# THE SIGNIFICANCE OF LIFE ASSURANCE FUNDS
# AS MOBILIZERS OF SAVINGS IN KENYA //

## BY

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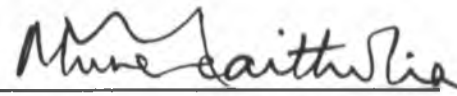
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# DECLARATION.

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

Signed_____          Date_____

**FRANCIS K. NYAMAI.**

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

Signed_____          Date 15th Oct. 2002

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# DEDICATION.

<u>TO MY PARENTS:</u>

Whose belief in the power of education has helped me come this far.

<u>CHARLES M. NYAMAI & NICHOLUS  R. NYAMAI</u>

Have been my role models and their academic achievements inspired me in achieving my academic dreams.

**May all be blessed.**

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# <u>ACKNOWLEDGEMENTS.</u>

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Thanks too to the members of my family for the support, love, encouragement and patience they accorded me in the course of this tedious journey.

# ABSTRACT.

The main objectives of this project were three fold,

i.     To study the trends in premium levels against GDP between 1987-2000.

ii.    To test whether life assurance funds have played a significant role in mobilising resources into savings in Kenya.

iii.   To examine the factors that  determine the level of life assurance premiums underwritten by life assurance companies in Kenya.

The data used to achieve the above objectives was obtained from various sources, gross premiums data was obtained from the financial statements of insurance companies, information relating to GDP was obtained from the treasury.

The study used bar graphs, line graphs and simple linear regression to come up with the conclusions.

Observations noticed implied that although life assurance funds have been growing over time, even at a rate higher than the GDP, they have not played a very significant role in harnessing resources into savings. It was also observed that companies that underwrote life assurance also did general insurance business. The companies interviewed admitted that the level of life assurance funds is influenced by variable like social factors, economic factors and even political factors.

Though many challenges faced the industry, efforts by the Ministry of Finance and the Commissioner of Insurance office are being consolidated to ensure the

operating environment is conducive which will enable a faster growth of the sector.

This paper is organised into 5 major sections.

Chapter 1 gives an overview of the study. It will introduce the Kenyan scenario and give us the background information on life assurance funds, the global, and continental trends. Briefly it touches on life assurance market, statement of the problem, objectives and importance of the study.

Chapter 2 reviews literature on life assurance, any prior related studies, role of life assurance funds in economic development and financial issues relating to life assurance.

Chapter 3 has details on research design, population of the study, data collection, hypotheses testing and data analysis procedures.

Chapter 4 comprises the workings and analysis of the data collected.

Chapter 5 which is the last  contains details on discussions of the research findings summary and conclusions as well as recommendations for further research.

# CHAPTER 1: INTRODUCTION.

## 1.1 Background.

For any economy to flourish, there is need for a financial system that transfers funds from people who save to people who have productive channels to put them.(CBK Monthly Economic Review, November 2001). The structure of the financial system is very complex and it comprises many different types of institutions like banks, insurance companies, mutual funds among others.

Nyamai (1989) argues that the importance of the financial industry of a country like Kenya can not be over emphasized. Many developing countries have been hindered in their development efforts by underdeveloped money and capital markets for both short term and long term capital respectively. Expanding and effectively working financial markets facilitates the rational and efficient allocation of saving resources into the most profitable uses and helps in achieving an equilibrium between the demand and the supply of loanable funds. In addition it helps to promote the liquidity and safety of financial assets in an economy which encourages higher savings and investments. This is so especially in developing countries where poor savings and investment habits inhibit economic growth.

The Kenyan economy has continued to experience continued growth in its financial sector over the last three decades. This can be evidenced by the increased number of financial institutions which emerged after the deregulation

of the financial services industry in the early 1980's (Nyamai 1989) The last few years have witnessed an enormous growth of the financial industry that includes Commercial banks, Non bank financial institutions,(NBFI'S), insurance companies and brokerage firms. Nyamai further asserts that this growth is no doubt a reflection of the rapid transformation in the Kenyan society and shows the increasing importance of financial intermediaries in virtually all economic transactions. By mid 2000, there existed 8 non bank financial institutions (CBK Monthly Economic Review, November 2001), these were, Bank of India Finance (K) Ltd, Consolidated Bank Finance, Consolidated Bank Mortgage, Devna Finance Bank, Fortune Finance Ltd, Glad ak Finance, Kenya Commercial Finance Company Ltd and Prime capital and credit Ltd.

Wasow & Hill (1986b) argue that economic development can not proceed without substancial capital accumulation. Saving rates must be high enough to sustain required investment, and the quality of the investment too must be adequate.

Reilly & Brown (1997) note that there is a wide range of investments in which an investor can put his funds depending on his risk and return perceptions. Such investment channels are bank deposits, pension funds, bonds, shares(stocks), derivatives, life assurance policies, mortgages, etc.

Despite having so many institutions in the financial system which channel funds from people who save, the major interest in this paper is life assurance , and the

basic concern will be determining how well life assurance funds have been able to mobilize resources into savings. Life assurance refers to the business of underwriting or accepting life assurance risks. It is a term interchangeable with insurance but generally used in connection with life business as assurance implies the certainty of an event and insurance the probability (Insurance Act, Cap 487)

Those engaged in the insurance profession find inquiring into the origins of insurance a fascinating exercise. Life assurance has graduated from its initial ad hocism to a modern business with a scientific approach (Ombija 1999). Ombija further notes that, today with the help of actuarial techniques, precise financial assessment of the economic value of an earning member of a family is possible.

Insurance in its modern sense was introduced in Kenya by the British colonial government in the early part of twentieth century, (Ombija 1999). The foreign masters at the time considered their colonies priority as a source of raw materials and market for certain manufactured goods that were mostly consumed by the Europeans living in the country. The buyers of these goods placed risks with insurance companies in their countries of origin, a practice that went on until such a time when parent companies opened branches in Kenya. Even then, most policyholders were foreigners. Ombija further argues that it took too long for the life assurance sector to establish itself and its contribution to economic growth was very much minimal as compared to sectors like manufacturing and banking.

Magbenu (1976) asserts that the process of establishing domestic insurance companies was not fast enough. In 1945 for example, a statute restricting the sale of policies to Africans was enacted. Then in 1948 a more liberal one replaced it, but even this did not permit any person to affect any life assurance business with an African unless with approval from the governor (Magbenu 1976).

After independence, Kenya needed freedom in the financial sector (Ombija 1999). The country adopted the British system of insurance based on the U.K. Insurance Act of 1958. Major changes have occurred since independence, the government has assumed more effective control of the sector. This has encouraged emergence of locally owned firms. Through a ministerial directive in 1978, all insurance companies had to be locally incorporated. Foreign owned companies (which were the majority at independence), carry on their operations through different forms of organizations, for instance subsidiaries, branches or even centres.

Being one of the most crucial sectors of Kenya's economy, the insurance industry is one of the most neglected sectors when it comes to rules and regulations that govern its existence and operations (Association of Kenya Insurers 2001). This is a very big blow to the sector as being an industry with so many players, its being exposed to many mal practices and moral hazards which will ultimately affect its operations. However this is not to say that the industry is totally let free.

The Insurance Companies Act which was enacted in 1961, was a replica of the U.K. Act of 1958 (Odour 1999). After independence, the industry started growing rapidly in size and its contribution to the entire economy was felt.

There was realization that the inherited laws were outdated and so there was the need for legislation that would address Kenya's real situation. A new Insurance Act was passed in parliament in 1984 so as to streamline the operations of the industry. On 1st January 1987 this Act came into force and took the duty of legislation and monitoring the operations of the entire industry. However, Association of Kenya Insurers (2002) laments that the Act that came into force in January 1987 did not create an autonomous regulatory body as the Commissioners office was still attached to the Ministry of Finance which made it hard to effectively regulate the industry, hence its ability to streamline and develop the sector was still in doubt.

The industry is regulated by the Insurance Act (Cap 487) which came into existence on 1st January 1987. The Insurance Act (Cap 487) was passed by an Act of parliament to amend and consolidate the law relating to insurance and regulate the business of insurance. However, the attachment of the Commissioners office to the Ministry of Finance limits the commissioner's powers such that the office can not take decisions which are for the benefit of the industry.(Association of Kenya Insurers, January 2002). Some of the Commissioners guidelines like directives on the kind of investments to put funds

into, the setting of floors or minimum levels of each category of investment leaves the life assurance fund managers with very limited investment options as the life fund managers have to adhere to such guidelines. This means that even if the life fund managers have alternative investment channels with higher rates of returns than the ones prescribed by the Commissioner's office, they have very limited funds to put in such profitable projects, as the available funds have to be put into the mandatory categories first.

The new Act was broader in perspective unlike the previous one which covered the insurance companies. It also included the insurance related services. The new Act also broke down the insurance business types and prescribed sixteen classes to cover long term and general business (Ombija 1999).

Other provisions of the new Act was the creation of the office of the Commissioner of Insurance whose major responsibility was supervisory. Others included formulating standards of business and ensuring that companies comply with the requirements of the new Act. More reforms are still expected as more parties demand changes in the current legislation (regulatory framework), " Give us a regulatory authority, insurance firms say", Kenya's troubled insurance industry has called for the establishment of a special regulatory body to police the sector, in the countdown to this years budget,(Daily Nation 2001).

This has led to the proposal of creating the Kenya Insurance Regulatory Authority (K.I.R.A), which would take over the functions of the Commissioner of

Insurance which the industry says has no powers to carry out its mandate effectively. The office of the Commissioner lacks the muscle and necessary resources. There is urgent need to elevate the office from a department in the treasury (Ministry of Finance) to the status of a statutory regulatory authority in line with other sectors of the economy.

The above was a suggestion made to the Association of Kenya Insurers (A.K.I) by the insurance firms. The Minister of Finance in his 2001 budget promised a comprehensive review of the insurance Act to include recasting of the office of the Commissioner of Insurance and liberalize the investment regime for insurance companies. This was to be done by July 2001, however it seems nothing much has been done on this.

## 1.2 **Life assurance market.**

Wheatcroft (1991) defines life assurance market as the various insurers which accept long term assurance risks. These may be written on an individual or group basis, and include annuity and permanent health insurance business. The life assurance market denotes people who sell and place risks and the various organizations which regulates the industry.

Clayton (1970) observes that in most developing countries, life assurance market is not well established and that their role in mobilizing resources into savings is not enormous. Clayton further notes that this is a total contrast to the developed

world where life funds play a leading role in accumulating resources for capital formation.

Ombija (1999) claims that an insurance transaction involves two parties, the producer of insurance and the consumer of insurance. The former provides a promissory note to the latter in order to pay for insurance of a risk. Insurance of a service provides for the transfer of risks being run by economic agents. The price of covering, or insuring a risk is referred to as a premium, while a claim is a commodity that replaces an economic loss. This way insurance provides security against certain risks so that the individuals or corporate organizations can go about running their economic activity without fear of losing their assets, (Ombija 1999).

The basic function of insurance as a means of protection against economic loss has helped it grow to the sophisticated mechanism that we know today. Ombija (1999) further argues that, the fact that the insurance transaction involves two parties, and with many middlemen like agents and brokers, there is need for strict regulations to be put in place to ensure smooth running of the sector. Failure to have such a regulator will lead to a dismal performance of the sector.

The main players in the life industry are the "Assurer's", companies which underwrite a risk; the insured, the party which transfers its risk to the insurer; and the brokers and agents who look for business and place it with the insurers in exchange for some commissions or fees (Ombija 1999).

In Kenya, the ratio of life assurance premiums to general insurance business is comparatively low year after year (Insurance Annual Report, 1998). This puts the sector in a very awkward position as a major player in mobilizing resources for saving purposes.

Market Intelligence (1999) observes that as the Kenyan economy continues in a recession, life assurance industry has been the worst hit sector. The standards of living have gone down so much such that people do not even have the basic necessities, hence they do not value life assurance as one of the basic necessities, their daily worry revolves around how to survive day after day.

Other Kenyans who are able to meet their basic needs do not also value the necessity of having a life cover. You will find that most Kenyans insure their property and forget about their lives. This can be viewed as being a very irrational behavior since one should insure the source of the power that gives him the strength to get the assets being insured.

