AN EVALUATION OF LIFE ASSURANCE FUNDS AS A SOURCE OF INVESTMENT FINANCING IN KENYA

BY

MASINGA, OLIVER MWISA

(D53/OL/1028/02)

RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN BUSINESS ADMINISTRATION

KENYATTA UNIVERSITY
DECLARATION

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

Signed .................................................. Date ..............................................................

Masinga, Oliver Mwisa

I confirm that the work reported in this project was carried out by the student under my supervision and is presented with the approval of Kenyatta University.

Signed .................................................. Date ..............................................................

Mr. J. MUTURI
Lecturer: Accounting & Finance Department

Signed .................................................. Date ..............................................................

Mr. A.K. KHASIANI
Lecturer: Accounting & Finance Department

Signed .................................................. Date ..............................................................

Dr. George Gongera
Chairman
Business Administration Department

(i)
DEDICATION

To my parents Alphonce Masinga & Josphine Masinga, brothers and sisters.
ACKNOWLEDGEMENTS

This study has been made possible by a number of people and organizations that I must offer my utmost gratitude.

I extend my appreciation to my supervisors Mr. Muturi and Mr. Khasiani for their tremendous and continued support throughout the project duration, their time, patience, guidance and ideas were of mutual importance to me.

My sincere gratitude importantly goes to all the managers from the insurance firms interviewed for their plentiful information offered without which this research project could not be complete.

I must also express my gratitude to my family for their continued courage and understanding during the time of study.
TABLE OF CONTENTS

Declaration .................................................................................................................. i
Dedication .................................................................................................................... ii
Acknowledgement ....................................................................................................... iii
Table of contents ....................................................................................................... iv
Appendices .................................................................................................................. vi
List of Tables ........................................................................................................... vii
List of abbreviations ................................................................................................. viii
Abstract ...................................................................................................................... ix

CHAPTER ONE:
1.0 Introduction .......................................................................................................... 1
1.1 Background ........................................................................................................... 1
1.2 Statement of the problem ..................................................................................... 4
1.3 Research objectives ............................................................................................... 5
1.4 Research questions ............................................................................................... 6
1.5 Importance of the Study ....................................................................................... 6
1.6 Scope of Study ....................................................................................................... 7

CHAPTER TWO:
2.0 Literature review ................................................................................................. 8
2.1.1 Savings and Investments Dynamics ................................................................. 8
2.1.2 Life Assurance Policies in the Context of Financial Assets .............................. 9
2.1.3 The Role of Insurance Funds in Investment Financing .................................... 11
2.1.4 Life Assurance as a Risk Management Instrument .......................................... 13
2.2.1 Solow Growth model on Investment and Capital Accumulation ....................... 14
2.3.1 Life Insurance and investment financing in Philippine ................................... 18
2.3.2 The role of life assurance funds in India’s Development Financing ............... 19
2.3.3 The role of life assurance funds towards Development Financing in Kenya .... 21
### APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>List of Life Assurance Companies surveyed</td>
<td>55</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Introductory letter</td>
<td>56</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Questionnaire</td>
<td>57</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Premium data collection data collection form</td>
<td>61</td>
</tr>
<tr>
<td>Appendix E</td>
<td>GDP data collection data collection form</td>
<td>62</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Computation of premium penetration ratios data</td>
<td>63</td>
</tr>
<tr>
<td>Appendix G</td>
<td>Comparative premium penetration ratios data</td>
<td>64</td>
</tr>
<tr>
<td>Appendix H</td>
<td>Domestic Investments /GDP ratio computation</td>
<td>65</td>
</tr>
<tr>
<td>Appendix I</td>
<td>Domestic Savings /GDP ratio computation</td>
<td>66</td>
</tr>
<tr>
<td>Appendix J</td>
<td>Life assurance industry investments computation</td>
<td>67</td>
</tr>
<tr>
<td>Appendix K</td>
<td>Life Fund Investments as a proportion to National</td>
<td>68</td>
</tr>
<tr>
<td>Appendix L</td>
<td>Industry investments channels analysis</td>
<td>69</td>
</tr>
<tr>
<td>Table/Graph/Chart</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Table 1</td>
<td>Premium Growth in Kenya 1997 – 2002</td>
<td>23</td>
</tr>
<tr>
<td>Table 2</td>
<td>Life Assurance Industry Investments Channels Analysis</td>
<td>43</td>
</tr>
<tr>
<td>Graph 1.</td>
<td>Investment/Capital Accumulation</td>
<td>15</td>
</tr>
<tr>
<td>Figures 1</td>
<td>Premium income bar graph</td>
<td>32</td>
</tr>
<tr>
<td>Figures 2</td>
<td>GDP bar graph</td>
<td>32</td>
</tr>
<tr>
<td>Figures 3</td>
<td>Life premium penetration ratio line graph</td>
<td>33</td>
</tr>
<tr>
<td>Figures 4</td>
<td>Life premium comparative penetration ratio line graph</td>
<td>34</td>
</tr>
<tr>
<td>Figures 5</td>
<td>National investments/GDP line graph</td>
<td>39</td>
</tr>
<tr>
<td>Figures 6</td>
<td>Gross domestic/GDP line graph</td>
<td>40</td>
</tr>
<tr>
<td>Figures 7</td>
<td>Life fund investments/GDP line graph</td>
<td>41</td>
</tr>
<tr>
<td>Figures 8</td>
<td>Comparison life fund/GDP &amp; national/GDP investments line graph</td>
<td>42</td>
</tr>
<tr>
<td>Figures 9</td>
<td>Life fund/National investments proportion line graph</td>
<td>43</td>
</tr>
<tr>
<td>Chart 1</td>
<td>Life assurance industry investments channels analysis 1997</td>
<td>44</td>
</tr>
<tr>
<td>Chart 2</td>
<td>Life assurance industry investments channels analysis 1998</td>
<td>44</td>
</tr>
<tr>
<td>Chart 3</td>
<td>Life assurance industry investments channels analysis 1999</td>
<td>44</td>
</tr>
<tr>
<td>Chart 4</td>
<td>Life assurance industry investments channels analysis 2000</td>
<td>44</td>
</tr>
<tr>
<td>Chart 5</td>
<td>Life assurance industry investments channels analysis 2001</td>
<td>44</td>
</tr>
<tr>
<td>Chart 6</td>
<td>Life assurance industry investments channels analysis 2002</td>
<td>44</td>
</tr>
<tr>
<td>Chart 7</td>
<td>Life assurance industry investments channels analysis 2003</td>
<td>45</td>
</tr>
<tr>
<td>Chart 8</td>
<td>Life assurance industry investments channels analysis 2004</td>
<td>45</td>
</tr>
</tbody>
</table>
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>Gross Domestic Product.</td>
</tr>
<tr>
<td>AKI</td>
<td>Association of Kenya Insurers</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>IPAR</td>
<td>Institute of Policy Analysis and Research</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
</tbody>
</table>
ABSTRACT

A thriving insurance sector is of vital importance to every modern economy. First because it encourages savings, secondly it provides a safety net to business enterprises and productive individuals. Finally and perhaps most importantly it generates long-term investment funds for economic development. Life assurance funds represent a form of investment financing whose full potential is yet to be realized in Kenya. Contributing to this lack of full potential are factors encompassing a high inequality and unbalanced distribution of national resources which constrain accumulation of wealth. In addition are cultural factors which embrace collective social responsibility and therefore inhibits individual initiative towards acquisition of life assurance cover against risks adversely affecting health and financial security.

The Kenyan economy, faced with declining foreign capital inflows, poor performing stock exchange and turbulent banking sector, it becomes necessary to explore alternative domestic financial mobilization mechanisms and establish appropriate policy framework geared towards transformation of savings into quality investments. Clayton (1970) asserts that the huge resources and conservative practices of life assurance companies reasonably guarantee their ability to mobilize savings for long term investment. This project seeks to determine the contribution of life assurance premium as a source of investment financing in Kenya.
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The generation of domestic resources to save and invest productively is the essential foundation of sustained development. Each country bears the primary responsibility for its economic development and therefore mobilization of domestic savings is crucial. As per the UN international conference on financing for development paper June 2002, to sustain and accelerate economic growth, there is obviously a need for investment and for mobilizing adequate resources to finance the investment. A very low domestic savings rate is one of the main structural weaknesses to be overcome in most developing countries.

Babson (2004) asserts that proper macroeconomic policy framework is mandatory for domestic savings mobilization and the creation of quality national investment. National efforts to mobilize domestic financial resources should consolidate an enabling environment geared towards the promotion of economic growth, effective domestic institutions, sound macroeconomic policies and a strong social agenda. A favorable economic environment is vital not only in mobilizing domestic resources, but also in attracting and effectively using international investment. Chino (2000) observed that in the case of East Asian economies, great emphasis was placed on fiscal discipline and on building a strong, effectively supervised financial sector able to mobilize private
savings and allocate them to efficient investment. Makau (1995) argues that Kenya took a different approach by promoting government funded investments through the establishment of a strong parastatal sector. This approach weakened the financial sector in terms of domestic savings mobilization and also decelerated the flow of venture capital and other forms of long term finance. Further, the government failed on its' efforts to keep tight controls on public expenditure by slackening on fiscal measures and financial discipline. Measures ought to have been put into place to ensure strengthening of the stock market and privatization of public enterprises through the issuance of shares.

Kenya's commitment to a system that favours market driven economy which encourages foreign investment was reiterated in the foreign investment Act of 1964 and the 1965 "session paper on African Socialism and its application to planning". These initial steps laid the basis for what is now a tradition of openness to private investment. In a move to reverse the declining trend in terms of investments inflow and halt the flight of existing foreign investments, the government resulted into strengthening the stock market in order to facilitate floating of shares by public enterprises through privatization and also stimulate private sector investments.

