in the USA and indicated that particular product improvements are positively associated with firm growth. Aduda and Kingoo (2012) investigated the relationship between e-banking and performance of Kenyan banking system and found out

that there exist positive relationship between e-banking and bank performance in the Kenyan banking Industry. Makini's (2010) study on the relationship between financial innovation and financial performance of commercial banks in Kenya found out that financial innovations improved the operations, improved liquidity and asset quality of the commercial banks. Among the studies identified none of them studied the relationship financial innovation and performance of insurance companies. The insurance industry however plays a very key and unique role in the financial services sector. This study will seek to investigate the relationship between financial innovations and financial performance of insurance companies in Kenya. In order to study this problem the following research question were addressed;

i. What financial innovations have been introduced by insurance companies in Kenya?
ii. What is the relationship between financial innovations and financial performance insurance companies in Kenyan?

The following hypothesis was used to test the significance of the regression model;

H_0: None of the financial innovations is a significant predictor of financial performance of insurance companies in Kenya ($\beta1= \beta2= \beta3 = 0$) and;

H_1: At least one of the financial innovations is a significant predictor of financial performance of insurance companies in Kenya ($\beta1= \beta2= \beta3 \neq 0$).

The decision criterion was if the P value is greater than 0.05 then accept the null hypothesis that none of the financial innovations predict the return on assets of insurance companies in Kenya.

1.3 Objectives of the Study

The objectives of this study were;

i. To describe the financial innovations in the insurance companies in Kenya.
ii. To determine the nature and strength of the relationship between financial innovations and financial performance of insurance companies in Kenya.

1.4 Value of the Study

The study will be used by the government and industry regulators to understand the types of financial innovations in the insurance industry so as ensure that the regulations that exist cover all the innovations and no gap exists. As a main player in registering and regulating the insurance industry this study will help them gain an understanding on the future of the industry and guide their decision making.

The study will inform investors about the recent trends in the insurance industry in respect to new insurance products and processes for them to invest in and enjoy the first mover advantage before the products are known to the rest of the market. This understanding will also assist the investor to re-think their investments in line with the emerging insurance products, processes and institutions.

To the researchers the study will build on the existing body of knowledge and form basis for further research work. Researchers who wish to study the area of financial innovation will be made aware of the relationship between financial innovation and performance of insurance companies and the financial innovations introduced by the Insurance companies in Kenya. This can prompt them in conducting further studies on financial innovation in future, and thereby adding to their existing knowledge on financial innovation.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on theories of financial innovations, determinants of financial innovations, empirical studies on financial innovations and summarizes the literature review.

2.2 Theoretical framework

2.2.1 Financial Innovations in the Insurance Industry in Kenya

Within the present economic environment, the needs and the demands of the insurance industry participants are rapidly changing. Through the use of cheaper, flexible financial instruments and that of new effective techniques to handle risk, financial innovation has significantly improved the insurance companies' effectiveness. Financial innovations in the Kenyan insurance market can be defined as improvements to the existing products, existing processes or development of new institutions to meet the needs of the market and upcoming developments. While profitable growth is the key to success in a mature industry like insurance, it can be prohibitively difficult to achieve through conventional strategies simply because the industry is mature (Deloitte, 2008). It is vital that insurance executives take a fresh look at the industry and seek fundamental change at all levels of the organization, from its people strategy to its client and product strategy to its processes and infrastructure achieving these will be difficult is appropriate innovation strategy is not put in place (Carrie, 2008).Financial innovations can be categorized as product, process or institutional.

2.2.1.1Product Innovations

Product innovations in the insurance market in Kenya can be defined as new products or improvements to the existing products to meet the needs of the market and upcoming developments. Examples include; micro-insurance products and agri-insurance. Micro insurance is an insurance that operates by risk-pooling, is financed through regular premiums

and is tailored to the poor who would otherwise not be able to take out insurance (Churchill, 2006). Agri- insurance insures farmers against losses accruing from bad weather conditions.

Product innovations are specific to the insurance company and they are created to differentiate an insurance company from the other. A product may thus have similar characteristics but different names based on the company of origin. For example micro-insurance products come in different names but are all characterized by low premium and are accessed by the low income population (Insurance sector report quarter one, 2013).

2.2.1.2 Process Innovations

New business processes have been created in the insurance industry in Kenya mainly due to the expansion of technology, the creation and negotiation of new securities, products, services and purchases. The complex relation between compatible organizations has also led to the creation of new processes. Examples are; worksite marketing, telemarketing, virtual marketing and invisible insurer. Telemarketing is the process of selling, promoting or soliciting a product or service over the telephone. The biggest advantage of telemarketing is that it involves human interaction that facilitates an immediate feedback mechanism as insurers access distribution networks, telephone companies gain detailed information on customers and an opportunity to increase customer loyalty.

The invisible insurer is whereby insurance policies are sold as an add-on product leveraging the brand of the retailer and the risk is carried by the insurance company which underwrites it for example crop insurance for agricultural loans. Virtual Marketing involves the use of electronic kiosk stands whereby a customer enters basic information such as name, gender, type of policy and amount to be insured and the system generates a quote with the customer having an option to approve and make a payment. Virtual marketing is ideal methods of selling complementary policies to existing services for example travel insurance, motor

insurance, health insurance and banks selling insurance products through ATMs (Insurance sector report quarter one, 2013).