## 1.3  **Life assurance  significance measurement.**

James & Richard (2000) note that the issue of performance measurement should be viewed from the wider economic standpoint of overall economy performance. They further observe that since the economy as a whole is a collection of many households or sectors interacting in the market, the well being of the overall economy is measured in a similar way.

The measurement of the national economy performance is called national income accounting and measures a nations income and production through mainly the gross domestic product (G.D.P) and gross national product,(G.N.P) . In order to determine the significance of life assurance funds, there is need to look at the total gross premium underwritten in a given year in relation to the G.D.P of the country as a whole,(Heinrich 1998).

Heinrich defined the above relationship as the premium penetration ratio. Premium Penetration ratio refers to the volume of total gross premiums underwritten which is expressed as a percentage of the G.D.P figures for a given year.

## 1.4   Statement of the  problem.

Life assurance has an important role to play in our modern Kenyan economy. Insurance is about risks and how to protect oneself against misfortune through adequate savings. For instance, in a family death and ill health are always very devastating both emotionally and financially, however a good life assurance scheme provides the necessary financial protection.

With the advent of the killer disease, HIV/AIDS, increased world wide terrorist attacks, one is left wondering what the future of life assurance funds as savings channels in Kenya  will be? Much will depend on how the society handles its finances today. This entails accumulating savings for the future, maximizing

income, ensuring financial security in retirement, or arranging for financial protection in the event of premature death or illness.

For such a noble mission to be accomplished, there has to be disciplined savings and life assurance offers one of these best channels of mobilizing the resources.

But the biggest question one should ask is, how well established is Kenya's life assurance sector as an intermediary of channeling resources into savings? Though the above study by Kasali (1996) gives an insight on how the life fund in Kenya may be performing, it may be considered as an isolated case as it focussed on one year (1994). This then prompts a study to be done to critically examine whether the scenario depicted above has been over time. No study has been done to examine the significance of life assurance funds in Kenya. That is why the gist of this study is to evaluate whether life assurance funds have played a significant role in mobilizing resources into savings or not. It has also become a management concern to the Life fund and Finance Managers on how to manage and develop such a vital sector so that truly, it becomes an unrivalled means of capital accumulation.

It is in view of the above discussions that this study aims to address the raised issues by seeking answers to the following questions.
1. What has been the level of life assurance funds in relation to G.D.P over the fourteen years, that is, ( 1987- 2000) ?
2. Have such funds had any significance in harnessing resources into savings?

3.What factors determine the level of  premiums underwritten by life assurance funds in Kenya?

It is in consideration of the above that this study will provide a justification for, or otherwise, on whether Kenya's life assurance funds have played a significant role in mobilizing  resources into savings.

## 1.5  <u>**Objectives of the study**</u>.

The main aim of this study is to investigate whether life assurance funds have played a significant role in mobilizing resources through savings. In order to achieve this, three main objectives  have been set, these are,

1.To study the trends in premium levels against G.D.P within the

period of study,(1987-2000). This objective will show a diagrammatic

Comparison between GDP and life premiums, and after testing objective

two, i will be able to conclude whether or not, the results agree

with what has been observed.

2. To test whether life assurance funds have played a significant

role in mobilizing resources into savings in Kenya.

3. To examine the factors that determine the level of premiums

underwritten by life assurance funds in Kenya.

## 1.6    **Importance of the study**

1.  Scholars, academics and students- It will open gaps for more research on life assurance issues. For instance, more studies could be done to evaluate how the liberalization of the investment regime, as proposed by the Minister of Finance in his 2001 budget proposals will influence investment decisions of life assurance companies in Kenya.

2.  Government – The study will enable the government to accurately know the current position of life assurance funds in relation to the whole economy. It will also strike the government to realise the importance of life assurance funds so that pending the restructuring of the insurance industry, the government can put into place the incentives likely to promote the growth of life schemes.  For instance mandatory life assurance schemes for all income earning individuals should be imposed.  This will harness excess resources from the citizens, turn them into savings hence triggering economic growth.

3.  Insurance industry – May assist the industry make prudent decisions on portfolio holding. For instance  having a good mix of long term (Life) and short term (general) business. This is because by realizing the importance of the life assurance sector, more companies can be encouraged to venture into life business.

# CHAPTER 2.- LITERATURE REVIEW.

## 2.1 Relevant studies and readings.

Magbenu (1976) did research on "portfolio holding of insurance companies in Kenya". His views were that portfolio held by life assurance schemes were less since life assurance was confined mainly to non-Africans who formed the minority hence the standards for underwriting African lives had been strict and the choice of policies available to them restricted.

Mirie (1987) did another research on the marketing of insurance in Kenya. Her findings were that, lack of organized formal bodies to market the insurance products and uninformed public about the existence of such products led to great marketing problems. Whether this view holds water remains to be seen at the conclusion of this study. Because this study was mainly focused on marketing aspects, it did nothing much to explore the exact position of Kenya's life assurance sector in relation to the whole economy.

Angima (1987) also conducted a study on the adequacy of life assurance in Kenya. Her general conclusions were that people are under insured in Kenya. The implication was that people take life assurance arbitrarily not necessarily based on the analysis of their needs or on the economic value to their dependants.

Vaughen (1990) asserts that the insurance industry and its environment have continued to change. Changes in the legal environment, revisions in policy forms, and a myriad of new problems continue to shape the future of the insurance industry. In the field of life assurance, universal life and other innovations continue to modify the structure of life assurance products all over the world. The Kenyan market is no exception and this can be evidenced by the new life products being offered in the market.

Insurance service is technically complex and continues to puzzle consumers all over the world. In the highly developed economies of Western Europe, America and lately Japan, assurance though an essential ingredient of the economic system is the least understood. People conceive insurance differently, unfortunately much of their opinion is based on misunderstanding or lack of knowledge regarding insurance.

N.U.I.S.A (1990) argues that in Kenya where the rate of literacy is still low, the situation is even worse in the villages, streets ,offices and even educational institutions. The majority of the people do not have positive appreciation of the insurance service, particularly life assurance. The result of this ignorance is a general misconception of, and poor attitude to the life assurance sector and the industry in general.

Nwokolo (1992) argues that Life Assurance appears to be of no consequences in a number of African countries. Indeed, its fortunes are declining in that it has

virtually lost its attraction as a medium of investment and protection. This calls

for efforts to be made to lift the sector out of this unfortunate situation,

otherwise the sector will be thrown into oblivion. At least, all those concerned

with the welfare of the industry need to make some inputs.

Kasali (1996) did research on the development of life assurance business in

Africa. He concluded that the life assurance in Africa is at varying stages of

development. A handful are so developed that they rank among the best in the

world , for instance, South Africa, while the majority are still groping in the dark,

unable to find a foothold.

Kasali further argue that the assertion that the life business has not gained the

prominence it deserves in a number of countries is in no doubt at all. A further

analysis of its impact on the economy painfully buttresses this fact, for instance

in 1995, as a measure of its contribution to the economic growth, premiums

constituted less than 1% of gross domestic product (GDP) in most African

countries. This shows how the sector is just underdeveloped.

Kasali takes another dimension in explaining the role of African life assurance in

economic growth. He argues that another indication of the state of development

of life assurance in Africa is the expenditure on life assurance per person. In

1994 for instance, life assurance density worked out to US dollars was 311 in

South Africa, US dollars 13.2 in Zimbabwe and less than US dollars 5 in the

remaining countries, (Kenya inclusive). This shows how well some countries have

used life assurance funds to stimulate their economic growth, while the majority, where Kenya lies are far from making the life assurance sector one of their back bones in promoting economic growth through long term savings. Kasali goes further in explaining that the above figures are in no way near the per capita premium income of well over US dollars 1000 in quite a number of countries in other parts of the world.

Daily Nation (2001), in it's survey on the role of life assurance in contributing to liquidity in the Kenyan economy found that life assurance seems to escape the attention of many planners. Insurance, particularly life assurance is one of the best and most effective vehicles for mobilizing domestic savings in the developed economies. However in the Kenyan situation, the ratio of life assurance to general insurance is one of the lowest in the world, currently at 1:3.75 or 27%.

## 2.2 <u>Life assurance companies as financial intermediaries.</u>

Clayton (1970) defines financial intermediaries as institutions which provide savers with attractive financial instruments and investors with borrowing opportunities. They may not actually physically participate, but their presence facilitates financial inter mediation processes. Insurance companies play a very great role in mobilizing resources from savers and channeling them to useful projects.

Magbenu (1976) argues that financial intermediaries channels flow of savings from ultimate savers to ultimate users through indirect securities, either for

investment in real assets or for consumption. The financial intermediaries
purchase primary securities and in turn, issue their own securities. In doing so,
they come between ultimate borrowers and ultimate lenders.

Insurance companie's importance as investors in the developed world is derived
from their function as intermediaries in the capital market who collect and
administer savings on behalf of a large body of individual policyholders (Clayton
1970). In Kenya life assurance companies act as financial intermediaries in that
they collect funds from the policyholders and invest such funds which earn a
certain rate of return.

Wasow & Hill (1986a) note that in some developed economies, particularly the
U.S. and the U.K, insurance companies own as much as 30% of all financial
wealth. The importance of insurance companie's assets relative to other forms
of financial capital rises with the level of income or other measures of economic
development. Wasow & Hill (1986a) further argue that the existence of well
established financial intermediaries, for instance the Capital Markets Authority
(C.M.A) in the developed economies has enabled life assurance funds to harness
very huge resources into savings.

Nyamai (1989), notes that the financial sector of an economy encompasses
financial instruments, financial markets and financial institutions. Financial
instruments such as promissory notes, commercial papers among others are
traded in the financial markets by financial institutions. Financial institutions

facilitate transfer of funds in an economy where in most cases, savers and borrowers are not always the same units and are unknown to each other. The efficiency of the transfer of funds increases their flow in the economy and accommodates greater individual preferences thus increasing the total economic welfare gain.

Outroville(1998) pointed out that life assurance is an interesting process of financial intermediation because of its reverse production cycle with payment made before a service. As a financial mediator, it mobilizes resources into savings which can be used for investment purposes.

Angima (1987) supports Outroville's sentiments. She notes that life assurance is the only unrivalled medium of disciplined savings. However, she laments that most people do not seem to understand that prudent savings through life assurance schemes can play a big role in their later lives or even to their dependants.

## 2.3 The Theory Of Life Assurance Portfolio Choice.

Markowitz (1995), defined a portfolio as a group or combination of assets. A good portfolio is more than a long list of good stocks and bonds. It is a balanced whole, providing the investor with protections and opportunities with respect to a

wide range of contingencies. The investor should move towards an integrated portfolio which best suits his needs.

Portfolio selection is a very crucial factor for life assurance fund managers. A skilful investment policy is very crucial to the success of life assurance companies. Its for this reason that actuaries have put more thought in issues of investing life funds.

Magbenu (1976) argues that in formulating a portfolio policy, that is a set of principles governing specific decisions to acquire or dispose a portfolio of certain assets, life assurance companies are faced with a choice between portfolio return and portfolio risk. The risk of life assurance company is rather unique in that the company enters into a contract which promises an investor return from the out set although the recipient of the premiums and hence the investment will be delayed until some future date.A major concern of investment policy is that life assurance companies must earn at least the rate of return assumed in the calculation of the contract.

Wheatcroft (1991) notes that most life assurance companies follow the principle of spreading investments to minimize risk of default.

In Kenya, the Commissioner of Insurance in liaison with the ministry of Finance gives guidelines on the nature of investments to undertake. Not only do they guide on this, but they also set floors on the minimum levels of funds to be invested in each type of investment. This is to protect the policyholder from

illiquidity problems that may arise if the funds are put into wrong investment channels.

## 2.4 **The Role Of Insurance Funds In Economic Development.**

There are many ingredients that promote economic growth, for instance, science, research etc. Though such ingredients are associated with a dynamic and expanding economy like Kenya's, the most important ingredient is capital formation.

Gurley and Shaw (1956) argue that capital formation takes place through two stages, savings and investment. When individuals and businesses save, they postpone their current consumption in preference for future consumption. For these entities to save, the standard of living must be high enough to allow some income to be channeled to other uses other than consumption. The process of saving is associated with certain institutions whose function is to take in the savings of many individuals and put them into productive use. Insurance companies play a very great role in achieving this objective.