However, as highlighted by Wagacha (2001), in Kenya like many other developing nations, the poor functioning of stock exchange markets is explained by several factors including lack of expertise, rigid regulatory framework, bureaucratic dealing procedures and lack of technological progress. As
highlighted in the CBK economic review January 2005 edition the Kenyan banking sector performance is afflicted by high interest rates, non performing loans and strict regulatory requirements. Despite continued reforms in the banking sector, the expected improvement in savings mobilization did not materialize. On the other hand foreign investments continue to diminish as a result of capital flight due to declining economic growth, deteriorating infrastructure and increasing cost of production.

Therefore, as stipulated by Heinrich (1998) the main challenge is to explore alternative domestic resource mobilization mechanisms and establish appropriate policy frame work geared towards transformation of savings into quality investments. Clayton (1970) asserts that the huge resources and conservative practices of life assurance companies reasonably guarantee their ability to mobilize savings for long term investment.

The nature of the insurance business is such that the cash inflow of insurance companies is constant while the payout is deferred and contingency related. Wasow & Hill (1986) points out that premium remittance by policy holders cumulatively contribute towards savings mobilization within the economy. The individual policy holders enjoy financial security against the insured risks as well as accumulating savings to meet education fees, medical care, development projects and retirement benefits. In return, the insurance companies invest the funds in government securities, corporate securities and bonds, mortgage financing and real estate.
The insurance sector in Kenya had its humble beginnings in the 1900s with little significance to the GDP at that time (the Insurer, July 2003). After independence the sector continued to attract investors, who committed resources and evidently reaped relatively good returns. Currently the industry comprises of 41 licensed companies and two reinsurers. The sector is highly competitive in both the life and general insurance sectors, with the top 4 companies in each sector holding approximately 75% of premiums. However, lack of regulatory mechanisms led to unethical practices characterized by high premium turnover and poor claims settlement record. It was not until 1984 that the insurance Act was enacted and become operational effective 1st January 1987. In order to effectively enforce the Act, the office of Commissioner of Insurance was established. The immediate challenges included determination of minimum capitalization requirements, solvency margins, formulating business standards, establishment of investment guidelines and setting reporting structures. The focus on such operating guidelines aimed at providing control mechanisms over insurance companies operations, brokerage firms and agents dealings, and also sought to protect the interests of the policy holders.

1.2 Statement of the problem

Makau (1997) asserts that the Kenyan economy experiences enormous difficulties in the path of stimulating both private and public investments. The initial approach taken by the government, after independence, sought to
promote public sector investments through the establishment of parastatals. Wagacha (2001) observed that this approach weakened the financial sector in mobilizing domestic savings and undermined the role of foreign investments.

The CBK economic review January 2005 edition stipulates that with the Kenyan economy faced with declining foreign capital inflows, poor performing stock exchange and turbulent banking sector, it becomes necessary to explore alternative domestic financial mobilization mechanisms. In consideration of the forgoing, what role would be played by life insurance companies in mobilizing domestic savings, which is considered as an important source of financing for investment? This research paper seeks to establish and describe this role.

1.3 Objectives of the Study

(i) To determine the level of life assurance premium penetration ratio as a percentage of the GDP over the period 1987 – 2003 in Kenya.

(ii) To determine the challenges to life assurance premium penetration ratio in Kenya.

(iii) To determine the level of national investments as a percentage of the GDP in Kenya.

(iv) To determine the contribution of life assurance funds as a source of investment financing in Kenya.
1.4 Research Questions

(i) What has been the level of life assurance premium penetration ratio as a percentage of the GDP in Kenya?

(ii) What have been the challenges to life assurance premium penetration ratio in Kenya?

(iii) What has been the level of national investments as a percentage of the GDP in Kenya?

(iv) What is the contribution of life assurance funds as a source of investment financing in Kenya?

1.5 Importance of the Study.

1) **Insurance industry** – This study would pose a challenge to industry players to re-engineer life assurance products to reflect changing consumer needs while enhancing returns on investments, in a bid to exploit the untapped market potential.

2) **Government** – Overcoming poverty in Kenya requires mobilization of capital resources. The insurance industry in Kenya represent enormous untapped source of finances for investment, highly required for economic development. The study opens gaps for more research towards formulation of suitable policy framework in a bid to spur growth in the underperforming life assurance industry. Priority areas would include the establishment of an
autonomous regulatory body, liberalization of investment regime and tax incentives on life insurance policies.

3) **Researchers and academicians** – The study serves as a stimulus to carry out research on unexplored potential and future challenges facing the life assurance industry in Kenya.

### 1.6 Scope of Study

The study seeks to establish the level of premium levels against the G.D.P within the period, (1987 – 2000) as a measure of the life assurance funds contribution towards domestic savings mobilization, which are a major source of financing for investments.
2.0 LITERATURE REVIEW

2.1.1 Savings and Investments Dynamics

Mendelson & Sidney (1976) asserts that in the lexicon of the economist savings occurs when only a portion of the income stream is consumed with the rest deferred in order to permit future consumption on a grander scale or at a more opportune time. Gurley (1956) urges that the acquisition of a financial asset called investment, pays off in the future, is subject to varying degrees of risk. When, at one extreme the operation embodies a minimum market risk, it may be described as savings while at the opposite extreme where risk fluctuation is high, it may be called speculation. Timothy (1978) argues that risks levels tend to vary more proportionately to expected rate of return. Savings are usually channeled to government securities, capital markets, life insurance and mutual funds. In evaluating such investment instruments the factors to be considered include safety, liquidity and legal restrictions on placement of funds.

Reilly & Brown (1997) pointed out that the savings - investments nexus has provided the basis for financing the enormous growth in tangible wealth globally. Entrepreneurs in pursuit of expansion sought external financing, whereas source income earners held savings in excess of their own requirements. Initially such transfers could be transacted directly; however,
financial institutions operating through developing financial markets became increasingly important as intermediaries relieving fund users and savers off the burden of transacting directly in an unstructured market.

Brealy & Myers (1984) observed that an institution's investment policies reflect its primary functions. The early maturing securities are important to commercial banks because of the short term nature of their liabilities, while long maturities are more suitable to life assurance companies faced with long term liabilities. As a result of accelerated growth in terms of asset base, most institutional investors have experienced difficult in finding high return – low risk outlets for their enlarged resources while pressure to expand the investment portfolios has grown accordingly.

2.1.2 Life Assurance Policies in the Context of Financial Assets

Vaughen (1990) stipulates that life insurance provides protection against the occurrence of contingencies such as death, disability, and old age. Level premium payments are usually made in exchange for the desired protection. Faced with increasing risk levels for most of these contingencies as contrasted with the level premiums charged, life insurance companies set aside reserves in early years to cover the deficit in later years.

Reilley and Brown (1997) observed that life insurance companies invest in long-term investment instruments to match their long-term obligations. Further, because pricing of life insurance policies is fixed in advance, life insurance
products have guaranteed investment returns over the life of a policy. The social
benefit of life insurance need to be underscored for it has served countless
insureds and their beneficiaries at their time of need.

Clayton (1970) argues that the huge resources and conservative practices of life
insurance companies reasonably guarantee their ability to discharge their
contractual obligations. Wheatcroft (1991) postulates that life assurance
products are designed not only to protect dependent persons in case of death but
also to provide a means for savings accumulation. In order to obtain full
benefits of a policy an individual must maintain cover until maturity. Nelson
(1997) articulates the fact that premature termination of a life policy yields only
surrender value resulting to forfeiture in the cumulative savings. Among the
great virtues of life assurance policies as a source of savings income lays in the
premium remittance program flexibility and possible tax advantages. Annuities
on other hand provide financial security in old age by providing a stream of
income starting at a specified future date until death. Such benefits are
purchased out of life savings paid to the insurer in the form of periodical
premiums. The cumulative premiums remitted to the insurance companies in
return contribute towards savings mobilization and subsequently accelerating
capital accumulation.
2.1.3 The Role of Insurance Funds in Investment Financing

Gurley and Shaw (1956) postulates 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. In economic terms 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 financial institutions whose function is to accept savings from individuals and put them into productive use. Clayton (1970) further asserts life assurance companies play a very great role in achieving this objective. However, it’s worth noting that the growth of life assurance institutions and also, the rate of savings accumulation depend on the strength of the incentives given to the potential savers.

Babson (2004) observed that the second process of capital formation is investment. 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. The mobilization of saving resources is as important as their efficient allocation. Life assurance companies act as savings mobilization vehicles by making investment funds available in large volumes.

Market Intelligence (1999) asserts that the life assurance industry is an important vehicle of development in any economy. The industry protects and
conserves the wealth of a nation by trading off uncertainty associated with risk. Vaughen (1990) argues that the aim of good business enterprise is to utilize resources, both in men and materials, with minimum friction to achieve maximum results. Nevertheless, production disruptions are bound to occur in the conduct of a normal business life. Warehouses may be broken into and burgled, workmen may suffer injury in the course of their normal employment, money 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. Premises may be damaged as a result of fire, flooding, natural disasters or other related perils. All these events altogether may have far reaching repercussions on the social and economic wellbeing of a nation.

Outroville (1998) points out that the insurance sector plays a crucial role in maintaining a steady economic growth pattern in several ways. Swiss Re catastrophes report (2004) denotes that 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 hydroelectric power plant can create bottlenecks in numerous sectors of the economy. Insurance helps to maintain the risk taking propensity of local entrepreneurs.