2.2.1.3 Institutional Innovations

Institutional innovations relate to changes in business structures or setting up a new service structure. They have been brought about by advancements in technological and communication channels, banking sector laws and internet distribution channels and thus affect the entire financial structure. Examples of institutional innovations include; banc assurance, partnering with NGOs/ other community based organizations, creation of mobile branches and new financial institutions. Banc assurance is a strategic alliance between the banks and the insurance companies where insurers enter into distribution agreements with banks to promote insurance products. Banc assurance has been embraced by a few banks in Kenya such as Equity Bank, National bank and Family Bank though there is need to develop this channel further to get optimal benefits. Distribution alliances between an insurance company and a bank enables insurance firms to penetrate the marker since banks have the advantage of a large customer base and better reputation than insurers.

Partnering with Community Based Organizations is appropriate for micro insurance which is characterized by low premium and is accessed by the low income population. These products can be distributed by partnerships with NGOs who identify and appoint micro agents mainly within self-help groups. Another form of partnerships involves partnership with other insurance companies and social welfare groups to lower overall costs and increase subscription rates. For example, the partnership between Changamka Micro-Health and Pumwani Maternity Hospital has lowered the overall cost of delivery, with expectant mothers paying KES3,000 (US$37.06) – one of the lowest child delivery charges in Nairobi.

New institutions involves creation of branch network through adoption of mobile branches, customized institutions among others .The use of mobile branches involves taking insurance services to the people by having mobile offices on a weekly basis to reduce expense on time and travel to headquarters. Another form of new institution is Takaful Insurance of Africa. Takaful which is administered as per the Sharia laws of financial transactions operates under the mutual and solidarity principles where policy holders pool together premium in a collectively owned risk fund that meets the claims and other policy holder benefits(Insurance sector report quarter one, 2013).

2.2.2Financial Innovation Theories

In this section the researcher reviews the various financial innovation theories developed to explain why financial innovations occur. For the purpose of this study the transaction cost theory, Merton's market efficiency theory, Miller's regulation and taxation theory and constraint-induced financial innovation theory will be discussed.

2.2.2.1 The Transaction Cost Theory

According to the folk history of transaction costs, the concept of transaction cost theory is due to a seminal article by Ronald H. Cease, written in the 1930s. Coase (1937) argue that the transactions cost theory of the firm focuses on problems of asymmetric information involved in transactions. According to this theory the firm comes into existence because it successfully minimizes 'make' inputs costs through vertical integration and 'buy' inputs costs using available markets. The more specific the inputs that the firm needs are the more likely it is that it would produce them internally and/or acquire them through joint ventures and alliances.

Hicks and Niehans (1983) argued that the dominant factor of financial innovation is the reduction of transaction cost, and in fact, financial innovation is the response of the advance

in technology which caused the transaction cost to reduce. The reduction of transaction cost can stimulate financial innovation and improve financial service. This theory studied the financial innovation from the perspective of microscopic economic structure change and provided that the motive of financial innovation is to reduce the transaction cost. The theory provides that the radical motive of financial innovation is the financial institute's purpose of earning benefits. For the purpose of this study this theory will be adopted.

Merton (1989) discusses how the presence of transaction costs provides a critical role for financial intermediaries. Many of the process innovations in payment systems technologies are aimed at lowering transaction costs. ATMs, smart cards, and many other new businesses are legitimate financial innovations that seek to dramatically lower costs of processing transactions. By some estimates, these innovations have the potential to lower the cost of transaction between buyers and sellers. History shows that as marketing costs fall, financial innovations exploit the easier access to buyers and sellers of securities. The weakness of this theory is that it does not take into consideration agency costs or firm evolution; neither does it explain how vertical integration should take place in the face of investments in human assets with unobservable value that cannot be transferred.

2.2.2.2 Merton’s Market Efficiency Theory

Merton’s market efficiency theory is based on the notion that financial innovations are motivated by forces designed to increase market efficiency and improve social welfare. Merton (1990) argued that the market is not perfect hence financial institutions must innovate to improve market efficiency. Merton (1990) gives three motivations for introducing innovations namely, the creation of new financial strictures that allow risk sharing, risk pooling and hedging as well as new structures for transferring resources, to improve economic efficiency and liquidity and to reduce agency costs.

In incomplete financial markets, not all the needs of investors are met Horne (1985). Adverse selection, moral hazards, high transaction costs and information asymmetries, may prevent agents from entering into agreements to share risks. However, introduction of financial innovations shields individuals from risks associated with market imperfections. According to Harris and Raviv (1989), financial innovation exists to address inherent agency concerns and information asymmetries and thus they explores on ways to better align the interests of different parties or to force the revelation of private information by managers. Persistent conflicts of interest between outside capital providers and self-interested managers, and asymmetric information between informed insiders and uniformed outsiders, leads to equilibrium in which firms issue a multiplicity of securities.

Uncertainty in the international financial market has caused disorders but has also encouraged companies and intermediaries to innovate by offering to their customer's new products to direct or even by advising them to take advantage of new risks (Calomiris, 2009). Through this process, financial organizations ameliorated their evaluation and the way they handle asset and investment risks along with external risks. In this way, a financial institution handles more effectively risks with the help of financial instrument innovations.