In an economy of free choice, the above institutions offer incentives to savers like safety and return. However it should not be forgotten that the growth of these institutions and of savings depends to a large extend with the strength of the incentives given. This is the savings environment in which commercial banks

and non bank financial institutions operate. This environment affects the efficiency with which these institutions mobilize savings.

The second process of capital formation is  investment,(Gurley & Shaw, 1956). In real terms, this is basically the devotion of national resources not for satisfying immediate consumption needs, but for producing capital goods, plant and equipment,, that enable the economy to have a large stream of consumer goods in future. In money terms, it means turning over savings to entrepreneurs who need them to acquire capital goods. Investment can not be accomplished without savings, and on the other hand, saving is not productive unless accompanied by investment. This is the process of capital formation which is very central to economic growth.
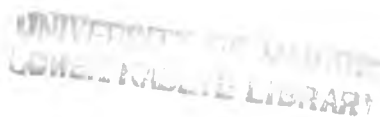
The mobilization of saving resources is as important as their efficient allocation. Financial institutions help in this because in their absence, all economic units have to rely on their own resources and those that they can borrow from their friends and close relatives. Gurley & Shaw  further argue that in such a situation, if the economic units have to maintain a balanced budget, that is each unit will have to invest its own savings with no outlets for excess savings, but in most cases, those who are not willing to take risks by undertaking investments are also ready to have the necessary finances, while those who have the funds are either not patient enough to wait for long periods before they reap the  rewards of their efforts or do not possess the ability to be entrepreneurs. In such situations, if each economic unit has to invest it's own savings, there's likely to

be less savings and inefficient investment because of differences in ability, values, and attitude towards risk and uncertainty. Insurance companies and other financial institutions come to the aid of the economic units by making investment funds available and make it possible the financing of larger volumes of investment.

As the case with other service industries, the demand for insurance services in Kenya as well as other developing countries has accelerated as the rate of economic growth and development has increased. Industrialization with comcomitant increase in the use of technology brings not only faster rates of economic growth, but new risks as well. The rising personal income associated with growth increases the demand for services in general including life assurance.

Market Intelligence (1999) notes that insurance has an important role in the economic life of every country. The operations of an insurance industry affects a country's economy in several ways, insurance transfers risk, insurers invest funds, and insurance affects balance of payments and aids trade. It further argues that for the insurance industry to survive and play a bigger role in resource mobilization, the industry must abandon premium rate reduction.

Nwokolo (1992) states that insurance is an important vehicle of development in any economy. The industry protects and conserves the wealth of a nation. The aim of good business enterprise is to utilize resources, both in men and

materials, with minimum friction to achieve maximum results. Frictions are nevertheless bound to occur in the conduct of a normal business life.  Premises may be damaged as a result of fire or other related perils. Stores or warehouses may be broken into and burgled, workmen may suffer injury in the course of their normal employment, wages may be lost to armed robbers in transit while there may be infidelity on the part of the employees resulting in huge financial losses to employers.  All these events altogether may have far reaching repercussions on the social and economic wellbeing of a nation.

The insurance  industry also generates wealth.  The industry is usually one of the largest institutional investors in most economies.  The premiums of thousands of policy holders are ploughed back into investment channels within the economy. These vary from  short-term lending, to banks, debenture stock as well as equity shareholding via the capital market.

" A man's dying is more the survivor's affair than his own," life assurance is unique as a means of creating an estate for one's dependants.  There is no legal method, other than life assurance where one can establish an immediate estate. For instance, lets assume Mr. X is 30 years of age, that he is progressing well in his career, and that his chances of continued success are bright indeed, has a wife aged 30 and two children. Suddenly it occurs to X that if he should die, he would leave his dependants with only the meager standard of living that social security benefits provide.  As a result, he decides that he should start accumulating an estate for this possible contingency.  He plans to set a portion

of his pay cheque each month and invest it carefully. Over a period of time, he feels he will accumulate a sizeable estate that will provide his dependants with proper standard of living if he should die. Mr. X is to be congratulated for his thoughtfulness, because his desire to make a provision for his dependants is nobble indeed. However his astuteness in utilizing a savings programme as the only means of accumulating an estate is sadly lacking in many respects. He is of course assuming that he will live for many years. Will save conscientiously and will invest these funds wisely. But X cannot predict the date of his death, may live for many years. If he dies, his dependants would be in precisely the situation from which he had hoped to protect them. If Mr. X was prudent enough, he would have avoided these difficulties by electing to build his estate by means of life assurance . If he purchases shs. 100,000 life assurance policy, he would have an estate of shs. 100,000 when he pays his first premium installment which can be as little as shs. 100 a month, or shs. 1200 a year. If he dies a week later, the assurance company will be obliged to pay his beneficiary the shs. 100,000 even though the policy has not yet been issued.

Insurance companies plays a crucial role in maintaining a steady economic growth pattern in several ways. For instance, insurance cushions the impact of catastrophes on the economy. Major disasters such as floods and earthquakes can offset years of economic progress for a country. More localized events such as the loss of a petrochemical plant can create bottlenecks in numerous sectors of the economy. Insurance helps to maintain the risk taking propensity of local entrepreneurs.

Insurance affects the balance of payments, (B.O.P). Insurance companies operations affect not only a countries domestic economy, but also because many insurance transactions are international, it's economic relations with the rest of the world.

## 2.5 **Life assurance as an investment alternative**.

In some developed economies, life assurance funds own much of the financial wealth, (Wasow & Hill 1986a). For instance, in the U.S life funds own more than 40% of all financial wealth. In U.K, at least 35% of the financial wealth is put in life funds. Wasow & Hill further note that of late , Japan has realized the need and importance of life funds as a means of long term savings hence there has been rapid growth in its life assurance sector.

James & Richard (2000) state that, an investment involves current commitment of funds for a period of time, in order to derive future payments that will compensate the investor for time the funds are committed, the expected rate of inflation and the uncertainty of future payments.

Investments occur due to prudent savings. A savings program affords the individual with liquidity for changes in occupation, emergencies and general transaction. The investor must determine which savings vehicle will give him the appropriate balance between liquidity and an acceptable rate of return.

Wasow & Hill (1986b) argue that life assurance is an important channel for financial capital accumulation. Life assurance companies offer policies which are purchased exclusively to protect the customer against risk, they often involve substantial savings. This is because the assurance fund must accumulate reserves against anticipated future claims, most a times such reserves are available to finance real investment.

Timothy (1978) explains that any prudent, conservative investor who attempts to have a long range personal financial plan will consider purchasing life assurance. Life assurance is basic to building a sound financial program. The lack of an adequate life assurance programs can be devastating for remaining family members should a key member of the family die young. Every individual must carefully examine the positive and negative aspects of life assurance in relation to an overall investment and financial plan.

## 2.6 **Life assurance and risk diversification**.

Brealey & Myers (1984) assert that diversification works because prices of different stocks do not move exactly together. Statisticians make the same point when they say that stock prices changes are imperfectly correlated. Life assurance can enable companies diversify their risks.

Kenyan companies holding a good mix of general and life assurance schemes normally show less fluctuations in their end year results than companies engaging in general business alone (Association of Kenya Insurers 2001). This can be explained by the single fact that the two business portfolios will

experience different trends in their performance, hence a decline in performance of general insurance will be compensated by an increase in performance of life funds and vice versa.

Risk management is a very important concept in any investment decision . In everyday activity we face different risks and people do make irrational decisions by insuring (protecting) their property, for instance houses, radios, furniture and fail to recognize the importance of the source of the ability that leads to acquisition of such assets, which is life.

Any rational investor should protect against the most important risk first, and for the family the risk of the loss of income is of paramount importance. Any well ordered insurance program should begin with the protection of income. It will be very foolish to insure the property one owns while neglecting to insure the asset that produces the property. The most important asset an individual has is the ability to produce income.

Death is not the only way in which income earning ability can be destroyed. Disability can be destructive for it results in unemployment and may also entail additional expenses. Unemployment from causes other than disability also impairs income, but other forms of unemployment have fundamental risks. Finally income may be cut off by retirement, however retirement does not have the grave implications premature death has.

# CHAPTER 3.-RESEARCH METHODOLOGY.

## 3.1 <u>Population.</u>

A complete census of all the 25 life assurance companies in Kenya that underwrote life assurance business between 1st January 1987 and 31st December 2000 was carried out. This period was chosen because it covered the period since the office of the Commissioner of Insurance was established (1987) and also the latest period when the commissioner's reports were available (2000). This catered for the problem of data availability.

## 3.2 <u>Data collection.</u>

Data was collected at two levels,

<u>Level 1.</u>

The first level involved use of secondary data which was obtained from the Commissioner of Insurance annual reports. This was because most of the data needed to answer objective one of the study could be obtained from audited and published accounts of all companies which offered life assurance policies. Such published accounts are also verified by the auditors at the Commissioner's office which made such reports very reliable. Data relating to G.D.P was obtained from the Ministry of Finance (Treasury). This was G.D.P figures for all the years covering the entire period of the study.

<u>Level 2.</u>

Level two of the Data collection involved use of primary data. Primary data played a great role in answering objective three of the study. This was done through questionnaires and interviews with life fund and Finance Managers who were entrusted with life assurance funds. The questionnaire consisted of closed and open ended questions. Before the questionnaire was dispatched, the targeted respondents were telephoned to inform them of the issue, after dispatch, telephone calls were also used to book appointment dates for the interviews. General insurance questions with regard to insurance industry were also included. However, a lot of emphasis was laid on those questions pertaining to life assurance funds.

## 3.3 **Data analysis.**

Each year's level of gross direct premiums was determined for all life assurance companies. This was compared with the GDP levels for the same year, and their relationships were depicted through bar graphs. The choice of bar graphs was preferred because they are better for comparison purposes.

After establishing the above relationship, penetration ratios for each year were calculated. These ratios were expressed as a percentage hence the use of descriptive analysis. A trend analysis for the entire period was established. The

trend analysis was represented through line graphs as they are best for showing movements over time.

Use of inferential statistics-The 't' distribution was used to do tests of significance. This was used to accept or reject the null hypotheses. The 't' distribution was chosen because it is the best for testing significance levels where the population is small: ''n less or equal to 30''. The 't' distribution had been used in other studies, (Mutia 1996).

## Hypothesis.

**Ho:** Life assurance funds have played a significant role in mobilizing resources into savings in Kenya. Since most of the literature in the study shows that life assurance funds have not played a significant role in mobilizing resources, the Null hypothesis will help to proof this otherwise.

**H1:** Life assurance funds have not played a significant role in mobilizing resources into savings in Kenya.

In coming up with a model to test the significance, the GDP is taken to be the dependent variable (Y), while the Level of life premiums is the independent variable (X).

The underlying assumption is that there is a linear relationship between X and Y and that a change in X results to a change in Y, ceteris paribus.
Ordinary Least Square Method (OLSM) is used in the study to show this relationship.

$Y_i = b_0 + b_1 X_1 + u_i$

  Where Y= Level of G.D.P,

        X= Level of life premiums,

        $b_0$ = Constant and is the intercept in the line,

        $b_1$= Is also a constant which is the slope to the line as given by change $(\delta y / \delta x)$.

The above regression model holds under various assumptions,

- $U_i$ is an error term and may assume positive, negative or zero values. In the above case $U_i$ is any other channel that mobilises resources into savings.

- Variance of $U_i$ is constant.

- The explanatory variables $X_{is}$ are measured with minimum error.

- $U_i$ is independent of the explanatory variables.

- That the relationship is correctly stated.

Since it is difficult to obtain true relations, estimation is used,

Hence,  $Y_i = b_0 + b_1 X_i + U_i$  is estimated as $Y = b_0 + b_1 X_i + e_i$

Where Y= Estimated value of Y, given a specified value of X.

$b_o$= Estimate of the true intercept,

$b_1$= Estimate of the true parameter,

$e_i$ = Estimate of the true value of the random term.

The data to generate this relationship relates to 14 years from 1987-2000.

The method of OLSM was chosen because it is simple and had been used successfully in other studies (Mutia 1996).