The Insurance Digest (September 2003) articulated the effects of insurance transactions on balance of payments. Insurance companies operations affect not only a country's domestic economy but also its economic relations with the rest
of the world. Developing nations lack the capacity to bear losses associated with disastrous calamities and as such would be better protected against such risks through offshore reinsurance treaties. Kenya having only two indigenous reinsurers namely Kenya Re and East Africa Re, our expenditure on reinsurance outwards exceeds cash inflows on insurance due to the limited local retention capacity. Majority of the local insurance firms hold various reinsurance treaties with Swiss Re, Munich Re, Hannover Re and other offshore reinsurers.

2.1.4 Life Assurance as a Risk Management Instrument

Wasow and Hill (1986) stipulate that 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. Life assurance provides cover to an individual policy holder against ill health, disability, premature death, natural calamities and financial insecurity in old age (http://akinsure.com). On the other hand education, group life, last expense, mortgage protection policies and pension schemes work towards providing financial security to the insured and surviving dependants, thereby reducing over-dependence on the community. At the national level life assurance provides a mechanism of mobilizing capital for economic development.

Globally, events and occurrences which pose enormous threats to human life and property have escalated in the recent years (Swiss Re catastrophes study 2004). Further, Swiss Re's sigma statistics for 2004 identify around 330 natural and man-made catastrophes worldwide resulting to total losses estimated at
USD 123bn, of this figure, USD 49bn was covered by property insurance. The importance of protection against life related risks within Kenya is amplified by the existence of HIV Aids epidemic, terrorism threats, road carnage, increasing insecurity and natural disasters. The threat on loss of lives and property cannot be over emphasized after the September 11th terrorism attack on world trade centre (National Security Archives 2001). Locally, terrorism threat is a reality in Kenya following the August 7, 1998 bombing of US embassy and also paradise hotel in Kikambala blast in November 2002.

As per the Insurance Digest (2003) escalation in risk factors on human life and property in the recent past has created a strong demand for insurance products. In Canada, 80% of income earners hold life insurance cover, which is almost double the amount held in 1990. Over the last ten years the Kenyan insurance industry has shown tremendous growth with gross premiums moving considerably from Ksh.6.55 billion in 1991 to 21 billion in 2000 (The Insurer July 2003).

2.2 THEORITICAL AND CONCEPTUAL FRAMEWORK

2.2.1 Solow Growth model on Investment and Capital Accumulation

The Solow Growth model stipulates that the conversion of savings into investments depends on the ability of a nation to proportionately defer consumption of financial resources and to transform those resources into capital accumulation. Deferring consumption (known as savings) depends on the ability
of that nation to first meet the basic needs of its citizens with existing financial systems and resource availability.

The juxtaposition of the proportion of savings put into investment and thus transforming into capital and by extension translating into economic development is well illustrated by the Solow growth model hereby applied as basis for conceptual framework.

**Graph 1. Investment/Capital Accumulation**

In effect the greater the proportion of national income not put into consumption the greater the accumulation of capital stock (investments) and the greater the
economic development. The model states the greater the savings the greater the production propensity function (PPF). On the other hand the less the savings the less the PPF.

The saving equation is illustrated as below:

\[ \text{Savings: } S = Y^* - C - G \]
\[ S = sY^* \]

Where;

's' represents the proportion of output not devoted consumption
'C' is the proportion of national income devoted to consumption by citizens.
'G' represents government/public expenditure.
'Y' represents national income.

Variables:

(a) Independent Variables;
   (i) National income

(b) Dependent variables
   (i) savings
   (ii) Consumption

(c) Output
   (i) Investment

Further the model postulates that with efficient financial and capital markets, these savings could be converted into investment valued at similar monetary worth as illustrated below;

\[ \text{Savings} = I_{\text{required}} \]
In every economy a tradeoff always exists between using resources for consumption or investment. The model seeks to explore the relationship between savings and capital accumulation. Further, it distinguishes conditions for the tendency of different nations to approach an equilibrium (steady-state) level of the capital stock.

Solows growth model further seeks to evaluate economic development in per-capita terms as illustrated in the equation below.

\[ sy^* = (n+\delta)k \]

Where;

- \( Sy^* \) represents per-capita savings as a proportion of per-capita income
- \( k \) represents the capital/labor ratio.
- \( \delta \) is the rate of depreciation per unit of capital
- \( n \) represents population growth rate.

A "steady-state" level of capital is defined as per the above equation and is modeled by the intersection of 'sy*' and '(d+n)k'.

According to this model, an increase in the rate of savings leads to growth in the capital stock and therefore a higher Standard of Living. Reductions in population growth rates 'n' may accomplish the same result. It is important to note that even though an economy may be in a "steady-state" condition, this does not imply that there is no growth in factor inputs or output. If \( k \) is constant,
this implies that the change in capital is equivalent to shift in labor and thus illustrated as follows

$$\%\Delta K = \%\Delta L.$$  

In addition, given that $y^*$ is also constant in the steady state, $\%\Delta Y^* = \%\Delta L$. Also illustrated as below:

$$\%\Delta Y^* = \%\Delta L = \%\Delta K.$$  

If we observe an economy with a growth rate that exceeds the rate of population growth, we can conclude that this economy is currently below its ‘steady state’ level of capital per unit or labour.

2.3 PAST STUDIES

2.3.1 Life Insurance and investment financing in Philippine

A Philippine Life Assurance Association (PLI) publication titled “Industry position on the abolition of Premium Taxes and Stamp taxes on life insurance and annuity products” posted in the Philippine life insurance association website www.plia.com.ph postulate that the life insurance industry remains one of the very few industries which mobilize the long-term savings of the populace. These savings are invested primarily in long-term investment instruments. It further stipulates that by the very nature of life assurance business, the industry has long been in search of investments to match its long-term liabilities. The offering of long-term fixed rate treasury notes by the Philippine government is a welcome development for the life insurance industry. Erstwhile investments in government securities with maturities not exceeding one year were readily
converted to these long-term government notes. The industry prides itself with
being able to offer long-term collateral loans to corporations and individuals
with fixed interest rates for extended periods of time. Such loans carry fixed
interest rates for up to 20 years. Not even the largest banks can offer such terms
as most banks, if not all, fix interest rates on loans for a maximum of two years
only.

The soundness of investments of the Philippine life insurance industry is
validated by the fact that no company has collapsed during the last 30 years or
so. During this period, the industry survived difficult times of political and
economic turmoil, calamities, both natural and man-made, and other events
which have brought about the collapse of some companies in the financial
sector, including banks, mutual funds and financing companies. The life
insurance industry has continued to serve the Philippine public through all these
difficult and trying years.

2.3.2 The role of life assurance funds in India’s Development Financing

Kumar, M in the Geneva Association publication ‘Eutes et Dossier No.236’
observed that a thriving life insurance sector is of vital importance to the Indian
economy mainly because it generates long-term investment funds for
infrastructure building. India, with a population of 1 Billion offers great
potential and opportunity for the insurance industry, however; only 22% of the
Indian population is insured. Insurance premium in India accounts for a mere2
percent of GDP compared to the world average of 7.8 per cent and G-7 average of 9.2 per cent. Insurance premium as a percentage of savings is barely 5.95 per cent in India compared to 52.5 per cent in the UK. Insurance companies have not been able to target niche markets that are currently served poorly or not at all.

Muhleisen (1997) observed that two state-owned monoliths - Life Insurance Corporation and General Insurance Corporation (GIC), run the insurance industry. In 1995-96, LIC had a total income from premium and investments of $5 Billion while GIC recorded a net premium of $1.3 Billion. During the last 15 years, LIC's income grew at a healthy average of 10 per cent as against the industry's 6.7 per cent growth in the rest of Asia, 3.4 per cent in Europe and 1.4 per cent in the US. Compounded annual growth rate for Life insurance business has been 19.22% per annum. LIC has even provided insurance cover to five million people living below the poverty line, with 50 per cent subsidy in the premium rates.

Muhleisen (1997) argues that like other long-term saving instruments, life insurance in India has experienced a relative decline recently, mainly owing to the comparatively low interest rate paid on life insurance funds. Regulatory measures requires that 75 percent of annual portfolio investments must be allocated to government securities or socially oriented purposes, while the remaining 25 percent can be invested in private sector debt. The average yield
has remained low, reaching only 12 percent in the early 1990s. Based on far-reaching recommendations by the Malhotra Committee, the Indian government has been considering plans to open the insurance sector to private competitors in bid to reinstate the industry’s role in savings mobilization and investment financing.

2.3.3 The role of life assurance funds in Kenya’s Development Financing

A study by Nyamai (2002) gives an insight on the significance of life assurance as mobilizers of savings in Kenya; however, it does not address the importance of such funds in terms of investment financing. While the banking sector, capital markets, public finance and foreign investment are considered as crucial in financial mobilization, no study has been done to determine the past or future significance of life assurance funds as a source of investment financing.

2.4 CRITICAL REVIEW OF MAJOR ISSUES

2.4.1 Life Assurance as an Alternative Investment Financial Instrument

The Insurance Digest 2003 postulate that the primary business of life insurance companies is no longer restricted to traditional life products, it has grown to encompass the underwriting of annuities, hybrid life assurance and investment products, and contracts that guarantee a fixed or variable return over a given
period of time. Nevertheless, the sale of such life insurance products as whole
life and term life policies in particular remains an important part of the business.

Heinrich (1998) pointed out that until recently life assurance products in the
Kenyan market were not linked to non-traditional investment avenues such as
stock market indices. Therefore, returns offered being lower than those on other
savings instruments. Clayton (1970) argues that life assurance is essentially an
investment of savings that offers a tax-free sum to the beneficiary at a specified
time in the future. Kumar (2000) observed that life insurance products compete
with investment and savings options like mutual funds. It is therefore imperative
that they should offer comparable returns and flexibility. Life insurers invest the
premiums they collect not only in government and corporate bonds, but also in
mortgage loans (mostly commercial). Besides annuities and life insurance, life
insurers may offer other types of financial services such as asset management.