2.2.2.3 Miller's Regulation and Taxation Theory

Miller's regulation and taxation theory attributed the developments of many financial innovations to attempts to alter the amount and timing of taxable income. Miller (1986) urges that major financial innovations in the last 20 years were almost exclusively as a result of changes in tax laws and other regulations. Miller (1986) also noted that financial innovation is as a result of regulatory barriers and desire of financial firms to avoid the impact of regulatory constraints. This theory is supported by one of the Modigliani-Miller proposition that states that taxes and regulations are the only reasons for investors to care what securities

firms issue whether debt, equity or any other form of security. When a deregulation is noticed in the financial markets a clear differentiation between financial institutions, commercial banks, saving and loan associations will not be feasible and therefore financial innovations becomes the necessary survival instrument.

Miller (1986), Tufano (1997) and Santangelo (1997) argue that the major impulses to successful innovations have come from regulation and taxes as this spurs the need to circumvent regulations and legislation giving rise to new financial products. Tax driven innovations include Euro Bonds and are designed to be free of withholding tax, and include many features that offer tax advantage to issuers as well as investors. According to Campbell (1988), to the extent that a tax system levies differential taxes on different streams of income or on different categories of assets, the higher taxed parties will seek ways of reducing their taxes and hence a financial innovation will follow. Higher levels of taxation will yield a larger flow of innovation. Campbell (1988) urge that regulation is a two edged sword. On one hand, some forms of regulation must inhibit innovation. For example, if a regulation prevents commercial banks from owning insurance companies and vice-versa, then whatever innovations might arise from joint ownership and operation will not occur. If cross ownership is prevented, then banks will have the incentive to create insurance like products and services. This observation is consistent with academic debate as to whether regulation has stimulated or impeded innovation.

Bodie (1990) observed that regulation and innovation are intricately linked since regulation is a major cause of innovation whilst innovation sometimes leads to a need for new regulations. Regulation can lead to financial innovation by creating incentive for firms and banks to evade regulations that restrict their ability to earn profits. Innovation can occur when the authorities change the operational rules of the financial markets so as to permit activities previously

forbidden. Strictly, this is usually re-regulation since one regulatory code replaces another even though the new regime is more liberal.

2.2.2.4 Constraint-Induced Financial Innovation Theory

American economist Silber (1983) advanced constraint-induced financial innovation theory. This theory pointed out that the purpose of profit maximization of financial institution is the key reason of financial innovation. Silber (1983) argues that there are some restrictions including external handicaps such as policy and internal handicaps such as organizational management in the process of pursuing profit maximization and though these restrictions not only guarantee the stability of management, they reduce the efficiency of financial institution, so financial institutions strive toward casting them off.

According to this theory financial innovations occur because agents in market are searching for new ways to make profits, such as circumventing regulations. A change in the economic environment will stimulate a search for innovations that are likely to be profitable. Regulation can lead to financial innovation by creating incentive for firms and banks to evade regulations that restrict their ability to earn profits. Kane (1982) describes this process of avoiding regulations as "loophole mining". The economic analysis of innovation suggests that when regulatory constraints are so burdensome, avoiding them results to firms making large profits, and loophole mining and innovation are more likely occur.

According to Knoll (2001) financial innovation could be an answer to taxation and regulatory constraints. If we think of taxes and regulations as imperfections, then higher taxation and the need to get around constraints will increase the flow of innovations. Gergen & Schmitz (1997) urge that every country's fiscal policy intends to the conditioning of different income pro rata tax rates. If a country doesn't change its fiscal policy for a certain time, the resulting equilibrium won't motivate innovation. When governments alter the existing fiscal structure,

financial innovations are created in order to overcome difficulties created by the new fiscal framework. Hence, a new internal fiscal equilibrium is achieved and thus new innovation opportunities are presented.

2.2.3 Determinants of Financial Innovations

Rising globalization and instability are phenomena that require the creation of financial innovations. Because of globalization, companies, investors and governments are exposed to new risks stimulating the need for financial innovations to assist in management of these risks. On the other hand, globalization gives room for more potential investors and allows investors to evolve horizontally and towards different groups and territories (Finnerty, 1992).Changes in the international financial environment and the increasing integration of domestic and international financial markets also lead financial innovation.

According to Kihumba (2008) technology and heavy competition are the major drivers of financial innovations. Technology defines the organizations range of the possible future and provides an organization with some environmental constraints that determines the kind of competitive weapon, product and market that they will face (Koech 2009). Competition among the market players has seen all players trying to come up with new products, ideas and services in effort to create competitive advantage. Gitonga (2003), in his study on the innovation process and the perceived role of the CEO found that 39% of the CEOs consider innovation as the most important factor in achieving completive advantage.

The constant development of academic research and of technology is an important push for the creation of financial innovation. A number of new forms of financial products, services and processes were created because the new assessment methods of security yields and their risk gained the trust of companies and managers. New methods for portfolio and shares management and for the assessment of secured stocks, new ways for transactions, new means

of managing risk and new evaluation techniques, facilitated evaluations and processes with the means of technological and IT innovations. Technological progress, IT and telecommunication improvements brought and continue to cause changes in a series of products and services, prompting the realization of financial innovation ideas (Kane, 1986).

Macroeconomic instability can be considered the stimulus of innovation (Citanna & Schmedders, 2005). Because inflation and interests are unstable, new products are designed in order to either reduce risk or protect economic agents from risk. A changing inflation and interest environment creates the demand for different types of products. Partly, a tendency for high asset negotiability is the result of interest mutability. Changes in the level of economic activity could motivate financial innovations. During economic welfare, financial institutions are open to new ideas. Nevertheless, during economic recession the accent is on reduction of risk and liquidity. The change in economic activity affects not only the volume and the type of capitals that are needed, but also the financial institutions' attitude towards risk.