The variances assist to get the standard errors which help in testing the parameters significance.

The percentage of Y which is determined by values of X chosen is calculated using the coefficient of determination ($r_{xy}$).This explains the proportion of variation in Y which is explained by the variation in X, and is given by,

$$r^2_{xy} = \frac{b_1\Sigma x_i y_i}{\Sigma y_i}$$

Later the statistical reliability of the parameter estimates is tested using the standard error test. Through this test the researcher will be able to establish whether $b_o$ and $b_1$ are significantly different from zero.

Here the t-test is applied since the sample is small (n less than 30).

The level of significance in the study is 5% and the degrees of freedom is (n-k) where n is the sample size and k is the number of of the parameters estimated from the regression, and are two, $b_o$ and $b_1$.

# CHAPTER 4: RESEARCH ANALYSIS AND PRESENTATION OF FINDINGS.

This chapter focuses on the findings on the specific areas of the study. It goes further into drawing some statistical inferences from the findings. The data in this study is summarised and presented by use of tables and graphs. Simple linear regression has been used to test the tests of significance in order to obtain results for certain relationships.

## 4.1 Presentation of findings.

This study aimed at answering 3 major objectives. The findings presented below are geared towards answering the first objective of the study whose main purpose was to establish the trends in premium levels vis a vis the G.D.P.

### 4.1.1 Observations and conclusions.

From figures 1 and 2, it is evident that the proportion of life fund as compared to GDP is very small, for instance in 1987, gross premiums was slightly above 1 billion as compared to GDP which was above 100 billion. It can also be noticed that life premiums kept on increasing though at a very small proportion until 1994 when there was a sharp drop, (Fig 1). Though the pattern for gross premiums growth was very unpredictable, it can be noticed from figure 2 that GDP kept on increasing steadily year after year. According to an interview with a top insurance executive it was revealed that the continued growth in life premiums was attributed to two main factors;

1. Entrance of new players in the Insurance Market- Many insurance Companies realized the benefits of underwriting Life business. Due to this many entered the market. For instance in 1994, Heritage Insurance merged with International Insurance Company to form Heritage A.I.I. Due to synergistic effects, the premiums produced by the resultant Company were very high. Other companies

also entered the Market in the early 90's. for instance Geminia, Kenya Alliance and Pan Africa Insurance Company.

2.Enhanced Public awareness- As years ticked by, life Assurance Companies started marketing their Life products. This created Public awareness which made many people acknowledge the role of life funds as savings channels. As life assurance Companies expanded their net, many people started buying life assurance hence the level of the fund continued to grow.

## Conclusion.

Though the life fund continued to grow over time, it's growth was very small in relation to the entire Kenyan economy as portrayed by the total GDP. From the graphs above, the bars showing the level of life premiums are very insignificant when compared to the over all GDP. In fact the insignificance made the researcher to use two different bar graphs, one depicting the life premiums alone and the other depicting GDP (Gross Domestic Product) separately.

Figure 5 Gross premiums...
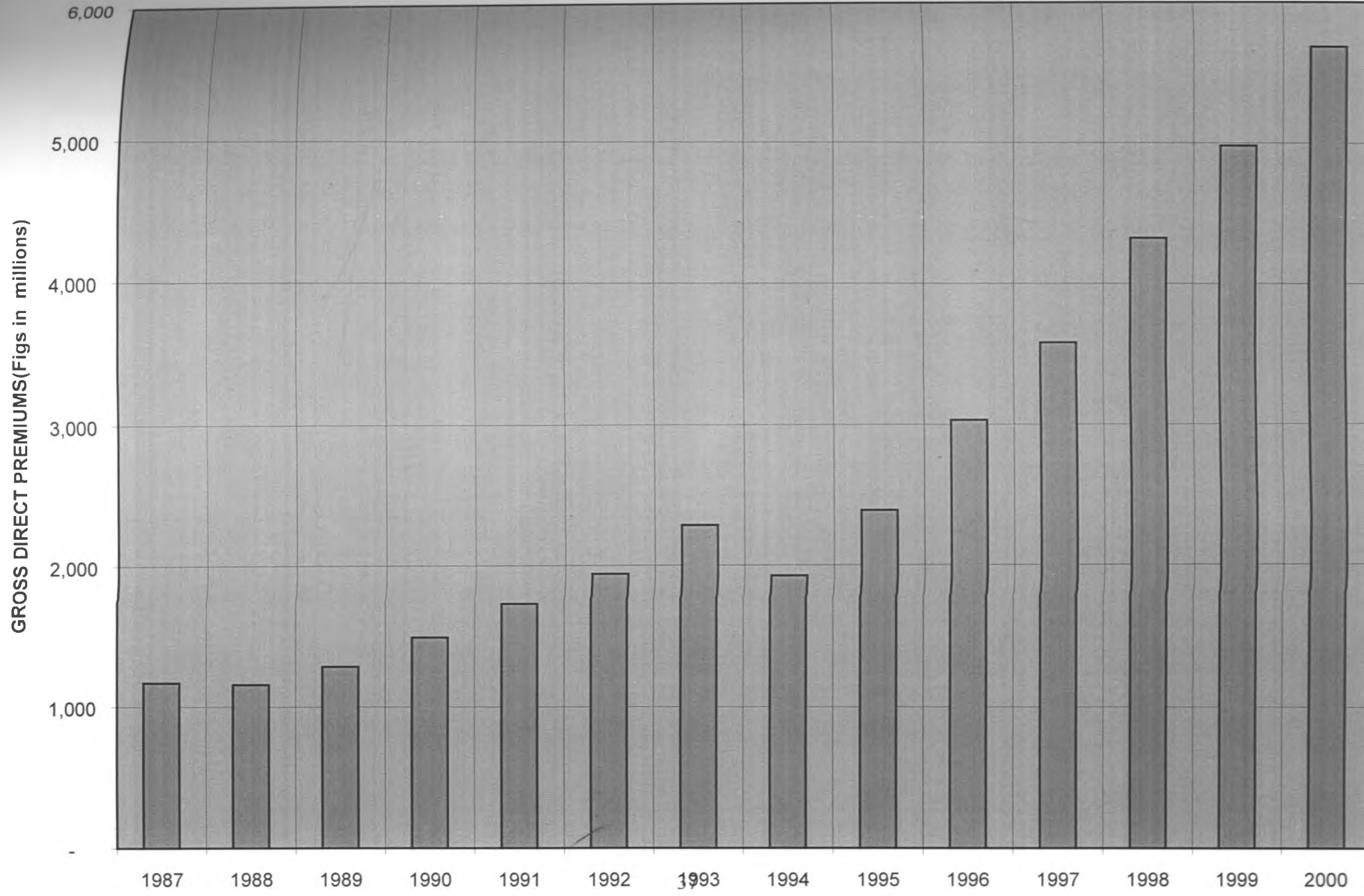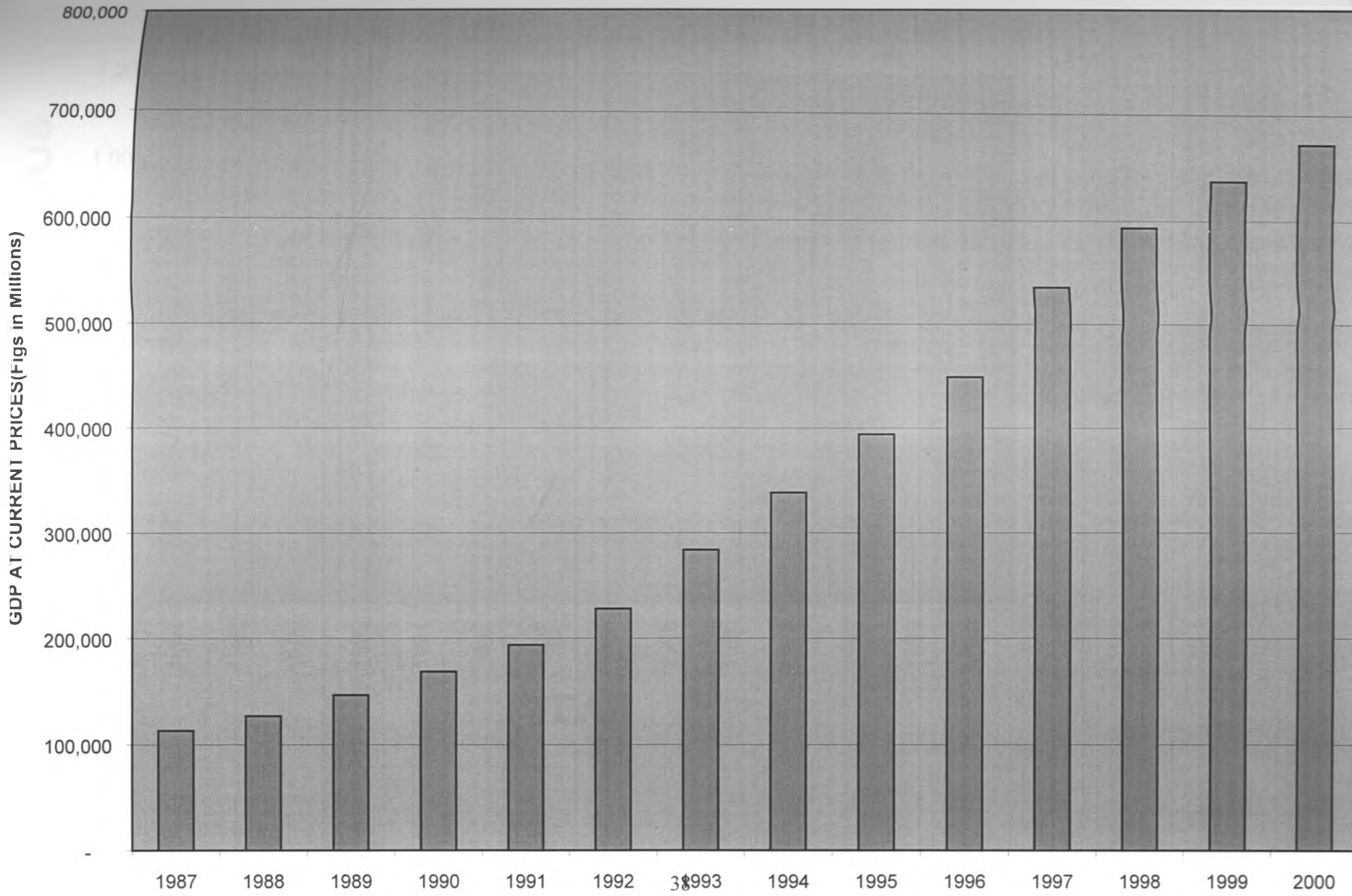
# PENETRATION RATIOS
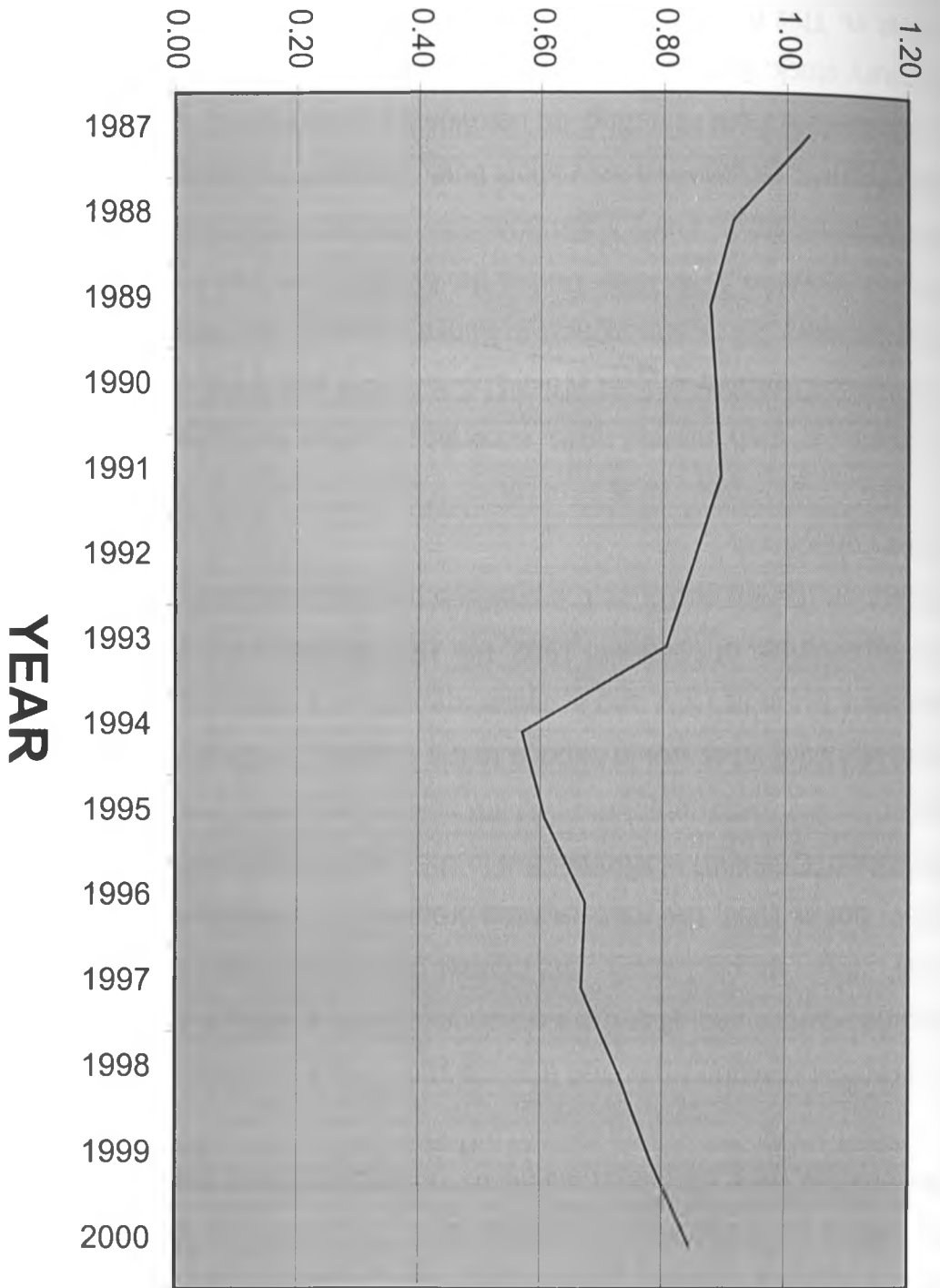
From figure 3, the ratio of life premiums to the GDP  which is referred to as the penetration ratio is clearly shown over time. It can be observed that in 1997, the penetration ratio was too high, in fact above 1.0, however in 1988 it fell to 0.91. From 1999, it stabilized for a while till late 1991. As time went on, this ratio started falling as GDP grew at a faster rate the growth in Life premiums. It can be observed that in late 1992, there was a very sharp decline in the penetration ratios until it reached its lowest in 1994 at 0.57. According to an interview with some senior life assurance officials, the above movements were attributed mainly to the following **four** reasons;