Kisali (1996) argues that the lack of a comprehensive social security system
combined with a willingness to save in the Kenyan context translates into
increased demand for pension products. However, the current penetration is still
very low. Converting pension products into attractive saving instruments would
require only simple innovations already common in other markets. Annuities
offer a life long income or an income for a specific period of time. An equity-
indexed annuity is a fixed annuity with interest linked to a stock index. Further,
their returns might be tied to index-linked funds or a specific basket of equities.
Buyers could be allowed to switch funds before the annuities begin and to invest different amounts at different times.

Nelson (1997) urges that among non traditional life products is credit life insurance. It is a specialized form of decreasing term insurance cover offering protection to creditors such as banks. The borrower pays the premium, generally as part of the credit transaction, to cover the outstanding loan in the event he or she dies. The face value of a policy decreases as the loan is paid off until both equal zero. When loans are paid off early, premiums for the remaining term are returned to the policyholder. Credit insurance on the other hand acts as protection shield to the insured's investments against credit financiers in the event of untimely demise of the policy holder.

2.4.2 Insurance industry as a key player in the economy

Nelson (1997) estimates that in the United States the industry's contribution to GDP, at over 100 billion dollars. The industry employs approximately 2.3 million people, which translates into a $69 billion contribution to the nation's payroll and therefore making it one of the key economic sectors'. The leap in global demand for insurance products, due to increased risk perception after September 11th terrorism attack in USA, promises new job opportunities within the sector.

The Insurer July 2003 edition stipulates that in Kenya the total premium written in year 2000 under life and General business was Ksh.5.675 billion and
Ksh.15.19 billion respectively. Heinrich (1998) points out that although Life assurance penetration ratio falls below 1% of the GDP, the underlying growth potential is enormous as evidenced by the growth rate witnessed between 1997 and 2002.

Table 1. Premium Growth in Kenya 1997 - 2002

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate</td>
<td>2.3%</td>
<td>24.5%</td>
<td>18.8%</td>
<td>10.5%</td>
<td>20.8%</td>
<td></td>
</tr>
</tbody>
</table>

Source - Report of the Commissioner of Insurance for the year ended December 31, 2002

Whereas the Kenyan insurance industry registered reasonable growth, it's interesting to note that it is quite small compared to other countries such as South Africa, Mauritius and Zimbabwe. However, the contribution of the sector to the GDP is quite crucial (the Insurer July 2003).

Further, the Kenya Insurer July 2003 edition stipulates that the growth registered in the industry calls for numerous categories of insurance professional, which include; finance experts, marketing specialists, human resource professionals, systems professionals, statisticians and even medical professionals. Apart from this, there will be high demand for professionals in
the streams like Underwriting and claims management and actuarial sciences. Apart from pure insurance activities, which is providing insurance protection, growth would be registered in service related fields like training, seminars, workshops, know-how transfer regarding risk assessment and rating, risk inspections, risk management and devising new policy covers, etc. Also, with more players in the market, there will be significant increase in advertising, brand building, and keen pricing not ridiculous pricing and this will benefit whole lot of ancillary industries.

2.4.3 Current Developments Affecting the Insurance industry in Kenya

On the investments front, the Kenya Insurer journal July 2003 issue, stipulates that shareholder funds increased from Ksh.3.6 billion in 1991 to Ksh.21 billion in 2000. The aggregate asset base for insurers has also expanded phenomenally from Ksh.19.8 billion to Ksh.65 billion over the same period. However, negative growth cannot be ignored. Failure by some insurance companies to meet obligations has led closure of four insurers over the past ten years Lakestar being the latest victim.

Having 41 registered insurers, out of which 16 write non-life, 2 exclusively life companies and 24 composite insurers, the Kenyan insurance industry is continuously becoming very competitive. Most companies are finding it a challenge to maintain professionalism and profitability in a business environment that elicits overcapacity. Rooted to the drive to acquire business
and meet premium targets some insurers have resorted to unethical competition through rate undercutting. Other players in the financial services sector, particularly banks, are performing much better. Barclays bank alone made a whooping profit of Ksh.4.79 billion in 2003, being triple the aggregate profit for all insurance companies put together. A challenge indeed for the insurance industry.

The Insurance Digest (2003) pointed out that the drive to sustain premium levels insurers led to re-engineered life products designed to reflect changes in market expectations. In the recent past the Kenyan market has experienced the emergence of unit-linked and inflation-indexed life policies. Unit-linked policies bear investment characteristics and offer the insured 'guaranteed' rate of return pegged on the performance in the money, equity and bonds markets. As per the Daily Nation February 24 2005 edition, the first half of year 2005 saw the introduction of unit-linked products in the Kenyan market with two Life insurance giants; British American and Madison launching new brands under the trade names “The Super Saver” and “The Smart Saver” respectively.

On the other hand the pricing of life policies has evolved from conservative approach based on generalization of theinsuring public to individualized risk assessment. Traditional underwriting practices would penalize the low risk category, which is indeed the majority, for instance the failure to differentiate between smokers and non-smokers in fixing premium for life policies. Premium
rating in modern times is strictly based on risk assessment pegged to medical tests, health history, occupation, diet patterns and psychological evaluation.

The drive to reap benefits from re-engineered products, improved underwriting procedures, better risk management and superimposed customer service, culminated into aggressive marketing strategies aimed at accelerating growth in premium income. In the recent past the Kenyan market has witnessed substantial shift in the distribution of insurance products. Many of these changes will echo international trends. In other markets, notably Europe, this has resulted in bancassurance. The Netherlands led with financial services firms providing an entire range of products including bank accounts, life assurance motor, property insurance and pensions. Other European markets have followed suit with France having over half of all life assurance sales made through banks. In the UK, almost 95% of banks and building societies are distributing insurance products today.

Another potential channel that reduces the need for an owned distribution network is worksite marketing. Worldwide interest in E-commerce has emerged to become a major factor in the marketing of insurance products in the immediate future. The internet account is increasing in arithmetic progression and the trend has already been set by some of the leading insurers and insurance brokers worldwide.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research design
The study involves analysis of both primary and secondary data. The primary data was obtained through questionnaires while secondary data was extracted from Commissioner of Insurance annual reports, published accounts of the various life assurance companies and CBK bureau of statistics with an aim of evaluating the contribution of life assurance premium as a source of investment financing in Kenya.

3.2 Population
The population of interest in this study consisted of all the 20 life assurance companies, currently underwriting life business as per the Annual Report, Commissioner of Insurance, 2002. Since the numbers of these firms are few a census survey was be done.

3.3 Data Collection
Data collection involved obtaining of primary data through administering a questionnaire and interviews with finance managers. Secondary data was obtained from the Commissioner of Insurance annual reports. The published financial reports of the various insurance firms having been verified by listed auditors and also by the Commissioner of insurance was also be applied as a source of secondary data. Data on investments and G.D.P statistics was obtained
from the Ministry of Finance, Treasury publications and Central Bank bureau of statistics.

The type of questionnaire included both open ended and closed questions to ensure that the respondent was not restricted to certain information details. The questionnaire was administered through a drop and pick letter method, alongside personal interviews. One questionnaire was provided to every organization, targeting the finance/life fund/treasury managers who would be in a position to influence investment decisions. Alongside the questionnaire, the study involved in-depth discussions through individual meeting (personal interviews) with finance managers of the firm's in question.

The questionnaire entailed various aspects of the study, which included the; nature of life products, premium income levels, factors affecting premium income and investments management issues.

3.4 Data Analysis

The questionnaires already completed were checked and verified to ensure that they were complete and consistent to information expected. The views from discussions were formatted in order to make their translation much easier. Statistical data compiled from commissioner of insurance annual reports, published financial reports, central bank publications and other related statistics was summarized through data collection forms.
Descriptive analysis was applied in analyzing the study findings. These included tables, graphs, proportion/percentage and ratios specifically designed to meet the set objectives. Premiums income, GDP and investment assets valuation figures for each year was determined and recorded in the respective data forms. Trend analysis in the form of graphs and tables representing changes in premium income, GDP and investment assets valuation was extracted. Further, annual premium penetration ratios were calculated to measure the total gross premium as a percentage of the G.D.P. The measure of changes in life fund investments was expressed as a proportion to changes in gross domestic investments levels in a bid to determine the contribution of life assurance funds as a source of investment financing in Kenya.
4.0. RESEARCH ANALYSIS AND PRESENTATION OF FINDINGS

This chapter focuses on the findings on the specific objectives of the study. The data gathered included a survey of life assurance premium income, computation of premium income as a proportion of the GDP, exploration of the factors affecting premium income, evaluation of national investments as a percentage of the GDP and assessment of life assurance funds as a source of investment financing in Kenya.

The data in this study is summarised and presented by use of tables, pie charts and graphs. The data has been analyzed by use of percentages, proportions evaluation and trend analysis.

4.1.1 Life Assurance Premium Income Penetration Ratio.

This study aimed at answering four major objectives. The first objective of the study seeks to determine the level of premium income ratio as a percentage of the G.D.P over the period 1987 – 2003.

Figure 1 in the next page illustrates the growth pattern of life assurance premium as reflected in the statistical publication by the commissioner of insurance. The growth in GDP over the same period is illustrated separately in
Figure 2. Finally the level of premium income ratio as a percentage of the G.D.P is set out in a line graph as shown in Figure 3.
4.1.2 Life Assurance Premium Income Penetration Ratio Trend.