2.5Empirical Framework

Abdul and Kazemi (2009) investigated whether firm innovation characteristics and patenting activity are incrementally informative in terms of predicting future financial performance for a sample of publicly traded U.S. based firms. Firm innovative characteristics were measured by R& D, goodwill and intangibles. A sample of 210 high tech firms was used. Results from the study indicated that goodwill and intangibles can directly predict financial performance while R&D does not directly predict financial performance. This study provides additional empirical evidence that support the notion that various patent measures are useful output indicators of R&D. Investors, for example, may better evaluate the benefits obtained from R&D investments, if they can observe an important step in the innovation process. Results also show that firm innovative characteristics in particular technology strength, is a strong

predictor of three profitability measures (ROA, ROS, and ROE). The study findings revealed a positive relationship between innovation characteristics and financial performance.

In USA, Nnanna (2009) studied the impact of innovation and change in public and private companies and its relationship to the overall net income or losses in the respective companies. The study compared the method of innovation introduced and its impact on the overall net income or losses for the fiscal year of the respective companies. Also, the leadership in the companies was examined to understand the relationship between leadership and innovation. In studying the relationship between good leadership and innovation and its impact to companies' bottom line, the researcher tested two hypotheses: The results for the first hypothesis; "under favorable economic conditions companies with good leadership easily implement innovation and have favorable bottom line figures" for all companies based on the surveyed results demonstrate that under favorable economic conditions companies with good leadership easily implement innovation and have favorable bottom line. The results for the second hypothesis, under favorable economic conditions employees that are open to Innovation and Change in Public and Private Companies directly translates to a favorable bottom line, for all companies also demonstrates that under favorable economic conditions employees that are open to innovation and Change in Public and Private Companies directly translates to a favorable bottom line. The results for all the four companies studied therefore indicated innovation is positively related to the overall revenues and net income for the fiscal year.

Makini (2010) sought to establish the relationship between financial innovation and financial performance of commercial banks in Kenya. The study used secondary data which was analyzed using descriptive statistics. The study conducted a census survey of all the 45 commercial banks licensed by the Central bank of Kenya in 2009 and found out that financial

innovations improved the operations, improved liquidity and asset quality of the commercial banks. Aduda and Kingoo (2012) investigated the relationship between e-banking and performance of Kenya banking system. The study used secondary data which was analyzed using both descriptive and inferential statistics. In the study performance was measured by return on assets while e-banking was measured by the number of ATMs and number of credit cards issued to customers. The study findings revealed that e-banking has strong and significance marginal effects on returns on asset in the Kenyan banking industry and therefore concluded that there exists positive relationship between e-banking and bank performance.

Kiraka, Kobia and Katwalo (2013) sought to examine the growth and innovation in micro, small and medium enterprises in Kenya by assessing the performance of the Women Enterprise Fund (WEF). The study used qualitative and quantitative research methodologies and a sample of fourteen constituencies in four Counties – Kakamega, Nairobi, Nakuru and Nyeri. Study findings show that although the general indicators reflect positive growth among women owned businesses in terms of total business worth, turnover, gross profit and number of employees, they obscure incidences of stagnation or decline in growth. Incidences of decline or stagnation were significant at between 15 to 30 percent across the four measures. The most common form of innovation was observed in the change or addition of new products in the post loan period. Innovations in terms of services, markets and sources of raw materials were, however, less common among women owned enterprises.

Gakure and Ngumi (2013) conducted a descriptive survey to establish the influence that bank innovations have on profitability of commercial banks in Kenya. Bank innovations were measured by automated teller machines, debit and credit cards, point of sale terminals, mobile banking, internet banking and electronic funds transfer while profitability was measured by

profit before tax. The study results showed that bank innovations have a moderate influence on profitability of commercial banks in Kenya. The analysis produced a coefficient of determination of 47.8% which shows the percentage of variations in profitability which is explained by bank innovations. The significance test showed that influence of bank innovations on bank profitability was statistically significant. This means that the combined effect of the bank innovations in this research is statistically significant in explaining the profits of commercial banks in Kenya.

2.6 Summary of Literature Review

Abdul and Kazemi (2009) and Nnanna (2009) studies in the USA indicted a positive relationship between innovations and performance of public and private companies. Makini (2010), Aduda and Kingoo (2012) and Gakure and Ngumi (2013) provide evidence of a positive relationship between financial innovations and performance of Commercial banks in Kenya. While Kiraka et al (2013) found out that financial innovations positively affect performance of Women Enterprise Fund in Kenya.

The literature identified provided insight in to how different financial innovations adopted affect performance in the context of other institutions other than the insurance companies. However, due to contextual, sectorial and legislative differences affecting innovations among the organizations the studies may not be assumed to explain the effects of financial innovations on financial performance of insurance companies. It is in light of these that the study will investigate the relationship between financial innovations and financial performance of insurance companies.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used in carrying out the study. The chapter covers the research design, population, data collection and data analysis**.**

3.2 Research Design

The study used a descriptive survey research design. Descriptive research design was considered appropriate as the study investigated the relationship between insurer's financial performance and investment in financial innovations (Chandran, 2004).