1. Pre/Post election fever and uncertaintys- There is evidence of sharp declines before and after the election years with a slight exception of 1996-1997.  From graph 3 above, the highest penetration ratio was experienced in 1987, but in 1988, the ratios started dropping .In 1988, Kenya had it's 'Mlolongo'(Queuing) elections. Due to the uncertainty's that engulfed the public, many expatriates who had life policies cancelled them because they were not sure what would happen to the country. The first multi party elections set in in 1992 and a similar scenario was observed. However due to the experiences of 1988 and 1992, the 1997 elections did not have a big impact on the life sector as the previous two elections as people had gained some confidence.

2. Impact of high interest rates. According to a top executive from the Insurance Company of East Africa (I.C.E.A), the years 1991-1994 saw the 91 days treasury bill hit the highest in Kenya's history, the Treasury bill rates ranged between 35%-70%. Due to the lucrative harvests from the Government stock, many institutions saw the stock as the best channel to reap highest returns in a very short time. This saw institution's like Pension funds deviate from remitting life premiums so as to invest them in the treasury stock. Individuals also saw the treasury stock as being the best to invest in. This made many people cancel their life Policies hence affecting the life funds very heavily. In fact it is during this period that we experienced the lowest penetration ratios ever  in the entire period of the study. The

penetration ratios in 1994 stood at 0.57. Note that the investors behavior was in line with the principle that *any rational investor would put his money in a stock that guarantees high and risk less returns within the shortest time period possible.* It was also observed that with the declining fortunes in the life sector, many companies had to come up with new products so as to salvage the whole situation. However the most encouraging observation was that despite the declining fortunes in the life sector, no company withdrew from underwriting life business.

3.High inflation rates. The year 1992 and post 1992 general elections was evidenced by very high inflation rates. This saw the Kenya shilling loss it's value so greatly. Due to the high inflation, people's purchasing power was eroded, this put many people into a very tight situation as they could not purchase life policies which they considered as a secondary need.

4. Fall of the giant Kenya National Assurance Company Limited (K.N.A.C)- The fall of the giant Public Assurance Fund (KNAC) had a very big impact on the life sector. By the time of it's collapse, KNAC was the biggest life underwriter in the Kenyan insurance market. Though it's departure meant that this life fund was lost, it also portrayed a very bad image of the industry. This was because with it's strength, nobody expected KNAC to go under. The signal to the life assurance investors was that the other life assurance companies may follow suit, hence many life policy holders cancelled their policies. This had a very negative impact on the life sector. According to one insurance official, the fall of KNAC had a very big negative impact on the life assurance sector in Kenya.

With the lessons learned from the previous experiences, Kenyan companies underwriting life business were not ready to repeat the same. What followed is that companies had to come up with new products which were tailor made. This approach saw the resurrection of the life sector, and as evidenced from

figure 3, the life fund started picking once more in 1996. From this time onwards there was a continuous growth in the life fund till year 2000.

## 4.2    Testing the significance of life assurance funds.

This section will test hypothesis about nature of "relationship" between two variables within a given population, "U" Life Assurance funds and of Gross Domestic Product (GDP). Without attributing "Causality", the paper looks at the extent to which life assurance funds are related to GDP. This form of test will merely serve as an addenda to graphical representation of the data. The paper is not just concerned with whether or not one can be said to "determine" the other. This can only be done through a more demanding regression analysis. With regression analysis, there is an asymmetry in the treatment of the variables. In testing the significance of a correlation coefficient both the "right hand side" variable(Life assurance premiums) and the "left hand side variable"(GDP), are assumed to be stochastic(random) and the relationship between the two variables is symmetrical. I want to know whether or not the "explanatory variable"(Life assurance premiums) affects the "dependent variable"(GDP)

In coming up with a model to test the significance, the GDP is taken to be the dependent variable (Y), While the Level of life premiums is the independent variable (X).

The underlying assumption is that there is a linear relationship between X and Y and that a change in X results to a change in Y, ceteris paribus.
Ordinary Least Square Method (OLSM) is used in the study to show this relationship.

$Y_i = b_0 + b_1 X_1 + u_i$

Where Y= Level of G.D.P,

X= Level of life premiums,

b$_0$ = Constant and is the intercept in the line,

b$_1$= Is also a constant which is the slope to the line as given by change $(\delta y/\delta x)$.

The above regression model holds under various assumptions,

- U$_i$ is an error term and may assume positive, negative or zero values. In the above case U$_i$ is any other channel that mobilises resources into savings.

- Variance of U$_i$ is constant.

- The explanatory variables X$_i$s are measured with minimum error.

- U$_i$ is independent of the explanatory variables.

- That the relationship is correctly stated.

Since it is difficult to obtain true relations, estimation is used,
Hence,   $Y_i = b_0 + b_1X + U_i$ is estimated as $\acute{Y} = b_0 + b_1X_i + e_i$

Where Y= Estimated value of Y, given a specified value of X.
    b$_0$= Estimate of the true intercept,
    b$_1$= Estimate of the true parameter,
    e$_i$ = Estimate of the true value of the random term.

The data to generate this relationship relates to 14 years from 1987-2000. On the basis of our observations, for all the Y's (GDP), and the X's, (Life assurance funds), the researcher is trying to find values for b$_0$ and b$_1$ which give him the "best fit" to the actual data. Because of  chance events and measurement errors, it will never be able to fit the data exactly, and so what is "left over" (the difference between the actual value of Y for a given

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observation X, and the estimated value of Y for the same X), is reflected in the error term ($e$). Therefore i proceed by trying to minimise the values of the error term by using ordinary least squares (OLS) which proceeds by choosing those values of estimated values of $b_0$ and $b_1$, which minimise the sum of squares of errors.(SSE).

In the analysis, the parameters are estimated from the data by using the following formula.

Parameter Estimations.

$$b_0 = Y + b_1 X$$

$$b_1 = \frac{\Sigma XY - nxy}{n\Sigma x_i^2 - nX},$$

$$= \frac{n\Sigma XY - \Sigma X \Sigma Y}{n\Sigma X_i^2 - (\Sigma X)^2},$$

$$= \frac{\Sigma x_i y_i}{\Sigma x_i^2}.$$

Their variances are estimated from the constant variance of $U_i$ as,

$$Var(b_1) = \frac{\delta^2 u_i}{\Sigma x_i},$$

where, $\quad \delta^2 U_i = \frac{\Sigma e_i^2}{n-k}$

and, $\quad$ n= Sample size ,

$\quad$ K= Number of parameters estimated from the regression, $b_0$ and $b_1$.

$$\Sigma x_i = \Sigma X_i^2 - nX^2,$$

$$Var(b_0) = \frac{\delta^2 U_i \Sigma X_i^2}{n\Sigma X_i^2}.$$

**Note**: The variances assist to get their standard errors which help in testing the parameters significance.

### 4.2.1 Coefficient of determination, ($r^2$xy).

The percentage of Y which is explained or determined by values of X chosen is calculated using the coefficient of determination ($r^2$xy). $r^2_{xy}$ indicates the explanation power of the regression model and its value is always between 0 to 1, not less than zero and greater than one and shows to what extent a given analysis has been explained.

The correlation coefficient takes the form:

$$r = \frac{\Sigma X_i Y_i}{\sqrt{(\Sigma X_i)^2 (\Sigma Y_i)^2}}.$$

Later the statistical reliability of the parameter is tested using the standard error test. Through this test, the researcher is able to establish whether bo and b1 are significantly different from zero. Here students ''t'' test is applied since the sample size is small (n<30) that is, (25<30).

A level of significance especially in the study of 5% is chosen and degrees of freedom in the study is n-k, where n is the sample size and k is the total number of parameters estimated from the regression and are 2, (b$_0$ and b$_1$).

### 4.2.2 Hypothesis testing.

H$_0$: Life assurance funds have played a significant role in mobilizing resources into savings in Kenya.

H$_1$: Life assurance funds have not played a significant role in mobilizing resources into savings in Kenya.