Life premiums grew over the period at an average rate of 17.23% as illustrated in Figure 1 as compared to the average growth rate of 14.64% in GDP as per Figure 2. The improved performance in the life assurance sector is attributed to increased focus on customer needs and inclusion of investment benefits in packaging of life assurance products as per the respondents to the questionnaire.

However the level of premium income ratio as a percentage of the G.D.P over the period is evidently very low. The highest rate registered in 2003 being 0.85% is significantly low as compared to other economies in Africa and developing countries in other regions having comparable GDP standing.
The Life assurance penetration ratio in Kenya ranks very lowly among the economies of the world as illustrated in Figure 4 above. Over the period of study Kenya recorded an average rate of 0.74% as compared to South Africa, Mauritius, Zimbabwe, South Korea and Switzerland with 14.41%, 2.31%, 2.0%, 9.24% and 8.10% respectively. As per the respondents to the questionnaire, contributing to this low penetration ratio are factors encompassing poor economic performance and a high inequality in distribution of national resources. In addition are cultural factors which embrace collective social responsibility and therefore inhibits individual initiative towards acquisition of
life assurance cover against risks adversely affecting health and financial security.

However, it’s important to note an average growth rate of 7.14% in Kenya’s penetration ratio falls way above the CBK Economic Review June 2005 edition projected 5% GDP growth rate.

4.2.1 Factors affecting Life Assurance Premium Income Penetration Ratio.

The second objective of this study seeks to determine the challenges to life assurance premium penetration ratio in Kenya. An interpretation of the respondent’s views on factors affecting life assurance business and particularly challenges contributing to the low penetration levels are summarized as below.

Poor Economic Performance

Majority of the respondent’s views indicated that Kenya’s economic performance during the last two decades has been far below the underlying potential. The persistent poor economic performance worsened the poverty situation. Poverty assessment in Kenya indicates that the per capita income is US$17 and US$36 per month per adult in the rural and urban areas respectively. Behind the worsening poverty situation are a number of factors including primarily low economic growth from 1994 that culminated into a 0.3 per cent contraction in 2000, high inflation rates and rise in consumer prices.
Low Income Per Capita

Owing to poor economic performance the respondents observed that per capita income was on the decline over the last two decades. Due to declining economic growth and high rates of unemployment the per capita income declined from US$271 in 1990 to US$239 in 2002. The key challenge facing Kenya today is to create jobs for all the unemployed currently estimated at 2 million or 14.6% of the labour force. The deterioration in the standard of living in Kenya is well demonstrated by the worsening in key social indicators over the last two decades. Kenya is ranked among the top ten low-income economies with a high concentration of income amongst its highest earners, that is, 10 per cent controlling 42 per cent of national income (Daily Nation October 27, 2004). These factors contribute to the low income per capita in Kenya and by extension resulting to low life assurance ratio as illustrated in figure 3.

Impact of High Interest Rates

According to most respondents having financial expertise, the period between 1991 and 1994 saw the 91 days treasury bill hit the highest level in Kenya’s history. The treasury bill rates ranged between 35%-70%. The lucrative harvests from the government stock, resulted to shifting of savings from life assurance premiums to treasury bills and treasury bonds. This made many people cancel their life Policies hence affecting the life assurance business very heavily. In fact it is during this period that we experienced the lowest penetration ratios ever in the entire period of the study as per figure 3 above.
High Inflation Rates.

A strong case advanced by most respondents indicated that owing 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. During the period between 1992 and 1994 very high inflation rates were evidenced. This saw the Kenya shilling loose its value so greatly and thus resulting to a dip in penetration ratio as illustrated in figure 3.

Effects of Competitive Rivalry among Life Assurance Providers.

A critical analysis of the respondent’s views reiterates that the sector is highly competitive in life assurance business with the top 4 companies holding approximately 75% of premiums. Lack of adequate regulatory mechanisms creates room for unethical practices characterized by high premium turnover and poor claims settlement record. Rooted to the drive to acquire business and meet premium targets some insurers have resorted to unethical competition through rate undercutting. These factors coupled with poor corporate governance saw the fall of the giant Kenya National Assurance Company Ltd. Though its departure meant that this life fund was lost, it also portrayed a very bad image of the industry, hence many life policy holders cancelled their policies. In recent times the industry started witnessing acquisitions and mergers
with ALICO offloading its life fund to Heritage All and the later transforming into CFC Life insurance company.

Social and Cultural Factors

A further contributory factor towards low penetration ratio, facing Kenya’s life assurance sector as per the respondent’s views, are social and cultural factors. The non dissolution of traditional practices and values among many Kenyan communities has adversely affected the growth of the life assurance industry. The African setup embraces collective social responsibility; this inhibits individual initiative towards acquisition of life assurance. As such in the event of the untimely demise of the family’s bread winner, funeral expenses, surviving children’s education, existing loans and mortgages would be borne by the community.

Political Factors

The respondents to the questionnaire observed that political uncertainties especially during pre/post election periods had detrimental impact on the life assurance sector in Kenya. From graph 3 above, the penetration ratio took a downward trend in the first multi party elections period 1992 – 1993 and also during the Kanu – Narc transition elections period 2001 – 2002. Bad governance, inefficient use of public resources, corruption and structural adjustment programs have significantly contributed to the poor performance facing the life assurance sector.
4.3.1 National Investments as a Ratio to GDP in Kenya.

The third objective seeks to determine the level of national investments as a percentage of the GDP in Kenya. The level of national investment ratio as a percentage of the G.D.P is set out in a line graph as shown in Figure 5.
Further, the evaluation of the impact of foreign investment inflows is determined by examination of gross domestic savings ratio (domestic savings as a percentage of GDP) as illustrated in figure 6 above. The difference between national investments and gross domestic savings constitutes foreign investment inflow.

4.3.2 National Investments as a Ratio to GDP Trend in Kenya.

The gross domestic savings ratio and by extension national investment ratio trend took a dip in the period preceding 2002. The economy's resilience and dynamism in post 2002 elections period was demonstrated by the fact that the marginal economic upturn occurred at a time of minimal foreign aid flow as illustrated in figure 5. However, the national investments curve as per figure 5 was less volatile as compared to domestic gross savings curve illustrated in
figure 6 due to more gradual change in foreign investments inflow. The upward surge in total investments as well as domestic savings starting from 2003 is attributable to change in political leadership and the restoration in investor confidence both locally and in the international community.

4.4.1 Life Fund as a Source of Investment Financing in Kenya.

The contribution of Life Assurance funds as a source of investment financing continues to gain prominence as illustrated in figure 8. Although life fund investments ratio seems quite low at the rate of 0.78% against the GDP in 2004, its average annual growth rate stood at 47% as illustrated in figure 7.

![Figure 7 Life Fund Investments/GDP %](image-url)
4.4.2 Life Fund as a Source of Investment Financing Trend in Kenya.

Life fund investment growth rate maintained a steady and impressive growth rate of 34%, with less volatility as compared to the national investments trend as illustrated in Figure 8. In deed the trend as shown in Figure 7 confirms that the cash inflow enjoyed by life insurance companies is constant while claims payout is deferred. Premium remittance by policy holders cumulatively contribute towards savings mobilization within the economy and hence making life fund investments an important contributor to domestic investments.

Life fund investments as a proportion to the national investments grew from 2.23% in 1998 to 4.25% in 2004 as shown in Figure 9. This represents an average growth rate of 34%.
It’s important that the Insurance Act sets specific categories through which investments out of life fund can be placed. Life fund investments distribution is shown in Table 2 below.

### Table 2 Life Assurance Industry Investments Channels Analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Category</strong></td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
</tr>
<tr>
<td><strong>LAND &amp; BUILDINGS</strong></td>
<td>6,894,520.00</td>
<td>7,113,646</td>
<td>8,536,375</td>
<td>9,646,104</td>
<td>11,039,966</td>
<td>11,293,885</td>
<td>13,100,907</td>
<td>15,000,538</td>
</tr>
<tr>
<td><strong>GOVT SECURITIES</strong></td>
<td>6,969,680.00</td>
<td>8,353,726</td>
<td>9,723,737</td>
<td>11,279,535</td>
<td>12,683,837</td>
<td>12,975,565</td>
<td>14,532,633</td>
<td>15,113,939</td>
</tr>
<tr>
<td><strong>SHARES</strong></td>
<td>167,100.00</td>
<td>786,380</td>
<td>915,346</td>
<td>1,034,341</td>
<td>1,163,117</td>
<td>1,628,364</td>
<td>3,175,309</td>
<td>8,573,334</td>
</tr>
<tr>
<td><strong>DEBENTURES</strong></td>
<td>17,750.00</td>
<td>14,101</td>
<td>16,414</td>
<td>18,547</td>
<td>20,856</td>
<td>21,336</td>
<td>24,750</td>
<td>28,710</td>
</tr>
<tr>
<td><strong>SECURED LOANS</strong></td>
<td>1,317,230.00</td>
<td>1,660,435</td>
<td>1,859,687</td>
<td>2,101,447</td>
<td>2,363,077</td>
<td>2,417,427</td>
<td>2,804,216</td>
<td>3,252,890</td>
</tr>
<tr>
<td><strong>UNSECURED LOANS</strong></td>
<td>-</td>
<td>6,056</td>
<td>7,049</td>
<td>7,966</td>
<td>8,957</td>
<td>9,163</td>
<td>10,629</td>
<td>10,948</td>
</tr>
<tr>
<td><strong>BANK DEPOSITS</strong></td>
<td>1,521,180.00</td>
<td>1,257,480</td>
<td>1,463,707</td>
<td>1,653,989</td>
<td>1,936,821</td>
<td>1,981,368</td>
<td>2,298,386</td>
<td>2,551,209</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>16,887,460</td>
<td>19,191,824</td>
<td>22,522,315</td>
<td>25,741,928</td>
<td>29,216,631</td>
<td>30,327,109</td>
<td>35,946,831</td>
<td>44,531,568</td>
</tr>
</tbody>
</table>
The annual life fund investments category spread over the period of study is further illustrated through the application of pie charts as above. Over the period of study specified investments recorded 38.83%, 40.84%, 7.72%, 0.07%, 7.92%, 0.03% and 6.54% under land & buildings, government stocks, shares & debentures, secured loans, unsecured loans and bank deposits were respectively. The law seeks to regulate life fund investments in order safeguard policy holder exposure to risk associated with certain investment instruments.