3.3 Population and Target Population of Study

The population of interest in this study consisted of all 47 insurance companies operating in Kenya. In pursuance of the objective of the study; attention focused on all insurance companies. However, only 30 insurance companies; 64% of the target population responded to the data request. The respondents included managers in research and development, sales and marketing, finance and administration and underwriting departments.

3.4 Data collection

Both secondary and primary data covering a period of five years from 2007 to 2011 was collected. Secondary data was obtained from the published financial statements of the respective insurance companies sourced from the insurance companies websites, AKI, CMA, and NSE while primary data was collected using a questionnaire developed and administered by the researcher personally to the managers in research and development, sales and marketing, finance and administration and underwriting departments in the target insurance companies.

3.5 Data Analysis

The study used descriptive statistics to analyze the data with the help of statistical package for social scientists (SPSS).In order to test the relationship between the variables Pearson Product-Moment Correlation Coefficient and regression analysis were used. The Pearson Product-Moment Correlation Coefficient as a measure of association was used to examine the strength of the relationship between the financial innovations and financial performance of insurance companies in Kenya while the multiple regression model $Y=\beta_0+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \varepsilon$ was used to evaluate the relationship between financial innovations and financial performance of the insurance companies in each of the five years that will be studied. In the model;

Y is financial performance represented by return on assets,

X_1 is process innovations measured by investment in new production or delivery method,

X_2 is product innovations measured by investment in new or improved product or service,

X_3 is institutional innovations measured by investment in new business structures or setting up a new service structure.

B_i , i= 1, 2, 3 are the slope coefficients whose sign will depict the relationship between return on assets as a measure of financial performance of insurance companies and financial innovations proxied by investment in process innovations; products innovations and institutional innovations.

$\beta_{0\ is}$ a constant which represents the regression intercept

ε is the error term

To test the significance of the regression model F statistics was used. T statistics was however used to test the significance of the individual variables.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter shows the findings of the study based on the data collected from the field. The analysis focused on describing financial innovations introduced and establishing the relationship between financial innovation and financial performance of insurance companies in Kenya.

4.2 Financial Innovations by Insurance Companies in Kenya.

This section outlines the findings on the financial innovations introduced by insurance companies in Kenya.

4.2.1Product Innovations

This section of the study sought to establish the product innovations introduced by the respondent's insurance companies.

Table 4.2.1 Product Innovations

	Frequency	Percentage
Takaful	0	0%
Agri-insurance	24	80%
Micro- insurance products	30	100%

Source: Research Data (2013)

The study shows that 100% of the respondents indicated that their insurance companies had introduced a micro-insurance product while 80% of the respondents indicated that their insurance company had introduced agri-insurance products. Takaful products had not been introduced by the respondents. Takaful is administered as per the Sharia laws of financial transactions and operates under the mutual and solidarity principles where policy holders pool together premium in a collectively owned risk fund that meets the claims and other

policy holder benefits.

4.2.2 Process Innovations

This section of the study sought to establish the process innovations introduced by the respondents. The researcher established that the most prevalent form of process innovations in the insurance industry in Kenya is worksite marketing, telemarketing, and office automation which were represented by 100%, 90% and 80% respectively. The respondents also revealed that 60% their insurance companies had adopted Bancassurance, while 50% had adopted virtual marketing. Use of smart cards was represented by 43%.

Table 4.2.2: Process innovations

	Frequency	**Percentage**
Banc assurance	18	60%
Smart cards	13	43 %
Office automation	24	80%
Telemarketing	27	90%
Virtual marketing	15	50%
Worksite marketing	30	100%

Source: Research Data (2013)

4.2.3 Institutional Innovations

This section sought to establish the institutions innovations introduced by the respondents. The researcher found that the widely adopted institutional innovations are development of new branch network, strategic alliance with banks and satellite offices which were represented by 100%, 80%, and 70% respectively. Mobile branches, partnership with NGO's, partnership with CBO's and creation of new insurance companies are not widely adopted by the insurance companies as only 37%, 29%, 40% 30% respectively indicated that their

insurance companies had adopted them.

Table 4.2.3 Institutional innovations

	Frequency	Percentage
Mobile branches	11	37%
Partnership with NGO's	8	29 %
Partnership with CBO's	12	40%
New branch networks	30	100%
New insurance companies	9	30%
Strategic alliances with banks	24	80%
Satellite offices	21	70%

4.3Nature and Strength of Relationship between Return on Assets and Product, Process and Institutional Innovations

In order to establish the nature and strength of the relationship between financial innovations and financial performance of insurance companies Pearson correlation and regression analysis was carried out.

4.3.1 Correlation Matrix

Table 4.3.1 presents the correlations between variables. The table shows that there is a positive correlation between return on assets and product innovations (.522), process innovations (.597) and institutional innovations (.239). The P values are .183, .144 and .399 respectively. This indicates that none of the product, process and institutional innovations is a significant predictor of return on assets of insurance companies in Kenya since the P values are all greater than 0.05.