**Table 1-Analysis**

## 4.2.3. STATISTICAL ANALYSIS

| YEAR | X | Y | XY | Y=b0+bx | Y=Y-y |
|------|------|------|------|------|------|
| 1987 | 1,168 | 112,965 | 131,943,120 | 847,614 | 498,979 |
| 1988 | 1,156 | 126,703 | 146,468,668 | 846,042 | 497,407 |
| 1989 | 1,284 | 146,573 | 188,199,732 | 862,810 | 514,175 |
| 1990 | 1,493 | 168,455 | 251,503,315 | 890,189 | 541,554 |
| 1991 | 1,732 | 193,788 | 335,640,816 | 921,498 | 572,863 |
| 1992 | 1,942 | 228,051 | 442,875,042 | 949,008 | 600,373 |
| 1993 | 2,282 | 283,708 | 647,421,656 | 993,548 | 644,913 |
| 1994 | 1,922 | 338,065 | 649,760,930 | 946,388 | 597,753 |
| 1995 | 2,390 | 393,767 | 941,103,130 | 1,007,696 | 659,061 |
| 1996 | 3,031 | 449,621 | 1,362,801,251 | 1,091,667 | 743,032 |
| 1997 | 3,582 | 536,264 | 1,920,897,648 | 1,163,848 | 815,213 |
| 1998 | 4,324 | 593,353 | 2,565,658,372 | 1,261,050 | 912,415 |
| 1999 | 4,978 | 637,362 | 3,172,788,036 | 1,346,724 | 998,089 |
| 2000 | 5,684 | 672,219 | 3,820,892,796 | 1,439,210 | 1,090,575 |
| TOTAL | 36,968 | 4,880,894 | 16,577,954,512 | 14,567,292 | 9,686,402 |

| Y³ | Y-Y | (Y-Y)² | Y² | ei y-y | ei² |
|---|---|---|---|---|---|
| 248,980,042,441 | 235,670 | 55,540,348,900 | 55,540,348,900 | 734,649 | 539,709,153,201 |
| 247,413,723,649 | 221,932 | 49,253,812,624 | 49,253,812,624 | 719,339 | 517,448,596,921 |
| 264,375,930,625 | 202,062 | 40,829,051,844 | 40,829,051,844 | 716,237 | 512,995,440,169 |
| 293,280,734,916 | 180,180 | 32,464,832,400 | 32,464,832,400 | 721,734 | 520,899,966,756 |
| 328,172,016,769 | 154,847 | 23,977,593,409 | 23,977,593,409 | 727,710 | 529,561,844,100 |
| 360,447,739,129 | 120,584 | 14,540,501,056 | 14,540,501,056 | 720,957 | 519,778,995,849 |
| 415,912,777,569 | 64,927 | 4,215,515,329 | 4,215,515,329 | 709,840 | 503,872,825,600 |
| 357,308,649,009 | 10,570 | 111,724,900 | 111,724,900 | 608,323 | 370,056,872,329 |
| 434,361,401,721 | 45,132 | 2,036,897,424 | 2,036,897,424 | 613,929 | 376,908,817,041 |
| 552,096,553,024 | 100,986 | 10,198,172,196 | 10,198,172,196 | 642,046 | 412,223,066,116 |
| 664,572,235,369 | 187,629 | 35,204,641,641 | 35,204,641,641 | 627,584 | 393,861,677,056 |
| 832,501,132,225 | 244,718 | 59,886,899,524 | 59,886,899,524 | 667,697 | 445,819,283,809 |
| 996,181,651,921 | 288,727 | 83,363,280,529 | 83,363,280,529 | 709,362 | 503,194,447,044 |
| 1,189,353,830,625 | 323,584 | 104,706,605,056 | 104,706,605,056 | 766,991 | 588,275,194,081 |
| 7,184,958,418,992 | 4 | 516,329,876,832 | 516,329,876,832 | 9,686,398 | 6,734,606,180,072 |

Y=(4,880,894/14)=348,635

Y=348,635.

X=(36,968/14)=2,641

$b_1$=516,544,73,776/394,093,244

$b_1$=131.

Y=b0+b1X+U1

$b_0$=Y+b1X

bo=348,635+131(2,641)=694,606


Therefore the estimated regression line, Y=$b_0$+$b_1$+$U_1$, becomes,

Y=694,606+131x.

### 4.2.4  Correlation analysis.

Correlation coefficient (r), is the number that result from the correlation measurement which measure the direction, strength and validity of the association between any two variables given. For this study, the correlation coefficient between GDP and Life assurance premiums is given by,

r=$\frac{\Sigma XY}{\sqrt{(\Sigma X)^2(\Sigma Y)^2}}$,

=$\frac{\Sigma XY}{(\Sigma X)(\Sigma Y)}$,

=$\frac{16,577,954,512}{(4,880,894)(36,968)}$,

=16,577,954,512/180,436,889,392=+0.091.

100r=9.1%.

## Interpretation of 'r'.

➤ The direction of the association between GDP and life assurance funds is given by the positive sign of 'r', which implies that the GDP and life assurance funds are positively related. Large values of GDP are linked with large values of life assurance funds, and or small values for GDP are linked with small values for life assurance funds.

➤ The result of 'r', that is, 0.091 may be interpreted that in the problem, 9.10% of the variation in actual GDP may be predicted by change in the actual value of life assurance funds. Factors other than life assurance funds account for 90.90% of the variation in GDP.

➤ The calculated value of correlation coefficient, (+0.091), is somewhere near zero, and it shows a weak linear association between GDP and life assurance funds. However it may imply that there may be a strong relationship between GDP and life assurance funds but of a non -linear nature. This is what has already been depicted in the literature review.


Test of significance of the parameter estimates at 5% level of significance.

For b1.

We wish to test:    $H_0: b_1 = 0$
                    $H_1: b_1 \neq 0$.

The t test statistic reduces to,

$t^*_c = \dfrac{b_1}{\sqrt{b_1}}$, Which,

$= b_1 / \sqrt{b_1}$,  since $E(b_1) = b_1$.


$\delta^2 b_1 = \dfrac{\delta^2 u_i}{\Sigma x^2_i}$


$\delta^2 u_i = \dfrac{\Sigma e_i^2}{n-k}$.


$n = 14$ and $k = 2$

$\delta^2 u_i = 6{,}732{,}088{,}868{,}266/12 = 480{,}863{,}490{,}590.42$.

$\Sigma x^2{}_i = \Sigma x^2{}_i - nx.$

$=125,766,162-(14)(2,641)$

$=125,766,162-36,974$

$=125,729,202.$

$Var(b_1)=\delta^2 b_1 = \dfrac{\delta^2 u_i}{\Sigma x_i} = 480,863,490,590.42/125,729,202 = 3,824.59$

Therefore, $t*_c = \dfrac{b_1-0}{\sqrt{\delta^2 b_1}}$ $= 480,863,490,590.42/\sqrt{3,824.59}$

$=480,863,490,590.42/61.84=7,775,929,666.72$

$t_{n-2,\propto/2} = t_{14-2,\ 0.05/2} = t_{12,\ 0.025} = 2.18.$

Since $t*_c > t_{12,\ 0.025}$, We reject the null hypothesis and accept the alternative hypothesis and conclude that, at 5% level of significance, the parameter estimate $b_1$ is statistically significant.

## 4.3  The questionnaire response.

The questionnaire was administered to all the 25 life assurance companies. The  main purpose of the questionnaire was to establish the factors that determine the level of premiums underwritten by life assurance Companies. The questionnaire went further into inquiring into the future of life assurance business in Kenya.

# The response rate.

The response rate for the questionnaires can be considered appropriate. The questionnaires were sent to 25 Companies. Out of the 25 Companies, 18 companies answered the questionnaire and supplied it back. This is a 72% response rate. Some of the companies that never responded were conducted through telephone to investigate the reasons for non response. 2 Companies cited  confidentiality as the main reason while 5 cited time factor as the main issue as some managers complained to have been too busy to answer the questions. Out of the 18 questionnaires received, most of them had hanging answers hence the respondents were conducted again through telephone calls to probe them for clarifications.

### 4.3.1  General insurance observations.

All the companies that responded to the questionnaire were privately owned. The only insurance company which the government had some interests and offered life assurance services is Kenya Reinsurance Corporation. It was noted that Kenya Re accepted life assurance on a reinsurance basis. This meant that it accepts life assurance from other insurance companies. The only other government entity that used to underwrite life assurance was the defunct Kenya National Assurance Company (K.N.A.C) which was the leading life assurance underwriter in the Kenyan life assurance market.

Further observations indicated that most of the companies had been operating in the Kenyan market for more than 10 years. The companies offered both life assurance and general insurance business. Though a few companies said they offered both segments as a risk diversification strategy, where due to the poor performance of the general insurance sector they, used to compensate this through the life sector which was proving to be lucrative and very profitable. A majority of the assurer's affirmed their entry into the life assurance sector was driven by the desire to tap the untapped life assurance sector  which most companies had declined to enter into. According to a senior official from one of the leading life assurance companies, there was clear indication that life assurance is the back borne of

the insurance industry. Due to this realisation, many insurance companies are putting into place strategies of entering the life assurance market.

The assertion that life assurance is the sector of the future was cemented by its growth behaviour. According to a top executive from the Heritage Insurance Company, the growth pattern for life assurance has been very encouraging in relation to general insurance. In terms of premium growth,(1998-2000), long term business has grown at a rate of 20.7%, 10.5% and 18.8 compared to general insurance which in the same period grew at 1.4%, 4.1% and −3.8%. This implies that long term business has greater potential of growth rate close to 20%, hence asserting it's stand as the sector of tomorrow in the insurance industry.

All the companies interviewed admitted that they do set targets for the amount of life premiums to underwrite. It was quite amazing to note that despite the hard times facing the insurance industry and the Kenyan economy in general, the premiums underwritten by the companies exceeded the set yearly production levels (targets). Some companies exceeded the set targets by more than 15% which is quite encouraging. This scenario was attributed to the fact that more people are willing to purchase life assurance year by year. This is so because most companies have engaged in aggressive marketing policies to sensitise the public on the importance of purchasing life assurance, which not only benefits the policyholders through financial security, but also the entire economy through capital formation and accumulation.

## 4.4 Factors affecting/considered when setting life Premium production levels.

All the companies admitted taking into account the following factors when setting premium production targets;

✓ Social factors,
✓ Economic factors,
✓ Political factors,
✓ Past production levels.

Though all the companies took into account the above factors, most of them did not consider social factors as a major factor affecting life premium production.

### 4.4.1 Social factors.

❖ Gender and age.

Gender and age affected the premium rates set. The premium rates are based on the life expectancy tables. The assumptions here are that,

- Females tend to live longer than the males. Sine the risk of assuring males is high, hence the premiums charged are also high. The direct implication here is that if more men than females are insured in a given year, then the life premiums are expected to be high and vice versa.

- Premium rates increase with advancement in age, however this poses high mortality. If in any given time we have more older people who are insured, then, we expect the premium rates to be high, and therefore the total premium underwritten.

❖ Occupation.

This concerns the exposure of life assured to health hazards at their work stations, for instance, fieldworkers are more exposed to contagious diseases, occupations involving travelling have the risk of accidents. In such situations, the premium rates charged are high, though at the end, the net written premiums are far less because such risk occupations have very high claim lodge rates which affects the premiums underwritten adversely.

❖ Social activities.

High dependency level and provision of other facilities eats into the desire to have cover. Also loose lifestyles brings with it premature death and increased hospitalisation costs. This in turn reduces the  amount of life premiums underwritten.

### 4.4.2 Economic factors.

❖ Inflation.

According to a senior official from British Insurance Company, inflation reduces the purchasing power of the people and the public in general. When inflation is high, most of the schemes  which are hardly hit tend to suspend cover or simply lapse their policies until such times when things work good for them. This reduces the premium collection very adversely. Therefore in setting the targets of life premiums to be produced, the current and predicted future economic situation is thoroughly examined to  ensure that the factors likely to affect premium underwriting and collection are taken into account.

❖ Interest rates.

When the treasury bill rate is very high, most life policyholders lapse their life policies so that they can invest the money in the treasury stock and reap the highest returns. This happened in the years 1992-1994. This also saw schemes like the pension funds stopping remitting funds to the life assurance companies and investing them in the governments stock.

Interest rates also relates to the investment performance of the life fund.

❖ Fiscal policies.

This concerns government policies and even those conditions which are imposed by the World Bank (WB) and the International Monetary Fund, (IMF). When the economy is hit hard, most companies end up retrenching or closing up their businesses. This has a direct impact on the schemes, in terms of size, level of cover and even in numbers. Therefore in setting up the

premium levels, most companies look at the fiscal policies that were proposed in the budget speech.

## ❖ Economies of scale and stiff competition.

The current Kenyan insurance industry has been faced with very stiff competition. This is not only from fellow insurance companies, but also from other financial institutions like commercial banks. For instance, Barclays bank of Kenya Ltd in liaison with Aon Minet, a leading insurance brokerage firm recently launched its insurance division which will assist its customers in getting faster and efficient insurance services. According to a senior officer from one of the assurance companies, the entrance of other financial institutions in the insurance industry will accelerate unhealthy competition. Currently most insurance companies have been engaged in what Association of Kenya Insurers (A.K.I) calls premium undercutting. This involves fixing the premium rates at such levels such that one insurance company locks out the other competitors. Indeed, this has been brought about by unfair competition. Most of the companies interviewed admitted considering the competition trends in the market before setting their premium production targets.
It's no doubt that in stiff competition, the underwriters have to lower their premium rates with an expectation to acquire more business which could top up the premiums being lost. In most cases, in an attempt to differentiate the services and develop products/innovate the existing products, more money has to be spent thus the net premium will be low.