The outlook is for life fund investments to maintain the steady upward growth trend. The resumption of positive GDP growth rate as well as improved premium income growth rate underpins the current and future life funds potential towards investment financing in Kenya.
5.0. CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings and Conclusions

This chapter contains details on discussions of the research findings summary and conclusions as well as recommendations for further research. This paper was specifically aimed at achieving four main objectives including; determine the level of life assurance premium penetration ratio, examine challenges to penetration ratio, measure changes in the level of national investments and most importantly evaluate the contribution of life assurance funds as a source of investment financing in Kenya.

In explaining the penetration ratio trend, the use of line graphs was applied. 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. Over the period of study Kenya recorded an average rate of 0.74% as compared to South Africa, Mauritius and Zimbabwe with 14.41%, 2.31% and 2.0% respectively. The penetration ratio line graph figure 3 showed an upward trend with a significant dip during the pre/post first and second multiparty election period between 1991 and 1997. A further observation revealed that although the growth pattern for GDP and gross premium was almost the same between 1987 and 1994, gross premiums grew at
a faster rate as compared to GDP between 1995 and 2000. The period prior to 2002 transitional election experienced a slight dip attributable to increased speculation in the economy. Growth trend resumed in 2003 at a rate of 2.3% and accelerated with 16% registered in 2004. The upward surge in the economy after 1997 election restated growth trend in penetration ratio.

The study was also aimed at examining the factors that determine the level of life assurance penetration level in Kenya. Respondents to the questionnaire felt strongly that a mix of various factors played a crucial role towards influencing the level of penetration ratio. The main factors are the major universal economic determinants encompassing growth in GDP, income per capita, level of interest rates and inflation. Other important determinants included increased level of competition, political, social and cultural factors.

Among the economic factors, interest rates were found to be a key variable affecting the levels of premiums in that if government stock yield increases many people tend to invest in it and forego life assurance. Favourable shift in the stock exchange market tends to have the same effect. On the other hand inflation, as per the findings of this study, was found be a strong driver in determination of the changes affecting penetration ratio. When inflation is high, less people acquire life policies hence low premiums. Kenya’s low life assurance penetration level is highly attributable to low income per capita. Many Kenyan households can barely meet their basic needs and thus they lack
sufficient savings margins necessary to acquire and maintain life assurance policies.

Social factors included gender and age of potential would be policyholder. In cases where more males than females are insured, premiums were expected to be higher due to the underwriting assumption that males lives bear a shorter life span as compared to females hence the rates charged on their premiums are a bit high. Other social factors included occupation and social activities undertaken by the assured. African cultural values still upheld in many Kenyan communities embraces collective social responsibility, a factor found to inhibit individual initiative towards acquisition of life assurance.

Further, the study was aimed at examining the changes in the level of national investments. Growth in domestic investments stagnated during the period 1998 and 2002. Owing to a poor performing economy and uncertainty due to the transitional elections, gross domestic investment stood at 17.3% in 1998 which further decreased to hit a low of 13.39% in 2002. However, the resumption of positive economic growth in 2003 propelled national investments upwards due to increased rate in domestic savings mobilization as well as renewed confidence among international investors. The upward surge in gross domestic investments resulted to an impressive growth rate of 29.95% and 5.17% in 2003 and 2004 respectively.
Finally and most importantly the contribution of life fund towards investment financing in Kenya was determined through computation of life fund investments as a proportion of the GDP and by extension annual growth rates further compared to the level of gross domestic investments. A critical review of the trend analysis presented as a line graph indicates that the growth in life fund investments as a ratio to GDP ratio was significantly low over the period of study. Having hit a low of 0.39% and a high of 0.78% in 1998 and 2004 respectively, the trend represents an average growth rate of 6.52%, an outstanding performance when compared to 2% average growth in gross domestic investments over the same period. Further life fund investments to gross domestic investments ratio increased tremendously from 2.23% in 1998 to 4.25% 2004, and more than doubled between 2002 and 2003, confirming the efficiency life assurance possess towards conversion of savings in the form of premium into quality investments. The average growth rate in Life fund investments ratio standing at a high of 34%, indeed confirms that life assurance funds bear enormous current potential as a source of premium financing in Kenya.

5.2 Recommendations of Study

Although the above factors influence the performance of the insurance industry, its future looks bright. The growth patterns in penetration ratios in the recent past have recorded tremendous results. If the Kenyan market were fully developed, then the level of life premiums could be very high. Life assurance
companies in Kenya ought to therefore re-engineer life assurance products to reflect changing consumer needs while enhancing returns on investments, in a bid to exploit the untapped market potential.

The contribution of life assurance funds as a source of investment financing continues to gain prominence as illustrated by greater growth rates in investments held by life assurance companies as compared to gross domestic investments expansion levels. Increased efficiency in conversion of savings into quality investments, a virtue possessed by life assurance companies, coupled with increasing life assurance penetration ratio would indeed accelerate the contribution of life assurance funds as a source of investment financing in Kenya. However there is an urgent need for the government to formulate incentives aimed at accelerating life assurance penetration ratio and liberalization of the controlled investment regime in a bid to maximize the underlying investments mobilization potential within the sector.

5.3. **Recommendations for further Research**

The study opens gaps for more research towards formulation of suitable policy framework in a bid to spur growth in the underperforming life assurance industry. Priority areas would include re-engineering of life assurance products to reflect changing consumer needs, liberalization of the controlled investment regime, establishment of an autonomous regulatory body and tax incentives on life insurance policies.
5.4. Limitations of the study.

The life insurance premium penetration level phenomenon is multidimensional and has a complex causality structure. Understanding the nature of this phenomenon and further relating it to investment financing is therefore multifaceted and methodologically diverse.

The absence of adequate and reliable data, not only in the Kenyan context but also globally, further complicates the study. Computation of penetration on some economies as per Swiss Re statistical publications was based on estimates for some few countries. On the other hand whereas the survey on premium growth and the examination of premium penetration ratio covered the period 1987 – 2003, the evaluation of gross domestic investments and determination of the proportionate contribution of life assurance funds as a source of investment financing in Kenya covered a shorter period 1998 – 2004 owing to availability of published CBK statistical data.
REFERENCES.


Kumar, M. Development of Insurance in India. Geneva Association publication ‘Eutes et Dossier No.236’, manoj@einsuranceprofessional.com.


APPENDICES

Appendix A

A list of Life Assurance companies as at December 31st 2002.

1. ALICO Kenya Insurance Company (Life Fund transferred to CFC Life in 2004)
2. Apollo Life Assurance
3. British American Insurance
4. Blue Shield Insurance
5. Cannon Assurance
6. Co-operative Insurance
7. Corporate Insurance
8. Geminia Insurance
9. Heritage All Insurance
10. Insurance Company of East Africa
11. Jubilee Insurance
12. Kenindia Assurance
13. Kenyan Alliance Insurance
14. Madison Insurance
15. Mercantile Life & General Assurance
16. Old Mutual Life Assurance
17. Pan Africa Life Assurance
18. The Monarch Insurance
19. UAP Insurance
20. Trinity Life Assurance
APPENDICES

APPENDIX B:

LETTER OF INTRODUCTION

Masinga, Oliver Mwisa  
C/o Kenyatta University  
Institute of Open Learning  
P.O. Box 43844,  
Nairobi.

4 April 2005,

Dear Sir/Madam,

I am a Post Graduate Student in the School of Business, Kenyatta University. I am conducting a Management Research on “An evaluation of life assurance funds as a source of investment financing in Kenya”.

Your organization has been selected to form part of the study. This is therefore to request your assistance in filling the attached questionnaire. The information you give will be treated with strict confidentiality and is needed purely for academic purposes. Even when a name has been provided, it will not under any circumstances appear in the final report.

A copy of the final report will be made available to you upon request.

Your assistance and co-operation will be greatly appreciated.

Yours sincerely,

Masinga, Oliver Mwisa  
(Student)  

Mr. Muturi  
Lecturer Dept. of Accounting & Finance  
(Supervisor)
APPENDIX C: QUESTIONNAIRE

Please respond to the questions as directed against each.

PART A: Company’s Data

Would you kindly give the name of your organization?

1.) Please indicate your primary functional responsibilities.
   a) CEO (Chief Executive Officer) ()
   b) Finance Manager ()
   c) Underwriting Manager ()
   d) Other (specify) ......................

2.) What is the ownership of your organization?
   a) Local ()
   b) Mixed ()

3.) What is the nature of company ownership?
   a) Private ()
   b) Public/Quoted ()

4.) How many branches does the organisation operate in the country?
   ...........................................

5.) What lines of business does your company engage in? Tick all that apply
   a) Ordinary life ()
   b) Group Life ()
   c) Mixed life and General ()

6.) What is the company’s annual premium? Kshs .......................
1) What is the nature of Life Assurance products offered by your company?
   a) Whole life
   b) Endowment
   c) Annuities
   d) All of the above
   e) Group Life
   f) Other (specify) ....................