Table 4.3.1 Correlations between Variables

		ROA	Product Innovations	Process Innovations	Institutional Innovations
Pearson Correlation	ROA	1.000	.522	.597	.239
	Product Innovations	.522	1.000	.981	.573
	Process Innovations	.597	.981	1.000	.616
	Institutional Innovations	.239	.573	.616	1.000
Sig. (1-tailed)	ROA	.	.183	.144	.349
	Product Innovations	.183	.	.002	.156
	Process Innovations	.144	.002	.	.134
	Institutional Innovations	.349	.156	.134	.
N	ROA	5	5	5	5
	Product Innovations	5	5	5	5
	Process Innovations	5	5	5	5
	Institutional Innovations	5	5	5	5

4.3.2 The Regression Analysis

From table 4.3.2.1 the β coefficients are -0.160, - 2.722, +1.434, and - 1.477 for β0, β1, β2 and β3 respectively and therefore the regression equation is; Y = -0.160 - 2.722X1 +1.434X2 - 1.477X3 which infers that, taking all the three financial innovations into account at constant zero, the return on assets of insurance companies in Kenya will be -0.160. The data findings analyzed also show that taking all other independent variables at zero, a unit increase in product innovation will lead to a -2.722 decrease in ROA of the insurance companies, a unit increase in process innovations will lead to 1.434 increase in ROA of insurance companies in Kenya while a unit increase in institutional innovations will lead to a 1.477 decrease in ROA of insurance companies in Kenya. This infers that process innovations contribute positively to return on assets while product and institutional innovations contribute negatively to the return on assets of insurance companies in Kenya.

Table 4.3.2.1 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.160	.264		-.605	.653
	Product Innovations	-2.722	.000	-1.989	-.542	.684
	Process Innovations	1.434	.000	2.739	.718	.604
	Institutional Innovations	-1.477	.000	-.309	-.345	.789

a. Dependent Variable: ROA

As indicated in table 4.3.2.2 the value of R which represents the correlation coefficient is 0.724 indicating that there is a high degree of correlation between the independent variable; investment in product, process and institutional innovations and the dependent variable return on assets. R Square also called coefficient of determination is 0.524 which indicates that 52.4% of the variation in return on assets of insurance companies in Kenya can be explained by the three independent variables that were studied (product, process and institutional innovations). This means that other factors not studied in this research contribute 47.6 % of the return on assets of the insurance companies in Kenya.

Adjusted R squared, also called the coefficient of multiple determination is the percentage of the variance in the dependent variable explained uniquely or jointly by the independent variable. From table 4.3 below adjusted R squared is -0.906 which indicates that 90.6% of the variance in return on assets is explained uniquely or jointly by product, process and institutional of insurance companies at a confidence level of 95%.

Table 4.3.2.2 Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.724[a]	.524	-.906	.008477	.524	.366	3	1	.803

a. Predictors: (Constant), Institutional Innovations, Product Innovations, Process Innovations

4.3.3 Test of significance

The t-values in the coefficients table 4.3.2.1 above indicate the variable's statistical significance. The p value for product innovation, process innovation and institutional innovation is 0.684, 0.604 and 0.784 respectively. All the values are greater than 0.05 and therefore the independent variables are not significant predictors of the dependent variable.

The F-statistics was used to test the significance of the whole regression model. From the results in table 4.3.2 above, the F- change at 5% level of significance and 3 degrees of freedom is 0.366 while the significance of f change is 0.803. Since 0.803 is greater than the P value (0.05), the overall model is not statistically significant in predicting how product innovations, process innovations and institutional innovations affect the financial performance of insurance companies in Kenya.

4.3.4 Hypothesis Test

The hypothesis test was;H_0: None of the financial innovations is a significant predictor of financial performance of insurance companies in Kenya ($\beta_1=\beta_2=\beta_3= 0$) and;$H_1$: At least one of the financial innovations is a significant predictor of financial performance of insurance companies in Kenya($\beta1= \beta2= \beta3 \neq 0$).The decision criterion was if the P value was greater than 0.05 then accept the null hypothesis that none of the independent variables predict the dependent variable. From table 4.3.2.2the Sig. F change which is the P values 0.803 and therefore the null hypothesis is accepted as the P value is greater than 0.05.Product, process and institutional innovations are therefore not significant predictors of financial performance of insurance companies in Kenya.

4.4 Discussion

An increase in investment in process innovations by one Kenya shillings leads to insurance companies return on assets increment by 1.434.This shows that improving processes in the

insurance sector allows insurance companies conduct their transactions more efficiently and market their products more effectively. For example creation of automated customer relationship management systems improve client management and reduce operating costs. This allows firms to achieve higher sales, growth in market share and improves customer loyalty and satisfaction.

An increase in investment in product and institutional innovations leads to a decline in the insurance company's profitability by 2.722 and 1.477 respectively. This indicates that not every new product or organization structure translates into positive returns. Many products despite costing huge capital outlays have failed in the market and thus in the long run have not contributed to the company sales. These factors can be attributed to the results revealed by this study that financial innovations measured by investment in Kenya Shillings on new products, new processes and new institutional structures are not statistically significant in predicating financial performance of insurance companies in Kenya measured by return on assets which is contrary to the research findings in other industries.

Abdul and Kazemi (2009) study on whether firm innovative characteristics predict the future financial performance for a sample of USA publically traded firms showed that firm innovative characteristics is a strong predictor of return on assets. Makini (2010) sought to establish the relationship between financial innovations and financial performance of commercial banks in Kenya and established that financial innovations improved the operations, improved asset quality of commercial banks in Kenya. The realization of the benefits in relation to financial innovations in terms of financial measures could therefore be the reason why the adoption of financial innovation by insurance companies in Kenya has been very low over the years as compared to the other industries.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings on the objectives of the study and draws conclusions and recommendations based on the study findings. It highlights the limitations of the study and provides suggestions for further research in the future.