## ❖ Salaries.

Salary escalations normally increases the sum assured (more exposure) but with an increase in premium payment. This is true for salary related benefits and not covers based on flat sums assured.

### 4.4.3 Political factors.

This includes aspects like , directorship, business placements and legislation's. The legislation that directly or indirectly influence life assurance include Insurance Act,(1987), Income Tax Act, and Retirements Benefits Authority, (RBA-1997).

Such rules and regulations regulate the life sector on investment procedures, commissions, incentives and the administration of the life business in general.

### 4.4.4  Past production levels.

All the companies interviewed agreed having used past premium production levels as the basis for future projections. Past production levels are used as an indicator of sustainable growth that the underwriter will be able to meet. This means that a reasonable target could be set so as not to over underwrite business that the shareholders fund and reserves will not be able to support in an event of adverse claims.

## 4.5 The future of life assurance in Kenya.

The life insurance sector in Kenya has a great potential to grow bigger than its current size. However, according to an official from  Heritage Insurance, the penetration ratio of  insurance consumption, particularly life, is very low. The industry is indeed facing quite a number of challenges. The Ministry of Finance in conjunction with the Commissioner of Insurance are in the process of laying modalities of how to tackle some of these problems. It's of no doubt that once these problems are addressed, the industry will enjoy a stable and steady growth.

Another senior  official from Kenindia assurance company asserts that the future of life assurance in Kenya is very bright. She further argues that only about 3% of insurable population in Kenya has cover. This shows what potential is there and affirms that Kenya is very underdeveloped in life assurance. According to the official, there is a very big possibility that Kenya will also get very sophisticated life assurance products in the future.

Another school of thought argues that the life assurance penetration ratio in Kenya on average is currently at 0.64%. There are many Kenyans who have the ability to purchase insurance but have not done so. If the economy was to grow, and good governance implemented, there is a very bright future for life assurance in Kenya.

The potentiality of life assurance in Kenya is shown by it's growth patterns. According to another official of a leading life assurance company the growth pattern over the years has been very encouraging as the penetration of long term business to GDP for the last four years up to 2000 was 0.6%, 0.6%,0.6% and 0.7%, while the general business to GDP was 2.4%, 2.2%, 2.1% and 1.9% over the same time period and in terms of gross premium written.

In terms of premium growth,(1998-2000), long term business has been 20.7%, 10.5%, and 18.8%, while general insurance business has been 1.4%, 4.1% and −3.8%. This indicates that long term business (life assurance) has greater potential of growth rate than general insurance as it clocks almost 20%.

The growth in terms of financial resources gives an indication that in the recent times there are some financial institutions which have come up with packages to finance premium payments. For instance Triple A is one of the leading premium financiers in the Kenyan insurance market.

In terms of human resources, it is also worth noting that there are now two well known learning institutions offering insurance courses and training, the University of Nairobi(U.O.N), and the College of Insurance(C.O.I). This is further strengthened by the local diploma offered by Insurance Institute of Kenya (I.I.K) on top of the normal qualification in the Associated Chartered Insurance Institute (A.C.I.I) certificate.

In terms of capital growth in the insurance industry, one may consider the highly computerised systems being adopted by some underwriters. It was

worth noting that some insurance companies have invested heavily on quality and efficient information technologies (IT) so as to offer better services.

## 4 .6  Challenges faced by the insurance industry in Kenya.

In a paper of this type, I feel obliged to touch briefly on the challenges facing the insurance industry in Kenya. Though this is not part of the objectives, it does make a better conclusion of the study.

The challenges being faced by the insurance company include  the following:

✓ Legislation-As pointed out in the literature review, there are guide lines which guide insurance companies on the type and limits of investments to put their funds into. This has made it very hard for insurers to make their own investment  decisions and in most cases they end up not putting their funds on the projects with the highest yields.

✓ Competition: Other insurance companies have entered the insurance market hence making competition very stiff. This has led to premium rate undercutting. Competition is not only coming from insurance companies, but also from other organisations like, health management organisations competing for medical products, banks offering insurance services relating to personal accidents, and even mortgage arrangements.

✓ Local insurance market practice:
♦ Marketing distribution and bad publicity arising from over reliance on intermediaries some of whom lack the technical expertise and understanding of the products they sell.
♦ Inadequate specialised personnel: Until recently, many people shied away from undertaking insurance courses, not only in our Universities, but also in the local colleges. But with the realisation that insurance will be the career of the future, many people have now enrolled in insurance courses.
♦ Unethical practices and competition. This includes price wars and lack of proper assessment of risks in a drive to acquire business.

- Unnecessary delay in transmission of premiums and demand for unreasonable commissions by the intermediaries thus significantly affecting the insurers cash flow management process. However this problem was tackled by the Minister of Finance in this years budget speech when he reduced the credit period given to brokers from 60 days to 30 days. With this initiative taken, it is hoped that in future, the issue of premium collection will not be a major issue.

- Lack of and inadequate product development and customer service. This has been a big problem affecting the insurance industry. As compared to other financial institutions like banks, insurance companies seem to be more reactive than proactive when it comes to product innovation and customer focus. This is because insurance companies never bother coming up with new tailor made products but have continued to rely on their traditional products which are universally offered by all insurance companies.

- Poor claims management and dishonesty among some employees. Of late dishonesty among employees of insurance companies has become a common phenomenon. This involves employees liasing with other parties like Lawyers and Doctors to defraud the insurance company concerned.

- Lack of incentives by the government. The government should also help the industry to grow. This may be by having incentives that will promote the development of the industry, for instance, tax incentives for life policy holders.

- Poverty and slow economic growth. Most Kenyans see insurance as a secondary need. Due to this they do not value it especially during these hard times.

- The last but not the least important is the Kenyan attitude which appears to be pessimistic as they view insurers as "conmen" due to bad publicity. This has also been perpetrated by the socio- cultural practices in the country.

Though the above problems have continued to hit the industry thoroughly, this is not to say that all is lost. The insurers through their association, Association of Kenya Insurers,(A.K.I) and other stakeholders including the popular Retirements Benefits Authority (R.B.A), are putting everything in

order and there is great hope that the insurance industry will have a very bright future given the potential it has.

# CHAPTER 5:-DISCUSSION,SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

The chapter will contain details on discussions of the research findings summary and conclusions as well as recommendations for further research.

This paper was aimed at achieving 3 main objectives,

i. To study the trends in premium levels against the GDP between 31st December 1987 to 31st December 2000.

ii. To test whether the life assurance funds have played a significant role in mobilizing resources in to savings in Kenya.

iii. To determine factors that influence the level of premiums underwritten by life assurance companies.

In order to explain or have a better comparison between GDP and life premiums( Gross Direct Premiums), bar graphs were used as they clearly showed the behavior patterns on a yearly basis. In explaining the trend, use of line graphs was applied. This is because line graphs are best suited in explaining the movement over time. In order to obtain information on the reasons of variations shown by the line graph, the researcher used interviews which were administered to long serving senior managers in the industry.

In testing whether life assurance funds have been significant, a simple ordinary least squares method was employed. This made use of the simple linear regression analysis, $Y = b_0 + b_1x$.

A close look at the bar graphs shows that the level of gross premiums kept on increasing year by year except in 1994. During this year there was a sharp drop in the level of premiums underwritten which was attributed to  the collapse of  the giant Kenya National Assurance Company, (K.N.A.C). By then K.N.A.C was the leading life assurance underwriter in the Kenyan insurance industry and it's collapse meant that many life policies were terminated prematurely and the business lost. This had a very big impact  on the life

sector. However this never affected the GDP levels as there is no indication of the fall in GDP which kept on increasing steadily.

The above observation can further be supported by looking closely at the penetration ratios. The premium penetration ratios kept on increasing steadily from 1987 with a very small decline in 1993, (0.81), however in 1994, a significant and very sharp decline in penetration ratios was noticed. In 1994, the penetration ratios reached a minimum of 0.57 ever noticed in the 14 years.

It is coincidental that the year that saw the exit of K.N.A.C from the industry also saw many industry players enter the market. Companies that entered the market included Heritage AII (1994), Geminia (1992), Kenyan Alliance (1992), Occidental (1993) and Mercantile life (1993). This enabled the industry to absorb the shocks of the fall of K.N.A.C and in a short while, the sector started picking up again. Due to this, gross premiums started increasing again vis a vis the GDP. This is also supported by the increasing trends of the penetration ratios which rose from 0.57 in 1994 to reach the highest 0.85 in year 2000.

A further more observation revealed that although the percentage change or growth pattern between GDP and Gross premiums year after year was almost the same. In the years 1987 to 1994, from 1995 to 2000, gross premiums grew at a faster rate as compared to GDP. The percentage change in 1994 for gross premiums was 24%, while GDP was 16%, 1996(gross premiums 27%, GDP 14%) 1997(gross premiums 18% GDP 19%), 1998(gross premiums 21%, GDP 11%), 1999(gross premiums 15%, GDP 7%), and in year 2000 gross premium growth rate was 14% while GDP was 5%. The direct implication here is that life fund was growing at a faster rate than the GDP. This scenerio can also be observed from the bar graphs. From years 1987 to 1994, the gross premium bars were not clearly visible as they were envisaged in the X axis line, however from 1995, an insignificant recognition started emerging, this continued steadily till year 2000 when the life column was clearly visible.

The tests of significance tested were aimed at testing the hypothesis that:

**H₁**: Life assurance funds have played a significant role as mobiliser's of savings in Kenya, or alternative that,

**H₀**: Life assurance funds have not played a significant role as mobiliser's of savings in Kenya.

From the study, the correlation coefficient calculated is 9.10%, This shows that there is a direct relationship between gross premiums and GDP, such that large values of GDP are associated with large values of gross premiums and small values of GDP are associated with small values of gross premiums.

However from the analysis an 'r' of 9.10% means that 9.10% of the variation in GDP is predicted by change in the actual value of life premiums, while factors other than life assurance funds account for 90.90% of the total variation in GDP.

Since the calculated value of 'r' (+0.091) is near zero, it shows a weak linear association between gross premiums and GDP. This can also be observed by analysing the calculated 't' statistic($t^*_c$) and comparing to $t_{12,0.025}$. In the calculation $t^*_c=775,929,666.72$ while $t_{n-2, \propto/2}$, $=t_{12, 0025}=2.18$, since $t^*_c>t12$, 0.025, we reject the null hypothesis that life assurance funds have played a significant role in mobilizing resources into savings in Kenya and accept the alternative hypothesis that life assurance funds have not played a significant role in mobilizing resources into savings in Kenya. These calculations rhymes with what has already been portrayed in the literature review.

The study was also aimed at examining the factors that determine the level of premiums underwritten by life assurance companies. It was found out that many factors play a very crucial role determining the factors that determine the level of premiums underwritten by life assurance companies in Kenya. Some of the main factors are, social factors, economic factors, political and past production trends. The social factors includes gender and age of the

would be policyholder. In cases where more males than females are insured, then premiums are expected to be high since the assumption is that males live for a shorter period than females hence the rates charged on their premiums are a bit high. Other social factors included occupation and social activities undertaken by the assured.

Economic factors include inflation. When inflation is high, less people acquire life policies hence low premiums. Interest rates also affects level of premiums in that if the government stock has high yields many people tend to invest in it and forego life assurance. Other factors considered include government fiscal policies, economies of scale and competition levels.

Despite the above factors playing a crucial role in shaping the insurance industry, its future looks bright. This is because  by looking at the growth patterns, the penetration ratios have been increasing year by year. If the Kenyan market were fully developed, then the level of life premiums could be very high.

The Ministry of Finance in conjunction with the Commissioner of Insurance's office are in the process of laying down modalities on how to tackle the problems hindering the development of the life sector in Kenya. Once such problems are resolved and a conducive environment created, there's no doubt that the industry will enjoy a very stable and steady growth.

## 5.1 Limitations of the study.

1. The data used in the study has been obtained from  financial statements of the insurance companies. Therefore any user has to be cautious on the limitations associated with such statements, for instance, they may be subject to management bias hence manipulations.