2) What special needs do your insurance policies focus on?
   a) Education
   b) Medical
   c) Savings
   d) Investment
   e) Health
   f) Retirement
   g) all of the above

3) What form of return or investment benefits does your company’s life assurance products offer?
   a) Annual bonuses
   b) Term bonuses
   c) Guaranteed rate of return
   d) Unit linked policies (Inflation sensitive)
   e) Enhanced maturity benefits

4) What is the average Life Assurance proportionate contribution to the annual premium income?
5) To what extent have the following industrial or environmental factors influenced changes in the level of premium income in your organization (Tick the appropriate box)

<table>
<thead>
<tr>
<th>Factor</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Entry of new life assurance providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Competitive rivalry among life assurance providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Availability of substitute products competing with life assurance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Change of Policy holder preferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) New technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Economic factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Political/legal factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) Social cultural factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6) In your opinion, what’s the future of life assurance business in Kenya?
PART C. Life Fund Investments

1) Does your organization have annual targets for investment income?
   Yes □   No □

2) What is the average rate of return on life fund investment as a proportion of total assets over the last 5 years? %

3) To what extent does government regulation affect your organization’s investment policy? (Tick the appropriate box)

<table>
<thead>
<tr>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a high extent</td>
<td>A fair extent</td>
<td>Moderate extend</td>
<td>To a lesser extent</td>
<td>No effect at all</td>
</tr>
</tbody>
</table>

4) To what extent have the following factors affected return on life fund investments in your organization? (Tick the appropriate box)

<table>
<thead>
<tr>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a high extent</td>
<td>A fair extent</td>
<td>Moderate extend</td>
<td>To a lesser extent</td>
<td>No effect at all</td>
</tr>
</tbody>
</table>

a) Interest on treasury bills changes
b) Stock market index changes
c) Interest on bank deposits changes
d) Real estate prices change
e) Economic factors
f) Regulatory/legal factors
h) Social factors

5) In your opinion, what’s the contribution of life assurance funds as a source of investment financing in Kenya?

...........................................................................................................
...........................................................................................................
...........................................................................................................
...........................................................................................................
...........................................................................................................
...........................................................................................................
...........................................................................................................

60
## GROSS DIRECT PREMIUM - LONG TERM BUSINESS

### Appendix D

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALICO</td>
<td>229,369</td>
<td>275,628</td>
<td>335,120</td>
<td>349,754</td>
<td>355,794</td>
<td>408,935</td>
<td>443,094</td>
<td>493,786</td>
<td>561,606</td>
<td>622,672</td>
<td>683,485</td>
<td>775,903</td>
<td>846,854</td>
<td>951,948</td>
<td>1,185,175</td>
<td>1,212,434</td>
<td>1,406,424</td>
</tr>
<tr>
<td>APPOLLO</td>
<td>22,908</td>
<td>23,544</td>
<td>23,384</td>
<td>22,068</td>
<td>24,898</td>
<td>23,803</td>
<td>28,785</td>
<td>31,580</td>
<td>34,775</td>
<td>40,338</td>
<td>47,471</td>
<td>47,942</td>
<td>56,752</td>
<td>55,617</td>
<td>69,243</td>
<td>70,836</td>
<td>82,169</td>
</tr>
<tr>
<td>BLUE SHIELD</td>
<td>1,300</td>
<td>3,950</td>
<td>5,609</td>
<td>5,772</td>
<td>7,563</td>
<td>9,074</td>
<td>11,276</td>
<td>11,829</td>
<td>13,151</td>
<td>15,315</td>
<td>17,609</td>
<td>23,343</td>
<td>23,527</td>
<td>28,382</td>
<td>35,336</td>
<td>36,146</td>
<td>41,932</td>
</tr>
<tr>
<td>BRITISH AMERICAN</td>
<td>35,972</td>
<td>47,044</td>
<td>61,157</td>
<td>76,547</td>
<td>93,151</td>
<td>108,205</td>
<td>136,556</td>
<td>186,399</td>
<td>224,155</td>
<td>286,841</td>
<td>371,882</td>
<td>488,244</td>
<td>753,935</td>
<td>1,070,496</td>
<td>1,258,068</td>
<td>1,287,003</td>
<td>1,492,924</td>
</tr>
<tr>
<td>CANNON</td>
<td>31,031</td>
<td>33,496</td>
<td>34,535</td>
<td>35,356</td>
<td>39,385</td>
<td>32,372</td>
<td>33,951</td>
<td>42,730</td>
<td>43,363</td>
<td>48,810</td>
<td>64,391</td>
<td>63,589</td>
<td>65,317</td>
<td>63,272</td>
<td>78,774</td>
<td>80,585</td>
<td>93,479</td>
</tr>
<tr>
<td>CO-OPERATIVE</td>
<td>26,933</td>
<td>34,908</td>
<td>34,960</td>
<td>38,279</td>
<td>49,385</td>
<td>59,951</td>
<td>59,851</td>
<td>50,128</td>
<td>38,824</td>
<td>31,922</td>
<td>32,561</td>
<td>27,626</td>
<td>38,026</td>
<td>44,824</td>
<td>55,986</td>
<td>57,088</td>
<td>66,224</td>
</tr>
<tr>
<td>CORPORATE</td>
<td>2,268</td>
<td>2,873</td>
<td>3,715</td>
<td>5,642</td>
<td>7,692</td>
<td>9,702</td>
<td>11,568</td>
<td>13,968</td>
<td>13,968</td>
<td>23,883</td>
<td>29,463</td>
<td>31,787</td>
<td>22,387</td>
<td>25,007</td>
<td>31,134</td>
<td>31,850</td>
<td>36,946</td>
</tr>
<tr>
<td>GEMMA</td>
<td>209</td>
<td>1,648</td>
<td>2,858</td>
<td>5,011</td>
<td>34,973</td>
<td>51,493</td>
<td>36,393</td>
<td>26,632</td>
<td>22,299</td>
<td>27,762</td>
<td>28,401</td>
<td>32,945</td>
<td>173,542</td>
<td>221,263</td>
<td>253,846</td>
<td>280,015</td>
<td>358,273</td>
</tr>
<tr>
<td>HERITAGE ALL</td>
<td>13,518</td>
<td>20,322</td>
<td>47,944</td>
<td>79,508</td>
<td>77,168</td>
<td>112,521</td>
<td>137,321</td>
<td>170,943</td>
<td>174,772</td>
<td>202,728</td>
<td>1,088</td>
<td>1,950</td>
<td>3,113</td>
<td>2,041</td>
<td>2,750</td>
<td>3,424</td>
<td>3,502</td>
</tr>
<tr>
<td>IDEA</td>
<td>22,803</td>
<td>35,075</td>
<td>47,744</td>
<td>58,550</td>
<td>63,624</td>
<td>72,069</td>
<td>101,548</td>
<td>119,404</td>
<td>137,221</td>
<td>170,843</td>
<td>174,772</td>
<td>202,728</td>
<td>1,088</td>
<td>1,950</td>
<td>3,113</td>
<td>2,041</td>
<td>2,750</td>
</tr>
<tr>
<td>JUBILEE</td>
<td>29,167</td>
<td>25,179</td>
<td>27,392</td>
<td>30,236</td>
<td>31,568</td>
<td>41,037</td>
<td>42,416</td>
<td>50,350</td>
<td>57,413</td>
<td>101,169</td>
<td>146,908</td>
<td>170,943</td>
<td>174,772</td>
<td>202,728</td>
<td>1,088</td>
<td>1,950</td>
<td>3,113</td>
</tr>
<tr>
<td>KENYAN ALLIANCE</td>
<td>4,465</td>
<td>7,607</td>
<td>9,518</td>
<td>15,053</td>
<td>23,299</td>
<td>36,183</td>
<td>46,964</td>
<td>65,528</td>
<td>64,446</td>
<td>80,238</td>
<td>82,083</td>
<td>95,217</td>
<td>51,284</td>
<td>61,271</td>
<td>70,376</td>
<td>97,433</td>
<td>105,526</td>
</tr>
<tr>
<td>MADISON</td>
<td>51,284</td>
<td>61,271</td>
<td>70,376</td>
<td>97,433</td>
<td>105,526</td>
<td>151,973</td>
<td>184,614</td>
<td>197,034</td>
<td>325,160</td>
<td>358,521</td>
<td>443,808</td>
<td>451,009</td>
<td>516,232</td>
<td>642,716</td>
<td>657,499</td>
<td>762,698</td>
<td>51,284</td>
</tr>
<tr>
<td>MERCANTILE</td>
<td>911</td>
<td>3,547</td>
<td>12,844</td>
<td>20,941</td>
<td>40,763</td>
<td>65,734</td>
<td>64,232</td>
<td>79,969</td>
<td>81,808</td>
<td>94,987</td>
<td>51,284</td>
<td>61,271</td>
<td>70,376</td>
<td>97,433</td>
<td>105,526</td>
<td>151,973</td>
<td>184,614</td>
</tr>
<tr>
<td>PAN AFRICA</td>
<td>40,796</td>
<td>42,859</td>
<td>45,884</td>
<td>50,640</td>
<td>53,948</td>
<td>58,986</td>
<td>69,658</td>
<td>74,582</td>
<td>93,265</td>
<td>126,422</td>
<td>151,145</td>
<td>184,753</td>
<td>225,492</td>
<td>245,915</td>
<td>306,158</td>
<td>313,200</td>
<td>363,312</td>
</tr>
</tbody>
</table>
| THE MONARCH     | 1,588 | 1,952 | 3,113 | 2,042 | 2,752 | 3,424 | 3,502 | 4,063 | 53,771 | 65,616 | 81,692 | 83,571 | 95,942 | 658,393 | 807,174 | 943,820 | 1,050,293 | 1,180,795 | 1,397,357 | 1,658,936 | 1,831,276 | 2,274,584 | 2,692,065 | 3,386,081 | 4,102,822 | 4,775,665 | 5,551,438 | 6,011,540 | 7,070,506 | 8,201,787 | 61