5.2 Summary of Findings

The study found out that micro-insurance products were the most common product innovation probably due to the vast population that it targets and thus could easily be used to penetrate the insurance market. Agri- insurance policies were fairly available however none of the insurance companies had introduced takaful products as they are viewed by most insurance companies as too vulnerable due to their risk pooling characteristic. It was also established that majority of the insurance companies had automated their office operations and were practicing telemarketing. Worksite marketing was however found to have pioneered other process innovations and all insurance companies were found to be selling their policies through worksite marketing. Important to note was the use of smart card where it was found that they were mostly being used in life policies than in general insurance. The study also found out that all the insurance companies had established new branch networks during the study period as a way of reaching out to the clients. Alliance with banks was also introduced by majority of the companies studied.

The Pearson correlation coefficient analysis results showed a strong positive relationship between return on assets and process and product innovations. However, a weak correlation between institutional innovation and return on assets was observed. From the regression analysis, investment in product and institutional innovations are negatively related with return on assets while investment in process innovations is positively related to return on assets of

insurance companies in Kenya. The regression analysis however showed that there is no significant relationship between financial innovation and financial performance of the insurance companies in Kenya since the F sig, (0.803) is more than the P -value, (0.05)and also the individual variables failed the t- test as the P values from the coefficient table were all greater than 0.05.

5.3 Conclusions

Inferring from the findings in this study it can be concluded that investment in product innovations, process innovations and institutional innovations are positively related to return on assets of insurance companies in Kenya but they are not statistically significant in predicting the return on assets of insurance companies in Kenya. The financial performance of insurance companies measured by return on assets is thus not explained by independent variable, financial innovations measured by investments in new products, new service delivery method and new structures.

This study concluded that there may be other factors affecting financial performance of insurance companies to a great extent other than financial innovation. However there is need for a proactive approach in financial innovation to enhance financial performance. There is also need for insurance companies to create awareness of its products and services to help clients understand and create the needed consumer confidence for insurance product uptake.

5.4 Recommendations

Insurance companies should invest more on process innovations as this will positively affect their financial performance. Caution should however be observed while investing in new products and new institutions as they are negatively related to financial performance of insurance companies. Not all new products translates into revenue and therefore the insurance companies must be focused in terms of their needs and use the right innovation to realize

their strategic goals rather than introduce financial innovations just because other insurance companies have done it.

5.5 Limitations of the Study

The study excluded the insurance companies under statutory management and those that had been in operation for a period shorter than the period under study. The study also covered a relatively short period of time due to constraints of data availability and relied on secondary data from the financial statements and thus may suffer from the inherent results of financial statements.

5.6 Suggestion for Further Research

The research recommends the following areas for further studies: This research was based on financial innovations in the entire insurance industry considering both life and general insurance policy insurers. The researcher suggests that for a conclusive study on the relationship between financial innovations and financial performance of insurance companies in Kenya, a case study should be carried out on a specific class of insurance companies for example those dealing with life policies and determine how the financial innovations have contributed to the net premiums for that particular class.

The research findings indicated that financial innovations are not a significant predictor of financial performance. This is contrary to expectations as the introduction of a new product, a new process or new organization structure is expected to expand the company's product scope and market penetration thus making it more productive and effective which in the long run translates to better financials. The researcher therefore suggests that further research should be conducted using a different measure of financial performance for instance net premiums to determine whether increase in net premiums can be explained by financial innovations.

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APPENDICES

Appendix I: Letter of Authority

Appendix II: Questionnaire

This questionnaire is designed to analyze the relationship between financial innovations and financial performance of insurance companies in Kenya. Information collected from each questionnaire will be used for academic purposes only and the responses will be treated with utmost confidentiality.

PART I: BACKGROUND INFORMATION

1. Name of the insurance Company…….……

2. What is the ownership structure of your company?

Local ☐

Foreign ☐

3. In the Kenyan insurance sector, how would you classify the size of your organization in terms of market share?

Large ☐

Medium ☐

Small ☐

4. Which of the following suits the nature of your business?

General insurance ☐

Life insurers ☐

Composite ☐

5. How long has your company been operational?

5-15 years ☐ 31-50 years ☐

16-30 years ☐ over 50 years ☐

PART II: FINANCIAL INOVATIONS

Financial innovation is the creation and familiarization of new products, new institutions and new processes within the financial system**.**

6. Does your company have a financial innovations policy?

Yes ☐

No ☐

7. Which departments are involved in developing financial innovations in your company?

Research and development ☐

Marketing ☐

Finance and Administration ☐

Underwriting, ☐

ICT ☐

All of the above ☐

None of the above ☐

8. Product innovation involves creation of new products or service to enable the company respond better to changes in the market demand and to improve the efficiency of the institution. The following are examples of product innovations in the insurance industry. Please tick in the period they were first introduced by your company and indicate any other new product that may have been introduced clearly specifying the period it was first introduced.

	2007	2008	2009	2010	2011
Takaful					

Smart cards					
Agri-insurance					
Banc assurance					
Micro- insurance products					
Others, please specify					

9. Process innovations refer to the creation of new production processes to increase efficiency and market penetration. The following are examples of process innovations in the insurance industry. Please tick in the period they were first introduced by your company and indicate any other new process that may have been introduced clearly specifying the period it was first introduced.