2. Time limitation- Time needed to cover this project was also a limitation. Given it's wide scope, it was not possible to exhaustively explore all aspects like conducting all the respondents for probing.

3. Inadequate life assurance literature- It was quite hard to get current writings and readings on life assurance. Most writers seem to have concentrated more on general insurance which is most developed in Kenya.

## 5.2   Recommendations for further research .

1. From the study, it has been evident that the Commissioner of Insurance sets limits for the levels and type of investments life funds should be put into. This means that though the life funds may have more viable projects, they have to adhere to the Commissioners guidelines. A study can be carried out to show what effects will the liberalization of the investment regime have on the investment decisions of life assurance companies.

2. Life is very precious, though of late many events have cropped up which are a big threat to the society. Many unfolding events have taken place in the last four decades or so. Of late , there has been continued global terrorist attacks, not to forget the rapid rise in the HIV-AIDS epidemic. It would therefore be wise for an enthusiastic researcher to indulge into examining the impact of these  phenomenon on the underwriting practices of life assurance companies.

3. It is clear that this study was only concerned with the life assurance sector, a study can also be done that compares the performance of life assurance funds with the general insurance sector. This will assist in knowing the overall performance of the industry.

# APPENDICES

## Appendix  A

### Table 2-Gross premiums

#### GROSS DIRECT PREMIUM INCOMES OF INSURERS
#### UNDER LONG TERM INSURANCE BUSINESS

| NAME OF INSURER | 1987 Figures in "000s" | 1988 Figures in "000s" | 1989 Figures in "000s" | 1990 Figures in "000s" | 1991 Figures in "000s" | 1992 Figures in "000s" |
|---|---|---|---|---|---|---|
| ALICO | 229,362 | 275,628 | 335,120 | 349,754 | 355,794 | 408,935 |
| APPOLO | 22,908 | 23,544 | 23,384 | 22,068 | 24,898 | 23,903 |
| BLUESHIELD | 1,300 | 3,950 | 5,609 | 5,772 | 7,583 | 9,074 |
| BRITISH AMERICAN | 35,972 | 47,044 | | 76,547 | 93,151 | 108,305 |
| CANNON | 31,031 | 33,486 | 34,535 | 35,356 | 29,395 | 32,372 |
| COOPERATIVE | 26,953 | 34,908 | 34,960 | 38,279 | 49,385 | 59,951 |
| CORPORATE | 2,268 | 2,873 | 3,775 | 5,640 | 7,692 | 9,702 |
| FIDELITY SHIELD | 21,522 | 31,811 | 30,554 | 22,642 | 30,706 | 21,444 |
| GEMINIA | | | | | | 205 |
| AFRICAN INTERNATIONAL INS. | 340 | 430 | 583 | 779 | 777 | 750 |
| HERITAGE AII | | | | | | |
| I CEA | 173,542 | 221,263 | 253,884 | 280,015 | 358,273 | 416,380 |
| JUBILEE | 22,803 | 35,075 | 47,744 | 58,550 | 63,624 | 72,069 |
| KENINDIA | 20,167 | 25,173 | 27,392 | 30,239 | 31,526 | 41,037 |
| KENYA REINSURANCE | 4,281 | | | | | |

| 1993 Figures in "000s" | 1994 Figures in "000s" | 1995 Figures in "000s" | 1996 Figures in "000s" | 1997 Figures in "000s" | 1998 Figures in "000s" | 1999 Figures in "000s" | 2000 Figures in "000s" |
|---|---|---|---|---|---|---|---|
| 443,094 | 493,786 | 561,606 | 622,672 | 683,485 | 775,903 | 846,854 | 951,948 |
| 28,785 | 31,580 | 34,775 | 40,338 | 47,471 | 47,942 | 56,752 | 55,617 |
| 11,276 | 11,829 | 13,151 | 15,315 | 17,605 | 23,343 | 23,527 | 28,382 |
| 136,556 | 186,599 | 224,155 | 286,841 | 371,882 | 488,244 | 753,935 | 1,010,496 |
| 33,951 | 42,730 | 43,363 | 48,810 | 64,391 | 63,589 | 65,317 | 63,272 |
| 59,861 | 50,135 | 38,824 | 31,992 | 32,561 | 27,626 | 38,058 | 44,824 |
| 11,563 | 13,960 | 13,960 | 23,883 | 29,463 | 31,787 | 22,387 | 25,007 |
| 22,991 | 24,945 | 25,796 | 27,554 | 29,328 | 24,678 | 25,093 | 22,461 |
| 1,688 | 2,858 | 5,011 | 34,973 merger | 51,493 | 36,393 | 26,632 | 22,299 |
| 514 | 554 | 949 | | | | | |
| | 13,518 | 20,322 | 47,944 | 79,508 | 77,168 | 112,520 | 137,223 |
| 514,262 | 444,343 | 680,863 | 802,692 | 909,541 | 1,097,919 | 1,198,828 | 1,374,814 |
| 101,548 | 199,042 | 232,368 | 287,396 | 318,380 | 331,763 | 368,296 | 372,321 |
| 42,416 | 50,350 | 75,473 | 134,324 | 170,511 | 308,388 | 293,081 | 354,705 |

| | | | | | |
|---|---|---|---|---|---|
| KENYA ALLIANCE | | | | | |
| KENYAN NATIONAL | 467,792 | 301,598 | 353,017 | 398,206 | 493,027 |
| MADISON | 51,284 | 61,271 | 70,376 | 97,433 | 105,526 |
| MERCANTILE | | | | | |
| OCCIDENTAL | | | | | |
| OLD MUTUAL | | | | | |
| PAN AFRICA | 40,796 | 42,959 | 45,884 | 50,640 | 53,948 |
| PIONEER STANDARD ASSURANCE | 15,031 | 15,159 | 16,029 | 18,228 | 20,833 |
| STALLION | 285 | 479 | 1,043 | 2,179 | 5,415 |
| THE MONARCH | | | | | |
| UAP PROVINCIAL | | | | | |
| UNION | 145 | 66 | 44 | 195 | 794 |
| UNITED **Total Gross Direct Premiums** | **1,167,782** | **1,156,717** | **1,283,933** | **1,492,522** | **1,732,347** |

*Source: Insurance Annual Statistics-Commissioner of Insurance office.*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4,465 | 7,607 | 5,918 | 15,053 | 23,296 | 36,183 | 46,964 | 65,528 | 64,448 |
| 489,466 | 549,758 | | | | | | | |
| 151,973 | 184,614 | 197,034 | 197,034 | 325,160 | 358,521 | 443,808 | 451,008 | 516,238 |
| | 911 | 3,545 | 12,864 | 20,943 | 40,763 | 65,739 | 65,858 | 64,232 |
| | 939 | 4,025 | 9,186 | 12,397 | 14,597 | 19,898 | 22,599 | 17,574 |
| | 11,146 | 9,467 | 12,502 | 17,976 | 21,225 | 48,380 | 105,779 | 151,336 |
| 58,986 | 69,658 | 74,582 | 93,260 | 126,422 | 151,145 | 184,753 | 225,492 | 245,910 |
| 22,279 | 28,065 | 34,527 | 45,448 | 53,054 | 61,360 | 70,926 | 81,670 | 83,379 |
| | | | | | | | 177 | 429 |
| 9,877 | 20,556 | 25,063 | 29,187 | 34,080 | 47,781 | 51,775 | 67,233 | |
| | | | | 1,088 | 1,953 | 3,113 | 2,042 | 2,750 |
| | | | | | | | 53,771 merged | 65,616 |
| 552 | 672 | 1,870 | 5,338 | 12,143 | 42,427 | 51,671 | | |
| | | | | | | 2,389 | 5,626 | 7,315 |
| ,941,725 | 2,282,431 | 1,922,260 | 2,390,488 | 3,031,293 | 3,581,574 | 4,324,159 | 4,978,063 | 5,682,596 |

## Table 3-Gross domestic product

| GDP AT CURRENT PRICES | 112,965 | 126,703 | 146,573 | 168,455 | 193,788 | 228,051 | 283,708 | 338,065 | 393,767 | 449,621 | 536,264 | 593,353 | 637,362 | 672,219 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

*Source: Central  Bureau of statistics-Various economic surveys.*

## Table 4-Gross premium/GDP percentage changes.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % CHANGE IN GROSS DIRECT PREMIUMS | -1.03% | 11.02% | 16.19% | 16.01% | 11.98% | 17.76% | -15.74% | 24.11% | 26.86% | 18.15% | 20.78% | 15.18% | 14.07% |
| % CHANGE IN GROSS DOMESTIC PRODUCT | 12.16% | 15.68% | 14.93% | 15.04% | 17.68% | 24.41% | 19.16% | 16.48% | 14.18% | 19.27% | 10.65% | 7.42% | 5.47% |

# Table 5-Premium penetration ratios

CALCULATION OF PREMIUM PENETRATION RATIOS.(1987-2000)

| Calculation Of Premium Penetration Ratios | (PPR'S) | | | | |
|---|---|---|---|---|---|
| YEAR | 1987 | 1988 | 1989 | 1990 | 1991 |
| PPR= Gross Direct Premiums/Gross Domestic Product PPR=GP/GDP*100 | 1.04 | 0.91 | 0.88 | 0.89 | 0.89 |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|------|
| 0.85 | 0.81 | 0.57 | 0.61 | 0.67 | 0.67 | 0.73 | 0.78 | 0.85 |

# Appendix B

# List of life assurance companies as at 31<sup>st</sup> December 2000.

1. AMERICAN LIFE ASSURANCE COMPANY (ALICO).
2. APPOLO.
3. BLUESHIELD.
4. BRITISH AMERICAN (BRITAK).
5. CANNON.
6. COOPERATIVE.
7. CORPORATE.
8. FIDELITY SHIELD.
9. GEMINIA.
10. HERITAGE A.I.I.
11. INSURANCE CO. OF EAST AFRICA (ICEA).
12. JUBILEE.
13. KENINDIA.
14. KENYAN ALLIANCE.
15. MADISON.
16. MERCANTILE.
17. OCCIDENTAL.
18. THE STANDARD ASSURANCE.
19. OLD MUTUAL.
20. PAN AFRICA.
21. PIONEER.
22. STALLION(Under Statutory Management).
23. THE MONARCH.
24. UAP PROVINCIAL.
25. UNITED INSURANCE.

# APPENDIX C.

## Questionnaire.

The questionnaire below seeks to establish the factors that determine the level of premiums underwritten by life assurance Companies in Kenya. Please answer all the questions. The information collected will be used for the purposes of this study and will be treated with confidentiality. Incase there are any issues you require clarification, kindly contact the researcher (**Francis K. Nyamai) at University Of Nairobi, Box 30197 Nairobi or Phone No**. **02-567374** A copy of the research project will be made available to you on request. I will very highly appreciate your kind assistance.

**Part A.  General information.**

1.What's the nature of  ownership of your Company?

- ❑      Private
- ❑      Private/ Government owned.
- ❑      Public Company.
- ❑      Any other(please specify)_____

2.How many years have you been in operation in Kenya?_____

3.What type of insurance do you offer?

- ❑      Life
- ❑      General
- ❑      Both
- ❑      Other, please specify_____

**Part B. Life assurance business issues.**

1.When did your company start offering life assurance in Kenya?_____

2.What has been the trend of your life fund over the years?

❑ Increasing

❑ Decreasing

❑ Constant

❑ Other,(please specify)_____

3. If decreasing or constant, what do you attribute this to?

_____

_____

_____

4.Do you normally set yearly targets for life premium production?

❑ Yes

❑ No

If no, what reasons make you not set the targets?_____

_____

_____

_____

_____

5. If yes to question 4. Above, how well do you attain the targets?_____

_____

_____

_____

_____

If no, what factors hinder you from attaining the said targets?

_____

_____

_____

6.Do you consider the below factors when setting the premium production
targets

- ❏ Social factors
- ❏ Economic factors
- ❏ Political factors
- ❏ Past production levels

For the factors you consider in 6 above, briefly explain how they affect your
premium production

_____

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7.In your opinion, what's the future of life assurance business in
Kenya?_____

_____

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_____

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