Source: Commissioner of Insurance Statistics
### GROSS DOMESTIC PRODUCT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shs'M'</td>
<td>112,965</td>
<td>126,703</td>
<td>148,573</td>
<td>168,455</td>
<td>193,768</td>
<td>228,051</td>
<td>283,708</td>
<td>338,065</td>
<td>393,767</td>
<td>544,136</td>
<td>572,774</td>
<td>596,640</td>
<td>639,060</td>
<td>685,440</td>
<td>767,380</td>
<td>849,990</td>
<td>968,420</td>
</tr>
</tbody>
</table>

**Source:** Central Bank of Kenya Statistics Bureau
## APPENDICES

### Appendix F

### COMPUTATION OF PREMIUM PENTRATION RATIOS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>0.58</td>
<td>0.64</td>
<td>0.64</td>
<td>0.62</td>
<td>0.61</td>
<td>0.61</td>
<td>0.58</td>
<td>0.58</td>
<td>0.53</td>
<td>0.59</td>
<td>0.69</td>
<td>0.75</td>
<td>0.81</td>
<td>0.90</td>
<td>0.83</td>
<td>0.85</td>
<td></td>
</tr>
</tbody>
</table>
### PREMIUM PENETRATION RATIOS - COMPARATIVE FIGURES WITH OTHER COUNTRISES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAURITIUS</td>
<td>1.99</td>
<td>2.1</td>
<td>2.2</td>
<td>2.26</td>
<td>2.07</td>
<td>2.46</td>
<td>2.62</td>
<td>2.78</td>
</tr>
<tr>
<td>NIGERIA</td>
<td>0.35</td>
<td>0.1</td>
<td>0.1</td>
<td>0.07</td>
<td>0.13</td>
<td>0.14</td>
<td>0.11</td>
<td>0.14</td>
</tr>
<tr>
<td>ZIMBABWE</td>
<td>1.93</td>
<td>1.93</td>
<td>1.88</td>
<td>1.77</td>
<td>1.96</td>
<td>1.81</td>
<td>2.35</td>
<td>2.4</td>
</tr>
<tr>
<td>EGYPT</td>
<td>0.15</td>
<td>0.15</td>
<td>0.16</td>
<td>0.18</td>
<td>0.19</td>
<td>0.18</td>
<td>0.18</td>
<td>0.22</td>
</tr>
<tr>
<td>SOUTH KOREA</td>
<td>10.01</td>
<td>11.63</td>
<td>10.32</td>
<td>8.39</td>
<td>9.89</td>
<td>8.69</td>
<td>8.23</td>
<td>6.77</td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>3.16</td>
<td>3.83</td>
<td>3.53</td>
<td>3.25</td>
<td>3.19</td>
<td>3.4</td>
<td>3.48</td>
<td>6.09</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>7.47</td>
<td>8.33</td>
<td>9.14</td>
<td>8.06</td>
<td>7.72</td>
<td>7.95</td>
<td>8.41</td>
<td>7.72</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>4.74</td>
<td>5.53</td>
<td>6.4</td>
<td>6.43</td>
<td>6.04</td>
<td>5.7</td>
<td>5.02</td>
<td>4.42</td>
</tr>
<tr>
<td>CANADA</td>
<td>2.5</td>
<td>3.07</td>
<td>3.09</td>
<td>3.19</td>
<td>3.27</td>
<td>2.97</td>
<td>2.81</td>
<td>2.63</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>7.27</td>
<td>7.87</td>
<td>8.94</td>
<td>10.3</td>
<td>12.71</td>
<td>10.73</td>
<td>10.19</td>
<td>8.62</td>
</tr>
<tr>
<td>UNITED STATES OF AMERICA</td>
<td>3.75</td>
<td>3.85</td>
<td>4.11</td>
<td>4.23</td>
<td>4.48</td>
<td>4.4</td>
<td>4.6</td>
<td>4.38</td>
</tr>
<tr>
<td>KENYA</td>
<td>0.53</td>
<td>0.59</td>
<td>0.69</td>
<td>0.75</td>
<td>0.81</td>
<td>0.90</td>
<td>0.83</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Source: Swiss Re World Insurance Report
## Appendix H

**GROSS DOMESTIC INVESTMENTS RATIO (Domestic Investments as a Percentage of GDP)**

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>17.3</td>
<td>16.15</td>
<td>15.38</td>
<td>14.41</td>
<td>13.39</td>
<td>17.4</td>
<td>18.3</td>
</tr>
</tbody>
</table>

(DOMESTIC INVESTMENT / GDP) × 100

Source: CBK Economic Review
### APPENDICES

**Appendix I**

**GROSS DOMESTIC SAVINGS RATIO (Domestic Savings as a Percentage of GDP)**

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(DOMESTIC SAVINGS / GDP) X 100</td>
<td>9.77</td>
<td>10.88</td>
<td>7.35</td>
<td>6.22</td>
<td>4.9</td>
<td>6.2</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Source: CBK Economic Review
## APPENDICES

### Appendix J

**COMPUTATION OF LIFE FUND INVESTMENTS AS A % OF GDP**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Life Fund Investments Ksh.'000'</strong></td>
<td>16,887,460</td>
<td>19,191,824</td>
<td>22,522,315</td>
<td>25,741,928</td>
<td>29,216,631</td>
<td>30,327,109</td>
<td>35,946,831</td>
<td>44,531,568</td>
</tr>
<tr>
<td><strong>Growth in Life Fund Investments Ksh. '000'</strong></td>
<td>-</td>
<td>2,304,364</td>
<td>3,330,491</td>
<td>3,219,613</td>
<td>3,474,703</td>
<td>1,110,478</td>
<td>5,619,722</td>
<td>8,584,738</td>
</tr>
<tr>
<td><strong>GDP at Current Prices Ksh'000'</strong></td>
<td>572,774,400</td>
<td>596,640,000</td>
<td>639,060,000</td>
<td>685,440,000</td>
<td>767,380,000</td>
<td>849,990,000</td>
<td>968,420,000</td>
<td>1,104,360,000</td>
</tr>
<tr>
<td><strong>Life Fund Investments Growth as a % of GDP</strong></td>
<td>-</td>
<td>0.39</td>
<td>0.52</td>
<td>0.47</td>
<td>0.45</td>
<td>0.13</td>
<td>0.58</td>
<td>0.78</td>
</tr>
</tbody>
</table>
### APPENDICES

**Appendix K**

**COMPUTATION OF LIFE FUND INVESTMENTS/GDP AS A PROPORTION OF NATIONAL INVESTMENTS/GDP PROPORTION**

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Life Fund Investments as a % of GDP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Fund Investments</td>
<td>0.39</td>
<td>0.52</td>
<td>0.47</td>
<td>0.45</td>
<td>0.13</td>
<td>0.58</td>
<td>0.78</td>
</tr>
<tr>
<td>as a % of GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Fund Investments/ National Investments %</td>
<td>2.23</td>
<td>3.23</td>
<td>3.05</td>
<td>3.14</td>
<td>0.98</td>
<td>3.34</td>
<td>4.25</td>
</tr>
</tbody>
</table>
## APPENDICES

### Appendix L

**INDUSTRY INVESTMENTS CHANNELS ANALYSIS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
<td>Ksh'000</td>
</tr>
<tr>
<td>LAND &amp; BUILDINGS</td>
<td>6,894,520.00</td>
<td>7,113,646</td>
<td>8,536,375</td>
<td>9,646,104</td>
<td>11,039,966</td>
<td>11,293,885</td>
<td>13,100,907</td>
<td>15,000,538</td>
</tr>
<tr>
<td>GOVT SECURITIES</td>
<td>6,969,680.00</td>
<td>8,353,726</td>
<td>9,723,737</td>
<td>11,279,535</td>
<td>12,683,837</td>
<td>12,975,565</td>
<td>14,532,633</td>
<td>15,113,939</td>
</tr>
<tr>
<td>SHARES</td>
<td>167,100.00</td>
<td>786,380</td>
<td>915,346</td>
<td>1,034,341</td>
<td>1,163,117</td>
<td>1,628,364</td>
<td>3,175,309</td>
<td>8,573,334</td>
</tr>
<tr>
<td>DEBENTURES</td>
<td>17,750.00</td>
<td>14,101</td>
<td>16,414</td>
<td>18,547</td>
<td>20,856</td>
<td>21,336</td>
<td>24,750</td>
<td>28,710</td>
</tr>
<tr>
<td>SECURED LOANS</td>
<td>1,317,230.00</td>
<td>1,660,435</td>
<td>1,859,687</td>
<td>2,101,447</td>
<td>2,363,077</td>
<td>2,417,427</td>
<td>2,804,216</td>
<td>3,252,890</td>
</tr>
<tr>
<td>UNSECURED LOANS</td>
<td>-</td>
<td>6,056</td>
<td>7,049</td>
<td>7,966</td>
<td>8,957</td>
<td>9,163</td>
<td>10,629</td>
<td>10,948</td>
</tr>
<tr>
<td>BANK DEPOSTS</td>
<td>1,521,180.00</td>
<td>1,257,480</td>
<td>1,463,707</td>
<td>1,653,989</td>
<td>1,936,821</td>
<td>1,981,368</td>
<td>2,298,386</td>
<td>2,551,209</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16,887,460</td>
<td>19,191,824</td>
<td>22,522,315</td>
<td>25,741,928</td>
<td>29,216,631</td>
<td>30,327,109</td>
<td>35,946,831</td>
<td>44,531,568</td>
</tr>
</tbody>
</table>