	2007	2008	2009	2010	2011
Office automation					
Telemarketing					
Virtual marketing					
Worksite marketing					
Others, please specify					

10. Institutional innovations relate to changes in business structures or setting up a new service structure. The following are examples of institutional innovations in the insurance

industry. Please tick in the period they were first introduced by your company and indicate any other institutional innovations that may have been introduced clearly specifying the period it was first introduced.

	2007	2008	2009	2010	2011
Mobile branches					
Partnership with NGO's					
Partnership with CBO's					
New branch networks					
New insurance companies					
Strategic alliances with banks					
Satellite offices					
Others, please specify					

11. On a scale of 1-4 where 1 - Kshs. 0-1 million, 2 - Kshs. 1-5 million, 3 - Kshs. 6-10 million and 4 Over Kshs. 10 million. Please indicate the average investment by your company on the following financial innovations in each of the period given.

	2007	2008	2009	2010	2011
Product Innovations(new products or service)					
Process Innovation (new service delivery method)					
Institutional Innovation (new structures and alliances)					

12. How would you rate the level of financial innovation being undertaken by your company when compared with your competitors in the insurance sector in each of the following years?

	2007	2008	2009	2010	2011
Market leader					
Sufficient					
Inadequate					

Appendix III: Secondary Data Collection Framework

The secondary data will include data on Earnings after interest and tax and Total assets for the insurance companies within the period 2007 to 2011 and will be sourced from the company's financial statements.

	EAT	**Total Assets**
1. A P A Insurance Limited		
2. Africa Merchant Assurance Company Limited		
3. AIG Kenya Insurance Company Limited (**Chartis**)		
4. Apollo Life Assurance Limited		
5. British-American Insurance Company Limited		
6. Cannon Assurance Limited		
7. Capex Life Assurance Company Limited		
8. CFC Life Assurance Limited		
9. CIC General Insurance Limited		
10. CIC Life Assurance Limited		
11. Corporate Insurance Company Limited		
12. Direct line Assurance Company Limited		
13. East Africa Reinsurance Company Limited		
14. Fidelity Shield Insurance Company Limited		
15. First Assurance Company Limited		
16. Geminia Insurance Company Limited		
17. ICEA LION General Insurance Company Limited		
18. ICEA LION Life Assurance Company Limited		

19. Intra Africa Assurance Company Limited		
20. Kenindia Assurance Company Limited		
21. Kenya Orient Insurance Limited		
22. Madison Insurance Company Kenya Limited		
23. Mayfair Insurance Company Limited		
24. Mercantile Insurance Company Limited		
25. Metropolitan Life Insurance Kenya Limited		
26. Occidental Insurance Company Limited		
27. Old Mutual Life Assurance Company Limited		
28. Pacis Insurance Company Limited		
29. Pan Africa Life Assurance Limited		
30. Phoenix of East Africa Assurance Company Limited		
31. Pioneer Assurance Company Limited		
32. Real Insurance Company Limited		
33. Tausi Assurance Company Limited		
34. The Heritage Insurance Company Limited		
35. The Jubilee Insurance Company of Kenya Limited		
36. The Monarch Insurance Company Limited		
37. Trident Insurance Company Limited		
38. UAP Insurance Company Limited		
39. UAP Life Assurance Limited		

Appendix IV: List of Insurance Companies Registered in Kenya

1. A P A Insurance Limited
2. AAR Insurance Kenya Limited
3. Africa Merchant Assurance Company Limited
4. AIG Kenya Insurance Company Limited (**Chartis)**
5. Apollo Life Assurance Limited
6. British-American Insurance Company Limited
7. Cannon Assurance Limited
8. Capex Life Assurance Company Limited
9. CFC Life Assurance Limited
10. CIC General Insurance Limited
11. CIC Life Assurance Limited
12. Continental Reinsurance Limited
13. Corporate Insurance Company Limited
14. Direct line Assurance Company Limited
15. East Africa Reinsurance Company Limited
16. Fidelity Shield Insurance Company Limited
17. First Assurance Company Limited
18. Geminia Insurance Company Limited
19. ICEA LION General Insurance Company Limited
20. ICEA LION Life Assurance Company Limited
21. Intra Africa Assurance Company Limited
22. Invesco Assurance Company Limited
23. Kenindia Assurance Company Limited
24. Kenya Orient Insurance Limited
25. Kenya Reinsurance Corporation Limited

26. Madison Insurance Company Kenya Limited
27. Mayfair Insurance Company Limited
28. Mercantile Insurance Company Limited
29. Metropolitan Life Insurance Kenya Limited
30. Occidental Insurance Company Limited
31. Old Mutual Life Assurance Company Limited
32. Pacis Insurance Company Limited
33. Pan Africa Life Assurance Limited
34. Phoenix of East Africa Assurance Company Limited
35. Pioneer Assurance Company Limited
36. Real Insurance Company Limited
37. Resolution Insurance Company Limited
38. Shield Assurance Company Limited
39. Takaful Insurance of Africa Limited
40. Tausi Assurance Company Limited
41. The Heritage Insurance Company Limited
42. The Jubilee Insurance Company of Kenya Limited
43. The Monarch Insurance Company Limited
44. Trident Insurance Company Limited
45. UAP Insurance Company Limited
46. UAP Life Assurance Limited
47. Xplico Insurance Company Limited

Source: Association of Kenya Insurers Website http://www.akiinsure.or.ke